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Strategic Banking Manual

Project Manager
William Gould

Editors
Michael Higgins
Vladimir Platonov



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Authors:

Elias Awad, Thomas Barrell, Norman Baxter, Dmitry Evstafiev, Michael Higgins, Galina Panova, Vladimir Platonov, Victor Senkevich, Steven Shipley, Brant Shuman, Andrew Smith, Natalia Tsitovich, Geary Vance, Juri Voropaev, Lori Yerzyk

Michael Higgins, Vladimir Platonov (ed.)

Project manager:

William Gould

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This publication deals with the issues of developing internal management systems and credit policy, human resources management policies and information technologies. The Manual discusses approaches to financial risks management, strategic analysis and management accounting. It contains the unique issues not highlighted earlier in the literature published in Russian. The Manual has been created by the team of authors that consists of consultants, instructors, and bankers from Russia and USA. The target readership is managers and officers from financial institutes as well as graduate and post-graduate students, instructors of business schools and universities, participants of training seminars.

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3
4 The book before you is the result of a team effort. USAID/Russia's Office of
5 Economic Reform worked with KPMG Barents Group to assemble the team of Russian
6 and American authors, the nucleus of which was formed from the team teaching
7 experiences gained in the USAID/Barents Russian program of commercial bank training.

8 Under this program, from 1994 to 1997, Russians from 247 banks participated in
9 130 seminars conducted on over 30 topics in commercial banking given in 21 cities
10 throughout Siberia and the Russian Far East.

11 In order to adapt Russian international best practices to commercial banking in
12 Russia, American instructors team taught with Russian specialists during the final year of
13 the program. In this way, an effort was made to change the concept of development
14 assistance from a model of foreign experts bringing their expertise to Russia to one of
15 joint development by Russians and foreign experts working together to produce a
16 Russian product for the Russian market.

17 This book was begun toward the conclusion of the USAID/Barents program with
18 the idea of making the best lessons learned in the program available to a broad
19 professional readership throughout Russia and the Newly Independent States of the
20 former Soviet Union.

21 The Manual is designed to provide a professional grounding in banking
22 fundamentals and for use by bank management to assist as a balanced standard-setter in
23 the preparation of their own bank's proprietary operating manuals. Views and
24 considerations are those of the book's authors and should not be attributed to the official
25 position of the United States Agency for International Development and KPMG Barents
26 Group.

27 USAID hopes that the book will make some small contribution to sound banking in
28 Russia.

29 **William Gould**

1

2 **Preface**

3 This book has been published thanks to the USAID sponsorship. The Manual
4 represents the culmination of three years of bankers training in Russia. More than 3,000
5 bankers across Russia have participated in this program. In this book, USAID and
6 KPMG Barents Group have selected ten of the most critically important topics taught in
7 the classroom and devoted a chapter to each.

8 What makes this publication different is that it combines a pragmatic approach to
9 the most important aspects of banking with a strategic and systematic one. That was why
10 the accent was placed on systematization and explanation, in practical terms, of the key,
11 strategic problems of banking relevant to the needs of the Russian reader. Both Russian
12 and foreign quantitative data and references to current regulations were made use of only
13 to the extent it would help a better comprehension of the material.

14 The central all-pervading theme of the Manual is the risk management. Growth in
15 volume of operations is blocked not only by the capacity of the financial market but also
16 by another major strategic constraint. It is risk management that becomes a complicated
17 problem when developing any banking activity. The inability to take the risk factor into
18 consideration results in a deterioration of the assets' quality, reduction of effectiveness of
19 operations, and, eventually in a situation where a period of rapid growth ends up in a
20 crisis, or even insolvency, of commercial banks.

21 Two opening chapters of the Manual are devoted to strategic planning of bank and
22 to risk management in banking. Those chapters introduce the key notions and concepts,
23 which are used throughout the Manual. In Chapter three «Credit Risk Management», the
24 largest of the lot, the subject of risk management is given detailed expression as applied
25 to the key sphere of banking – lending. As far as other categories of financial risks are
26 concerned, they are discussed in the following chapter «asset and liability management».

1 As the market economy takes ever-deeper roots in the country it becomes virtually
2 impossible to develop a bank without understanding its role as a market institution.
3 Chapter five «Marketing» is devoted to this aspect of strategic management. With the
4 opportunities of the most profitable and relatively uncomplicated segments of the
5 financial market exhausted, the key factor of success of a banking strategy becomes the
6 availability of modern technologies and qualified personnel. The above important points
7 of resource backup are dealt with in the chapters «humanResource Management» and
8 «management of Information Technologies».

9 A feedback mechanism is required for managing any complex organization. The
10 development of the banking system has now reached such a level where judicious
11 managerial decision-making, or just expressing reasonable opinions on financial and
12 economic activities, are impossible without effective systems of data collection and
13 evaluation. It is not by chance that the last two years have seen a growth of interest in the
14 problems of internal control and management accounting in banks. The problems of
15 collection and evaluation of data on the bank's activities, with the accent placed on its
16 internal use by the bank managers, are the subjects of chapter seven «Performance
17 Management System and Management accounting» and chapter eight «Audit».

18 The last chapter «Some Issues of Management Bank Operations» contains a review
19 of banking operations (in the strict meaning of that term, as differentiated from banking
20 products and services).

21 This publication is targeted mainly for bankers. At the same time, the Manual offers
22 a detailed consideration of the basic notions and definitions directly referring to the main
23 issues under discussion. It makes the book accessible to any reader acquainted with the
24 fundamentals of finance and also makes it possible to use the Manual as a textbook for
25 an advanced study course in banking. The material is presented in such a way that the
26 reader can begin to study it from any chapter that may be of interest to him/her.

27 On behalf of the authors' team we would like to give special thanks USAID and
28 KPMG Barents Group, prominently to Thomas Barrell for his contribution into
29 initialization of the working process and to Patrick Bryski, Geil Baisky, Norman Baxter,
30 David Dad, Michael D'Emic, Gin George, M. Grzhebin, William Haworth, Brain Kurtz,

1 Hank Merrill, L.Norka, V.Rudko-Silivanov, O.Selezneva, Roger Simmons, as well as to
2 others who have contributed in preparation of the Manual.

3 **Michael Higgins**

4 **Vladimir Platonov**

STRATEGIC PLANNING

1

2 Thomas Barrell
3 Michael Higgins

4 *As banking developing the strategic planning has become one of*
5 *the key factor of success. The main aim of this chapter is to provide*
6 *thorough consideration of the logic of the strategic management and*
7 *planning process. A special attention is paid to the analytical tools of*
8 *strategic planning including external and internal analysis, SWOT*
9 *analysis, as well as the task of achieving sustainable competitive*
10 *advantage. Especial focus is made on the consideration of the problems*
11 *of development and implementation of Strategic Plan.*

12 Sometimes strategic planning is little more than an annual budget-related exercise
13 and the means to an end rather than end. This is largely due to the fact that an executive
14 management team is faced with rapidly changing regulative environment as well as new
15 challenges in operational level and have make decisions more and more complicated
16 matters. Their reaction is to get as much authority as possible to improve their
17 organization performance. When market share is dropping, the reaction is to sell
18 products and services harder. When a segment of the market's loans go bad and the
19 percentage of bad debts increases, the reaction is to stop lending.

20 This is understandable except that those actions hardly ever fix the situation.
21 Selling harder is of little value if the products and services do not fit the customers'
22 *demands and capacities*. Cutting off lending activity simply cuts off a source of revenue
23 and does not make the quality of loan portfolio better. These actions fail because they
24 are a trial-and-error approach. The successful bank strategy can only be put into practice
25 by taken a number of coherent, well-planned decisions throughout the period of time, for
26 example a year.

1 The Process of Strategic Management and Planning

2 Nature of Strategy in Banking

3 Today's high performance foreign banks have upgraded from annual budget related
4 planning to strategic management and planning. *Strategic Management and Planning* is
5 the managerial process of developing and maintaining a viable fit between the bank's
6 objectives, businesses, and resources and the changing market environment and
7 regulations. The aim is to shape and reshape the bank's businesses and products so that
8 they promote to growth, yield target profits growth, and increase in shareholder value.

9 Four key ideas define strategic management and planning.

10 *The first* key idea calls for a *strategic vision* of the bank (general description of the
11 future organization, businesses and main strategy of the bank). In other words it is
12 managing through enlightened leadership and a coherent, unifying, and integrated set of
13 strategic decisions which are concerned with the:

- 14 • scope of the bank's activities;
- 15 • matching of the bank's activities to CBR (Central Bank of Russia)
16 requirements;
- 17 • matching the bank's activities to its resource capabilities and developing the
18 ability of allocation and reallocation of resources;
- 19 • values, expectations, and objectives of the bank
- 20 • bank's long-term planning aimed at achieving sustainable advantages and
21 long-term growth;
- 22 • implications for change throughout the bank.

23 *The second* key idea calls for managing a bank's businesses as an *investment*
24 *portfolio*, consists of the quasi separated businesses for which the bank decides which
25 business entities to build, maintain, phase down, or terminate. Each business has a

1 different *profit potential*, and the executive management team should allocate the bank's
2 resources according to the profit potential i.e. according to market criteria.

3 *The third* key idea is to assess accurately the future profit potential of each business
4 by considering the bank's position.

5 *The fourth* key idea is that of strategy and planning for each business. This will be
6 covered in the Chapter Marketing.

7 *Essence of Strategic Management and Planning*

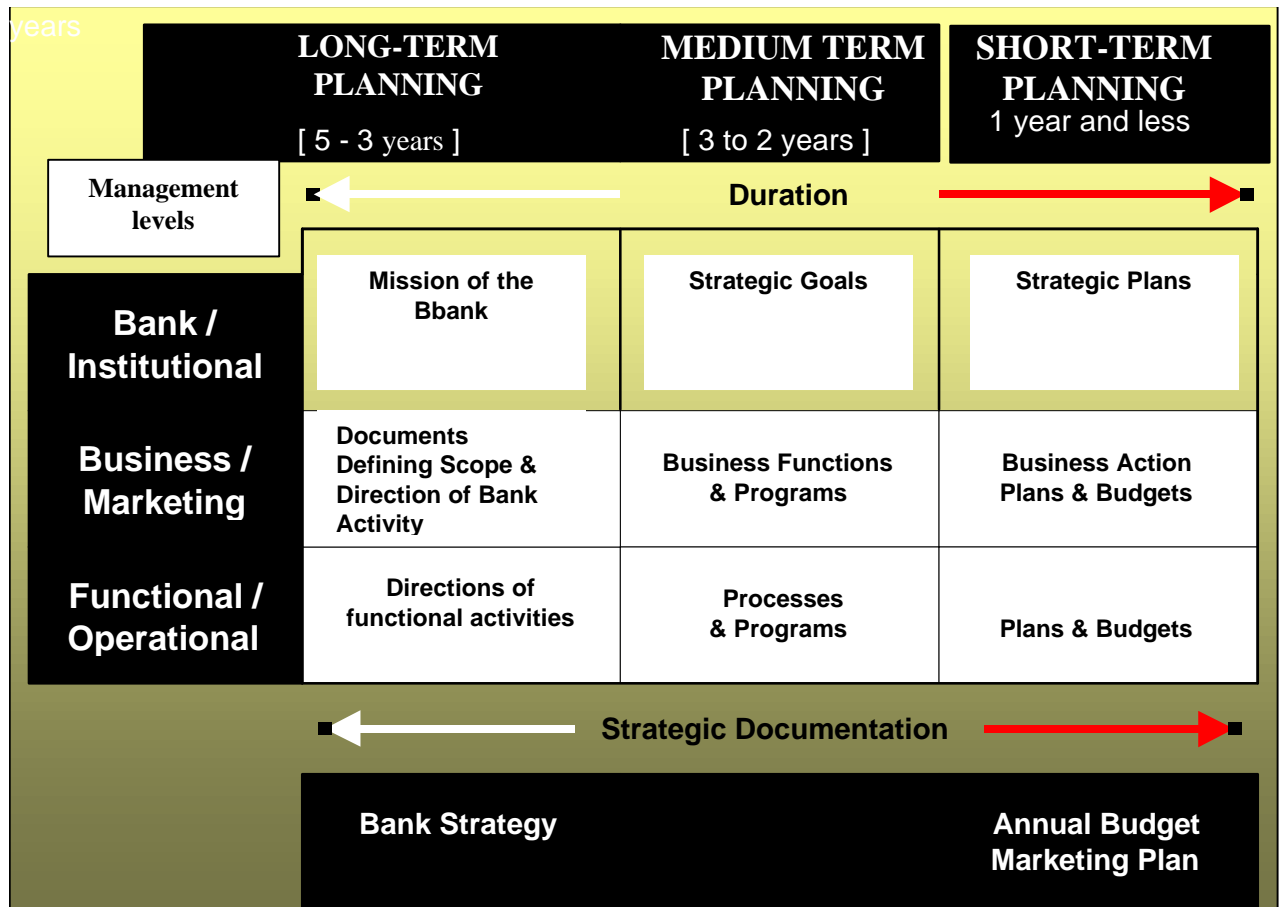
8 In Russia most banks today still do not have a strong sense of direction or strategic
9 focus. Generally, this weakness results from fragmented leadership, the lack of a
10 carefully conceptualized and clearly articulated strategic vision of the bank. It is seen the
11 lack of a systematic approach to strategic management and planning process to provide
12 the discipline and accountability needed to maintain strategic focus.

13 Usually even in the good bank, regardless of size, there is no one defending the
14 strategic vision of the bank, rather everyone operates from a private agenda, often with
15 conflicting *priorities* and values. The primary reason many banks perform poorly, even
16 when a commitment is made to strategic planning is because the bank and its senior
17 management team are not strategically *focused*. They are too concerned with doing
18 things right and not concerned enough with doing the right things. It is needed to ensure
19 survival and superior performance in a changing and increasingly competitive
20 environment.

21 Therefore it is not surprising that today's high performance banks are those who
22 succeed best in defining and implementing the strategic vision of the bank. They stay
23 focused through a formalized strategic management and planning process by which the
24 strategic vision of the bank is to be realized.

25 The chart in the

1 Figure 1 depicts the strategic management and planning process in a high
 2 performance bank. Multiple levels of management – from the bank's headquarters to
 3 functional support offices – are involved in the process. While the strategic planning
 4 process may look ahead 3 – 5 years, it also provides the long-term context for the annual
 5 budgeting cycle. Each point (time period) in the planning process is characterized by its
 6 own unique documentation, as shown in the bottom horizontal bar in this chart.



7
8

9 Figure 1 Strategic Management & Planning Process

10 Levels of Strategic Planning

11 To understand the strategic management , and planning process, one must
 12 recognize that according to the approach widely accepted in abroad banks consist of
 13 three hierarchical levels or layers of the formal planning process.

1 1. Bank level. At the this level reside the strategic vision decisions which will
 2 guide the entire enterprise into the future, define which types of business the
 3 bank will be in, organizational structure, and allocation of resources. The
 4 decision-makers at this level are the Board of Directors, President, and higher
 5 executive management (e.g. bank pravlenie or governor)

6 2. Business level. At this level reside the core strategies aimed at achieving and
 7 maintaining long-term competitive advantage ;by identifying:

- 8 • target groups and needs;
- 9 • products and services which satisfy those needs;
- 10 • geographical coverage;
- 11 • key success factors;
- 12 • business objectives;
- 13 • performance measures.

14 These strategies are unique to each business defined at the Bank level. The
 15 decision-makers are the heads of departments, businesses or market managers.

16 3. Functional/Operational level. At this level strategies are designed which
 17 consolidate the functional/operational requirements demanded by the composite of
 18 businesses of the bank but also constitute the depository of the systems/processes which
 19 develop and maintain the unique competencies and sustainable advantage of the bank.
 20 The decisions are made on the level of the support unit managers concerning human
 21 resources, MIS, technologies and operations.

22 The concepts and suggestions presented in the section are relevant to the bank
 23 level.

24 *Sequence of Strategic Management and Planning Process*

25 Consider a model, which illustrates the formal strategic management and planning
 26 process (See. Figure 2). It recognizes the three essential levels of managerial decision
 27 making; serves to depict the different nature of planning tasks undertaken at each level,

1 defines where final decisions should be made, and a possible sequence for the execution
 2 of those task.

3 Regarding the sequencing and nature of the tasks, it is important to distinguish
 4 which have a more permanent character. Although planning is a continuous process
 5 throughout the year, there are certain aspects that are not significantly altered in each
 6 planning cycle. This is step 1 and 2 or strategic drivers which will remain constant for
 7 between three and five years.

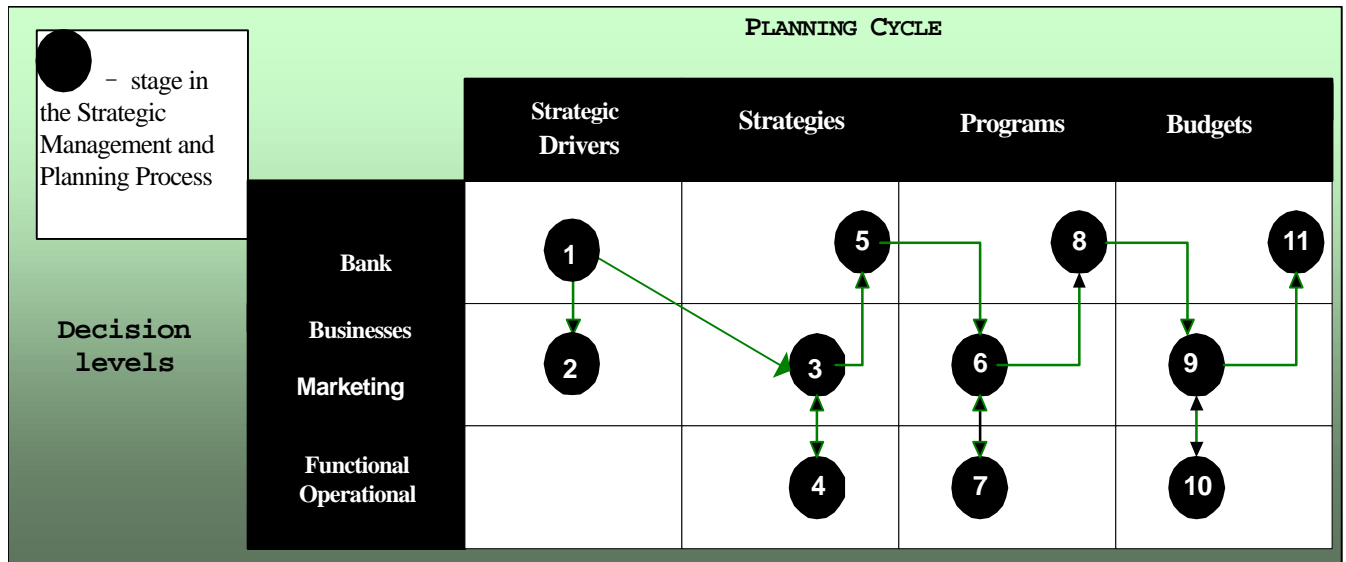


Figure 2 Sequence of Strategic Management & Planning Process

11 At the same time Steps 3–11 need to be revised during every annual planning cycle.
 12 The definition of strategy resulting from this planning process is expressed as a hierarchy
 13 of objectives from very broad guidelines to very detailed action plans. Each level and
 14 each unit in the bank can find in the definition of strategy a piece of information or goal
 15 that applies directly to them.

16 With regard to the execution sequence, the essence of the process is neither top-
 17 down nor bottom-up. It is a much more complex requiring a strong participation of key
 18 managers at all level. Objectives are proposed from the top and specific programs and
 19 alternatives are proposed from the business based on an already agreed solutions between
 20 the business and functional units.

1 Steps in Strategic Management and Planning Process

2 **Step 1. Strategic Mission of the Bank:**

3 *Strategic Mission* is a statement of the bank's current and future expected product,
4 market, and geographical scope, as well as the unique competencies the bank has and
5 will developed to achieve a long-term sustainable competitive advantage;, and the
6 priorities for the strategic agenda to take advantage of identified opportunities and
7 protect the bank from identified threats. As such, it provides basic guiding principles and
8 a set of expectations that condition the rest of the strategic activities at all managerial
9 levels.

10 *Market segmentation.* The cornerstone of strategic management and planning is the
11 segmentation of the bank's activities into businesses and functional units in accordance
12 with characteristics and demands of separate market segments.

13 *Organizational structure* The central question in the design of the organization is to
14 identify key responsibilities representing the major tasks of the bank and allocate the
15 proper levels of authorities to facilitate the use of the necessary resources to execute the
16 assigned tasks.

17 *Institutional Philosophy* addresses the following issues:

- 18 1) The relationship between the bank and its primary stakeholders, i.e., customers,
19 shareholders, employees, and the communities in which it operates;
- 20 2) A statement of broad objectives of the bank's expected performance, primarily in
21 terms of growth and profitability;
- 22 3) A definition of basic corporate policies with regard to issues such as management
23 style, human resource management, marketing technology, etc;
- 24 4) A statement of corporate culture and values pertaining to ethics, beliefs, and rules of
25 personnel and bank behavior

1 ***Step 2: Mission of the Strategic Business Units***

2 Mission of the strategic business units is the expression of the business purpose, as
3 well as standards defining the required degree of excellence to assume a position of
4 competitive leadership. The primary information that should be contained in a statement
5 of mission is a clear definition of the current and future business scope (product, market,
6 and geographic) and ways to compete. Mission should contain the criteria to assess the
7 success in its implementation, for instance it could be quantified as growth of
8 profitability, increase of market share or increase in the level of customer satisfaction and
9 so on. Mission of every SBU has to promote to the fulfillment of the mission of the bank.

10 ***Step 3: Formulation of Business Goals and Strategies***

11 A business strategy is a well-coordinated set of programs aimed at securing a long-
12 term sustainable competitive advantage. These programs should respond to achievement
13 of the business goals established for the business from the bank level, to the desired
14 changes in the mission of the business, address the *opportunities and threats* revealed
15 during the assessment of the environment. It is important that these programs should
16 reinforce strengths and neutralize weaknesses uncovered in the internal analysis of bank
17 activity.

18 ***Step 4: Formulation of Functional Strategies***

19 Formulation of *functional strategies* is based on understanding what the
20 competition is doing in terms of developing unique capabilities, and being able to match
21 or exceed their competencies. From a strategic point of view, simply knowing the bank's
22 cost base or productivity rate is not relevant unless this is positioned in full contrast to
23 similar factors being developed or implemented by the competition. It is not the bank's
24 costs that matter, but it is the bank's costs relative to its key competitors.

1 ***Step 5: Bank Level Approval and Resource Allocation Prioritization***

2 Once the business and functional units' strategies are coordinated they must receive
3 bank level approval. ; Based upon this approval, the senior management team then must
4 rank order the various strategies in order to allocate the bank's resources. (See section
5 devoted to analysis of the strategic choice).

6 ***Step 6: Definition and Evaluation of Target Programs***

7 After receiving prioritization and approval of the business's strategies, the next step
8 is to define and evaluate *target programs* for change or improvement. These programs
9 must be linked to the business objectives and strategies.

10 ***Step 7: Definition of Functional Requirements and Costing***

11 Once the businesses have formulated their target programs for change, they must be
12 distributed to the appropriate functional units for assessment of the requirements relative
13 to the current capabilities of the bank and costing for delivery. The key here is that the
14 functional units are not evaluating the merits of the program but rather its feasibility and
15 cost with respect to the bank's current capabilities.

16 ***Step 8: Approval of Long-term Programs***

17 Once business and functional units have defined required programs and developed
18 detailed time and costing tables, they are presented to senior management at the bank
19 level for final approval and resource allocation. These programs are broad in nature
20 and typically cover a multi-year planning horizon, which are understood to represent the
21 long-term strategic objectives of the business unit.

22 ***Step 9: Definition of Action Plans and the Budget***

23 In addition to the broad programs, there are specific action plans with duration of
24 between six and eighteen months. These action plans are more tactical in nature and

1 needed for realization of specific performance objectives. These action plans must be
2 supported with specific budgets and performance measures for management control.

3 ***Step 10: Definition of Functional Responsibilities and Costing***

4 Action plans, once again, involve functional commitments translating a business
5 strategy into an articulation of integrated multi-functional activities. These activities
6 must be approved by the appropriate functional units and further translated into the
7 annual budget.

8 ***Step 11: The Final Plan and Budget Approval***

9 The final annual operative and functional plan *is* then submitted to senior
10 management for sanctioning and resource allocation. There are three primary categories
11 of information, which is part of a well-designed operative plan. The first is a narrative
12 concerning key descriptive elements of the target programs and action plans. The second
13 is a budget, and the third is a definition of performance measures for management
14 control.

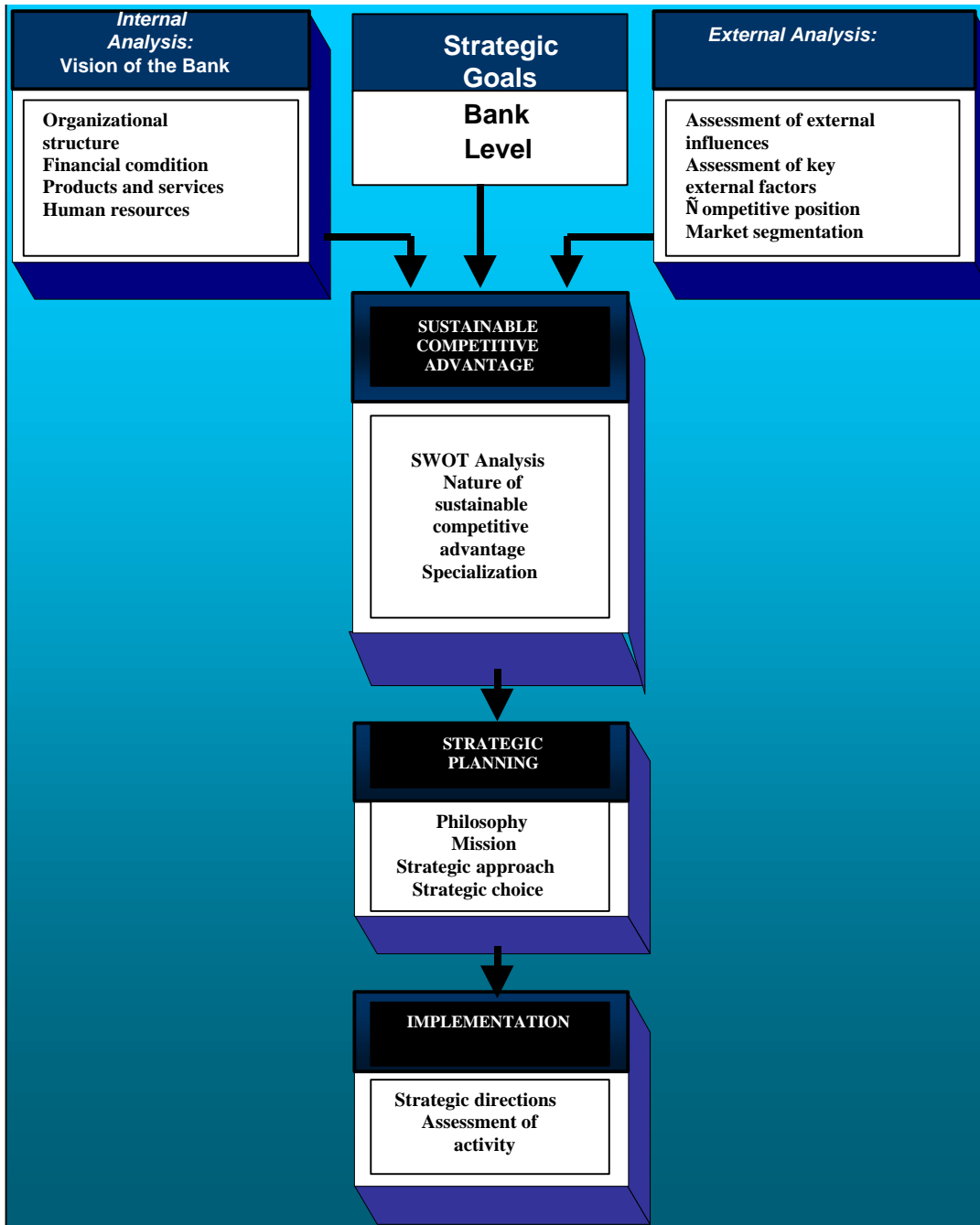
15 ***Management Control***

16 Management control *is* achieved through a monthly business review document and
17 meeting. This monthly review document details the actual performance of the businesses
18 and functional units versus the stated plan. In particular, it monitors: the target programs
19 for change, the specific action plans, and the performance measurements. The monthly
20 meeting provides business and functional managers to present to senior management
21 explanations for any variances from plan and forecast any changes to the plan.

1 Analytical Tools of Strategic Planning in Banking

2 Approach to Strategic Decision Making

3 Now consider in details the two first steps of the strategic management and
4 planning process. These steps reside entirely at the bank level. They have enormous
5 significance because they are the fundamental mechanism allowing the executive
6 management team to provide a sense of vision and leadership to the bank as a whole. The
7 bank / institution level tasks cannot be delegated to any lower level in the organization.
8 The strategic planning process is illustrated in Figure 3.



1

2

Figure 3 Elements of the Bank Strategic Planning Process ; :

3 Strategic management and planning is primarily concerned with the future direction
 4 of the bank as a whole. This involves managing change within the banking environment
 5 – external and internal change. This involves strategic decision-making, which is
 6 concerned with:

7

- the scope of a bank's activities;

8

- the matching of the bank's activities to real market demands;

- 1 • the matching of the activities the bank to its resource capabilities
- 2 • the allocation and reallocation of major resources in the bank;
- 3 • the future directions of bank development in the long term;
- 4 • the ability of bank to adapt to changing environment.

5 Strategic Management

6 Strategic management is concerned with deciding on strategy and planning how
 7 that strategy is to be put into effect. It can be thought of as having three main elements
 8 within it and it is these elements which provide the framework. They are strategic
 9 analysis strategic choice and implementation of the strategy.

- 10 1. In *Strategic analysis* the strategist seeks to understand the strategic position of
 11 the bank, e.g., What changes are going on in the environment and how will they
 12 affect the bank and its activities? What is the resource strength of the bank in
 13 the context of these changes? Thus, the aim of strategic analysis is to form a
 14 view of key influences on the present and future well being of the bank and
 15 therefore on the choice of strategy.
- 16 2. *Strategic approach.* ; It is based on strategic analysis. This aspect of strategic
 17 management can be conceived of as having three parts to it:
 - 18 • generation of strategic options;
 - 19 • evaluation of strategic options;
 - 20 • selection of strategy which contributes to the strategic posture of the bank.
- 21 3. *Strategic implementation* ; is concerned with translation of strategy into action.
 22 Implementation involves resource planning in which the logistics of
 23 implementing are examined.

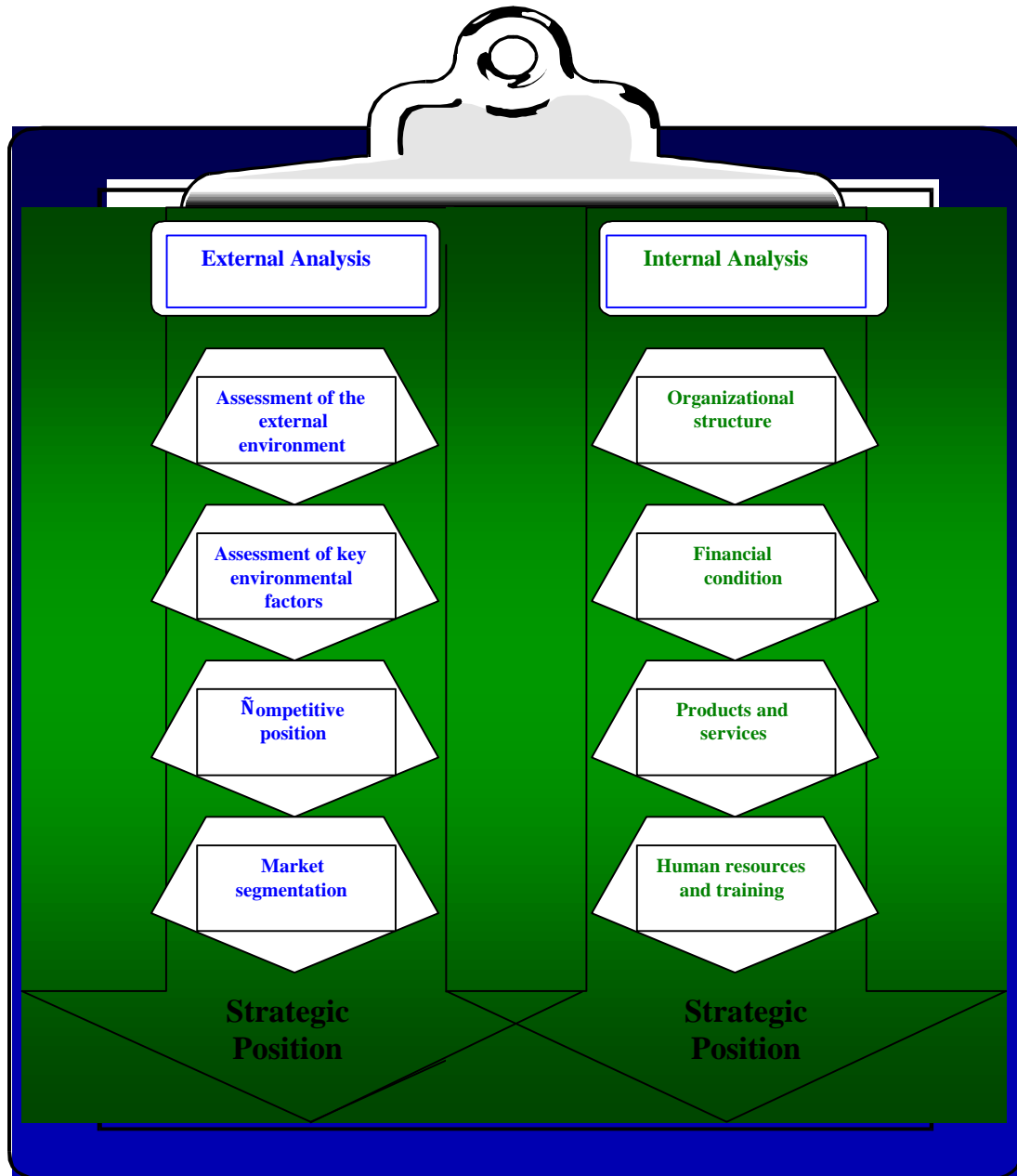
24 For example:

- 25 • What are the key tasks needing to be carried out? What changes need to be
 26 made in the resource mix of the bank?

- 1 • By when? Who is to be responsible for them? It is also likely there will be
- 2 changes in the organizational structure needed plus adaptation of the
- 3 processes and procedures used to manage the bank.
- 4 • What will different businesses and functions be held responsible for?
- 5 • What sorts of information are needed to monitor progress?
- 6 • Will retraining be involved?

7 Strategic Analysis

8 The formulation of strategy is concerned with matching the capabilities of the bank
9 with its environment. Therefore, strategic analysis must make an assessment of both the
10 competitive environment the bank is operating in and its internal resources and
11 capabilities. The steps of strategic analysis are shown in Figure 4.



1

2

Figure 4 Steps in the Strategic Analysis

3 **External Analysis**

4 Bank strategists faced with the need to understand the effects of the environment,
 5 are dealing with a difficult problem. The notion of the environment encapsulates very
 6 many different influences, and the difficulty is in understanding this diversity of factors
 7 in a way, which can contribute to strategic decision making.

1 The attempt to adopt a ‘balance sheet’ approach, which consists of listing all
2 conceivable environmental influences in an attempt to identify opportunities and threats,
3 is very dangerous. It is relatively easy to see that a bank might have a whole range of
4 things going for it and a range going against it: long lists can be generated for most
5 banks. However, if external analysis consists of this alone the limitations are significant.
6 No overall picture emerges of what are really important influences on the bank. What is
7 more, there is the danger that attempts will be made to deal with environmental
8 influences in a piecemeal way. As the result there will be impossible to make systematic
9 strategic response.

10 The difficulty of the bank strategist are further complicated by having to make
11 strategic decisions and pursue strategies which it is capable of implementing and
12 sustaining.

13 In banking strategic capability is crucially linked to its competitive position and its
14 ability to sustain competitive advantage;. In some instances banks have the added
15 burden of social and public responsibilities. Here, strategic capability also is concerned
16 with the extent to which the bank is able to fulfill its expected role within acceptable
17 financial limits and without undue overlap with products of bank-competitors.

18 ***General Algorithm of Analysis***

19 The external analysis attempts to diagnose the general condition of the banking
20 industry as a whole. It concentrates on assessing the overall economic, political,
21 technological, and social factors that are affecting the banking industry.

22 The following approach is an analytical one. It provides a series of steps that enable
23 an assessment of the external environment to take place. It is necessary to remember that
24 the role of each step is in relation to the others and not stand-alone. They are summarized
25 in Figure 4.

1 *Step 1: Assessment of the External Environment*

2 This first step involves auditing the external environmental factors/influences with
3 the aim to identify which of the many different sorts of environmental influences have
4 influenced the bank development and performance in the past and to take an initial view
5 as to which will in the future.

6 That is why, this assessment has to be conducted first from a historical perspective
7 to determine how well the bank has positioned its resources to meet the challenges
8 presented in the past. Next the bank strategist needs to forecast future trends and seek a
9 repositioning of resources. As the result the bank can either take advantage of
10 opportunities or protect the bank from threats.

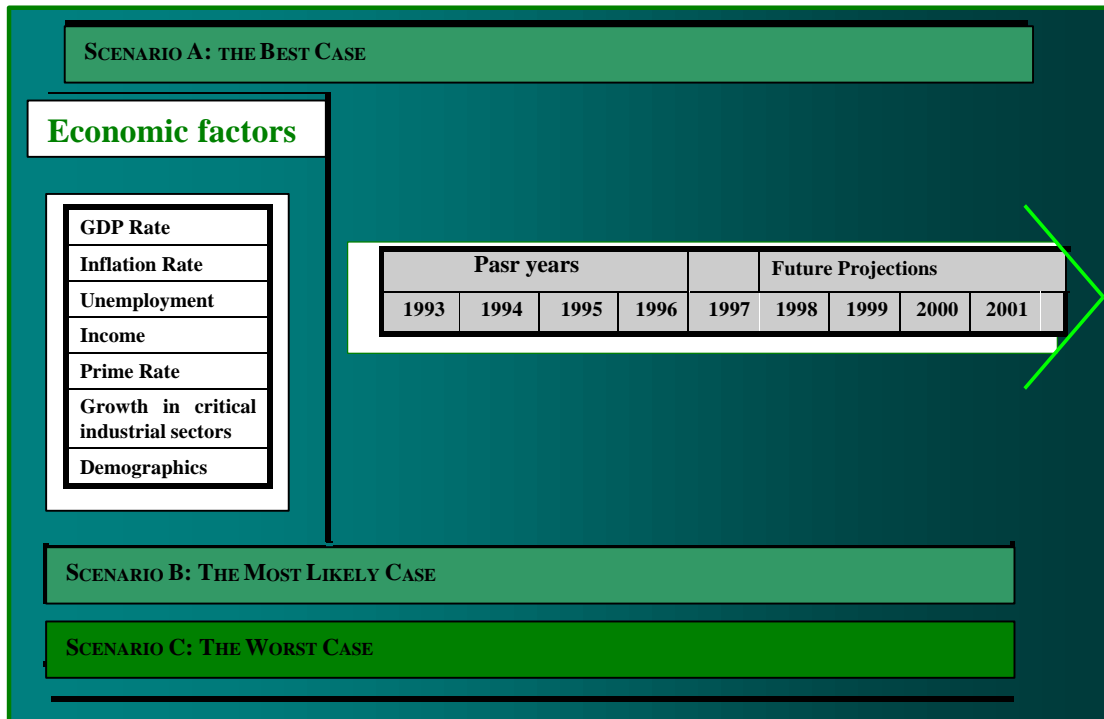
11 The ability to sense changes in the environment is very important because they
12 signal the possible need for changes in strategy and strategic positioning. The evidence
13 is that high performance banks are those that are better able to sense environmental
14 changes and react. The problem of coping with environmental factors affecting the bank
15 depends on:

- 16 • assessment of the extent to which environmental changes will affect strategy;
- 17 • understanding the ways these environmental changes will affect strategy;
- 18 • relating these changes to the capabilities of the bank to cope
19 with such changes.

20 The output of Step 1 normally starts with an economic scenario;, which exhibits
21 three possibilities affecting the planning cycle:

- 22 • the best case;
- 23 • the most likely case;
- 24 • the worst case.

25 The example of the best case is represented in Figure 5. The list contained in it is
26 not intended to definitive or exhaustive.



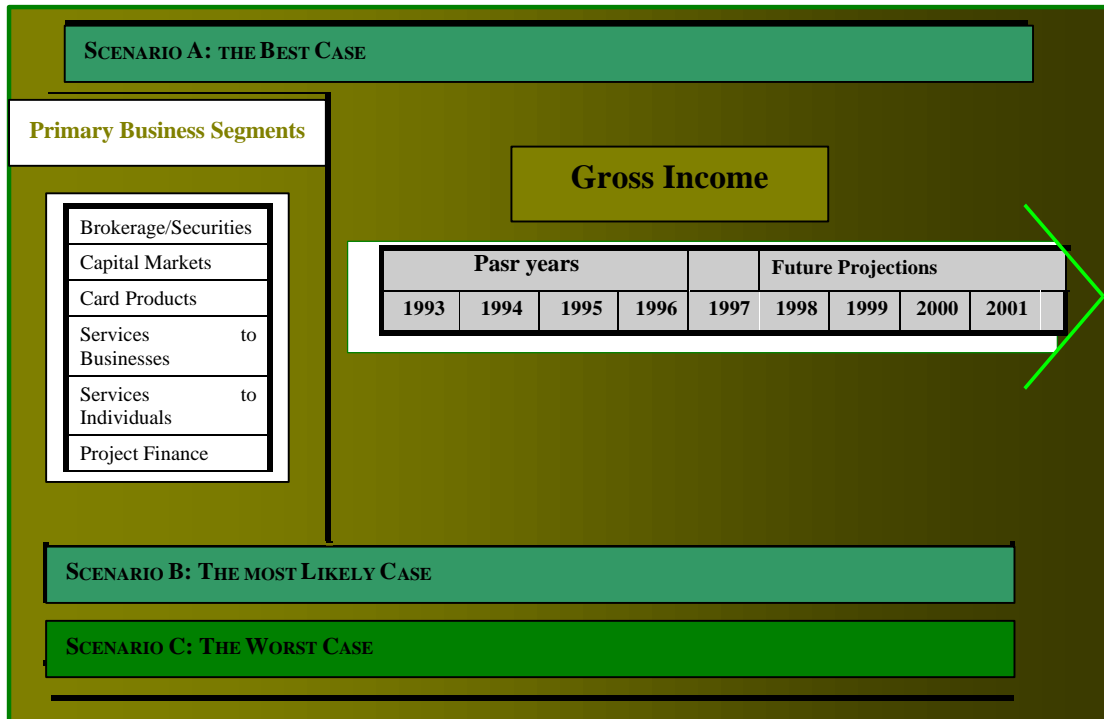
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Figure 5 Economic Overview

3 The final step in the analyzing of scenarios is to make projections of the future
 4 developments by spotting the best, the most likely and the worst scenarios. So the bank
 5 management can develop the action plan for any future course of events.

6 The second output of Step 1 normally contains the primary business scenarios
 7 having impact on primary bank business segments. As in the above-mentioned example
 8 the list contained in the Figure 6 is not intended to definitive or exhaustive.



1

2

Figure 6 Audit of Primary Business Segments

3 Bank should track all business scenarios and assess their impact on all key bank
 4 businesses. It is also necessary to make initial assessment of uncertainty of competitive
 5 environment in which bank operates and to provide clear understanding: is it constant or
 6 changes? What are the mechanisms of these changes? This assessment promotes to
 7 forecasting of the business segment development in the future that is illustrated in Figure
 8 7.

9 If the bank operates in a fairly static environment then detailed, systematic
 10 historical analysis is most useful (trend analysis with consideration of various long-term
 11 trends). If the environment is in a dynamic state or shows signs of becoming so, then a
 12 more future oriented perspective is required. This can be done by considering the extent
 13 to which the bank's strategy and structure are matched or mismatched to the
 14 developments in the environment. This analysis provide a picture of external
 15 environmental factors. As the result it will be clear enough to provide an understanding
 16 of opportunities which can be built upon and threats which have to be overcome or
 17 circumvented. This analysis commonly known as a SWOT that means *strengths*,
 18 *weaknesses*, *opportunities*, *threats*.

1 ***Step 2: Identify Key External Factors***

2 The next step in the external analysis is to identify those influences outside the
3 bank, which will likely have a major effect on its future performance. At this stage of the
4 strategic planning process, it is mainly important to identify as many major influences as
5 possible. As discussed in a later section, the list should eventually be winnowed down to
6 a more manageable size, with the most important external factors identified as
7 opportunities or threats. The table below provides an example of external trends or
8 developments, which could significantly impact a bank's performance.

9 **Economy:**

- 10 • Inflationary trends;
- 11 • Economic growth, both nationally and regionally;
- 12 • The performance of different industrial sectors, such as energy, transportation,
13 and timber;
- 14 • Foreign investment trends.

15 **Legal and Regulatory:**

- 16 • Bank capital; and reserve requirements;
- 17 • Adoption of deposit insurance protection;
- 18 • Migration to international accounting standards;
- 19 • Enforceability of security agreements.

20 **Competition:**

- 21 • Relative quality and pricing of bank's products and services;
- 22 • Financial condition and stability of competitors;
- 23 • Service delivery relative to competition;
- 24 • Comparative advertising and marketing.

25 **Technology and automation**

- 1 • Technological advances to increase volumes and lower costs;
- 2 • Development of 24 hours a day service in market;
- 3 • Potential of automation ; to reduce paper-intensive processes;
- 4 • Comparative quality of management information systems.

5 **Political and cultural issues**

- 6 • Political uncertainties and their effects on net inward investment;
- 7 • Confidence in the banking system and its effect on savings deposits;
- 8 • Uncertain future of state-owned enterprises;
- 9 • Trends in privatization of state-owned property.

10 **Market area**

- 11 • Success in identifying and meeting customer needs;
- 12 • Market leader or market follower;
- 13 • Bank customer profile compared to socioeconomic market characteristics;
- 14 • Business and economic trends in the market area.

15 One of the challenges in analyzing the key external factors is to obtain good
 16 sources of information. A number of sources are available to Russian bankers, and some
 17 of the best are the following:

- 18 • the customer data base of the bank;
- 19 • interviews with customers about their suppliers and customers;
- 20 • newspapers, such as Expert, Finansovie Izvestiya, Kommersant Daily and regional
 21 newspapers;
- 22 • Western correspondent banks, especially their credit departments;
- 23 • reports by the government, the central bank, and international donor agencies,
 24 such as USAID, TACIS, or the World Bank;
- 25 • annual reports of competitor banks;

- 1 • reports of directors and employees of the bank
- 2 • local or national banking association.

3 ***Step 3: Assessment of Competitive Position***

4 This third step analyzes the bank's competitive position. That is how it stands in
5 relation to those other banks competing for the same customers. This may be done in a
6 number of ways with high performance banks concentrating on:

- 7 • strategic group analysis, which seeks to detail/map competitors in terms of
8 similarities and dissimilarities of the strategies they follow;
- 9 • market share analysis, which seeks to detail/map out the relative power of a bank
10 within its market.

11 ***Strategic Group Analysis***

12 It is useful to consider the extent to which banks differ in terms of:

- 13 • extent of product or service diversity;
- 14 • extent of geographic coverage;
- 15 • number of market segments served;
- 16 • distribution channels used;
- 17 • marketing effort/strategies;
- 18 • product or service quality;
- 19 • technology leadership/capabilities;
- 20 • operational cost position;
- 21 • pricing policy;
- 22 • size of organization.

1 *Market Share Analysis*

2 The extent to which one competitor has a greater market share than another is an
3 important aspect of the capability of that competitor. Market share is, in effect, a
4 measure of market power and it is important to gain an understanding of both the
5 structure of a market and the relative power of competitors within this structure. One
6 way of doing this is to break down the market according to business segments and to
7 examine market shares within those business segments. (See chapter Marketing).

8 *Step 4: Market Segmentation*

9 Market segmentation is an important part of strategic planning, since it enables a
10 bank to seek opportunities by capitalizing on its strengths. The way this is accomplished
11 is by dividing the bank's larger market area into distinct segments. A market segment is
12 defined as a group of customers with largely similar product and service requirements
13 that are different from those of other customers (i.e. corporate short-term credit versus
14 mortgage loans to individuals).

15 Because of the increasing complexities of the financial marketplace, it has become
16 difficult for any commercial bank to be a top performer in servicing all types of customer
17 segments. The best performing commercial banks typically choose an area of focus, and
18 then concentrate on servicing that market segment (i.e. Citibank in consumer banking or
19 Menatep in investment banking).

20 For a bank to be successful, it must understand the dynamics of that market
21 segment and the key success factors, which are required to excel in the marketplace.
22 Each Russian bank should align its resources against, and strive to compete in, those
23 market segments where analysis shows that it can achieve a sustainable competitive
24 advantage, ; enabling the bank to earn an attractive long-term return on its investment.

25 Many Russian banks strive to be successful universal banks. The markets in which
26 a universal bank may operate include the following:

- 27 • Servicing to corporations – Corporate Banking;

- 1 • Servicing to smaller clients – Retail Banking;
- 2 • Small Business;
- 3 • Correspondent Banking;
- 4 • International Banking;
- 5 • Corporate Finance;
- 6 • Private Banking;
- 7 • Federal and local Governments;
- 8 • Treasury Services;
- 9 • Clearing, Settlement;
- 10 • Custody;
- 11 • Depository services;
- 12 • Management of Investment Portfolio;
- 13 • Brokerage and Dealing.

14 Each of these market segments has different characteristics, such as:

- 15 • size and capacity;
- 16 • projected segment growth;
- 17 • leading banks;
- 18 • segment economics (e.g., risk/return profile).

19 The segments also differ in another important way – the key success factors for
 20 each market segment may be different. The Table 1 contrasts some of the key success
 21 factors for Corporate Banking and Consumer Banking segments.

22 **Table 1 Comparative Key Success Factors: Corporate and Consumer Banking,**

CATEGORY	CORPORATE BANKING	CONSUMER BANKING
<i>Market Presence/ Reputation</i>	Name Recognition Strong Capitalization	Effective Advertising Reputation for Innovation

	Clients are Industry leaders	
Product Range/ Pricing	Full Range of Wholesale Products Extremely Price Sensitive	Extensive Range of Retail Products Competitive Rates
Human Resources,	Strong marketing/Analytical Skills Deal Structuring Proficiency	Flexible Lower Cost Human Resource Base
Marketing Approach	Extensive Calling Provision of Advice/Information	Mass Media/Promotions
Delivery Mechanism	Superb Relationship Management Selective but Outstanding Branch Locations in the Centers of Business Activity	Convenient Hours of Operation Extensive Branch Network
Systems/Technology	Superior Management Information Systems Sophisticated Exposure/Return Monitoring:	Significant Technology Investment

1
2 The difference in success factors in these two market segments demonstrates that a
3 bank must use a different approach in each market to be successful. This is a very
4 important concept, which will be discussed more fully in the later section on Analysis of
5 Strategic Options.

6 The ultimate result of step by step assessment will be developing of clear
7 understanding of future projections, which are really significant for the bank. It is
8 impossible to identify all external influences and not any future development has impact
9 on the bank performance but assessment of strategic importance of future developments
10 what it is important.

11 Internal Analysis

12 As just discussed, the external analysis looks outward to identify trends and
13 influences which could shape the future of the bank. The internal analysis has a different
14 vantage point. It represents an objective assessment of the internal features of the bank,
15 which constitutes the other half of the overall situational analysis. There are many

1 different internal aspects of the bank, which can be considered. The following are among
2 the most important: organizational structure; financial condition; products and services,
3 and human resources.

4 Corresponding to similar part in the External Analysis section, below are
5 summarized some desirable internal characteristics whose absence or presence should be
6 noted as part of the internal analysis:

7 ***Organizational Structure***

- 8 • Sufficient decentralization of decision making;
- 9 • Flatness of the organizational structure;
- 10 • Sufficient functional management expertise and management depth;
- 11 • Well-defined and organized strategic business units;
- 12 • Excellent communication vertically, horizontally, and externally;
- 13 • Written policies for credit, investment, asset and liability management and
14 human resources.

15 ***Financial Condition***

- 16 • Adequacy of capital to risk-weighted assets;
- 17 • Good asset quality with minimal nonperformance loans and adequate reserves;
- 18 • Conservative and focused management with strong technical skills;
- 19 • Sufficient earnings and good expense maintenance to earn attractive risk-
20 adjusted returns;
- 21 • Adequate liquidity, stable deposits, and diversified funding options.

1 *Products and Services*

- 2 • Sufficient range of asset, liability, and service products to meet needs of
- 3 targeted markets;
- 4 • Market-driven pricing sufficient to cover product risks;
- 5 • Strong knowledge of customer needs and wants;
- 6 • Bank orientation towards customer service;
- 7 • Sufficient number of branches in good locations with convenient operating
- 8 hours.

9 *Human Resources and Training*

- 10 • Right number of people with right skills, performing right tasks;
- 11 • Strong program of recruitment, regular performance appraisals, and competitive
- 12 compensation;
- 13 • Minimization of turnover;
- 14 • Strong orientation towards customer service;
- 15 • Continuous training to enhance job skills;
- 16 • Contingency plan to ensure succession of management.

17 Ultimately, the purpose of the internal analysis is for the bank to identify its
 18 strengths and weakness. As most bankers review the above list, they will no doubt spot
 19 some areas of comparative strengths, but also some where the bank needs to improve its
 20 improve its performance. And the above list is not exhaustive. Some other critical areas
 21 to examine include the following:

- 22 • Management Information Systems; .
- 23 • Operations;
- 24 • Information Technologies;

- 1 • Bank Marketing;
- 2 • Bank Image;
- 3 • Bank Policies.

4 A thorough, objective "check-up" of how the bank is doing in each of these areas is
5 critical to the ultimate success of the strategic planning effort. Comparing the assessment
6 of the bank today (i.e., the internal analysis) with the market and its potential (i.e., the
7 external analysis) is the essence of the SWOT analysis described in the next section.

8 *Achieving a Sustainable Competitive Advantage*

9 The external analysis and internal analysis are two aspects of what is known as the
10 situational analysis of the bank. The process of conducting a yearly situational analysis,
11 in conjunction with updating the strategic plan, is valuable for two reasons:

- 12 1) It enhances communication within the bank, thereby building teamwork and
13 solidarity and a stronger sense of common purpose;
- 14 2) It forms the necessary basis for conducting a SWOT analysis of the bank's
15 *strengths-weaknesses-opportunities-threats*. The internal analysis examines
16 many facets (i.e., financial, technological, cultural) of the bank to determine
17 which of them may most positively contribute to the bank's performance (i.e.,
18 its strengths) and which may make the bank the most vulnerable (i.e., its
19 weaknesses). Similarly, the external analysis looks outward to identify positive
20 trends or developments (i.e., opportunities) and negative ones (i.e., threats).
21 Drawing meaningful conclusions from the synthesis of this analysis is the
22 essence of SWOT analysis.

23 To focus on the most meaningful influences, it is important that the SWOT analysis
24 confine itself to considering only several items in each of the four categories. One way of
25 identifying the most important items is to respond to simple questions. For example,
26 considering only negative external influences for the moment, which threats are most
27 likely to have the greatest negative impact on net profits over the next three years? Or in
28 terms of weaknesses, in a targeted market segment, are there any key success factors that

1 the bank lacks relative to the competition? Remember that it is not enough for the
2 potential impact of a threat or weakness to be negative; one must consider the probability
3 as well. Clearly, those possible events where both the potential impact and the
4 probability are high deserve the most significant management attention.

5 By way of example, the following SWOT analysis may apply to a number of
6 Russian banks:

7 *Strengths*

- 8 • Participant in World Bank/EBRD twinning program;
- 9 • Extensive branch network;
- 10 • Numerous government contacts;
- 11 • Core bank of Financial Industrial Group (FIG)
- 12 • Conservative reputation.

13 *Weaknesses*

- 14 • Insufficient long-term resources;
- 15 • Excessive industry concentration in portfolio;
- 16 • Poor management information systems. .
- 17 • Unduly centralized decision-making;
- 18 • Lack of a well-conceived, dynamic strategic plan.

19 *Opportunities*

- 20 • Project finance needs of clients;
- 21 • \$15 - 20 billion cash savings not in banking system;
- 22 • Increased access of Russian banks to overseas term funding;
- 23 • Weakness of some regional banks;

- 1 • Expense savings through rationalization of network.

2 ***Threats***

- 3 • Weak image of banking system;
- 4 • Access of competitor banks to long-term sources of funds;
- 5 • Competition has technological or new product advantage;
- 6 • Declining returns on GKO and other government debt securities;
- 7 • Loss of access to inexpensive government funding.

8 The SWOT analysis should be studied carefully to determine if there are strategic
9 initiatives which the bank might pursue. Are there any opportunities (i.e., increasing
10 investment in the banking sector) which can help the bank overcome a weakness (i.e.,
11 insufficient capital)? Or any threats (e.g., competitor access to long-term funds) that
12 could neutralize one of the bank's strengths (e.g., loyal client base). The SWOT analysis
13 helps a bank focus on its sustainable competitive advantages,, which are the key to its
14 long-term profitability.

15 A sustainable competitive advantage is a feature of a bank, which it can manage
16 and cultivate in such a way that it can produce returns superior to the competition for the
17 foreseeable future. Such an advantage can arise in a number of ways. Some possible
18 examples are the following:

- 19 • Superior quality of personnel;
- 20 • Locational advantage;
- 21 • Industry expertise;
- 22 • Market niche;
- 23 • Lowest cost provider of services;
- 24 • Market reputation;
- 25 • State-of-the-art technology;

- 1 • Dominant market share.

2 A competitive advantage is rarely acquired instantaneously. It is more likely to
3 grow over time as the bank strives to develop a *core competency* in a certain area. And,
4 generally speaking, the deeper-rooted the core competency, the more likely the
5 competitive advantage acquired can be sustainable.

6 For a Russian bank, a core competency may be industry-related, such as in the case
7 of a bank which has successfully lent to the petroleum industry for many years,
8 developing a thorough understanding of the business and strong client relationships,
9 which in turn have provided the bank with a well-entrenched market niche. Or a bank
10 may acquire a core competency ;in technology and successfully use that technology, for
11 example, to increase its market share of consumer deposits in its regional market. Then it
12 may apply that technology or core competency in other markets, to expand its consumer
13 business and increase its nationwide market share. Or a bank may acquire a unique
14 product or service through a strategic alliance with a foreign bank, which it is difficult
15 for its domestic competitor banks to replicate.

16 Regardless of the source of a bank's core competency, it is at the heart of a bank's
17 competitive advantage. Generally, a bank will demonstrate a competitive advantage by
18 acting in one of three ways:

- 19 1) Providing products and services at a low cost (i.e., economies of scale ;in the
20 provision of plastic cards);
- 21 2) Providing significant added value (i.e., corporate finance or private banking);
- 22 3) Serving as a niche player in the market (i.e., providing products and services to
23 the automobile industry).

1 Development of the Strategic Plan

2 Strategic Approach to the Bank Activities

3 **Step1: Developing of Bank Philosophy**

4 Bank philosophy is a permanent statement developed by the bank's senior
5 executive management team, which addresses the following issues:

- 6 • What are the principles to maintain the relationship between the bank and its primary
7 stakeholders, i.e., shareholders, customers, employees, and the other stakeholders
8 belongs to the environment where bank operates¹?
- 9 • What are a statement of broad objectives of the bank's expected performance,
10 primarily expressed in terms of growth and profitability ?
- 11 • What is the definition of basic bank policies with regard to issues such as
12 management style, organizational policies, human resources management financial
13 policies, marketing, as well as implementation of new technologies .
- 14 • What is a statement of bank values pertaining to ethics, beliefs, and
15 rules of personal and bank behavior ?

16 The bank philosophy has to provide a unifying theme and a vital challenge to all
17 organizational units. It should communicate a sense of achievable ideals, serve as a
18 source of inspiration for confronting daily activities, and become a contagious,
19 motivating, and guiding force congruent with the bank's ethic and values (See Table 2).

20 **Table 2 List of Issues Considered During Developing of Bank Philosophy;**

<p><i>Relationship w/Stakeholders:</i></p> <p>Shareholders Customers Employees Others</p>
<p><i>Broad Bank Objectives:</i></p> <p>Growth Profitability</p>

¹ For example: representatives of legal authorities, influential public organizations and so on.

<p><i>Bank Policies:</i></p> <p>Management style Personnel Credit Accounting Procedures</p>
<p>Bank Values:</p> <p>Ethics Behavior</p>

1

2 ***Step 2: Formulation of Mission Statement***

3 The aim of the formulation of the mission statement is a statement of the current
4 and future expected product scope, market scope, and geographical scope supported by
5 the core competencies of the bank has or must develop to achieve and sustain
6 competitive advantage. Strategic focus is often called the mission of the bank. The
7 declaration made explicit in the mission statement contains an inherent definition of
8 priorities for the strategic agenda of the bank, and simultaneously it identifies how the
9 major opportunities (identified during the external environmental analysis) for growth
10 and those capabilities that have to be enhanced to achieve superior performance and
11 competitive advantage;. As such, it provides basic guiding principles and a set
12 of expectations that are going to condition the rest of the strategic activities at
13 all levels of the bank (See Table 3).

14

Table 3 Mission Statement

	CURRENT / FROM	FUTURE / TO
Product and Services Scope	Loans	Loans Plastic cards CD
Market Scope	Medium sized companies	Medium sized companies Individuals
Geographic Scope	Moscow	Moscow and Moscow region
Ways to Achieve Competitive Advantage	Based on well established customer relationships	Implementation of state of the art technology

15

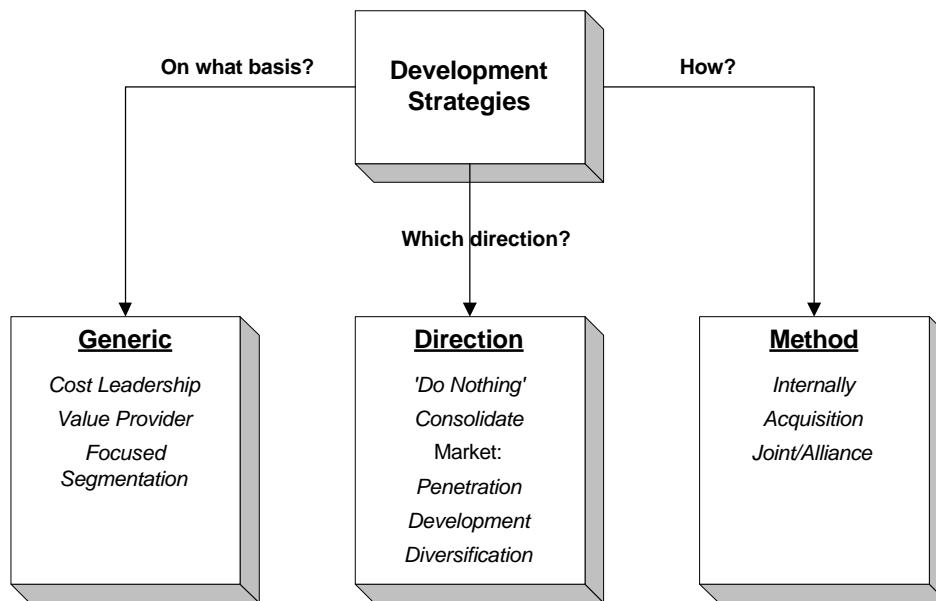
16 This can be further detailed and amended to express the major challenges, which
17 the bank is facing, going forward.

1 **Step 3. Strategic Approach**

2 Each bank has to implement strategic approach. Growth is a major objective but
 3 cannot be the single rationale for change. As we have being trying to establish strategic
 4 choice is in response to the unique and special circumstances which a bank has identified
 5 during its strategic analysis.

6 There are three strategic choices, which must be made or considered (See Figure 7).

- 7 • The generic strategy to be pursued by the bank, i.e., the basis on which the
- 8 bank will compete or sustain competitive advantage;
- 9 • The direction in which the bank chooses to develop;
- 10 • The selection of method by which the bank will achieve success.



11

12 **Figure 7 Strategic Directions of Bank Activity**

13
 14 Before considering the development directions it is important to determine the basis
 15 on which the bank will compete and sustain a superior level of performance. This basis
 16 of competition is often called the generic strategy or the strategic driver (See Figure 8).

17 The purpose of the *main (core) strategy* of the bank is to define:

- 18 • the type of competitive advantage bank seeks to attain;

- 1 • specification of competitive advantage;
- 2 • the scope within which it will be achieved;
- 3 • its impact on level of future performance.

4 ***Low Cost Producer or Price Leader***

5 There are many banks who sustain their competitive advantage through continued
6 attention to their *cost structure* versus the competition. If a bank is to sustain cost
7 leadership successfully across their range of activities they must be clear on how this s to
8 be achieved through the various elements of the value chain? It should analyze
9 operations, use of processes, technology and so on. These banks can be a price leader²
10 and achieve superior performance through generating volume, i.e., economies of scale.

11 ***Value Provider or Differentiation***

12 Those banks, which are primarily concerned with developing relationships, should
13 provide superior value for which they can charge a premium. So the bank that has proved
14 its ability of fast and reliable money transfer can charge fee for maintenance settlement
15 accounts. Those banks, which have no similar reputation, use different core strategies
16 that are not based on this competitive differentiation.

17 ***Focus or Niche Player***

18 These same generic strategies can be applied by banks who have the ability to
19 segment the marketplace and focus on particular parts or niches for example on niche
20 that represents one product or group of similar customers.

² It means better ratio of price to quality.

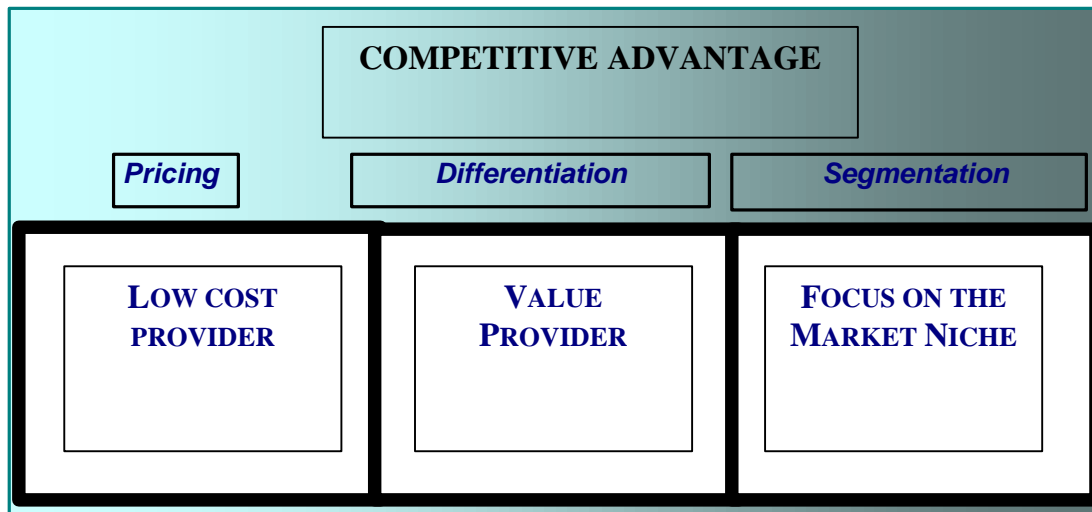


Figure 8 Examples of Core Strategies or Strategic Drivers

Alternative Strategies

Next, the bank needs to determine the alternative direction, which it will take. The alternatives available to the bank are:

- *'Do Nothing'* – represents the situation whereby the bank continues to follow its current strategies even if the environment is changing;
- *Withdrawal* – is an option where partial or complete withdrawal from a business segment would be the most sensible course.
- *Consolidation* – implies changes in the specific way the bank operates, although the range of products and markets served may remain the same; for example, maintaining market share in a growing market.
- *Market Penetration* – Opportunities often exist for gaining market share as a deliberate strategy. Increasing service quality, product offerings or enhancements, capacity, or increasing marketing activity could all be means of achieving market penetration. Banks which had failed to follow the natural growth of a market may need to catch-up at later date which can often prove more difficult. So they lose the advantage of the first step. Though at the same time banks-followers may gain advantage learning from mistakes of innovators.

1 •*Product Development and Implementation* – Often banks will feel that
2 consolidation in their present product/markets does not present adequate
3 opportunities and will search for alternatives, which build upon the bank’s
4 present knowledge and skills. In the case of product development the bank
5 maintains the security of its present markets while enhancing and developing
6 new products.

7 •*Entering into New Markets* – again the bank maintains the security of its present
8 products while venturing into new market areas. This can include entering new
9 market segments, exploiting new uses for products/services or spreading into
10 new geographical areas.

11 •*Diversification* (increasing the directions of bank activities) – diversification deals
12 with strategies, which enable the bank to eliminate over-concentration on a few
13 products, services or markets.

14 For each strategic direction a further choice is also needed, the method by which it
15 will that direction is to be developed. These methods are divided into three types:
16 internal development, mergers and acquisitions, and strategic alliances with a third party.
17 Like most strategic decisions, the choice between these methods involves a trade-off
18 between a number of factors such as cost, speed and risk. How this trade-off is viewed
19 in any one situation is directly related to the circumstances of the bank and the attitudes
20 of those making the decision.

21 ***Step 4: Analysis of Strategic Options***

22 The next step in the strategic planning process is for the bank to evaluate its
23 strategic options. This is one of the most critical steps in the process, and it is important
24 that the bank use a rigorous methodology to assist it in the evaluation of its alternatives.
25 Clearly, the bank cannot pursue all the options available to it. The answers to the
26 following set of questions should assist the bank in determining which options are the
27 most attractive to pursue:

- 1 • Which of the options will best assist the bank in meeting its mission, while also being
2 consistent with the bank's philosophy and strategic approach?

3 Based on the SWOT analysis, which alternatives will:

- 4 - help the bank capitalize on its strengths and minimize its weaknesses;
5 - permit the bank to take advantage of its business opportunities while overcoming or
6 minimizing its threats;
7 - build on the bank's core competencies and permit the bank to achieve a sustainable
8 competitive advantage;;
- 9 • Are there any economically attractive alternatives (i.e., the closing of branches)
10 which the bank cannot pursue because of political or social reasons ?
- 11 • Which options seem most likely to provide the highest risk-adjusted return on equity
12 to the bank, thereby permitting the bank to maximize shareholder value ?

13 The responses to the above questions should enable the bank to identify certain
14 options, which have a clear superiority in terms of their strategic value. However, the
15 bank should also consider certain additional criteria that could affect the attractiveness of
16 some of the options. One of the key issues is the *cost* associated with pursuing certain
17 options. For example, if the bank is poorly capitalized but wishes to expand its corporate
18 banking activity, it will incur a significant financial cost in boosting its capital. Also, it
19 may need to hire and/or train its staff in corporate banking skills, which will result in
20 significant human resource costs. Another key issue is the *time factor*. Let us assume that
21 a bank with little experience in consumer banking but an outstanding branch network
22 decides to become a consumer banking powerhouse. This would entail a major
23 investment in technology from which a positive return may not be realized for a number
24 of years.

25 One way for the bank to incorporate these considerations into the planning process
26 is to do financial projections of how the different options will affect the bank's financial
27 performance. Projections are especially valuable if the bank must choose between several
28 options and needs to know the expected present value that the different options will
29 provide.

1 Another tool that can be very helpful in this analysis is market segmentation. Let us
 2 assume that a bank wishes to improve its market position in consumer banking. The first
 3 step is to quantify the cost of this initiative is to consider the key success factors, which
 4 this market segment requires. The bank should then assess its position today relative to
 5 those key success factors. The difference between the two represents a “gap which can
 6 only be closed by incurring certain financial and human resource costs. The Figure 9
 7 provides an example of how such an analysis might be done for a hypothetical bank,
 8 which wishes to improve its consumer banking operations.

Category	Key Success Factors	Bank position today	Gap
Human Resources	Flexible, low-cost human resources base Lower skilled but well-trained staff	Rigid, high-cost human resource base Additional training required	Bank needs to lower cost of its human resources base and increase training
Systems/Technology	Significant technology investment 1. ATM 2. Phone banking 3. Credit scoring	Outdated technology ATM's not functioning properly No phone banking	Bank needs to make a significant investment in modern technology
Product Range	Extensive range of asset and liability products	Limited range of liabilities products, i.e., deposits	Bank needs to expand somewhat its range of products

9
10

11 Figure 9 Example of Market Segment Gap Analysis for Consumer Banking (the Services to
 12 Individuals)

13 Bank can use this analysis to assess the costs of developing the given type of
 14 services to individuals and to get information that is necessary for choice among several
 15 alternatives.

1 Implementation – Bank Level

2 Strategic analysis and choice are of little value to a bank unless the proposals are
3 capable of being implemented. Strategic change does not take place simply because
4 senior management desires it. It takes place if it meets real organizational demands and
5 can be made to work.

6 *Strategic thrusts* constitute a powerful mechanism to translate the broad sense of
7 directions the bank wants to follow into a practical set of prescriptions to all key
8 managers involved in the strategy process. Strategic thrusts are defined as the primary
9 issues the bank has to address during the next three to five years (in accordance with
10 bank plan horizon) to establish superior performance and a competitive position in the
11 key businesses, markets or products in which it participates. Strategic thrusts should
12 contain specific and meaningful planning challenges for each of the strategic business
13 and functional units of the bank. The process of collective reflection on the strategic
14 thrusts by the senior executive management team requires assessing primary issues,
15 assigning priorities, and identifying responsibilities is a major advance in strategic
16 thinking for many banks. On the surface, it may sound like a relatively simple and
17 straightforward exercise. This is far from being the case. The formulation of strategic
18 thrusts requires raising the central questions the bank should address for a meaningful
19 strategic development. Once the strategic thrusts are stated and agreed on, the bank has
20 established an important part of a coherent framework to implement the bank's
21 strategies.

22 The matrix containing strategic thrusts can be read in three different ways. (See the
23 Table 4).

24 1. *Read the matrix as set.* Analyze the overall set of issues identified for
25 completeness and to confirm whether, as a set, they really capture the totality
26 of the strategic initiatives facing the bank and that they are sufficiently
27 aggressive to be challenging and impact strategic change.

1

Table 4 Matrix of Strategic Thrusts

Strategic Thrusts	Bank Level	Strategic Businesses			Strategic Functions			Performance Measures and Due Dates
		Corporations	Individuals	Investments	Operations	Technologies	Marketing	
To increase the volume of corporate deposits		X					X	Rate of increase – 50% per 5 years
To increase the revenues from credit cards		X	X		X	X	X	Rate of increase – 25% per 2 years

2

3 2. *Read the matrix horizontally.* Each strategic thrusts can be identified and
4 evaluated individually to make sure that the bank has properly associated the
5 right business and or functional areas which should be in formulating action
6 plans and responsible for implementation.

7 3. *Read the matrix vertically.* This will for detection of roles assigned to each
8 unit and to spot potential bottlenecks and the critical level of involvement of
9 each unit.

10 The matrix also provides information relevant to due dates and the means to
11 determine performance.

12 Performance objectives are quantitative indicators of the overall performance of the
13 bank. Typically, banks choose to express their strategic objectives via a selective
14 number of indices predominantly of a financial nature. It is also beneficial to set both
15 short and long term targets.

16 Figure 10 presents those often used to assess the bank performance. The set of these
17 indices can be enlarged in accordance with objectives of the given bank.

Size	Sales Assets Profits	Growth	Sales Assets No. of Accounts	Profitability	ROA Profit Margin	Marketing	Retention Rate Acquisition Rate Cross-Sell Rate
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1

2

Figure 10 Performance Indicators

3

Conclusion

4 The highly competitive and dynamic nature of Russian banking has made strategic
5 planning one of the most important tools used by senior management. In the Financial
6 Institutions Development Program sponsored by the World Bank and USAID, the
7 strategic planning area is invariably the first area addressed by the Russian bank's
8 international twinning partner. A sound planning process enables a bank to chart a course
9 of directed rather than random growth and be prepared for the challenges and
10 opportunities that lie ahead.

1 RISK MANAGEMENT IN BANKING

2 **Lori Yerzyk**

Vladimir Platonov

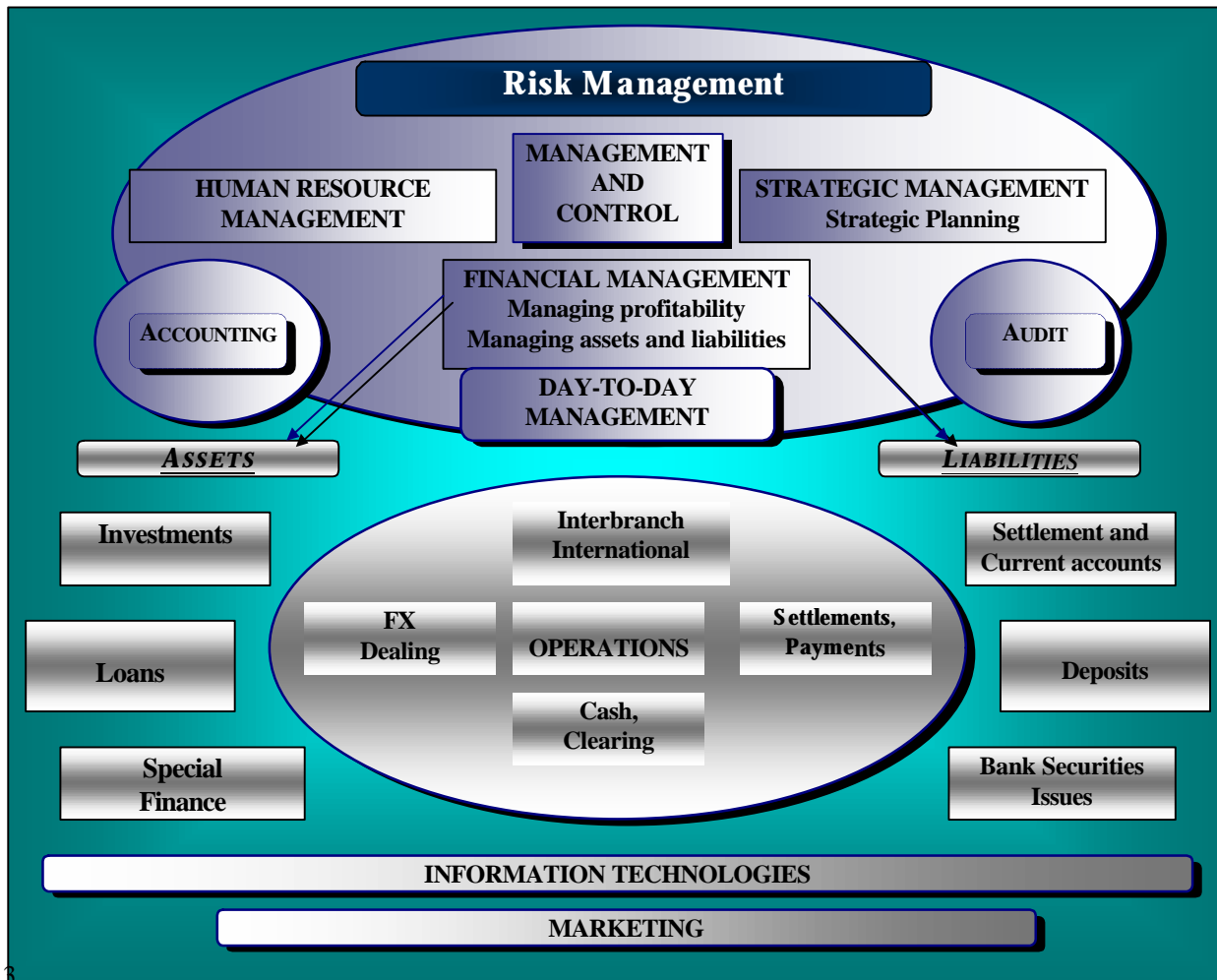
3 *Banking involves numerous risks. At the same time banks have to be the*
4 *most reliable and safety institutions. That is why the risk management*
5 *represents one of the most important tasks in bank management. The*
6 *main types of risks and their impact on decisions making, key approaches*
7 *to risk management, as well as the examples of modern systems and*
8 *techniques of risk management are considered in this chapter. To*
9 *facilitate the work on the next parts of the Manual we recommend*
10 *studying the problems of risk management, assessment, monitoring and*
11 *implementation of risk management system.*

12 **Main Types of Risk in Banking**

13 Although the terms "risk" and "risk management" is frequently used, the concepts
14 themselves are multifaceted and may be defined in many different ways. In its broadest
15 sense, risk means uncertainty about future events. More detailed definitions of risk are
16 usually depends on type of industry of the person who gives definition. Risk in banking
17 means the likelihood of event that could cause an adverse impact on the earnings or
18 equity of credit institution.

19 Risk management function encompasses all bank activities. A number of financial
20 risks are involved in deployment of bank funds. Bank beside these activities takes time
21 deposits, issues securities, raises funds as balances on the transaction (settlement)
22 accounts, etc. that brings new risks. Moreover the fact that financial institution performs
23 both assets and liability side activities means additional exposure. It requires a special
24 approach – Asset and Liability management. Operational activities, implementation of
25 information technologies, marketing produce various functional risks that also might
26 affect negatively on bank's capital and profitability. Environmental risks impact on bank
27 as a whole and some of them as compliance risk is of great importance. That is why risk
28 management is one of the key strategic tasks in bank management. Given task requires

- 1 establishing of a special risk management systems and applies to activity of each unit
- 2 (See Figure 11).



4 *Figure 11 Risk Management and Banking*

5 There are many different classifications of banking risks. Risks are generally
6 classified into three categories, namely:

- 7 • financial;
- 8 • functional;
- 9 • environmental risks.

10 Financial risks result from unexpected changes in volume, return and value of
11 assets and liabilities; they are usually associated with the use of borrowed funds.
12 Functional (often called operating) risks arise in the process of creating products or
13 services; they are present in every bank's operations. Functional risks are caused by

1 inability to ensure timely and comprehensive control over business process, collect and
2 analyze accurate and timely manner relevant information. They may be as harmful as
3 financial risks but more difficult to identify and quantify. Eventually, functional risks
4 also result in financial losses.

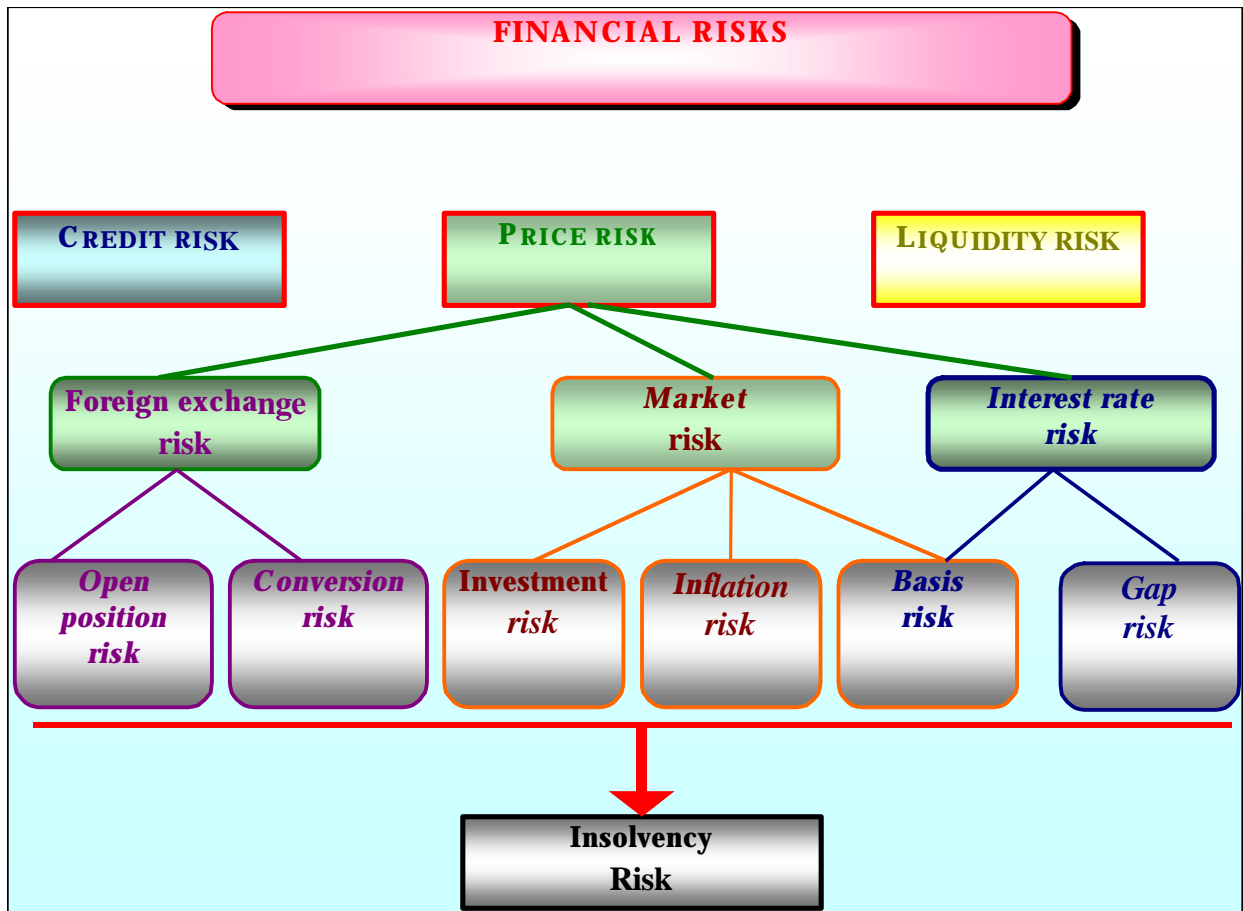
5 Financial and functional risks are generally further divided into several
6 subcategories. Their brief description is given below.

7 *Financial Risks*

8 *Credit Risk*

9 In a broad sense, credit risk refers to as the chance of financial losses due to
10 counterpart default, primarily on the part of borrowers. Credit risk may be associated
11 with both balance sheet and off-balance sheet items. Credit risk may arise from a
12 partner's, borrower or issuer default on formal as well as informal obligations. It may
13 result in varying degrees of risk from nominal to total loss.

14 Credit risk is evident in lending, investment portfolio decisions, inter-bank
15 activities, foreign exchange transactions, guarantees and derivatives trading, as well as in
16 dealing. (Criteria for assessment of credit risk management that are introduced by one of
17 US regulatory body are given in the Appendix to this chapter. Special attention to the
18 problem of credit risk management is rendered the next chapter).



1
2

3

Figure 12 Financial Risks Structure

4 *Liquidity Risk*

5 For a bank, liquidity means ability to meet *timely* claims of depositors and other
6 creditors. Liquidity risk means likelihood the bank's liquidity will be either too low or
7 too high. Risk of insufficient liquidity means that meeting the bank's obligations in due
8 time may be impossible or may require that the bank sell certain assets at a loss. Risk of
9 excessive liquidity is the risk that the bank may lose profits because of redundancy of
10 highly liquid assets and, consequently, unjustified financing of these low-earning assets
11 using interest-bearing liabilities.

12 Liquidity is a measure of the borrower's ability to satisfy current requirements of its
13 creditors as well as meet legitimate requirements of its borrowers. One example of the
14 latter is a bank's commitment to credit lines. Liquidity is impacted by poor credit
15 decisions, unanticipated changes in the interest rate environment, or conditions within

1 the economic environment. Virtually every banking transaction has some impact on
2 liquidity, but the important fact is that many factors behind the bank's liquidity are
3 actually outside of institution's control.

4 The term "company liquidity" (including also "bank liquidity") derives from "asset
5 liquidity"; the term itself originated from the English word "liquid" and initially referred
6 to the ability to convert an asset into cash. This ability, in turn, is determined by two
7 factors:

- 8 • how fast the assets can be converted into cash;
- 9 • to what extent the assets retain their real value when they have to be converted
10 into cash (reversibility).

11 Much of the bank's ability to promptly meet its obligations depends on the liquidity
12 of its assets. However, there is more to it than just "liquidity of assets". The three main
13 factors here are:

- 14 • liquidity of assets;
- 15 • volatility of liabilities;
- 16 • volume and timing of cash flows.

17 Low liquidity could eventually bring the financial institute to insolvency and total
18 failure. If the financial institute fails to meet claims of its depositors and this fact
19 becomes publicly known, a "snowballing" effect (an outflow of major deposits and sharp
20 decrease in balances in settlement accounts with this bank) will be triggered making
21 insolvency irreversible.

22 Measuring liquidity risk is extremely difficult because bank liquidity is affected by
23 many factors, with most of which being outside the bank's control. A number of
24 indicators are used in practice, each describing one single element of bank liquidity. The
25 most well known set of indicators includes balance sheet liquidity ratios

26 The simplest ratio which only characterizes *assets liquidity* is the ratio between
27 liquid assets and total assets of the financial institute (Standard H₅, according to
28 Regulation 1 of the Central Bank of Russia).

1 In order to take into account *volatility of liabilities* one should use limits
2 represented by ratio of liquid assets to volatile liabilities. Examples of such ratios. are H_2
3 and H_3 . Other mandatory liquidity ratio represents ratio of the least liquid assets to the
4 most permanent liabilities (H_4), also exist ratios of liquid assets to major liabilities, loans
5 to deposits, etc.

6 In calculating liquidity ratios the crucial question is: which assets should be
7 regarded as liquid? There happens to be no ready answer, and, as a result, a number of
8 intermediate ratios are applied in financial analysis of industrial and trading companies;
9 these ratios differ by the scope of the "liquid assets" category. In terms of banking, the
10 key important issue is whether to include under liquid assets loans repayable in the near
11 future but, until maturity date, possessing zero reversibility. For this purpose, under the
12 CBR approach, liquid assets are subdivided into "highly liquid assets", which do not
13 include loans repayable in the near future (ratio H_3), and "liquid assets" that contain loans
14 maturing within the next 30 days (ratio H_2). The same adjustments should be made for
15 the bank's liabilities as well. If these ratios are used for internal risk control, and not for
16 the purposes of banking supervision, the 30-day liquidity horizon appears too loose and
17 should be reduced 2.5 to 3 times.

18 Apart from ratio analysis, a number of other tools are used for the purpose of
19 balance sheet liquidity assessment. One example is analysis of maturity ledger of asset
20 and liabilities, as prescribed in Note 8 to Regulation 17 of CBR. However, this approach
21 is of a lower analytical value and can be viewed as halfway to more detailed liquidity
22 ratio analysis.

23 Balance sheet liquidity ratios have become popular because they are relatively easy
24 to use. However they share one important weakness. Under this approach, a bank is
25 viewed as a portfolio of assets and liabilities, rather than a going concern. This
26 assumption is acceptable for external examination of the bank by supervisory authorities
27 or investors, but absolutely irrelevant for internal bank management objectives. In the
28 latter case, balance sheet liquidity analysis must be substantiated by cash flow analysis. It
29 focuses on detailed cash flow statement covering inflow, outflow and the difference
30 between the two, item by item.

1 (Criteria for assessment of liquidity risk management that are introduced by one of
2 US regulatory body are given in Appendix to this chapter).

3 ***Price Risks***

4 This term stands for a whole group of banking risks, which constitute, together with
5 credit and liquidity risks, the major financial risks. Price risks result from the possibility
6 of unexpected changes in the rate of return or value of the bank's assets and liabilities.
7 Three key risk in banking refer to this group are interest rate risk, market risk and foreign
8 currency risk:

- 9 • interest rate risk is associated with both assets and liabilities side;
- 10 • market risk refers to risk of changes in market value of assets;
- 11 • foreign currency risk occurs when it is considered value of assets and liabilities
12 which are denominated in foreign currencies.

13 Foreign currency risk and interest rate risk due to their importance in banking are
14 usually classified as separate categories of the same level as price risk. In such a case the
15 word price risk refers to remain assets, mainly securities. When this approach is applied
16 term's price risk and market risk are used interchangeably.

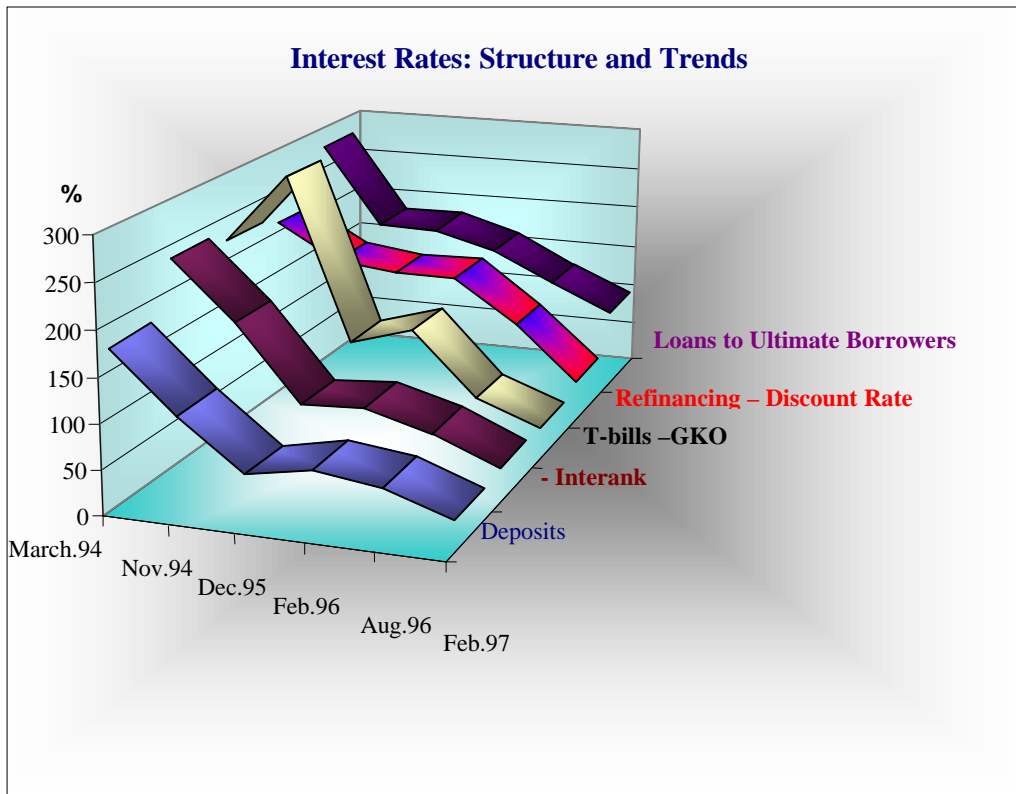
17 ***Interest Rate Risk***

18 Interest rate risk is the risk of the bank's profit being adversely affected by
19 unexpected changes in the general level of interest rates. This type of risk is a direct
20 consequence of interest rate variability and is always present in a market economy.

21 Interest rates differ for borrowing and lending as well as for different financial
22 instruments. Yet they are closely interrelated. This is why one can talk about a general
23 interest rate structure. For example, when interest rates on deposits show a downward
24 trend, interest rates on loans to primary borrowers also decline.

- 25 • The more financial market develops, the clearer this pattern is manifested.

- 1 • As financial market becomes more complex and competition grows, interest rate
2 risk becomes more important variable of a bank financial management.



3

4

Figure 13 Interest Rates: Structure and Trends

5 If interest rates decline, funds are available to the bank at lower cost, but assets
6 generate lower return, as well. When the opposite is true, interests received grow, but
7 cost of borrowing increases as well.

8 In this way, similarly to liquidity risk, every bank is exposed to interest rate risk. In
9 most of the former socialist economies, because of tough government regulation of
10 interest rates, for banks this type of risk has been a minor concern compared to liquidity
11 risk. Though in Russia there is greater degree of deregulation of interest rates, interest
12 rate risk management also has not been given as much attention as liquidity management.
13 This can be explained in part by very short maturities both for assets and liabilities.
14 Another reason was that, initially, banks could easily charge the cost of adverse interest
15 rate changes on clients, primarily depositors. With competition increasing and legislative
16 authorities imposing new regulations, the scope for such strategy became much more
17 limited. In any case, a bank has a chance to partially shift interest rate risk to the

1 customer. However, in deciding whether this, so called aggressive policy, is reasonable
2 management should take into account two important constraints. The first is the degree
3 of competition on the local market. Only if the client finds it difficult to change his
4 banker, the latter can charge fix the interest rate on loans in anticipation of general level
5 of interest rates decline and on deposits, in anticipation of interest rates growth. The
6 other constraint is not so apparent as the first one. As bank moves most of interest rate
7 risk on the borrower, it increases the risk of borrower insolvency that may cause
8 substantially higher losses. It is necessary to take into account that for financial
9 institution this type of risk is much more manageable than for industrial or trade firm. To
10 learn more about management of interest rate risk, See Chapter Assets & Liabilities
11 Management.

12 ***Basis Risk***

13 Basis risk should be differentiated from interest rate risk. Unlike interest rate risk,
14 it is associated with shifts in the interest rate structure, and not with changes in general
15 level of interest rates. In other words, it is caused by irregular dynamics of interest rates
16 on earning assets and cost of interest bearing liabilities.

17 For example, a bank may have done everything to match assets and liabilities by
18 maturities. However, the bank may still be vulnerable to interest rate risk if interest rates
19 on loans are calculated on the basis of inter-bank lending rates but variable interest rates
20 on deposits are not directly linked to this market. Any discrepancy in the dynamics of
21 base rates, which determine returns on assets and liabilities, may result in either profit or
22 loss, which means that interest rate risks are still present.

23 ***Foreign Currency Risk***

24 Foreign currency risk takes place when assets are built and funds raised in
25 currencies of other countries. Foreign currency risk results from multiple factors, not all
26 of them being only market forces. The country's economic trends as well as political
27 events that vary from changes in foreign exchange regulation to social tensions can

1 significantly influence exchange rate of national currency. Foreign currency risk has
2 three main components:

- 3 • *exchange rate risk* – risk of depreciation of foreign currency investment due to
4 unexpected exchanges in exchange rates;
- 5 • *conversion risk* resulting from restrictions on foreign exchange transactions;
- 6 • *risk of open currency position which* results from mismatch between the bank's
7 assets and liabilities denominated in foreign currency.

8 Foreign currency risk may trigger liquidity crisis or become a factor of credit risk
9 due to damaging to financial position of borrowers, which are exposed to this risk.
10 Foreign currency risk is involved in all balance sheet and off-balance sheet operations
11 involved foreign currency. However, a financial institution has little or no control over
12 the factors that result in this risk and therefore, can only protect their interests by
13 techniques that identify and reduce the level of its impact on bank.

14 Criteria for assessment of system of foreign currency risk management that are
15 prescribed by one of US regulatory body are given in Appendix.

16 ***Market Risk***

17 Market risk results from changes in market factors that impact on the value of
18 assets, liabilities and off-balance sheet items. Sometimes the terms market risk and price
19 risk are used interchangeably. It takes place when two other sub-categories of price risk
20 (foreign currency risk and interest rate risk) are considered independently. According to
21 that simplified classification the only subcategory of price risk is the market risk and,
22 hence, these terms are used interchangeably. The accuracy of market risk assessment
23 depends on the accounting practices in use. It becomes most obvious when the financial
24 institution appraises its balance sheet items by their market values as of the end of each
25 business day according to “marked-to-market” approach, as, for example, paevie
26 (mutual) investment funds are prescribed to do. If this is the case, any change in market
27 value will be immediately recorded in the financial institution's assets and liabilities.
28 The other approach to assets valuation is the “lower of cost”. In most Western countries

1 the adequacy of this approaches to assessment a commercial bank's balance sheet items
2 is still debated; very few countries, such as Denmark, have prescribed it to banks. It is
3 important, however, to distinguish between the formal and real aspects of the
4 phenomenon. Unawareness of management about losses, which result from disregarded
5 risk influences, does not mean that such risks are not in fact present. Moreover, the
6 impact of the risk factor is in this case even higher, which leads to more losses.
7 Additional costs are also incurred if benefits are not accounted for in due time.
8 Furthermore financial institutes are especially vulnerable to market risk if assets are
9 listed at their nominal or historical value. Advocates of mark to market or similar
10 approaches believe that these methods reflect a more timely and potentially truer
11 financial condition. However when it is applied to banks, this practice is very costly and
12 appears the less economy effective the longer the term of financial institution's assets.

13 Banks are exposed to market risk for two reasons. The most important, is the risk
14 of change in the value of balance sheet items, primarily assets, and particularly, the
15 *investment portfolio*. But declining market value of equities issued by the bank may also
16 entail increase in costs of capital at the new equity issue.

17 The other part of market risk exposure is associated with the approach to real estate
18 and equipment assessment. In Russia fixed capital revaluation is practiced regularly and
19 does not accurately reflect the asset value. Russian banks are less susceptible to this risk
20 factor than Russian manufacturers. Fixed capital to assets ratio for banks lies between
21 3% and 5%, while for manufacturing it often exceeds two-thirds. Banks are most
22 affected by this part of market risk in the valuation of counterparty's business procedure,
23 which involved in lending decisions, specialized finance and investments.

24 Market risk is gaining increased attention with the January, 1996 amendment to the
25 risk-based capital standards to address market risks for all internationally active banks by
26 the Basle Committee on Banking Supervision. The amendment requires institutions to
27 develop internal market risk measurement models to be used in determining risk based
28 capital adequacy.

1 ***Inflation Risk***

2 Inflation risk affects a bank in a different ways. The most evident adverse effect of
3 inflation manifests itself in devaluation of bank assets that mostly consist of cash, loans
4 and investments. Bank lends cash and after certain period of time the borrower redeems
5 the loan in depreciated roubles. However, high inflation rate may effectively increase
6 return on bank operations, even though it may not be self-evident. By the very nature of
7 their activity, banks usually have the best chances to win from rapid monetary expansion,
8 both through inter-bank borrowings and through credit multiplier. Another factor that
9 turns inflation to the bank's benefit is increase in borrower capacity to pay interests. It
10 takes place when the borrowers are trading companies with quick working capital
11 turnover. Underestimation of this factor often takes effect with significant lag. Banks
12 were faced with declining solvency of borrowers from trading industry in late 1993 –
13 early 1994 and this development resulted in an outburst of nonperforming loans. The
14 cause was unexpected reduction of real demand for loans on the part of the most
15 important group of borrowers. This was one of the reasons caused the first since the
16 revival of Russia's banking system change in interest rates trend from the upward
17 movement to downward trend. (See the chapter Asset and Liability Management).

18 ***Solvency Risk***

19 This type of risk is derived from all other risks, both financial and functional. The
20 danger here is that the bank may find itself unable to meet claims of its depositors and
21 other creditors because accumulated losses have exceeded equity capital. Low liquidity
22 first brings about temporary or technical insolvency of the bank that manifests itself in a
23 deficit in bank's correspondent account with CBR. Real insolvency refers directly to
24 bankruptcy. Negative equity shows that even if all assets would be sold out, the bank is
25 not able to repay all its debts. It means that bank owners' funds have been eroded and
26 that the next step should be liquidation or hand-over. The development of bank
27 bankruptcy legal procedure in Russia has been inconsistent process. This gave rise to an
28 erroneous identification of bank liquidation with the termination of banking license.
29 However, termination of license means just that the bank has not met minimum

1 mandatory liquidity requirements, while liquidation means that the bank ceases to exist
2 as business concern. To make this procedure as painless as possible, court authorities
3 should coordinate efforts with the CBR.

4 *Functional Risks*

5 Functional risks are present in a number of situations. As was mentioned above,
6 such risks are more difficult to identify and quantify in monetary units than financial
7 risks. They are caused by personal mistakes as well as technological failures. Credit
8 institutions normally seek to minimize functional risks by developing internal audit,
9 improving internal reporting, developing operational standards and procedures, making
10 feasibility studies for individual operations, carefully human resources management and
11 maintenance of banking equipment.

12 *Strategic Risk*

13 Strategic risk relates to deficiencies of strategic management including the
14 possibility that the bank may set itself wrong objectives or allocate inadequate resources
15 for implementation and fail implement adequate risk management systems in the
16 institution. Ambitious targets not properly backed by human and financial resources
17 may result in loss of money or reputation. Classical examples include unreasonably
18 large investments in real estate or erroneous entry into new regional markets. Other
19 example of strategic mistake that exposes bank to strategic risk is underestimation of the
20 risk level in derivatives trading when development of this activity is not backed by
21 investments in IT and relevant risk management systems. (Approach for assessment of
22 system of foreign currency risk management that is prescribed by one of US regulatory
23 body is given in Appendix).

24 *Technological Risk*

25 This type of risk is associated with the use of various equipment and technologies
26 in banking. It may be experienced as possible losses due to troubleshooting costs or
27 unauthorized access to key bank data. This category of risk faces any business, but to

1 manage it is especially crucial in a bank environment. Typical examples of technological
2 risk include electronic fraud and electronic funds transfer system failures (see the chapter
3 Management of Information Technologies).

4 ***Risk of Operating Costs or Overheads (Inefficiency Risk)***

5 Inefficiency risk is a likelihood that the bank's spending on its own activities will
6 not be justified by their outcome. It is more difficult to manage overheads in a bank than
7 in any other business because, unlike in manufacturing, it is more difficult to assess to
8 what extent incremental net interest income – the main component of a bank's profit – is
9 affected by non-interest expense. It is noteworthy that the term "operating costs" is often
10 misused in Russia. Thus, the prescribed chart of accounts classifies bank interest
11 expenses as part of operating costs. According to the logic of banking business, however,
12 these two categories should be clearly separated. Interest expenses are virtually the
13 bank's payment for resources (in economic terms, this is the same as a trading company's
14 payment for purchased goods), while operating expenses are costs associated with
15 performing banking operations. One of its main components is labor cost. In contrast,
16 according with approach accepted in domestic practice, payments to bank personnel
17 directly involved in operations are included in management and administration costs.
18 That is why banks that take risk management seriously often use a different non-
19 prescribed by chart of accounts classification of incomes, expenditures and bank balance
20 sheet items.

21 ***Risk of Innovations (Implementation Risk)***

22 Risk of overheads is in close relation to the risk of innovations, that is, the risk of
23 not achieving target returns on new bank products, services, activities, business units or
24 technologies. In this respect a bank is not basically different from other businesses that
25 offer their products on the market. Taking deposits, lending and investments require to
26 compete for customers and achieving the competitive advantage for the bank. This
27 process is influenced by multiple marketing risks. Risk of product innovations is a

1 special case of marketing risk but taken together with the risk of implementation of new
2 technologies within the bank is also one of the most serious exposures in banking.

3 *Environmental Risks*

4 This group encompasses those non-financial risks which, unlike operational risks,
5 are external to the bank. Their impact on bank performance may be dramatic;
6 management of these risks is most difficult to formalize and requires special skills.

7 *Compliance Risk*

8 Compliance risk or risk that bank will fail to comply with government regulations
9 is related to possible losses resulting from new regulatory enactments or amendments to
10 current laws and regulations or losses that are attributed to problems in bank
11 management systems. Losses from this type of risk include:

- 12 • direct losses incurred by paying fines and penalties imposed on the bank;
- 13 • losses because of damage to reputation;
- 14 • losses that result from the financial institution's growing expenditure and
15 shrinking margin when "rules of the game" change. Losses from this risk also
16 include both indirect costs and opportunity costs.

17 Bank's failure to reorganize its activities in accordance with regulatory changes and
18 failure to comply in day to day operations to effective law and regulations results in
19 losses from this category of risk.

20 *Reputation Risk*

21 This category of risk represents possible inability of a bank or another financial
22 institution to protect its reputation as a reliable business partner. Dependence on
23 depositors' funds makes banks very vulnerable to the risk of reputation. Even when
24 rumors that some bank is insolvent are false they could cause lost of depositors' trust in
25 the institution, outflow of borrowed funds and eventually bring about real insolvency.

1 Bank has to pay attention to reputation among individuals as well as its reputation among
2 regulatory bodies, federal and local authorities. Actions to control this type of risk might
3 include maintaining of sufficient liquidity (prevention of delays in payments), prevention
4 of money laundering, participation in development projects of local communities, etc.
5 Criteria for how bank should control compliance and reputation risks management that
6 are introduced by one of US regulatory body are given in appendix.

7 *Interrelationships of Different Types Risks*

8 Next follows an example describing typical banking activities and related risks.

- 9 • Commercial bank extends a loan to a customer with the proceeds used to
10 purchase inventory. The most apparent risk in this operation is credit risk:
11 will the borrower meet his liabilities in full and in due time? Proceeding from
12 the Credit Department's estimate of the probability of unfavorable scenario
13 (non-repayment), the bank has to determine the size of compensation. Here
14 compensation does mean direct coverage in case of unfavorable outcome but
15 rather risk-adjusted pricing, when the probability of loan losses is
16 incorporated in the interest rate.

17 However, this particular operation exposes the bank to a number of other risks including:

- 18 • Liquidity risk: the borrower may default on repayment schedule, which in turn
19 may impact the bank's ability to repay its debts e.g. to deposit holders.
- 20 • Interest rate risk: due to an unexpected general increase in interest rates, the
21 interest income may not compensate for the higher cost of resources.
- 22 • Foreign currency risk is present when lending is in a foreign currency or exists
23 even in roubles, if the bank's liabilities in large extent are denominated in
24 foreign currencies.
- 25 • Several functional risks are also a potential including the possibility of
26 inaccurate collection or reporting of payments, legal documentation, securing
27 of collateral etc.

1 Because in economic perspective the assumption of additional risk virtually means
2 assumption of additional costs, such costs have to be covered. The bank's earnings must
3 reimburse loan and security losses from other assets. This requirement is illustrated by
4 the following formula of calculating credit risk-adjusted interest rate:

5 *Equation 1 General Approach to Determine Interest Rate with Adjustment for Credit Risk*

$$6 \quad I = \frac{C \times r}{P (A)}$$

7
8 Where I – level of interest rate adjusted for credit risk; P (A) – likelihood of loan
9 repayment; C – principal amount; r – rate of return on government securities with similar
10 maturity.

11 *Warranted verses Unwarranted Risk*

12 A warranted is known as risk that is understood by management and able to be
13 controlled and identified. In the contrast unwarranted risks are not fully understood, lack
14 appropriate controls, and/or create excessive concentrations.

15 Risks can be either warranted or unwarranted. At times, a transaction or activity
16 that is warranted given the risk may become unwarranted. For example, risk associated
17 with additional lending or increasing percentage of loans outstanding to one borrower or
18 an related borrowers may become unwarranted even if the borrowers have good
19 creditworthiness. The reason is growing ratio between loans they received and the bank
20 capital. Another example is when the bank is introducing a new product or activity. This
21 business decision may be perfect as it is. However there is a chance that one risk factor
22 or another will get out of control because such decision may involve resource and
23 logistical tensions.

24 Bank can imply a numerous general and specific approaches, methods and
25 techniques to manage any particular type of risk.

1

Approaches to Management of Major Financial Risks

TYPE OF RISK	SYSTEMS AND TECHNIQUES	FINANCIAL AND ORGANIZATIONAL INSTRUMENTS
All financial risks	Analysis, Control, Monitoring; Establishing limits, Internal Audit, Management Information Systems	Limits, Board Committees, Management Reporting, Standards, Written Policies and Procedures
Credit Risk	Credit Approval Process, Credit Administration, Diversification, Hedging, Portfolio Stratification, Pricing, Taking Security, Hands on, Financial and Industrial Groups	Allowances, Ratings, Mortgages, Pledges, Credit Files, Credit Histories
Liquidity Risk	Asset and Liability Management, Balance Sheet Management, Cash Position Management Securitization, Reserve Position Management, Conversion of Funds Approach	Primarily and Secondary Reserves, Minibanks, Money Market Instruments
Interest rate risk	Asset and Liability Management, Gap Management, Hedging, Pricing	Interest Rate Futures, Options, Swaps
Foreign Currency risk	Asset and Liability Management, Open Currency Position Management, Hedging, Diversification.	Foreign Currency Futures, Options, Swaps, Money Market Instruments

2

3 Financial institutions are different and their ability to manage a risk as compared to
4 another institution will vary. Many activities carry significant risk, for example foreign
5 exchange futures and forward contracts. However, the risk may be justified or warranted

1 if the proper controls are in place. Therefore, just because an activity is considered to be
2 high risk, it may be a prudent business strategy with the proper systems in place. In
3 countries with traditionally high performing banking industry, bankers usually share one
4 distinctive feature: they are not afraid to make decisions that involve increased yet
5 controlled risk. In contrast, even low risk operations such as investment in GKO and
6 OFZ could involve high risk if the bank lacks effective system to manage liquidity and
7 interest rate risks.

8 Many times, in evaluating whether a risk is warranted or unwarranted, the best
9 decision must consider the input of several departments and managers within a financial
10 institution. For instance, the following business decision is reasonable and on a stand-
11 alone basis appears to be a good business decision.

12 Bank lends local ore metal refinery that have excellent creditworthiness 10 billion
13 roubles for 6 months at 48% annual interest. The resulting interest income for the period
14 would be 2.4 billion roubles.

15 But have all possible risks been warranted? Can the Credit Department guarantee
16 that this decision will not indirectly affect the bank's overall performance?

17 The following issues may also need to be addressed:

- 18 • Is there adequate liquidity to fund the loan (liquidity management)?
- 19 • Will funds lent at 48% for six months have an adverse impact on the bank's
20 interest margin (gap management)?
- 21 • Does the Credit Department have enough personnel and technical capacity to
22 accurately monitor and oversee the transaction?
- 23 • Does this lending increase percentage of loans to single borrower or related
24 group of borrowers and creates excessive concentration single in loan
25 portfolio (analysis of the portfolio component of credit risk)?
- 26 • Does this extension of credit create a concentration to this particular customer
27 or industry from institutional perspective (e.g., foreign exchange department

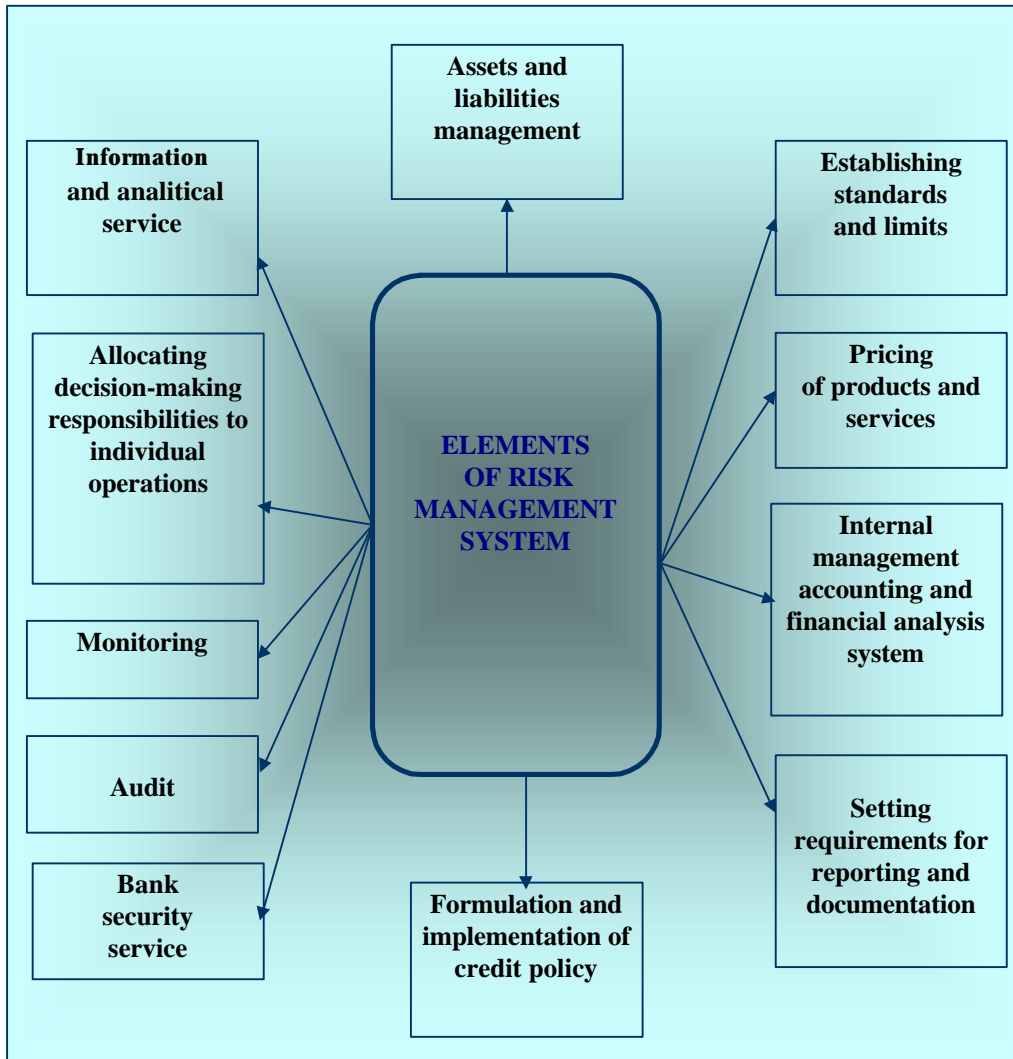
1 has an excessive foreign currency position because of its focus on export
2 oriented industries)?

3 For a number of simple operations these questions, which involve the system
4 component of each risk, can be disregarded. In other cases they are very relevant, and
5 there have to be management systems to support information exchange and coordination
6 for decision making between bank's departments. To date, the most effective
7 organizational solution is to set up a risk management committee of the Board of
8 Directors.

9 **Risk Management Systems**

10 In order to succeed in a high-risk area, banks must develop special decision-making
11 mechanisms. Such mechanisms help assess which types of risk and to what extent the
12 financial institute can take, and also whether this risk is justified by expected returns.
13 They can be put to use by creating a Risk Management System through which bank
14 managers can identify, localize, quantify and control any particular category of risk and
15 hence to eliminate or reduce given exposure. As it was mentioned above risk
16 management system involves a number of components. At the bank level, the system
17 would include components shown in the Figure 14.

18



1

2

Figure 14 Bank Risk Management System

3 The risk management system is implemented through specific procedures
 4 performed at level of strategic management; the business and functional units level or by
 5 interacting units to control risk involved in a certain complex activity. In Table 5 are
 6 listed procedures within a risk management system at the Credit Department level.

1

Table 5 Elements of Risk Management System - Credit Department

Risk Tolerance	Risk Identification	Risk Control	Risk Monitoring:
Level 1			
Credit policy	Credit Analysis	Legal Appraisal	Loan Portfolio Review
Level 2			
Credit Planning	Loan Contract: Review and Approval	Controls to Ensure Loan Use According to Terms of Loan Agreement	Management Reporting
Level 3			
Loan Pricing	Internal Credit Rating	Problem Loans Identification and Building Reserves Against Loan Losses	Internal (Loan) Audit

2 Establishing Limits

3 Establishing limits refers to the level of risk which bank management is willing to
4 take to achieve its overall goals and strategies. These limits or tolerances are generally
5 discussed in corporate policies, standards and procedures.

6 As soon as it passes through the starting, "semi-amateur" phase, the bank will need
7 to develop a strategic plan for all its major businesses. The same is relevant to new
8 banks that start business in to-day more competitive environment. This strategic plan
9 should in turn be implemented through detailed operational plans. (See the chapter

1 Strategic Management.) They provide the framework under which operating officers can
2 act, and generally provide controls and limits for transactions that occur in the area.

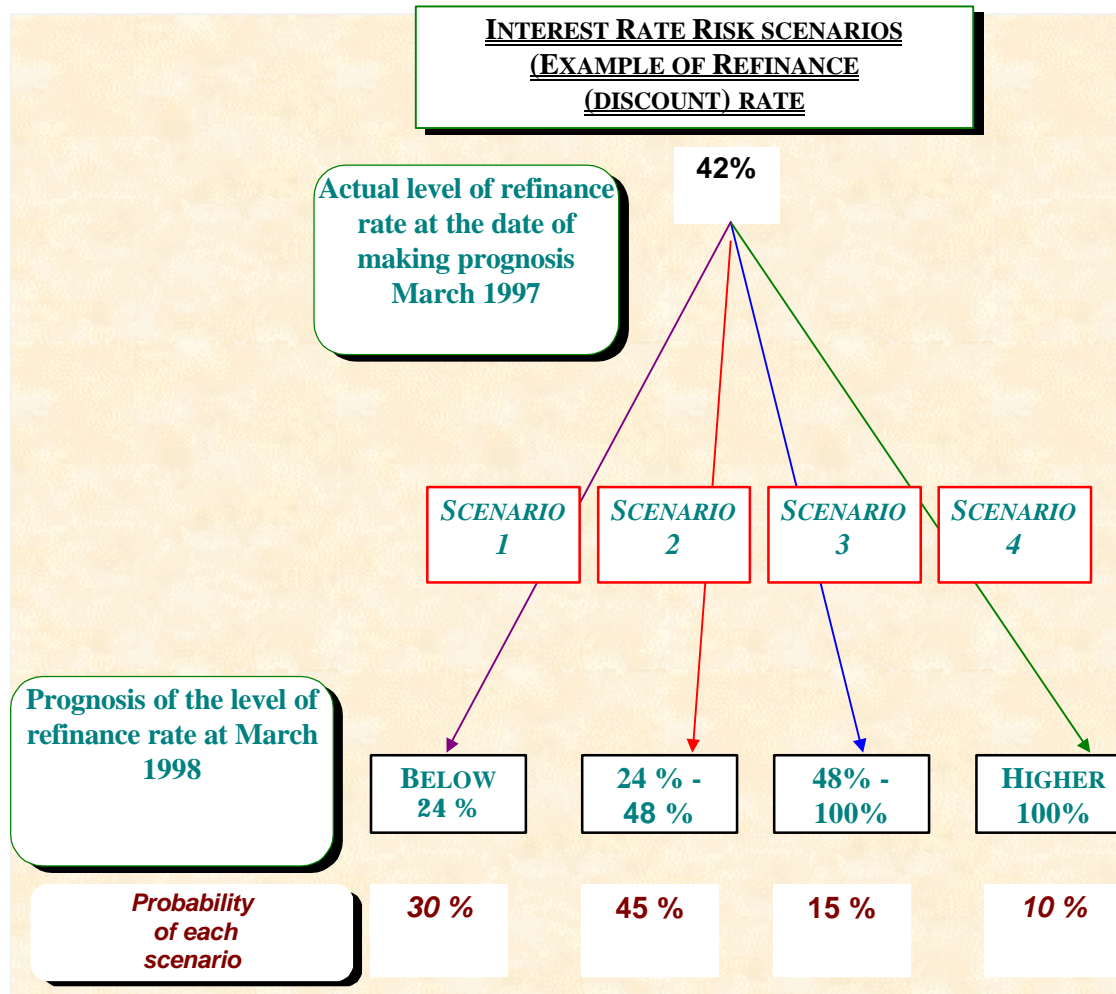
3 A system like this is effective when it provides framework to bank staff to take day-
4 to-day decisions that take into account the desirable level of risk planned by the senior
5 management. For example, if limits are very conservatively, then it can be assumed that
6 the level of risk, which the board is willing to take in a specific activity, is low. In
7 contrast, if limits are nonexistent or excessive, then it can be assumed that the board is
8 willing to accept is higher.

9 It is not unusual for internal bank documents to contain aggregated limits.
10 Aggregate limits are based on an activity's risk as compared to a percent of bank capital;
11 or earnings at risk (typical examples of this approach include techniques of risk-adjusted
12 return on capital, that takes into account bank target profitability, borrowers' credit rating
13 and capital adequacy). Such techniques are being constantly improved and applied by
14 financial institutes of different size, but usually by larger banks.

15 *Risk Identification and Quantification*

16 *Assessment of Scenarios*

17 The existence of risk always implies that there are a number of scenarios, or
18 alternative courses that future events can take. Scenario analysis is an important tool for
19 both risk quantification and risk management. This analysis is based on estimates such as
20 duration of the bank's exposure to the given risk, the level of its impact that calculated as
21 financial profits and losses, as well as assessment of likelihood of the best or worst
22 scenarios. In figure below is given a hypothetical example of scenarios involved in
23 forecasting of refinance (discount) rate. Experts set probability of the first scenario as 30
24 % and interest rate level in a one year would be 24 % per annum. According to the
25 second scenario with likelihood of 45 % refinance rate will be in the interval 24 % – 48
26 % per annum and so on.



1

2

Example of Future Scenarios

3

4 This approach provides a tool to calculate – *quantify* risks. At the same time there
 5 are two important constraints that hinder accuracy of calculations. The first is that the
 6 accuracy of calculation does not exceed reliability of identification of the scenarios and
 7 assessment of their probabilities. However they represent the judgements of experts and
 8 so involve chance of personal mistakes. The second is that risks in banking are often
 9 multi-factor dependence with complex feedback and interrelationships. Eventually there
 10 are many influences in banking that are impossible to describe formally. That is why it is
 11 necessary to know constraints of implication of this technique and avoid misapplications.
 12 Quantification promotes to more effective commercial banking risk management only to
 a certain point beyond which lie undue illusions and risk increases.

13 Risk manifests itself in the fluctuation of indicators that characterize the object
 14 affected by this particular type of risk. For example, if a number of scenarios present

1 with equal probabilities and according to them the given investment produces different
2 returns, then in reality over a long run the return will actually fluctuate. The more is
3 difference in return according to different scenarios and the higher likelihood that in long
4 run one will follow the other – the higher will be fluctuations of return. For example
5 amounts in transaction deposits, which are classified among highly volatile sources of
6 bank funds, are at the same time characterized by substantial fluctuations.

7 ***Approaches to Implementation of Risk Identification and*** 8 ***Quantification Procedures***

9 A key procedure is quantification of risk level that will be considered as acceptable
10 for particular products, businesses, and activities of bank's departments, as well as for
11 the financial institution as a whole. It is crucial not just to measure existing risk but also
12 to forecast exposures associated with new markets, transactions or directions of banking
13 activity. It depends on the organization of marketing researches (see the chapter
14 Marketing). The risk management system is to establish its three parameters: size;
15 timing of exposure; and probability of losses.

16 In the example of risk-adjusted return on capital, it is important to mention that this
17 technique requires quantification of risk in the form of credit ratings. In assessing risk on
18 particular loan, the bank management should be able to set a well-substantiated interest
19 rate, that is, receive reward for risk-taking. As regards to borrowers (loan consumers)
20 this means an individual approach to risk quantification. Procedures for identifying risks
21 within loan portfolio can be upgraded by assigning ratings to different types of loans or
22 industries (e.g. manufacturing, trade or real estate).

23 The degree of complexity of risk measurement systems should match to the
24 uncertainty of environments in which bank operates. On the other hand, such a system
25 of risk identification and management should be built in advance. Losses from system
26 unavailability might by far surpass the costs of its development and introduction.

27 In banking, whenever there is risk, there are costs. In the face of risk a credit
28 institution has to either: avoid certain activities or reduce the scope of these activities
29 (e.g., by introducing limits). It means loss of incomes. Bank can build reserves (e.g.,

1 building reserves to secure liquidity) that similar reduces bank's working capital and thus
2 result in opportunity costs. Other approach is to spend on implementation and
3 maintenance of risk management systems. To give up risk management system means
4 even more costs that are associated with losses in the case of adverse events. Given the
5 fact that risk is always associated with additional costs it is possible to assess any type of
6 risk in terms of direct costs, indirect costs or opportunity costs.

7 *Risk Control*

8 This function refers to responsibilities of bank officers, middle and senior managers
9 as well as shareholders. Ultimately the effectiveness of the risk control function depends
10 on implementation of various risk management systems and procedures, as well as on
11 day-to-day activity of particular organizational departments. Its success depends on a
12 thorough development of organizational structure, proper staffing and continuous,
13 effective control over certain transactions right at workplace. To ensure proper risk
14 control the bank needs a sound establishing of job responsibilities, well-developed job
15 regulations and perfect management information systems.

16 In order to achieve accuracy in risk accountability, most activities should be
17 considered from different perspectives. Every structural unit of the bank possesses a
18 portion of information required for a comprehensive risk analysis as applied to individual
19 operations. The same is true for employees engaged in risk management. It means that a
20 proper system must be built to coordinate their efforts.

21

Table 6 Commercial Bank Units Coordination Matrix for Assessment of Lending Operations**Risk**

	Credit Department	Foreign Exchange Department	Economic Department	Treasury/ Financial Department
Type of currency	+	+	+	+
Type of collateral	+		+	
Pricing method (fixed/variable interest rate; coupon/discount security)	+		+	+
Borrower's Industry	+		+	
Maturity	+	+	+	+

Risk supervision is the function of both managers and shareholders (especially majority owners). While the former may be responsible for day-to-day control, it is only owners can ensure strategic control over the bank's activities. Unless the shareholders create effective control mechanisms at the Board level and are involved in strategic control over the bank, there is little chance that their investment will yield expected profits. Important as risk control systems and methods may be, the other necessary condition of a bank's stability is commitment and supervisory skills of its top officials.

It is obvious, that senior managers should ensure that adequate staffing is in place to conduct the affairs of the institution and that the appropriate resources are maintained. Deficiencies in staffing, technologies and financing of the bank's particular businesses and organizational units results in unnecessary risks. For example, if the treasury area enters into well-researched derivatives transactions but the institution's computer technology and software is incapable of properly maintaining financial records for derivative transactions the outcome of the activity may be adverse.

1 Adequate internal controls are also necessary for proper risk supervision. At
2 minimum, internal controls in all risk activities should require appropriate separation of
3 duties for personnel, dual controls, employee rotation, and required vacation time. While
4 no internal control will prevent fraudulent activities in all cases, it is important for
5 management to implement processes to reduce the potential for fraud.

6 Risk Monitoring

7 This term represents regular, continuing, systematic, independent risk assessment
8 and control system complete with a feedback mechanism. Monitoring is accomplished
9 thorough management information reports, internal/external audits, or activities such as
10 loan review.

11 These reports and activities should provide managers with feedback and
12 information on a micro and macro basis. They use this information as input to analyze
13 current performance, which is crucial for making decisions timely both on particular
14 activities and bank in general.

15 The following list covers information that must be available to the person
16 responsible for credit monitoring:

- 17 • name of credit transaction;
- 18 • overall size of exposure;
- 19 • size of risk adjusted for collateral;
- 20 • special circumstances of the transaction;
- 21 • net size of exposure;
- 22 • the client's previous ratings;
- 23 • current rating;
- 24 • assessment of the client's financial position and current activities;
- 25 • debt service assessment;
- 26 • the client's total current debt service burden;

- other comments.

To put bank allocations for monitoring to efficient use, risks must first be classified as to their importance from the bank's perspective. Detailed monitoring reports should only include the most important risks. The first step is to set value limits and exclude all risks that go beyond those limits from detailed monitoring reporting. This does not mean that minor risks are placed outside the overall risk management system, but in monitoring these risks will be subject to selective control. Such risks will by necessity come into view of controllers for detailed analysis only if alarm signals are received. They might include default on repayment schedule or violation of limits. This approach assures that bank spends money only for detailed monitoring of really important risks.

Risk Management Techniques

There are multiple techniques that help measure risk by its possible effect on profit, net interest income or equity capital. This chapter does not attempt to give a comprehensive coverage of such models but is limited to discussion of the general risk management concept to the extent that it affects managerial decisions. One should note that the adoption of risk management practices in Russia is still under way and there is no single methodology that would satisfy all. Perhaps this general methodology can not exist in principle. Each bank is unique and differs from the rest in such characteristics as the type of market niche it serves, type of bank's human resource base, one credit organizations have well-established relationships with industrial customers, other organization has product or service diversity, etc. A model that proved its success in one bank would lead to a complete failure in other financial institute if it were implemented without adjustments for its external and internal environment. For example failure could be caused by the fact that risks warranted for former financial institute were unwarranted for the latter.

For the purposes of developing an overall risk assessment system for a bank, let's consider one example. It is closely associated with calculation of the risk-adjusted return on capital.

1 Two departments have presented their annual budgets for review and approval and
2 they both report that they will increase revenues by 1 billion roubles next year. To meet
3 this target, the Long-term Credit Department will need to expand its loan portfolio by 3
4 billion roubles, while the Foreign Operations Department would increase its off-balance
5 sheet exposures by 2.5 billion roubles.

6 Should these budgets to be approved? Is there sufficient capital to support an
7 increase in both balance sheet and off-balance sheet commitments? If there is not
8 sufficient capital or shareholders equity which department manager should be allowed to
9 increase their position? What are the capital requirements for each of these transactions
10 and based on the amount of capital necessary are the returns (rewards) equal? Is the
11 potential for adverse outcomes equal?

12 The bank will not find answers to these "easy" questions unless a number of
13 preconditions are met.

14 First of all, the bank must have a developed management accounting system. It
15 provides accurate calculation of incomes, expenditures and, hence, net incomes of these
16 departments. (See. Chapter Performance Measurement Systems and Management
17 Accounting). Unfortunately, it is not easy to implement such system; one of the major
18 problems is the right classification: what expenditure items and in what volumes should
19 be allocated to the given department's activity, and what are the resulted incomes? After
20 this step is completed, bank will find that establishing accounting system is difficult but
21 technically possible.

22 The second is that financial institutions are addressing these types of issues by
23 assigning capital usage to individual product lines or departments has to evaluate the
24 return earned on the use of its equity capital. For instance, if a banks assets are comprised
25 of 500 billion roubles in Russian government securities and 750 billion roubles in the
26 aggregate loan portfolio, what is the cost of required capital to maintain this asset
27 structure meeting CBR requirements? Would it be more cost beneficial to invest more in
28 loans and less in government securities? It refers to risk adjusted assessment of
29 comparative advantages of the two bank's businesses.

1 ***Return on Risk Adjusted Capital (RORAC)***

2 As an example, consider the method for calculation of rate of return on risk-
 3 adjusted capital. This technique is based on preposition that the main strategic goal of a
 4 bank is maximization of shareholders' wealth that means maximization of return on
 5 equity. This goal is the axiom in the Western economic literature. Minimum capital
 6 adequacy requirements force bank to limit the loan portfolio depending on the level of
 7 bank capital. Nonperforming loans and loan losses (i.e. direct results of credit risk) have
 8 two impacts on profitability and equity:

- 9 • On one hand they cause direct impact – loan losses;
- 10 • On the other hand this direct impact is further aggravated due to the part of bank
 11 capital continues to back nonperforming loans or loan losses that earn no income

12 Technique of RORAC defines step by step: what should be the level of interest rate
 13 to offset credit risk exposure and to achieve target profitability benchmark for
 14 institution? However it is possible to define this goal in a different way: what is the level
 15 of credit risk exposure at the projected loan portfolio composition if to measure it by
 16 required interest rate?

17 It is necessary to note that the method discussed here is only one element of a
 18 special risk management system which based on assessment of required rate of return on
 19 bank capital and individual risks of institution's activities.

20 **Table 7 Risk-adjusted Pricing Algorithm Incorporating Rate of Return on Bank Capital:**

Pricing Adjusted for Forecasted Losses. Example for two risk categories A & E		Algorithm for RORAC Calculation (in million roubles)		
Loan loss ratio based on the bank's historical experience			Category A	Category E
Category (rating) Loan risk ratio of borrowers		STEP 1 (Calculation of Required Return on Capital)		
A -	0.1 %	Loan amount	1 000	1 000
B -	1.0 %	Required capital (1 000 × 0.08)	80	80
C -	1.9 %	Required return on capital (80 × 0.30)	24	24

D -	2.8 %	STEP 2. (Calculation of Costs)		
E -	3.7 %	Interest paid + overheads (1 000 × 0.25)	250	250
Average for credit portfolio	1.9 %	Average non- repayment of loans per contract	(1 000 × 0.001) = 1	(1 000 × 0.037) = 37
Input of other important information		Costs	251	287
Price of bank funds, including overheads	25 %	STEP 3. (Calculation of Risk-Adjusted Interest Rate)		
Capital adequacy ratio	8 %	Costs	251	287
Required rate of return on equity	30 %	Required return on capital	24	24
Pro forma example for two loans		Required return on loans	275	311
Category A	1 000 millions Roubles	Performing loans	999	963
Category E	1 000 millions Roubles	Non performing loans	1	37
		Interest rate calculation	275 / 999	311 / 963
		Required Interest Rate	27,5 %	32,3%

1

2 *Hedging, Diversification and Implementation of Derivatives in Risk* 3 *Management*

4 The markets for derivatives emerge with developing of Russian financial services
5 industry. Foreign currency and interest rate futures are widely used in banking to reduce
6 level of risk. In domestic banking they have been introduced for management of interest
7 rate risk and in some extent for reducing the market risk. For this purpose a bank may
8 use forward contracts, interest rate and foreign currency futures.

9 Russian foreign currency futures market has been surviving deep crisis but at the
10 same time interest rate futures market has grown substantially. With emerging of market
11 for derivative banks get new way to reduce their exposure to interest rate risk. Using of
12 derivatives in banking is closely associated with to *hedging* technique though the latter
13 does not only imply derivative transactions.

1 Hedging is applied to reduce foreign currency risk, credit risk and several other
2 risks by taking opposite positions for given type of risk. Certain risk factor could affect
3 negatively on return in some investment. However it simultaneously increases return in
4 another. Hedging involves including in portfolio such investments or entering into such
5 transactions in which certain types of risks have opposite impact on bank's profitability.
6 Consider the hedge of credit risk results from lending to industries, which depend on
7 import of goods. These borrowers have exposure due to large open currency position. In
8 this case bank can perform hedge by lending to export oriented industries. Exporter gain
9 when rouble exchange rate plunges because of the amount of roubles they proceed from
10 foreign currency denominated revenues increases. On the contrary strengthening of
11 domestic currency boosts earnings of importers and brings financial problems to
12 exporters.

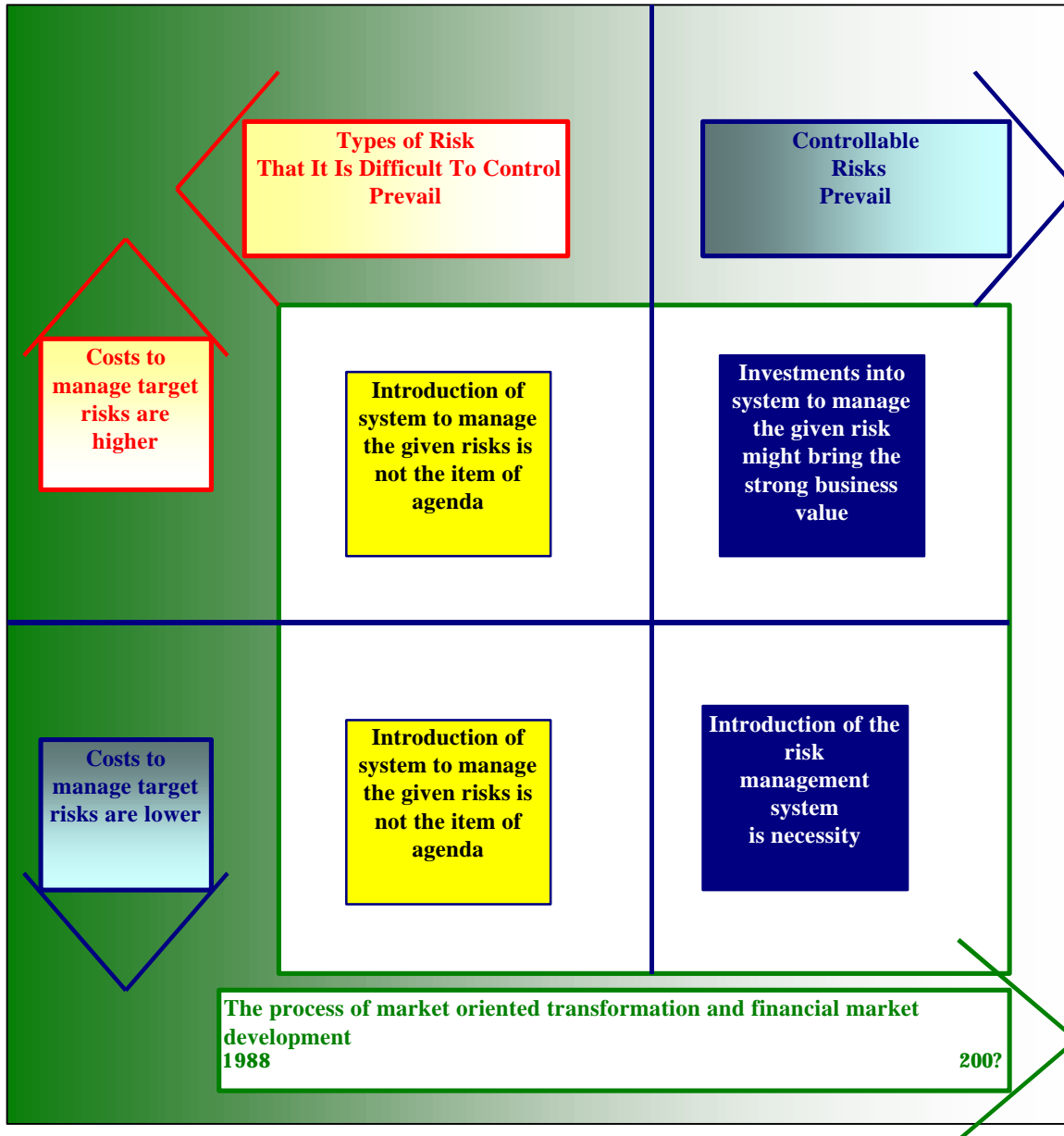
13 Success in hedging requires high level of training of bank staff. It is necessary to
14 choose correctly opposite transaction and assess the level of possible profits and losses.

15 *Diversification* refers to making numerous investments and reducing risk by
16 eliminating excessive concentration in a few transactions. Unlike hedging the correct
17 diversification is achieved when profits and losses in different investments do not affect
18 each other.

19 *Implementation of Risk Management System*

20 At the initial stage of economic transition the prevailing risks were environmental
21 and of the types that were difficult to reduce, they included unpredictable and adverse
22 (for the bank) changes in government regulation, as well as risks associated with criminal
23 actions. Such risks are either difficult to control or they require costly security systems.
24 In the face of their dominant pressure, management of other financial and functional
25 risks appeared irrelevant. Moreover, risk management at this stage was too expensive
26 and, in economic terms, not worthwhile when comparing costs with benefits. As market
27 develops and banking become increasingly sophisticated and competitive, the
28 comparative importance of the financial and functional risks begins to change and

1 eventually at a certain stage, management of key financial and functional risks becomes
 2 available, and then turns into necessity. This tendency is illustrated below (see Figure 8).



3

4 **Figure 15 Strategy for Risk Management System Implementation in Transition Economy**

5 Many organizations require individual departments or product lines to develop
 6 internal risk systems for identifying, monitoring and feedback. Risk management
 7 systems are developed in a variety of ways depending on an organization's needs and
 8 situations. Abroad, some organizations require individual departments or managers in
 9 charge of product lines to develop internal risk systems for identifying, monitoring and
 10 feedback. With such a system in place, current activities can be adjusted following

1 warning signals the system itself generates. The latter provides feedback mechanism
2 whose efficiency is crucial for successful implementation of the risk management
3 system. Under this approach, departments and product line managers are held
4 accountable for ensuring the accuracy of systems, adherence to senior management
5 adopted policies, and overall progress towards meeting the strategic objective.

6 Larger institutions establish risk management committees of the Board of Directors,
7 or the similar organizational departments, which have the oversight responsibility for
8 aggregating information regarding risks from all departments and compiling them on a
9 institution wide basis.

10 Organization of Risk Management Process and Control of Implementation of 11 Innovations

12 It is common practice abroad when risk management committees is also responsible
13 for approval; implementation of financial innovations considering their feasibility and
14 compliance with bank's strategy. In transition economies, when the banking sector is
15 experiencing deep and frequent changes, organizational maintenance of this process and
16 reducing the risks involved become key factors of financial institutes' stability in the long
17 run.

18 At present, introduction of new banking products and activities on Russian market
19 can be justified either by short-term financial gain or by:

- 20 • increased stability of the bank's financial structure;
- 21 • entering into new regional markets and growth in volume of activities;
- 22 • stabilization of return on equity in the conditions of long-term trend of eroding net
23 interest margin.

24 Implementation of new banking products, which could help win new customer base
25 as well as diversify the range of products and services offered to existing clients, is
26 hindered by a number of constraints, of which two are especially important.

27 The first constraint is relative growth of operating expenses comparing to declining
28 return on capital. The key factor of the bank's financial capacity for development is

1 productivity ratio of operating expenses to net earnings.³ Because each innovation
2 involves a risk of unpredictable costs mounting, it is essential to be able to account direct
3 and indirect costs and to estimate absolute and relative efficiency whenever a new
4 banking product or operation is offered on the market. For example, the extensive use of
5 debit cards obviously helps commercial banks expand their resource base. Being capital-
6 intensive, however, these initiatives represents internal investment projects for banks
7 themselves. In other words, payback period exceeds the annual planning period and
8 bank should be able to account for long-term costs/benefits. When the spread between
9 the bank's net earnings and its current expenses was large, funding such costs did not
10 bring a problem. With the decline of net interest margin and the relative growth of
11 operating costs, funding start-up investment in new banking technologies and products
12 becomes more. However it is these expenses with long-term payback are crucial for
13 sustainable and profitable banking in the lower margin environment.

14 Lack of adequate management procedures is another constraint that slows down the
15 introduction of financial innovations and bank restructuring. Ultimately it aggravates
16 instability of Russian banks in the conditions of turbulent changes in the domestic
17 financial markets. This factor is typically manifested in the lack of organizational
18 support for product and technological innovations. Management both at the level of
19 senior management and heads of departments are overloaded with day-to-day work and
20 can not control properly and coordinate the process of innovation. However, if this task
21 is handed over to departments, it results in such problems as low incentive to innovation
22 and conflict of interests. One approach, which is frequently used by Russian banks to
23 deal with these problems, is to set up New Product Development Department or similar
24 organizational unit. The weak point is that units at this level of managerial hierarchy
25 have little authority to implement their objectives. To shift innovation coordination and
26 control responsibilities from day-to-day to strategic management would promote to solve
27 the problem. It should be establishment of a special committee within the Board of

3 Operating costs that are nominator in this ratio are calculated as costs for bank to maintain its operations. These costs do not include interest paid but does include staff payrolls. In 1991, the level of this indicator for Russian banks was three times better than the international average level. By the beginning of last year the productivity ration (operating costs/net earnings) increased from 23% to 69%, thus deteriorating and approaching the average level for foreign banks (2/3).

1 Directors. However it is also necessary to make the Board itself a real operating
2 management body that meets on a regular basis and possesses the real strategic control
3 and management responsibilities, which are unequivocally distinguished from day-to-day
4 management functions.

5 The membership of committee of the Board of Directors consists of representatives
6 of key departments. The committee is responsible for ensuring that new products obtain
7 the necessary approvals before being implemented and implementation process will be
8 properly coordinated. For example, a new derivative product activity may first have to be
9 discussed with individuals from the legal; audit; technology; and funding areas prior to
10 approval. The formal procedure refers to this method is performed by usage of special
11 form. It is tool for obtained written approvals form all departments, which are involved
12 in innovation. It is tool to control and ensure risks are warranted.

13 *Approach to Assessment of Management Decisions*

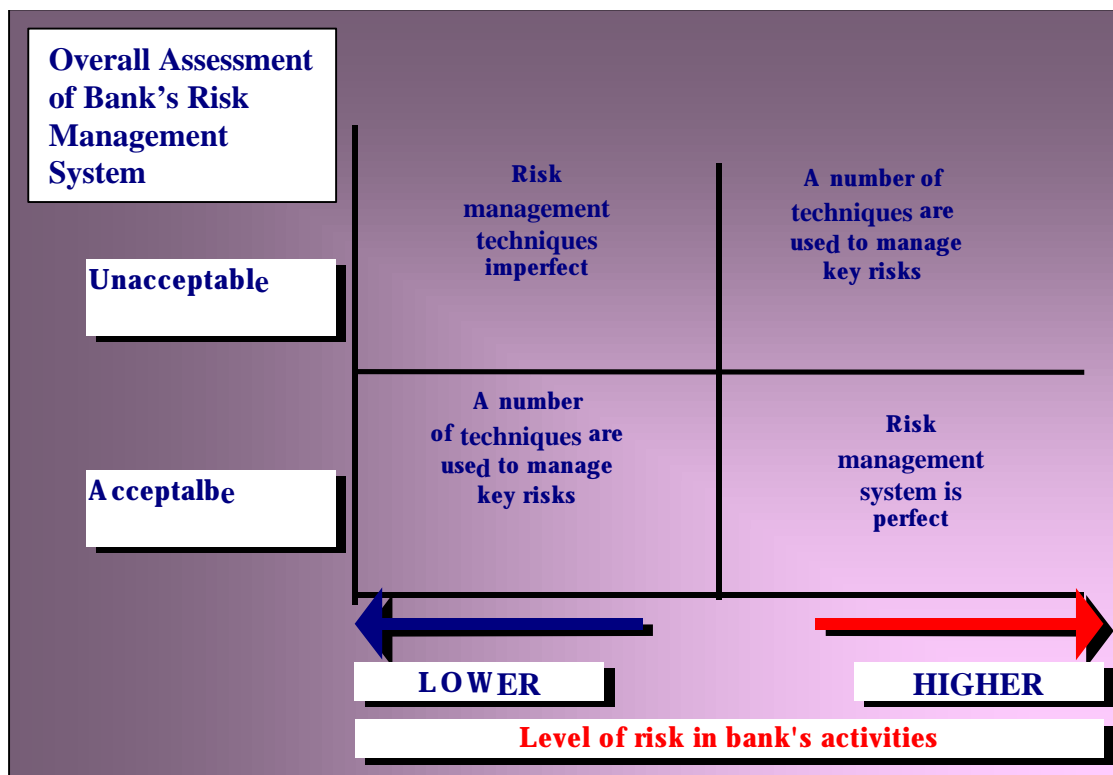
14 To implement a risk management system within your organization, senior
15 management or the Board of Directors must perform assessment of the current activities
16 and organizational structure. The following questions need to be answered or
17 understood:

- 18 • Does your institution think about risk and how is it managed?
- 19 • What is your bank's risk management strategy?
- 20 • Who is involved in risk management?
- 21 • How and when do they become involved?
- 22 • How are risk management process is coordinated and communicated?
- 23 • What types of reports are generated?
- 24 • How is the risk methods are developed and implemented?

25 From this assessment, the types of systems currently in place can be determined.
26 This evaluation should be done on an individual department and activities basis in
27 addition to a bank-wide basis. This information will enable management to begin to

1 understand if the desired ‘risk-appetite’ for the institution is understood and followed.
 2 The goal of this type of assessment is to start with development of risk management
 3 strategy and systems of its implementation.

4 The more uncertain external environment in which the bank operates and more
 5 risky its activities the higher requirements should be introduced to the quality of its risk
 6 management system. Graphically, how internal bank’s risk management system relates to
 7 the level of risk in given bank businesses or in other words how the volume of exposure
 8 in banking relates to requirements to the quality of risk management system illustrated in
 9 Figure 16.



10

11 Figure 16 The Required Quality of the Risk Management System Depending on Level of
 12 Exposure In Bank's Activities

13 The common approach that regulators use to control the risk is establishing
 14 standards and limits for financial institutes. A sophisticated set of risk assessment limits
 15 is prescribed by the well-known Regulation 1 of CBR. Another technique that is used by
 16 regulators to identify and assess risk is checklists that bankers are to fill during
 17 inspection.

1 Checklist contains questions to judge on exposure to solvency and liquidity risk
 2 and, to some extent, credit risk. Assessment of some other important risks, such as
 3 interest rate risk, is not reflected in the document. However this framework as well as
 4 more detailed analysis of other financial risks that can be found in CBR Regulation 17
 5 and in some other regulations could be used as pro forma, which is helpful for analysis of
 6 particular risk.

7 It is necessary to note, however, that central banks tend to develop approaches for
 8 risk assessment from perspective of supervision over financial institutes. Analytical
 9 methods they apply are thus are of limited value for the internal bank objectives and
 10 banks should develop their own analytical techniques and risk management systems.

11

12 Appendix

13 Office of the Comptroller of the Currency Community 14 Bank Risk Assessment System (USA)

15

Liquidity Risk

<i>Low</i>	<i>Moderate</i>	<i>High</i>
Management fully understands all aspects of liquidity risk.	Management reasonably understands the key aspects of liquidity risk.	Management does not understand, or chooses to ignore, key aspects of liquidity risk.
Management anticipates and responds well to changes in market conditions.	Management adequately responds to changes in market conditions.	Management does not anticipate or take timely or appropriate actions in response to changes in market conditions.
The liquidity position is favorable with negligible	The bank is not excessively vulnerable to funding	The bank's access to funds is impacted by poor market

exposure to earnings and capital expected.	difficulties should an adverse change in market perception occur. Earnings or capital exposure is manageable.	perception or market resistance, resulting in substantial exposure to loss of earnings or capital.
Ample funding sources exist. Funding sources provide the institution with a competitive cost advantage.	Sufficient funding sources exist to provide cost-effective liquidity.	Funding sources and portfolio structures suggest current or potential difficulty in sustaining long-term and cost-effective liquidity.
Borrowing sources are widely diversified, with little or no reliance on wholesale or other credit-sensitive funds providers.	Borrowing sources are diversified with few providers or groups sharing common investment objectives and economic influences.	Borrowing sources are concentrated in a few providers or providers with common investment objectives or economic influences.
Market alternatives exceed demand for liquidity, with no adverse changes expected.	The liquidity position is not expected to deteriorate in the near term.	Liquidity needs may be increasing with declining medium- and long-term funding alternatives.
Liquidity risk management processes reflect a sound culture that has proven effective over time.	Liquidity risk management processes are adequate.	Liquidity risk management processes are deficient.
Management information is timely, complete, and reliable.	Management information is, for the most part, timely, accurate, complete and reliable.	Management information systems do not provide useful information for managing liquidity risk
Appropriate attention is given to balance sheet symmetry and the cost effectiveness of liquidity alternatives.	Access to funding markets is properly assessed and diversified, and attention to balance sheet symmetry is appropriate.	Management has not realistically assessed the bank's access to funds and has not paid sufficient attention to diversification. Attention to balance sheet symmetry is inappropriate.
Contingency plans are well	Contingency planning is	Contingency planning is

developed and effective.	effective, and the cost of liquidity alternatives is adequately considered.	either nonexistent or incomplete. The cost of liquidity alternatives has not been adequately considered. A high probability exists that contingency funding sources are needed. Improvement is not expected in the near future.
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1

Credit Risk

<i>Low</i>	<i>Moderate</i>	<i>High</i>
Management fully understands all aspects of credit risk and anticipates and responds well to changes in market conditions.	Management reasonably understands key aspects of credit risk and adequately responds to changes in market conditions.	Management does not understand, or has chosen to ignore, key aspects of credit risk. They do not anticipate or take timely and appropriate actions in response to changes in market conditions.
Policies are effective.	Policies are satisfactory.	Policies are ineffective.
Credit risk diversification is actively managed.	Attention to credit risk diversification is adequate.	Credit risk diversification is unsatisfactory.
New extensions are conservative in structure, terms, growth, or settlement practices.	New extensions are prudent in structure, terms, growth, or settlement practices.	New extensions are aggressive in structure, terms, growth, or settlement practices.
Few or no exceptions to sound underwriting standards exist.	A limited volume of exceptions to sound underwriting standards exists.	A large volume of exceptions to sound underwriting standards exists
Concentrations of credit reflect appropriate diversification.	Concentrations of credit reflect adequate diversification.	Significant concentrations of credit exist.
Collateral values satisfactorily support credit	Collateral values protect credit exposure.	Collateral is illiquid or values provide inadequate support

exposure.		
The volume of problem credits is low and can be worked through in the normal course of business.	The volume of problem credits is moderate and can be worked through within reasonable time frames.	The volume of problem credits may be high and may require an extended time for resolution.
Reserves adequately cover inherent losses. Exposure to loss of earnings or capital from credit risk is minimal.	Inherent credit-related losses should not seriously deplete current reserves or necessitate more than normal provisions. Exposure to loss of earnings or capital from credit risk is manageable.	Credit-related losses may seriously deplete current reserves or necessitate abnormal provisions to cover remaining inherent losses. Exposure to loss of earnings or capital from credit risk is substantial.
Credit analyses are comprehensive and promote early identification of emerging risks.	Credit analyses are satisfactory, as are risk measurement and monitoring systems.	Credit analyses are not comprehensive or of deficient quality.
Internal grading appropriately stratifies portfolio quality and provides early detection of potential problems.	Internal grading reasonably stratifies portfolio quality.	Internal grading of credit does not accurately reflect the portfolio's quality.
Loan review and audit are timely, comprehensive, and independent.	Loan review and audit are acceptable.	Serious weaknesses exist in loan review and audit such as lack of independence, timeliness, or scope of review.
The ALLL methodology is sound and appropriate coverage of risks exists.	The ALLL methodology is generally adequate and coverage of risks is acceptable.	The ALLL methodology is flawed. It provides insufficient coverage of risks present.

1

Price Risk

<i>Low</i>	<i>Moderate</i>	<i>High</i>
Management fully	Management reasonably	Management does not

understands all aspects of price risk.	understands the key aspects of price risk.	understand, or has chosen to ignore, key aspects of price risk.
Management anticipates and responds well to changes in market conditions.	Management adequately responds to changes in market conditions.	Management does not anticipate or take timely and appropriate actions in response to changing market conditions.
Knowledge of price risk exposure is well understood at appropriate levels throughout the institution.	Knowledge of risk exposure is adequate and risk is understood at appropriate levels throughout the institution.	Knowledge of risk exposure is limited or concentrated in too few individuals.
Exposure reflects limited open, or unhedged positions. As a result, earnings and capital are vulnerable to nominal volatility from revaluation requirements.	Exposure reflects moderate open or unhedged positions, limiting the vulnerability of earnings and capital to moderate volatility from revaluation requirements.	Exposure reflects significant open or unhedged positions, which subjects earnings or capital to significant volatility from revaluation requirements.
Exposures are confined primarily to those arising from customer transactions, and involve liquid and readily manageable products, markets, and levels of activity.	Exposure originates primarily in conjunction with customer transactions. The bank has access to a variety of risk management instruments and markets at reasonable costs, given the size, tenor, and complexity of open positions.	Exposure may arise from transactions or positions that are taken as a result of management or trader views of the market, or in conjunction with customer transactions.
The frequency' and size of position-taking are expected to continue at, or decline from, current levels.	The frequency' and size of position-taking are expected to remain at current levels.	The positions may be difficult or costly to close out or hedge due to complexity; difficulty in readily accessing certain instruments, markets or

		tenors; or the general liquidity of markets or products. The frequency' and size of position-taking are expected to continue at, or increase beyond, current level.
Price risk management processes have few or no deficiencies.	Price risk management processes are adequate.	Price risk management processes are deficient.
Measurement tools and methods are sophisticated, given the size and complexity of activities.	Measurement tools and methods have minor deficiencies, but are sufficient given the size and complexity of activities	Measurement tools and methods are inadequate given the size or complexity of activities.
Management information provides a clear assessment of the potential volatility and aggregate risk-taking.	Management information reasonably portrays the potential volatility and aggregate risk-taking.	Management information does not accurately characterize potential volatility or aggregate risk-taking
Valuation methods are 'state of the art,' independently reviewed, tested, and documented.	Valuation methodologies are acceptable.	Valuation methodologies are flawed
Limit structures are reasonable, clear, and effectively communicated: The limits reflect a clear understanding of the risk to earnings and capital under a variety of defined and reasonable scenarios.	Limit structures are reasonable, clear and effectively communicated. The limits also reflect a clear understanding of the risk to earnings and capital under defined and reasonable scenarios.	Limit structures may not be reasonably clear, or effectively communicated Limits may not reflect a complete understanding of the risk to earnings and capital.
Responsibility for measuring exposures and monitoring risk is	Responsibility for measuring exposures and monitoring price risk is	Responsibility for measuring exposures and monitoring price risk is not

independent from risk-taking activities.	independent from risk-taking activities.	independent from risk-taking activities
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1

Interest Rate Risk

<i>Low</i>	<i>Moderate</i>	<i>High</i>
Responsible officials fully understand all aspects of interest rate risk.	Responsible officials reasonably understand the key aspects of interest rate risk.	Responsible officials do not understand, or choose to ignore, key aspects of interest rate risk.,
Management anticipates and responds well to changes in market conditions.	Management adequately responds to changes in market conditions.	Management does not anticipate or take timely and appropriate actions in response to changes in market conditions.
Knowledge of interest rate risk is well understood at appropriate levels in the institution.	Knowledge of interest rate risk exists at appropriate levels in the institution.	Knowledge of interest rate risk may be concentrated in too few individuals.
Responsibility for monitoring risk limits and measuring exposures is independent from those executing risk-taking decisions.	Responsibility for monitoring risk limits and measuring exposure is independent from those executing risk-taking decisions.	Responsibility for monitoring risk limits and measuring exposures is not independent from those executing risk-taking decisions.
Exposure reflects little repricing risk and minimal exposure to basis risk and yield curve risk. Options positions are clearly identified and well-managed.	Exposure reflects repricing risk, basis risk, yield curve risk, and options risk that, collectively, are maintained at manageable levels.	Exposure reflects significant repricing risk, high levels of basis risk, undue yield curve risk, or significant levels of options risk.
Mismatched positions are short-term.	Mismatched positions may be longer term, but are effectively hedged.	Mismatched positions are longer term and costly to hedge.

The mismatches are unlikely to cause earnings or capital volatility due to the movement of interest rates.	Substantial volatility in earnings or capital due to the movement of interest rates is not anticipated.	The probability of substantial volatility in earnings or capital due to the movement of interest rates is high.
The interest rate risk management process is effective and proactive.	Interest rate risk management process is adequate.	Interest rate risk management process is deficient.
Measurement tools and methods enhance decision making by providing meaningful and timely information under a variety of defined and reasonable rate scenarios.	Measurement tools and methods have minor weaknesses, but are appropriate given the size and complexity of the bank's on- and off-balance sheet exposures.	The process is overly simplistic in light of the relative size and complexity of the bank's on- and off-balance sheet exposures.
Management information systems are timely, accurate, complete, and reliable.	Management information is, for the most part, timely, accurate, complete, and reliable.	Management information systems contain significant weaknesses.
Limit structures provide clear parameters for risk to earnings and the economic value of equity under a variety of defined and reasonable interest rate scenarios.	Limit structures are adequate to control the risk to earnings and the economic value of equity under defined and reasonable interest rate scenarios.	Limit structures are not reasonable or do not reflect an understanding of the risks to earnings and the economic value of equity.

1

Foreign Currency Risk

<i>Low</i>	<i>Moderate</i>	<i>High</i>
The foreign currency risk management process is well understood throughout the Institution.	The foreign currency risk management process is adequate. Knowledge of foreign currency risk exposures is adequately	Knowledge of foreign currency risk exposure is limited or concentrated In too few individual

	understood at appropriate levels.	
Management fully understands all aspects of foreign currency risk.	Management reasonably understands the key aspects of foreign currency risk	Management does not understand, or has chosen to ignore, key aspects of foreign currency risk
Management anticipates and responds well to changes in market conditions.	Management adequately responds to changes in market conditions.	Management does not anticipate or take timely or appropriate actions in response to changes in market conditions.
Exposure reflects non-dollar denominated positions that are largely hedged.	Exposure may reflect large non-dollar denominated positions that are open., but can be readily hedged at a reasonable cost	Exposure reflects large non-dollar denominated positions, or cash flow mismatches, that are unhedged.
Cash flows are predictable and are closely matched or hedged.	Cash flow mismatches are predictable and moderate in size.	Some positions may be denominated in relatively illiquid currencies, complicating the ease, speed, and cost of hedging.
There is negligible volatility to earnings or capital because of translation adjustments.	There is moderate volatility to earnings or capital due to translation adjustments.	There is substantial volatility to earnings or capital due to translation adjustments.
Risk measurement tools and methods are sophisticated, given the size and complexity of activities.	Risk measurement tools and methods may have minor deficiencies, but are sufficient given the size and complexity of activities.	Risk measurement tools and methods are inadequate given the size or complexity of activities.
Management information system provides a clear assessment of the potential volatility and aggregate risk-taking	Management information systems provide a reasonable assessment of the potential volatility and aggregate risk-taking.	Management information systems do not accurately portray the potential volatility or aggregate risk-taking.

Limit structures are reasonable, clear, and effectively communicated.	Limit structures are reasonable, clear, and effectively communicated.	Limit structures are not reasonable, clear, or effectively communicate
Limits reflect a clear understanding of the risk to earnings and capital under a variety of defined and reasonable scenarios. ;,	Limits reflect an understanding of the risk to earnings and capital under a defined yet reasonable scenario.	Limits do not reflect a complete understanding of the risk to earnings and capital.
Qualified individuals, independent from risk-taking activities. Have the responsibility for measuring exposures and monitoring risk.	Responsibility for measuring exposures and monitoring risk is independent from risk-taking activities.	Responsibility for measuring exposures and monitoring risks is not independent view from risk-taking activities.

1

Compliance Risk

<i>Low</i>	<i>Moderate</i>	<i>High</i>
Management fully understands all aspects of compliance risk and exhibits a clear commitment to compliance. The commitment is communicated throughout the institution.	Management reasonably understands the key aspects of compliance risk Its commitment to compliance is reasonable and satisfactorily communicated.	Management does not understand, or has chosen to ignore, key aspects of compliance risk. The importance of compliance is not emphasized or communicated throughout the organization.
Authority and accountability for compliance are clearly defined and enforced.	Authority and accountability are defined, although some refinements may be needed.	Management has not established or enforced accountability for compliance performance.
Management anticipates and responds well to changes of a market or regulatory nature.	Management adequately responds to changes of a market or regulatory nature.	Management does not anticipate or take timely or appropriate actions in response to changes of a market or regulatory nature.

Compliance considerations are incorporated into product and system development processes.	While compliance may not be formally considered when developing products and systems, issues are typically addressed before they are fully implemented.	Compliance considerations are not incorporated in product or systems development.
Violations or noncompliance issues are insignificant, as measured by their number or seriousness.	The frequency or severity of violations or noncompliance is reasonable.	Violations or noncompliance expose the company to significant impairment of reputation, value, earnings, or business opportunity.
When deficiencies are identified, management promptly implements meaningful corrective action.	Problems can be corrected in the normal course of business without a significant investment of money or management attention. Management is responsive when deficiencies are identified.	Errors are often not detected internally, corrective action is often ineffective, or management is unresponsive.
The institution has a good record of compliance. The bank has a strong control culture, which is proven effective. Compliance management systems are sound and minimize the likelihood of excessive or serious future violations or noncompliance.	Compliance management systems are adequate to avoid significant or frequent violations or noncompliance.	Compliance management systems are deficient, reflecting an inadequate commitment to risk management.
Appropriate controls and systems are implemented to identify compliance problems and assess performance.	No shortcomings of significance are evident in controls or systems. The probability of serious future violations or noncompliance	The likelihood of continued violations or noncompliance is high because a corrective action program does not exist, or extended time is

	is within acceptable tolerance.	needed to implement such a program.
Training programs are effective and the necessary resources have been provided to ensure compliance.	Management provides adequate resources and training given the complexity of products and operations.	Management has not provided adequate resources or training

1

Reputation Risk

<i>Low</i>	<i>Moderate</i>	<i>High</i>
Management anticipates and responds well to changes of a market or regulatory nature that impact its reputation in the marketplace.	Management adequately responds to changes of a market or regulatory nature that impact the institution's reputation in the marketplace.	Management does not anticipate or take timely or appropriate actions in response to changes of a market or regulatory nature.
Management fosters a sound culture that is well supported throughout the organization and has proven very effective over time.	Administration procedures and processes are satisfactory. Management has a good record of correcting problems. Any deficiencies in management information systems are minor.	Weaknesses may be observed in one or more critical operational, administrative, or investment activities. Management information at various levels exhibits significant weaknesses.
The bank self-polices risks.	The bank effectively self-polices risks.	The institution's performance in self-policing risk is suspect
Internal controls and audit , are fully effective.	Internal controls and audit are generally effective.	Internal controls or audit are not effective in reducing exposure. Management has either not initiated, or has a poor record of, corrective action to address problems.
Franchise value is only minimally exposed by reputation risk. Exposure from reputation risk is expected to remain low in the foreseeable future.	The exposure of franchise value from reputation risk is controlled. Exposure is not expected to increase in the foreseeable future.	Franchise value is substantially exposed by reputation risk shown in significant litigation, large dollar losses, or a high volume of customer complaints. The potential exposure is increased by the

		number of accounts, the volume of assets under management, or the number of affected transactions. Exposure is expected to continue in the foreseeable future.
Losses from fiduciary activities are low relative to the number of accounts, the volume of assets under management, and the number of affected transactions. The bank does not regularly experience litigation or customer complaints.	The bank has avoided conflicts of interest and other legal or control breaches. The level of litigation, losses, and customer complaints are manageable and commensurate with the volume of business conducted.	Poor administration, conflicts of interest and other legal or control breaches may be evident.

1

Strategic Risk

Low	Moderate	High
Risk management practices are an integral part of strategic planning.	The quality of risk management is consistent with the strategic issues confronting the organization.	Risk management practices are inconsistent with strategic initiatives. A lack of strategic direction is evident
Strategic goals, objectives, corporate culture, and behavior are effectively communicated and consistently applied throughout the institution. Strategic direction and organizational efficiency are enhanced by the depth of	Management has demonstrated the ability to implement goals and objectives and successful implementation of strategic initiatives is likely.	Strategic initiatives are inadequately supported by the operating policies and programs that direct behavior. The structure and talent of the organization do not support long-term strategies.

management talent		
Management has been successful in accomplishing past goals and is appropriately disciplined.	Management has a reasonable record in decision making and controls.	Deficiencies in management decision making and risk recognition do not allow the institution to effectively evaluate new products, services, or acquisitions..
Management information systems effectively support strategic direction and initiatives.	Management information systems reasonably support the company's short-term direction and initiatives.	Management information systems supporting strategic Initiatives are seriously flawed or do not exist
Exposure reflects strategic goals that are not overly aggressive and are compatible with developed business strategies.	Exposure reflects strategic goals that are aggressive but compatible with business strategies.	Strategic goals emphasize significant growth or expansion that is likely to result in earnings volatility or capital pressures.
Initiatives will have a negligible impact on capital. systems, or management resources. The initiatives are well supported by capital for the foreseeable future and pose only nominal possible effects on earnings volatility.	The corporate culture has only minor inconsistencies with planned initiatives. The initiatives are reasonable considering the capital, systems, and management available to support them. Decisions are not likely to have a significant adverse impact on earnings or capital. If necessary, the decisions or actions can be reversed without significant cost or difficulty.	The impact of strategic decisions is expected to significantly affect franchise value. Strategic initiatives may be aggressive and/or incompatible with developed business strategies. Decisions are either difficult or costly to reverse.
Initiatives are supported by sound due diligence and strong risk management systems. The decisions can be reversed with little	Strategic initiatives will not materially alter business direction, can be implemented efficiently and cost effectively, and are	Strategic goals are unclear or inconsistent, and have led to an imbalance between the institution's tolerance for risk and willingness to

difficulty and manageable costs.	within management's abilities.	supply supporting resources.
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1
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1 CREDIT RISK MANAGEMENT

2 Norman Baxter

Galina Panova,
3 Vladimir Platonov

4
5 *Lending is the key banking business with the loan portfolio*
6 *normally ranging in size between one-third and half of the bank's total*
7 *assets. This chapter is thus of particular importance. It focuses on a*
8 *modern system and basic procedures for credit risk management; process*
9 *of credit risk control; and typical problems one has to address to*
10 *implement a successful risk management system. Issues such as*
11 *approaches to credit policy development and implementation*
12 *mechanisms, as well as loan portfolio management and evaluation, are*
13 *discussed in detail.*

14 Credit Risk Management System

15 Credit risk (see chapter on "Risk Management in Banking") refers to the likelihood
16 of counterparts' default on their obligations; in most cases, this means failure to repay all
17 or part of the principal and interest within time limits specified in the loan agreement.

18 Russian commercial banks engaged in lending today face enormous internal, as
19 well as external, challenges. The result is that, even with the best credit policy in place,
20 some credit loss is unavoidable. A bank does not extend bad loans, but in fact some loans
21 will inevitably become bad at a certain point in future. With an increase in the relative
22 number of problem loans, the bank's reputation may be seriously damaged; this, in turn,
23 may adversely affect the bank's market position.

24 In recent years the degree of adverse effect caused by credit risk on Russian banks
25 has become apparent. Credit risk management continues to be a major problem area for
26 them. Problem loans normally consist 5 to 6 percent of total loans in countries like
27 Germany and the USA, while in Russia this percentage can be as high as 30-35 percent.
28 The level of credit risk in Russia is conditioned by both macro- and microeconomic

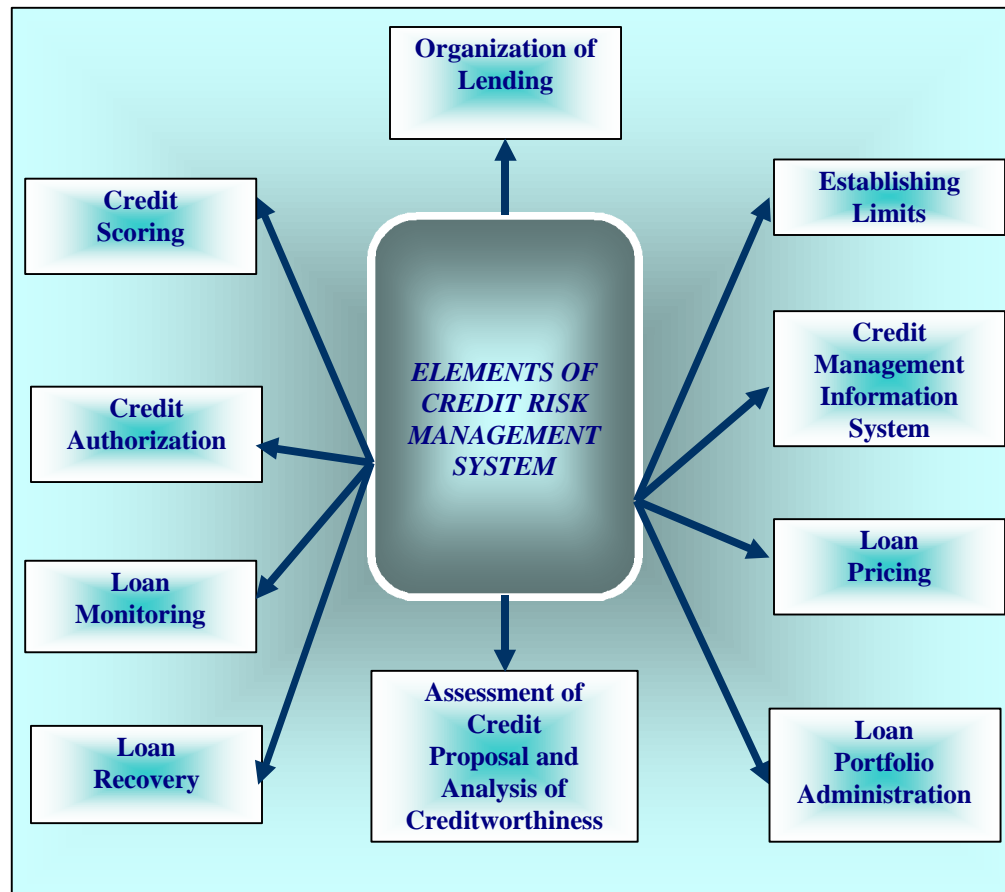
1 factors. From the lack of qualified personnel to the dearth of economically literate,
2 honest, experienced borrowers, to the constantly changing economic, legal and
3 regulatory environment, the commercial banks today face constant uncertainty and
4 instability. The lack of well-conceived legislation on collateral, an imperfect system of
5 collateral registration, and resulting difficulties in establishing the priority position of
6 commercial banks when trying to liquidate collateral creates even more uncertainty for
7 the commercial banks.

8 As they establish reliable operations, the most successful banks face some new
9 problems. In addition, the widely dispersed branch networks of many larger banks over
10 the vast expanse of Russia, and the enormous difficulties in communication further
11 complicate the difficulty of maintaining quality control over the lending process.

12 *Principles of Credit Management System Development*

13
14 To lend successfully in the current environment of uncertainty and instability,
15 imperfect and often contradictory legislation any bank should develop and implement a
16 comprehensive, yet flexible, system of *credit risk management* throughout the bank. The
17 key element in such a system is a well-conceived *credit policy* with accompanying
18 *lending standards*, developed jointly by lower level and senior level management, and
19 approved by the board of directors of the bank. The credit policy and lending standards
20 provide the framework for the lending activities of the bank.

21 A credit risk management system should include the following basic elements:
22 organization provision of the lending process; establishing limits; initiation and
23 assessment of credit proposal, credit scoring (rating) according to risk; pricing with risk
24 adjustments; allocation of responsibilities pertaining to lending decisions – authorization;
25 credit monitoring; loan portfolio administration, and problem loans recovery.



1

2

Figure 17 Elements of a Credit Risk Management System

3

4

Key to a sound banking credit risk management system lies in proper evaluation and control of the individual credit relationship plus conservative management and control of the loan portfolio. The latter is frequently referred to as *conservative approach*. This term seems being somewhat alien for a transition economy, given low stability and constant changes in the banking system. Essentially, however, the concept of conservative approach is quite general and adaptable. It provides a foundation on which credit risk management procedures corresponding to prevalent conditions of the domestic economy should be developed.

12

13

14

15

16

Critical to sound management of credit risk is the development of a common *credit culture* by fostering standard credit practices for initiating, analyzing, approving, and monitoring individual loans. Management of the loan portfolio as a whole is a senior management function that requires determining the types of risks and loan exposure levels the bank is willing to accept. The framework for developing a common credit

1 culture, fostering standard credit practices, and managing the types and risks and
2 exposure levels is the approved written *credit policy* of the bank.

3 A common credit culture throughout the bank is developed by:

- 4 • implementing a credit policy, lending standards and credit procedures;
- 5 • training credit personnel in the credit policy, standards and procedures;
- 6 • assessment of contribution of the job to the profitability of lending in
7 accordance with the guidelines formulated in credit policy;
- 8 • developing parameters for acceptable loans;
- 9 • specifying credit analysis procedures for all loans;
- 10 • establishing a credit approval; process for all loans;
- 11 • defining required procedures for monitoring all loans.

12 Conservative management of the loan portfolio as a whole is promoted by:

- 13 • establishing internal lending limits to individual borrowers and groups of
14 borrowers;
- 15 • developing a loan exposure matrix tied to borrower risk ratings;
- 16 • limiting industry concentrations;
- 17 • identifying priority, lower-risk industries;
- 18 • restricting lending to identified high-risk industries;
- 19 • establishing a loan pricing policy.

20 The chart in Figure 18 depicts the credit risk management process that embodies
21 the above elements. The system is divided into three sections: *loan portfolio*
22 *management, management of bank-borrower relationship, and control management.* .

23

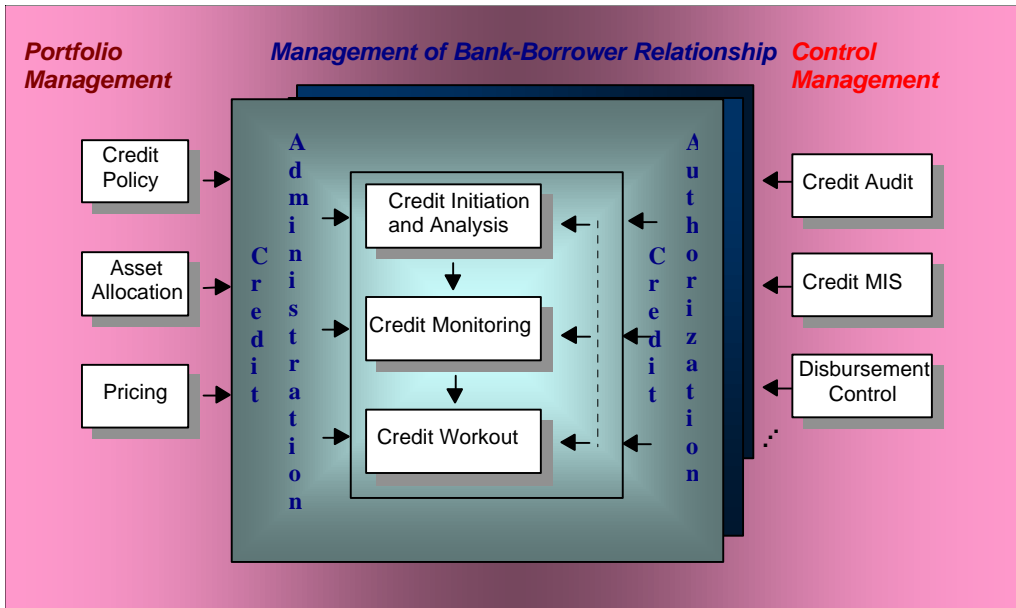


Figure 18 Credit Risk Management Process

The credit risk management system includes the following elements as part of the lending strategy established by senior management:

- a credit policy to set the framework for the credit activities of the bank;
- asset allocation guidelines to limit the type and amount of risk that a bank will accept by industry/sector or other predetermined categories;
- pricing guidelines to determine what interest, fees and commissions a bank must charge to meet the profitability as well as capital adequacy objectives of the bank.

Key Steps in Managing Credit Risk

Credit Risk Management in Bank-Borrower Relationship

This relates to "bank-client" relationship management processes focused on measuring and containing *individual credit risks* within strategic guidelines. Credit analysis focuses on evaluating the creditworthiness of individual borrowers and *structuring individual credits* to mitigate and protect against any risk identified; *credit monitoring* focuses on ensuring that creditworthiness is maintained, and *credit workout*

1 focuses on restoring creditworthiness once it has significantly deteriorated or has been
2 lost altogether.

3 ***Approval & Administration in Lending Process***

4 This relates to the *line control* process embedded in the relationship management
5 processes. Credit analysis, credit monitoring and working with problem loans all involve
6 decisions which entail risk and require line control. The approval chain and authorities
7 should be common to each relationship process.

8 ***Management Control***

9 This should be an independent management control process that reviews individual
10 credit decisions, the composition of the loan portfolio as a whole, and the controls over
11 decision making. A further description of each element of control management follows:

- 12 • Loan audit , should be a qualified, independent review of credit decisions and the
13 loan portfolio as a whole;
- 14 • Credit Management Information Systems (MIS) . should provide both relationship
15 managers and control managers with proper information to monitor credit quality
16 and the composition of the loan portfolio as a whole;
- 17 • Disbursement control should ensure that money is not made available to
18 borrowers until all approval and documentation requirements are met.

19 **Credit Policy and Its Implementation**

20 ***Purposes and Content of Credit Policy***

21 Credit policy contains a definition of the bank's lending objectives and priorities,
22 ways and methods to attain them, as well as lending principles and procedures. Credit
23 policy establishes a basic organizational pattern for lending operations in conformity

1 with the bank's overall strategy, while being a necessary prerequisite for developing
2 lending standards and supporting procedures.

3 The following are key elements of a good credit policy:

- 4 • It is a concise, high level statement or directive rather than an instruction;
- 5 • It supports the achievement of a clear, unambiguous credit objective;
- 6 • It may include several rules designed to meet a specific objective;
- 7 • It is supported by standards and procedures that clarify the methodology for
8 executing the policy.

9 The sine qua non for a successful credit risk management system in modern
10 banking is a carefully written credit policy, approved and supported completely by senior
11 management, and disseminated to all credit personnel.

12 Approval and enforcement of credit policies are the responsibility of the directors
13 and senior management to ensure that a common credit culture is developed and that
14 bank credit objectives are met. Thus the credit policy not only sets the framework for all
15 credit activities but also reinforces the credit culture.

16 *Credit policy* takes into account banking strategy and risk management policies. It
17 sets a framework for the main areas of lending business:

- 18 • systematic standards and criteria to be observed by banking staff responsible for
19 loan issue and portfolio management;
- 20 • main responsibilities of those who make strategic lending decisions;
- 21 • procedures for controlling the quality of credit operations management and the
22 performance of internal and external auditors.

23
24 Credit policy is critical for proper sequencing of activities, operational diversity,
25 *delegation of authority* and terms of reference for credit officers. Without well-
26 elaborated credit policy and implementation mechanisms, it is impossible to introduce
27 uniform lending regulations to be observed by all bank staff. A written credit policy and
28 relevant implementation procedures thus constitute a basis for the whole credit system.

1 Ideally, it is the *Credit Policy Committee* subordinated to the Board of Directors that
2 should be made responsible for the formulation of credit policy, as well as relevant
3 lending standards and implementation procedures.

4 Credit policy relies on banking staff to identify the "right" sector and the "right"
5 client, making a sound judgment based on credit standing and other key factors that
6 determine the bank's decision on whether to extend a loan. Credit policy also depends on
7 those *credit products*, which the bank currently offers or is about to introduce. As regards
8 business clients, these may include, for example, short-term, working capital loans or
9 investment loans extended over longer periods (to support business expansion,
10 technological innovations and modernization).

11 A key element of credit policy is an internal control system (to verify whether
12 lending standards are properly applied to a prospective borrower and whether individual
13 credit officers comply with their terms of reference, as well as to exercise an overall
14 control over the portfolio and, in particular, problem loans).

15 *Credit Policy Development*

16 Formulation of an internal credit policy requires that the bank management identify
17 lending objectives and see how they conform with the bank's broader goals and long-
18 term strategy. When lending objective take shape, they serve as a starting point for
19 developing a credit policy along with *lending standards and procedures (instruksii)*,
20 which allow bank officers to execute all the necessary credit transactions as guided by a
21 consistent credit policy.

22 Following this initial step in developing credit policy, standards and procedures, the
23 first version is those documents should be reviewed by expert staff who check whether
24 they are clear, logical and functional. Having studied expert recommendations, the credit
25 policy committee (or board of directors or credit committee) officially approves both the
26 policy and the relevant procedures.

27 Credit policy should be reviewed and amended regularly so that to reflect ongoing
28 changes both within the bank and in the banking system generally. The content of credit
29 policy and respective manuals should thus be sensitive to recent trends. Credit policy

1 may detail credit limits, lending procedures or even individual rules, but most
2 importantly, it should include general guidelines and the bank's long-term lending
3 strategy. Credit policy may set internal risk limits per borrower or expressly regulate loan
4 extension. For example, it may require that loans be provided only if linked to a clear,
5 feasible objective that must be specified in documents supporting the credit request.
6 Credit policy may also emphasize that any loans requested to finance high-risk
7 transactions or for purposes outside the borrower's main sphere of activity, shall be
8 extended in exceptional cases only and shall be subject to a special approval procedure.

9 Communication of credit policy to banking staff, followed by their exposure to
10 relevant procedures and manuals, is the key element of credit policy installment in the
11 bank.

12 ***Key Elements of Credit Policy***

13 Credit policy defines main lending directives which, in turn, may be described as a
14 system for credit policy implementation. Key elements that a credit policy should
15 include:

- 16 • organization of the credit process;
- 17 • loan portfolio management;
- 18 • lending control;
- 19 • credit authority;
- 20 • general credit selection criteria;
- 21 • credit limits for key lending areas;
- 22 • credit administration (current work with existing loans);
- 23 • loan reserve classifications.

24 The section on "Organization for the credit process" should describe areas of
25 responsibility of credit officers. For instance, duties of a staff member in the credit
26 department should include: drawing up a loan agreement, collecting relevant

1 information, preparation of loan documents, risk identification (ratings) and loan
2 servicing. The "Loan portfolio" section should include *limits* and standards which
3 determine maximum acceptable credit risk per borrower depending on his risk rating.
4 (The higher the rating, the lower the total sum of credit available to the particular
5 borrower.) In addition, the bank can limit the total sum of loans to private borrowers as a
6 ratio of the bank's equity capital. The section on "Loan servicing routine" should focus
7 on procedures for drafting loan documents and compiling the borrower file, risk rating,
8 and recovery of nonperforming and written-off bad loans. Characteristics of loans that
9 require loan loss reserves are specified in the "Classification of reserves" section. The
10 «credit policy" section should stipulate possible deviations from credit policy. The credit
11 process is thus taking shape, with a view to build a sustainable and efficient, manageable
12 loan portfolio.

13 *Forms of Implementation of Credit Policy*

14 Ways and methods of practical implementation of credit policy are formalized as a
15 set of documents:

- 16 1. Credit policy.
- 17 2. Lending standards.
- 18 3. Lending procedures.

19 The above three basic documents can be brought together in a single document
20 entitled «Credit Policy Guidelines". Whereas the credit policy establishes the framework,
21 the lending standards and credit provide more precise detail to guide lending personnel.
22 Those documents are in line with credit policy requirements and serve as a more
23 practical guide for bank staff.

24 *Lending Standards*

25 Lending standards are different from lending manuals. In banks with traditional,
26 functional-type organization, lending standards are documented in *regulations on*
27 *functional units* that perform specific lending functions. The same is true to standards

1 followed in other areas of banking activity. The first step in transition from a function-
2 based to a (marketable) product-based organization should thus be to specify standards
3 for each major banking area in a separate document. Lending standards should preferably
4 include: sample working documents to be used by lending personnel; checklists to obtain
5 financial information from actual and prospective borrowers; algorithm for loan approval
6 by banking staff; and a list of loan categories that require careful treatment. Lending
7 standards as described above constitute a document, which is more specific than credit
8 policy but not as elaborated as a credit procedure. They focus on the main activities
9 towards credit policy implementation.

10 Lending standards are designed to guide all lending personnel.

11 They should cover the following key elements:

- 12 • process of financial information collection and analysis;
- 13 • requirements to collateral, guarantors and co-borrowers;
- 14 • administrative standards and rules of organization of lending;
- 15 • rules for evaluation of creditworthiness;
- 16 • requirements for structure of documentation;
- 17 • regulation for special types of lending, such as consumer and real estate lending.

18 Sample documents may even be included in the lending standards in order to
19 promote standardization of documents throughout the bank. Such sample documents
20 might include a loan agreement, a security agreement, a guaranty, and a commitment
21 letter to a borrower etc.

22 Lending standards adopted in different banks may vary both in structure and
23 content. However they should include the following information:

- 24 • a description of the bank's credit authority system;
- 25 • a descriptive list of "desirable" and "undesirable" loans, as viewed by top
26 management. It may be recommended, for example, to extend personal real
27 estate loans but restrict lending against pledge of borrower's securities.

- 1 • geographical areas of prospective credit expansion. For example, the bank
2 may restrict the scope of its credit policy to the are within city limits or to a
3 single rural district. On the other hand, a larger bank may target its credit
4 operations on local as well as international clientele;
- 5 • regulations on employee loans, overdue loan collection, overdraft, etc.

6 Lending standards should only contain general recommendations not to stifle
7 personnel initiative. For example, even if the bank policy rules out any lending to
8 financially insecure companies, a lending officer may choose to issue a loan to a small
9 firm provided the owner's private property (such as apartment etc.) is listed as additional
10 pledge. Lending standards prescribe optimal organization patterns for credit operations,
11 assign individual accountability, etc.

12 ***Credit Procedure***

13 A credit procedure is a step within a methodology that clarifies how to execute a
14 policy. A credit procedure defines the set of major consecutive actions (steps) describing
15 a general *algorithm of one specific credit policy only*. In other words it tends to be a work
16 step for executing a specific policy rather than a detailed approach on how to implement
17 an action step. Manual relates to given procedure can be depicted in a workflow chart as
18 one of the activity boxes and is points out person responsible and corresponding
19 authorities.

20 For example, credit procedures may indicate how loan and loan-related documents
21 are to be completed, steps to complete in monitoring loans, and how watch loan reports
22 are to be completed.

23 ***Credit Policy Guidelines***

24 Documented lending procedures identify individual steps in the credit process and
25 keep it in line with credit policy requirements.

26 One of the credit policy requirements is to continuously monitor all loans, that is, to
27 keep a systematic record of debt servicing, both principal and interest. Manuals may

1 stipulate that information on current debt repayment be analyzed monthly. If the
2 borrower defaults on the repayment schedule, his risk rating will be reconsidered.
3 Lending manuals also list specific ways to monitor loans extended in compliance with
4 the general credit policy.

5 Judging from recent banking practices (both in Russia and abroad) credit policy
6 development should incorporate: definition of strategy, to be approved by the Board of
7 directors (or pravleniem), and preparation of detailed Credit Policy Guidelines so as to
8 ensure attainment of the bank's strategic goals in the particular area. The Credit Policy
9 Committee should be made responsible for drafting, and subsequently enforcing, such a
10 document. Credit Policy Guidelines are a confidential document because it describes
11 strategy and methodology of the bank's credit activity; even within the bank it is
12 available only to those directly involved in lending operations. The Guidelines generally
13 cover all the elements of the credit process, from information collection and credit
14 standing verification to credit analysis and audit, including loan loss recovery procedure.

15 Credit Policy Guidelines is the most powerful tool of credit policy implementation.
16 It should:

- 17 • lay the foundation on which to control and monitor credit process arrangements;
- 18 • provide a source of reference materials and instructions for staff involved in all
19 aspects of lending;
- 20 • help control the enforcement of credit manuals written for credit department chiefs;
- 21 • specify requirements for internal audit by credit analysis and audit department
22 personnel;
- 23 • simplify the process of reviewing current credit policy and implementation
24 procedures.

25 For the commercial bank that implements its credit policy, problem loans should be
26 a matter of special concern. Bank staff must learn to discern early signals of possible
27 future losses and make appropriate decisions, based on credit policy, as regards problem
28 loans. When there is an apparent problem they should refer to Credit Policy Guidelines
29 and promptly decide whether to renegotiate or withdraw the particular loan.

1 Credit policy specifies types and amounts of risk that the commercial bank finds
2 acceptable, thus defining its target clientele. One of the key issues in risk minimization is
3 quality and risk assessment of the bank's assets transactions; primarily, credit risk should
4 be assessed.

5 *Loan Documentation and Methods of Organizing Credit Information*

6 Lending personnel must be familiar with standard practices of filling up and
7 keeping loan documentation. A well-organized, transparent registration and accounting
8 system is a crucial element. It is important to maintain a credit file, which is the bank's
9 own tool for keeping a complete chronological record of bank-client transactions. Its
10 scope usually goes beyond credit relations and covers all activities involving the two
11 parties (except trust arrangements). This broader scope of file information helps estimate
12 profitability or risk involved in offering package services to the client. Package services
13 currently are not in Russian banks' practice. There is, however, some experience with
14 developing credit record and credit history of the borrowers. The former document is the
15 record of bank's earlier transactions with the particular client. The credit history contains
16 facts and analytical intelligence information refer to the historical record of client's
17 transactions with other credit institutions. A credit file can include the following:

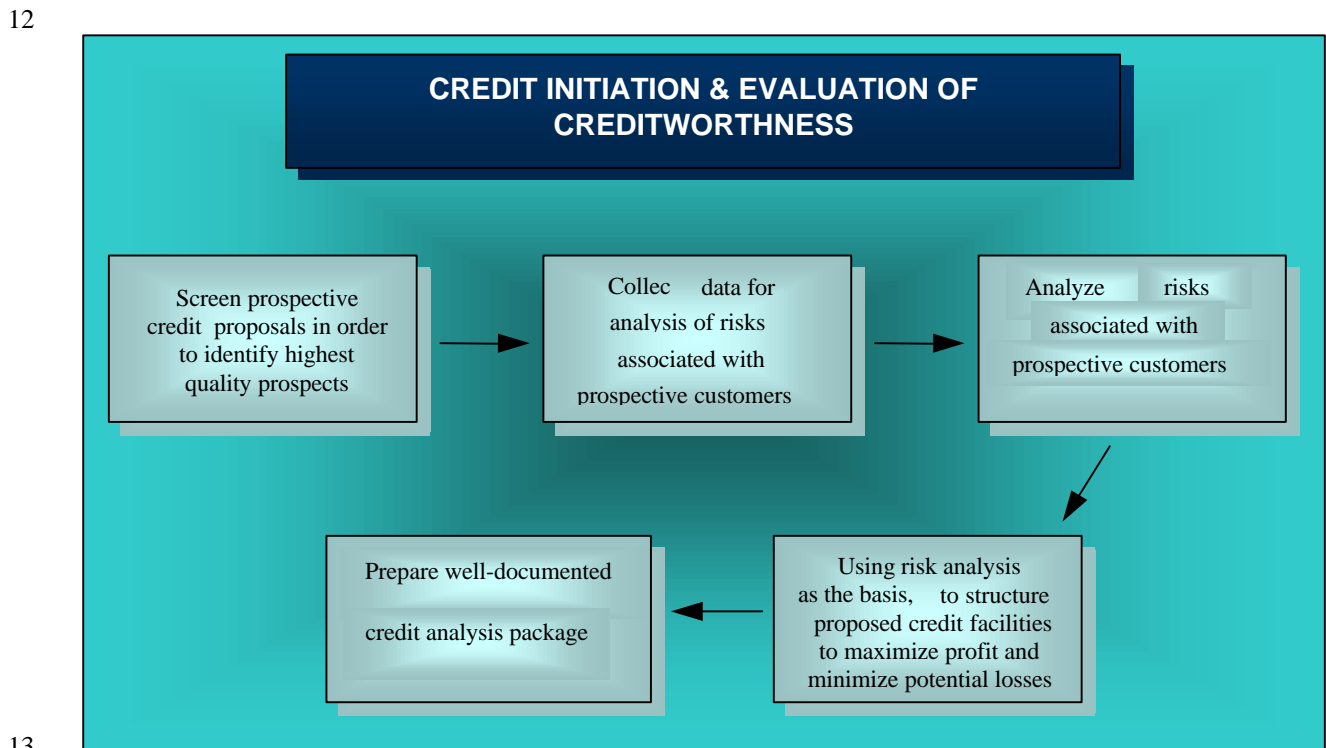
- 18 • copies of all correspondence between the bank and the client;
- 19 • all records made by bank staff as part of a detailed relations report;
- 20 • copies of all credit analysis and loan improvement documentation that should bear
21 signatures of authorized officers and, in case of credit rejection, include a statement
22 of justification;
- 23 • copies of all loan agreements, other agreements and contracts, foreign exchange issue
24 restrictions or any other documents related to bank-client relations;
- 25 • copies of reports analyzing the profitability of transactions with the particular client.

26 The file is a limited access facility. It is usually located within the relevant division.
27 Information is available to bank staff when needed.

1 Risk Control in Lending

2 Credit Initiation and Analysis

3 Credit initiation and analysis should ensure that loans are within credit policy
 4 guidelines and meet credit standards. The credit initiation and analysis process should
 5 follow a typical diagnostic process flow, beginning with borrower data collection.
 6 Prospective borrower assessment is not limited to financial analysis. In fact, financial
 7 analysis is irrelevant until information is available on the client's credit history, company
 8 managers and, preferably, management quality; and until the client's position in his
 9 sector and business prospects are estimated. The above procedures are no substitute for
 10 financial analysis as a tool for borrower creditworthiness assessment; on the other hand,
 11 financial analysis can not compensate for their absence.



13
14

15 **Figure 19 Credit Initiation and Evaluation of Creditworthiness**

16
17 The analysis of credit risk should focus on the four foundations of creditworthiness

1 • **Industry** focuses on the *industry dynamics* and *company position within the*
2 *industry*. Weakness in the industry foundation can significantly affect
3 repayment ability.

4 • **Financial Condition and Performance** determines the borrower's ability to
5 generate sufficient cash, the first source of loan repayment, or to draw on
6 existing resources, e.g., capital or assets, to repay bank borrowings. The three
7 specific measurement criteria are *profitability*, *liquidity* and *leverage*.

8 • **Management Quality** determines the *competence*, *integrity* and *alliances* of the
9 key individuals running the company. Weakness here can affect not only
10 repayment ability but also security realization.

11 • **Security Realization** determines the level of the bank's *control* over collateral
12 and the likely *liquidation value*.

13 Based on the analysis of these four foundations, the loan should be structured to
14 contain and mitigate risks identified and meet rate of return requirements, approved,
15 based on the approval; policy and credit authorities in accordance with Credit Policy as
16 well as documented, signed and disbursed.

17 *Using a Standard Spreadsheet*

18 One of the fundamental tools in financial analysis is the computer-generated
19 spreadsheet. Typically, three years of financial information is provided about a company,
20 in the form of balance sheet and income statement, and entered into a computer
21 spreadsheet program. The program then generates a multi-page computer printout that
22 contains the five key components of a standard financial spreadsheet:

- 23 • Income statement;
- 24 • Balance sheet;
- 25 • Net worth and fixed asset reconciliation;
- 26 • Cash flow statement;
- 27 • Key ratios.

1 The spreadsheet is the standard format for financial information on which the credit
2 analysis is performed. If the spreadsheet format is used consistently throughout the bank
3 in analyzing all loans, it will be a key factor in developing credit analysis standards that
4 will create a common credit culture. Russian market offers a number of locally produced
5 software packages, some of them designed for a company-level financial analysis, others
6 for individual projects. Alternatively, many banks develop their own software.

7 ***An Overview of Key Financial Ratios***

8 These key financial ratios describe the company's liquidity, efficiency of operating
9 activity and financial structure. The following key ratios are widely used:

- 10 • *Liquidity* the ability of the company's management to meet current
11 obligations;
- 12 • *Performance*: represents the degree to which results of this business are
13 greater than the cost of doing business.
- 14 • *Financial Structure*: reflects the ratios between different sources of funds and
15 types of assets with the main of them ratios reflecting equity finance versus
16 funds supplied by creditors.

17 When analyzing profitability, the gross profit as well as pre-tax profit of any
18 borrower should be examined. Particular attention should be paid to the operating profit
19 of the company to determine if the company is generating a profit from its basic business
20 operations, or its real business is questionable.

21 Liquidity analysis is the most important part of borrower assessment, as is it most
22 relevant to the objectives of credit status analysis, which is to establish the borrower's
23 capacity to meet his contract obligations with bank in accordance with loan agreement.

24 When analyzing balance sheet liquidity (see the chapter on "Risk Management in
25 Banking"), there are two ratios that must be calculated:

- 26 • current ratio (current assets divided by current liabilities) is an indicator of the
27 company's principal capacity to meet timely current claims of its debtors;

- quick ratio (current assets minus inventory, divided by current liabilities).

This indicator has gained crucial importance in the process of transition to market economy. When its level is below standard, it may indicate technical insolvency.

The greater a current ratio above 1:1 the better, whereas a quick ratio as close to 1:1 as possible is desirable. Usually, however, the quick ratio is less than 1:1. The level of liquidity ratios depends to a great extent on the sector in which the company operates. It is highest in commercial trade, and lowest in industries with long production cycle, e.g. as shipbuilding. The bank analyst should be primarily interested in the borrower's capacity to repay short-term debt, so he should not apply any industrial adjustments to liquidity. There are products specially designed for industries, which are unfavorable in terms of liquidity; those industries will usually be charged a relatively higher loan price.

Apart from the above listed ratios liquidity can be expressed through *net (own) working capital*, which equals the difference between current assets and current liabilities. A negative level means that the company's working capital is funded from borrowers' counterparties' funds i.e. the company "draws on" its suppliers and other partners working capital. This may somewhat increase return on capital but it also makes liquidity management far more difficult.

In spite of the importance of balance sheet liquidity analysis, a more accurate measure of a borrower's short-term creditworthiness is cash flow analysis, which is discussed below.

The level of company's performance is primarily the concern of its owners and managers. These indicators, however, they are valuable for the lender as they also give some idea of management quality and the borrower's ability to pay interest.

- ◆ *Asset Utilization* (gross sales (revenues) divided by assets) is an extensive indicator of how many roubles' worth of products the borrower earns per one rouble employed in fixed and current assets.

1 ◆ *Profit margin* (profit divided by gross sales) shows efficiency of production and
2 sales: it measures the percentage of profit contains in one rouble worth of
3 borrower's sales.

4 ◆ *Return on assets* (profit divided by assets) derives from the levels of the former
5 two ratios; it shows how much profit the borrower earns from using its assets.

6 Such indicator as *return on capital* (profit divided by equity capital) is a major ratio
7 for company owners but is not as important to the lender. At the same time *cover ratio* –
8 ratio of borrower profit before interest and taxes to interest expenses is a crucial factor in
9 credit analysis.

10 Generally, the key financial structure ratio is *leverage* – total debt divided by total
11 equity⁴. The lower the leverage is the better. It is attributed to the fact that the more own
12 capital in the company the better it will be able to withstand financial difficulties.
13 Leverage greater than 2:1 is unacceptable to the bank, though even tighter criteria are
14 usually applied. First, high financial leverage shows that creditors' funds are not backed
15 enough by owners' investments. Second, the higher financial leverage, the more the
16 borrower is exposed to both unexpected reverse factors affect his business and financial
17 market influences.

⁴ Another measure of financial leverage is ratio of assets (equals the sum of own and borrowed funds) to equity.

1

Table 8 Risk of Financial Leverage

Billion roubles				
	Company	Company	Company	Company
	1	2	1	2
1. Equity	100	100	100	100
2. Debt	0	100	0	100
3. Financial leverage	0	100 %	0	100 %
4. Return on	-----			
Assets	30 %	30 %	5 %	5 %
Business Risk				
5. Profit before interest and taxes	30	60	5	10
6. Interest rate (Long-term debt 20% per annum)	0%	20%	0%	20%
7. Interest expenses	0	20	0	20
8. Profit before income taxes	30	40	5	0
9. Tax rate	30%	30%	30%	30%
10. Income tax	9	12	1.5	0
11. Net profit after taxes	21	28	3.5	-10
12. Return on Equity	-----			
	21 %	28 %	3.5 %	- 10 %
Risk of Financial Leverage				

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Single ratios calculated for one year mean little, but they are important when they can be calculated for several periods - quarters or years - because they aid in the identification of trends in a company or enterprise. Multi-year ratio analysis prompts the analyst to ask his/her favorite question: why the level and dynamics of the given indicator differs from another or vary with the course of time? In analyzing the ratios, one should draw a comparison with other companies and industries and, most importantly, understand specificity of company's operations and economic trends.

11 ***Cash Flow Analysis***

12

13

14

Perhaps the most important part of credit analysis is consideration of cash flow because it represents the first source of loan repayment. If a strong first source of repayment is not in evidence, the loan should generally not be made.

Cash flow statement analysis is performed when reviewing both actual, historical financial statements and cash flow projections. When analyzing the potential cash flows of an enterprise in assessing the capacity of the enterprise to repay a loan, the analyst prepares a cash flow projection. In doing so, he/she may develop several cash flow projections, using different assumptions, such as most likely total sales or least likely total sales. Developing several such projections is called *sensitivity analysis*. The objective of the analyst is to determine whether or not the enterprise is likely to have the capacity to repay the loan, if the worst case is realized.

When accrual basis (modern accounting) financial statements are presented, cash flow analysis is required to analyze both the income statement and the balance sheet in order to glance “behind” those accrual-based financial statements to discern the actual cash flows in and out of the company. Here, the analyst is primarily examining *historical cash flows*.

There are two basic types of cash flow analysis statements for calculating historical cash flow:

- direct method;
- indirect method.

The direct method is considered more thorough because it begins with net sales and works through the entire income statement and balance sheet. The indirect method begins with net income and is not as thorough. An example of a direct method cash flow statement is presented on the following.

Table 9 Cash Flow Analysis Form (Direct Method)

CASH FLOW STATEMENT				
Company Name:		Currency:		
Amounts in:				
Date (Day, Month, Yr.):				
Cash Flow Statement - Direct Method				
DESCRIPTION:				
1. Sales-Net of VAT (IS)				
2. Increase (-) or Decrease (+) in Receivables				
3. Cash from Sales [1 + 2]				
4. Cost of Sales (IS) / Net of Depr. & Finc. Costs				
5. Increase (-) or Decrease (+) in Inventories				

6. Increase (+) or Decrease (-) in Payables				
7. Other				
8. Cash Production Costs [sum 4 thru 7]				
9. Gross Cash Margin (3 + 8)				
10. Other Liabilities				
11 Increase (+) or Decrease (-) in Prepaids				
12. Increase (+) or Decrease (-) in Accruals				
13. Increase (-) or Decrease (+) other Assets				
14. Cash Operating Expense [sum 10 thru 13]				
15. Cash Inflow (Outflow) from Operations (9 + 14)				
16. Miscellaneous Cash Income (IS)				
17. Income Taxes Paid (IS)				
18. Total [sum 16 thru 17]				
19. Net Cash Inflow (Outflow) from Operations (15 + 18)				
20. Financial Expenses (IS)				
21. Dividends Paid/Owner Withdrawals				
22. Extraordinary Loss (IS)				
23. Financing Costs [sum 20 thru 22]				
24. Net Cash Inflow (Outflow) (19 + 23)				
25. Current Portion long-term Debt				
26. Other				
26. Total [25 + 26]				
27. Cash after Debt Amortization (24 + 26)				
28. Capital Expenditures				
29. Intangibles				
30. Total [sum 28 thru 29]				
31. Financial Surplus (Requirements) [27 + 30]				
32. Other				
33. Increase (+) or Decrease (-) in Short-Term Debt				
34. Increase (+) or Decrease (-) in Receivables Long-Term Debt				
35. Increase (+) or Decrease (-) Equity				
36. Other Liabilities				
37. Total Inflow (Outflow) after External Financing (sum 32 thru 36)				
38. Cash after Financing [31 + 37]				
40. Actual Change in Cash				

1
2

3 The following key *cash flow ratios* are used by banks for purposes of cash flow
4 analysis: total debt of the borrower to cash flow; debt payable in current period to cash
5 flow; and cash flow from operations to interest payable.

6 When using the direct method, one should focus on positive and negative cash flow
7 from operations (item 15), because it is this item that represents an observable source of
8 loan repayment.

9 This indicator can turn negative for two reasons:

- 10 • negative sales return (resulting from the company's weak market position or
11 high production and/or marketing costs);

- interruptions in working capital turn-over (primarily delay in converting accounts receivables into cash and mounting of work in process)

To know which of the two is taking place in each particular case, one needs to collect additional information. Income statement contains information useful for sales profitability analysis; by adding balance sheet data, one can calculate turnover for working capital (as a whole and by its components). The capital turnover problem is aggravated by the "non-payment crisis", which has drastically reduced the market for loans with acceptable credit risk level.

When analyzing historical data of the total cash flow balance over a number of periods, one needs to ascertain whether the fund outflow was compensated through: inflow of business operations proceeds; borrowing from contractors or credit institutions; owner investment; new stock issue, or partial sale of assets.

Apart from doing traditional financial analysis techniques, the bank can analyze data on the borrower's settlement (current) account to establish his credit position. Two important types of data can be derived:

- debit and credit account turnover;
- settlement account balances.

The advantage of this additional source of information is high reliability; the disadvantage is complexity of analysis and ambiguity of results.

Loan Structure

The structure of the loan recommended by the credit officer and approved by the authorized individuals and/or committee is critical to timely repayment. The fundamental loan structure parameters are given below:

- Amount;
- Repayment schedule;
- Monitoring requirements;
- Security;

1 • Documentation;

2 • Pricing.

3 The credit department officer bases the loan structure on the financial analysis
4 performed, including the analysis of ratios and cash flow analysis. Any loan must have
5 the following attributes that should be specified and all be reflected in the loan structure:

- 6 • the loan must make economic sense;
- 7 • the credit requirement and the capacity to repay should be confirmed;
- 8 • the information needed and weak points should be identified, in order to
9 monitor the loan adequately;
- 10 • collateral should be thoroughly investigated, its liquidity and *effective value*
11 confirmed;
- 12 • the loan agreement should have covenants designed to protect against the
13 weak points and preserve the strong points of the borrower
- 14 • the pricing of the loan should be sufficient to provide the bank with an
15 acceptable return.

16 If any of the above attributes are missing, the loan is far more likely to become a
17 problem and/or prove unprofitable for the bank.

18 *Credit Authorization*

19 Another key element of credit policy, apart from developing credit procedure
20 guidelines, is organization for the credit process. For smaller banks, the system can be
21 both simple and efficient with all decisions made at the top. This approach is not
22 appropriate for larger banks, whose credit policy needs to be implemented in system
23 where loan extension functions are delegated.

1 *Delegation of Approval Authority*

2 A system of delegated authority can be described as follows. Each branch is
3 assigned a maximum acceptable amount of risk per borrower, ranging between 100 and
4 1,000 thousand US dollars (loans may be denominated in roubles or in other foreign
5 currency). Then the risk limit depends on the volume of loan portfolio of the branch;
6 branch staff skills and experience; existence of overdue loans; branch loan portfolio
7 structure, etc. The Credit Department is authorized to extend a loan within \$2 million; all
8 credit requests in excess of this sum being examined by the bank's Credit Committee.
9 Empirical data has shown that in the Russian banking environment, this approach will
10 lead to about 2/3 of loans being extended at the branch level.

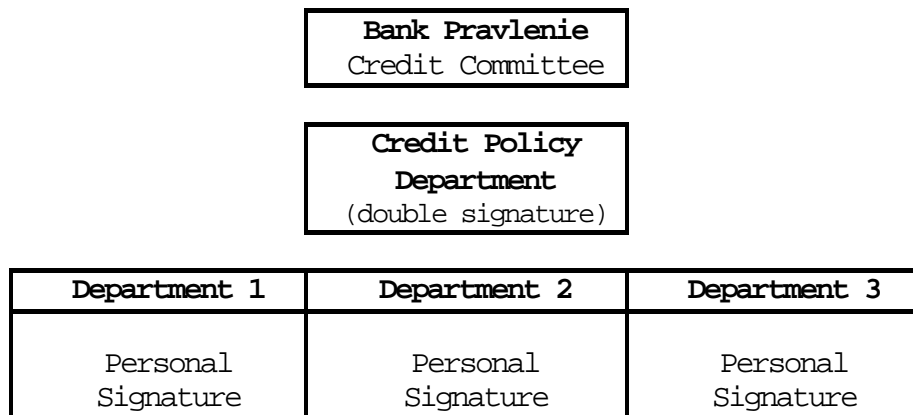
11 The following is a general view on delegation of approval authority system. The
12 lender bases the loan. Responsibilities of lending officers, as well as the bank's
13 procedures for approving different kinds of credit products, depend on the numbers and
14 skill levels of credit officers whose signatures are required to approve loans of a certain
15 amount and quality.

16 As they translate credit policy into actions, bank staff should use of a set of
17 techniques and operations that have to be applied during credit approval and hence in
18 organization for credit process. The system of credit approval is usually multi-level. The
19 level at which each individual credit product will be approved depends on client rating
20 (the borrower's credit score) and the credit risk level.

21 For example, individual authority of a credit officer (individual signature) may
22 extend to the approval of a credit product totaling, say, \$20,000 (except in special cases).
23 The scope of individual authority is often different even within one bank and depends on
24 the officer's expertise, as well as on the type, amount and maturity of previously issued
25 loans. An important tool for lending personnel is their capacity to sell and diversify
26 credit products up to the permissible limit. When the limit on a given credit product
27 (such as forwards exchange transactions) is exhausted for the particular client, the bank
28 officer can not approve any further extension of similar services; he can only offer those
29 other products that are still within the specified limits. The officer may approve a

1 package of credit products for the client using any combination of loan categories,
 2 provided the total authorized credit limit is not exceeded. The branch manager can be
 3 personally responsible for all loans extended by the credit department.

4



5

6

Figure 20 Example of Loan Approval System

7 *Double signature* (by the credit officer and by his supervisor) will be required if the
 8 amount of credit ranges, for example, between \$20,000 and \$50,000 and creates no
 9 additional risks. Double signature is normally practiced when the loan amount and/or
 10 maturity exceed the personal credit limit of the officer who extends the loan and is made
 11 responsible for it. Multiple signature procedures necessary to approve a given credit
 12 product vary from bank to bank. Banks generally observe either of the two principles.
 13 The larger the amount of credit, the more persons have to sign, each additional signature
 14 being an authorization; from a higher ranking official of the same branch or division;
 15 alternatively, a loan exceeding credit limit is to be signed by a member of Credit
 16 Committee.

17 The *Credit Committee* makes decisions on granting large loans - say, starting from
 18 \$50,000. Credit Committees consists of experienced banking officers and they are
 19 created with the specific purpose of making independent judgment when the prospective
 20 exposure exceeds the bank's lending limits (in amount, maturity, etc.) or when there are
 21 exceptions from the bank's standard lending terms. Committee members thus perform a
 22 thorough credit analysis on the bank level. This approach is believed to reduce the rate of

1 error in making lending decisions. However, one potential disadvantage of this practice
2 is that it claims on the working time of valuable staff members that could otherwise be
3 used for business development. Another problem is delays in loan approval.

4 *Alternative Approaches*

5 At present, Russian banks practice a variety of approaches to implementing their
6 credit policies. A number of banks recently gave up the system of delegating lending
7 authority because they found that this system:

- 8 • lacks flexibility;
- 9 • slows down the decision making process;
- 10 • distracts skilled credit officers from discharging their main duties.

11 The authority delegation system, if applied properly, does allow to improve the
12 level of credit departments performance, define the responsibilities of employees for
13 each level in bank hierarchy and for each particular employee (depending on personal
14 competence, risk inherent to bank's portfolio, etc.), as well as to maintain strict
15 supervision over staff. The problem, then, is not whether or not the system should be
16 used but rather, how to use it best.

17 Every bank should develop its own credit policy. The main issue is not the
18 existence of own credit policy but its quality. Bank-borrower relationship patterns
19 depend on multiple factors, which include the size of the bank, the skill level of its staff
20 involved in lending, the size of portfolio, lending priorities, etc.

21 *Principles of Organization of Credit Process*

22 In large banks throughout the world, it is the credit department that takes
23 responsibility for organization of lending. The department coordinates and sustains this
24 process. With lending function separated from credit analysis, credit departments can
25 focus entirely on their primary area of activity. In smaller banks and branches lending
26 personnel often performs credit analysis. On the other hand, this separation of functions
27 (and departments) allows for more objective credit analysis and better justified loan

1 approval decisions, as compared to a situation where both functions are combined within
2 one department.

3 The objective of the credit approval process is to control risks within policy
4 guidelines while maintaining a streamlined process. This objective is accomplished by:

- 5 • Ensuring that all credit decisions meet established policy guidelines and are
6 based on sound credit judgment;
- 7 • Requiring higher approval for higher risk to ensure that senior management
8 approves the highest risk credits;
- 9 • Requiring multiple signatures to ensure that credit decisions are made with the
10 “collective wisdom” of a group of experienced bankers and to enforce the first
11 level of control over the credit process;
- 12 • Ensuring individual accountability so that each and every approving officer is
13 fully responsible for their credit decision;
- 14 • Balancing the level of control with efficiency.

15 To balance control with efficiency, it is necessary to achieve some degree of
16 decentralization to avoid delays in approval times. The higher the concentration of credit
17 exposure in a relatively few loans, the easier it is to balance control and efficiency. At the
18 same time, a greater concentration of loans, especially in a few industries, the higher
19 portfolio risk. The CBR has introduced a special standard in order to control this
20 particular risk factor: "permissible risk limit per borrower or group of borrowers" (ratio
21 H₆ of Regulation 1). However, internal risk management requires that the bank use a
22 more detailed system of limits.

23 The vehicle for credit approval is a well-documented, thorough credit approval
24 package that should include the following items:

- 25 • credit request summary sheet, including purpose of the loan and amount of
26 credit needed;
- 27 • history of borrower;
- 28 • risk analysis;

- 1 • discussion of collateral;
- 2 • credit recommendation, including loan structure.

3 **Table 10 Key Credit Approval Issues**

KEY ISSUES	COMMENTS
Delegating Authority	Is too much authority concentrated at the top? Should Credit Policy Committees have approval authority? Should there be individual approval authorities?
Approving Frequency	How often should Loan Agreements should be reviewed and approved?
Controlling Approvals	What controls over the approving process are required?
Approving Exceptions and Problem Loans	Should exceptions and problem loans require higher approval?
Approving Groups	What controls over availment are needed to minimize mistakes?
Modifying Facilities	Should high and low risk facility modifications require different approval levels?

4

5 **Loan Pricing**

6 Pricing of loans is a key portfolio management function that must be managed well in
 7 order for the bank to realize maximum profitability from its loan portfolio. Often,
 8 however, pricing Does not reflect the true cost of funds, errors are derived from ignoring:

- 9 • indirect costs;
- 10 • costs conditioned by different levels of risk;
- 11 • servicing costs (overheads), such as marketing and administrative costs.

12 Banks tend to set pricing on an average cost of funds basis, rather than determining
 13 what it costs to fund a loan at the time the loan is approved. This approach can quickly

1 reduce profitability as cheaper retail deposits and any priority funding are exhausted. The
2 model shown below (Figure 21) reflects the key elements of proper loan pricing, with the
3 base rate taking into account the marginal cost of funds.

4



5

6

Figure 21 Main Factors of Loan Pricing

7 The most up-to-date approach, which is also the most difficult to apply, is loan
8 pricing taking into account the target return on bank capital and the amount of credit risk.
9 (For algorithm underlying this approach, please refer to the chapter on Credit Risk
10 Management). To properly set the interest rate, one must appreciate the fact that the
11 volume of real effective demand for credit (that is, when the borrower is creditworthy) is
12 inevitably limited. The tougher the competition banks have to face, the more attention
13 they should pay to market analysis and competitors analysis for the purposes of loan
14 pricing.

1 Credit Control

2 The key role of credit control participants is to maintain the overall integrity of the
3 credit process and credit culture. Below is a chart which outlines the role of the credit
4 control personnel.

5 **Table 11 Role of Key Credit Control Personnel**

6

PARTICIPANTS	ROLE
Loan audit,	Review loan quality Ensure policy adherence Maintain independence and remain unbiased in decision making
Credit Management Information System	Thorough data gathering Generate management reports Diligent and attention to detail
Disbursement Control: Branch personnel Control clerks	Control available funds Review documentation Maintain independence Maintain high attention to detail

7

8 ***Risk Acceptance Guidelines***

9 Risk acceptance guidelines control individual credit exposure and standardize credit
10 quality by setting prudent extension standards. They determine *performance thresholds*
11 which a company must meet prior to being considered for credit extension. They
12 establish credit structuring requirements that must be met prior to extending a loan. As
13 the result credit facilities will be structured to address key risks. To prevent snow ball
14 effect in increase of these guidelines they should address one or more of the six
15 structuring parameters. These guidelines are not inflexible rules, but are intended to
16 provide control. The credit officer or relationship manager must understand the specific
17 credit issues of each individual credit, based on the analysis of the four credit

1 foundations performed. Any exceptions to the guidelines must be carefully justified and
 2 exceptions should be approved at a higher level.

3
 4
 5

Table 12 Examples of Risk Acceptance Guidelines

FOUNDATION OF CREDITWORTHINESS	COMMON CRITERIA
Industry	Specific industry risk acceptance standards are usually not set. Instead, others are altered for specific industries.
Financial Condition	Leverage Liquidity Performance
Management Quality	Years in business Competence Management depth
Security Realization	Effective Value Control Executability

6
 7
 8 In Table 13 are some sample financial condition risk acceptance guidelines by
 9 industry.

1

Table 13 Examples of Financial Condition Risk Acceptance Guidelines

Industry Category	Maximum Leverage	Minimum Debt Service (Coverage)¹
Trade and Commerce	5.0	1.2
Banking and Finance	CBR and Bank for International Settlements Standards	1.2
Manufacturing and Mining	2.0	1.5
Construction	1.5	1.5
Tourism, Recreation and Transportation	2.0	1.5
Services	3.0	1.2

2 **Loan Portfolio Management**

3 Asset allocation standards are a critical tool for conservative management of the
4 loan portfolio. The basic components of such standards are:

- 5 • portfolio limits;
- 6 • priority segments;
- 7 • risk acceptance guidelines.

8 **Portfolio Limits**

9 Defining portfolio limits is the key asset allocation control used to contain risks and
10 improve long-term viability. They enable the bank to:

- 11 • Avoid catastrophic losses from overexposure in any one risk area;

¹ Revenues to interest expenses ratio.

- 1 • Diversify the portfolio to reduce concentrations and provide a more stable earning
2 base.

3 The distinction is usually made between industry limits; country limits; and
4 borrower limits. There are limits concerning currencies, maturities, and types of
5 collateral.

6 Limits can be set as standards or absolute maximum values. A standard may be
7 calculated based on the volume of bank equity capital or the size of loan portfolio; some
8 other indices may also be relevant. For example, the lending limit for non-ferrous metals
9 industries may be set at 150% of bank capital;. It means that, if bank capital equals 100
10 billion roubles, then a total of loans to enterprises in this particular industry may not be
11 larger than 150 billion roubles.

12 Prior to establishing portfolio limits, the key risk areas should be determined. Key
13 risk areas will differ by bank and country and regions (See Table 14)

14

1

Table 14 Sample Key Risk Areas

Risk Area	Risk Area Rationale
Single Borrowers	Excessive exposure to a single borrower that goes out of business and does not repay could eliminate a year's profit or capital Exposure to large borrowers is difficult to unwind once unforeseen problems emerge
Groups of Related Borrowers	Same as above Financial problems in only a part of a group's businesses often cause insolvency of the whole group
Industries and sub-industries	Cyclical or systemic structural weaknesses in an industry can result in bankruptcy of all but the strongest companies Industry structural problems impact both first and second source of repayment
Business Segments	Economic events can cause entire banking businesses to experience downturns -- e.g., real estate financing caused by real estate market crash
Products and Services (For Example Letters of Credit, Foreign Exchange Transactions)	Product profitability is generally impacted by a set of structural elements which lead to cyclical performance Over-concentration in any one product or service could expose the bank to cyclical swings in earnings

2
3 Prior to establishing portfolio limits, the key risk areas should be determined. Key
4 risk areas will differ by bank and country.

5 Once the key risk areas have been identified, management should establish
6 portfolio limits based on key relevant market factors and the risk areas identified.

1 In Table 15 are some of the potential key factors to be considered when
 2 establishing portfolio limits.

3 **Table 15 Sample Key Factors When Establishing Portfolio Limits**

KEY FACTOR	SAMPLE QUESTION
Current Risk Environment	What key environmental trends are prevalent and how will they impact each risk area?
Growth Goals	What is the bank's overall growth objective and what are specific objectives for each risk area? What credit exposure levels are implied by the growth objectives? Do implied credit exposure levels conflict with conclusions regarding risk trends?
Regulatory and Internal Bank Objectives & Regulations	What credit exposure levels do CBR regulations/objectives imply for key risk areas? What are the implications for other risk areas? Do these credit exposure levels conflict with the bank's own growth goals and the level of environmental risk?
Market Influences	What is the current competitive environment in key risk areas? What are the demand trends? How do these trends impact credit exposure levels?

4

1 Priorities in Loan Portfolio Management

2 This group sets guidelines to productively move the portfolio toward the better
3 solution to risk-profitability dilemma, i.e.

- 4 • To minimize risks and considering this constraint maximize profitability as
5 much as possible.

6 Priority portfolio management seeks to identify those industries that have a lower
7 risk profile than average where the bank can earn a higher return than average on its
8 lending and service activities. The process of identifying such industries also aids the
9 bank in determining those higher risk industries where the bank may want to limit or
10 reduce its credit exposure.

11 Risk acceptance guidelines define performance criteria and structuring
12 requirements for individual credits within risk areas. There may be characteristics
13 peculiar to certain industries that should be recognized when setting threshold
14 requirements for borrowers in those industries. For example, banks generally require that
15 manufacturers have lower leverage (thus lower risk) than many other industries because
16 of the large amount of fixed, less liquid assets needed in the manufacturing process.

17 Credit Monitoring and Portfolio Quality Control

18 The credit monitoring process should build on the previous analysis process to
19 monitor creditworthiness and identify corrective actions necessary to preserve credit
20 quality. Once credit facilities are disbursed, the bank should continually monitor credit
21 quality to ensure that no deterioration occurs. The key of doing this is maintaining close
22 customer contact to provide the flow of current information that will support further
23 analysis.

24 The analytical framework introduced in credit analysis should be used to track
25 performance and watch for deterioration in creditworthiness. Liquidity, financial
26 structure and profitability should all be observed closely. In particular, the weak points
27 identified during the analysis of the four credit foundations should be monitored. The

1 loan structure, as embodied in the loan agreement, should protect the bank against these
2 same weak points. And, the loan agreement itself is a tool to use in credit monitoring.

3 To guide the monitoring process, a *credit scoring* (grading) system should be
4 developed and introduced to rate customer credit quality, at a minimum, on a quarterly
5 basis. Such a system of loan classification will aid in identifying problem areas and
6 planning, approving and executing any action required to protect the bank against any
7 deterioration in borrower creditworthiness.

8 Credit scoring is a method for systematic and unbiased stratification of loan
9 portfolio according to quality and risk.

10 The main purpose of credit rating is to improve portfolio quality by:

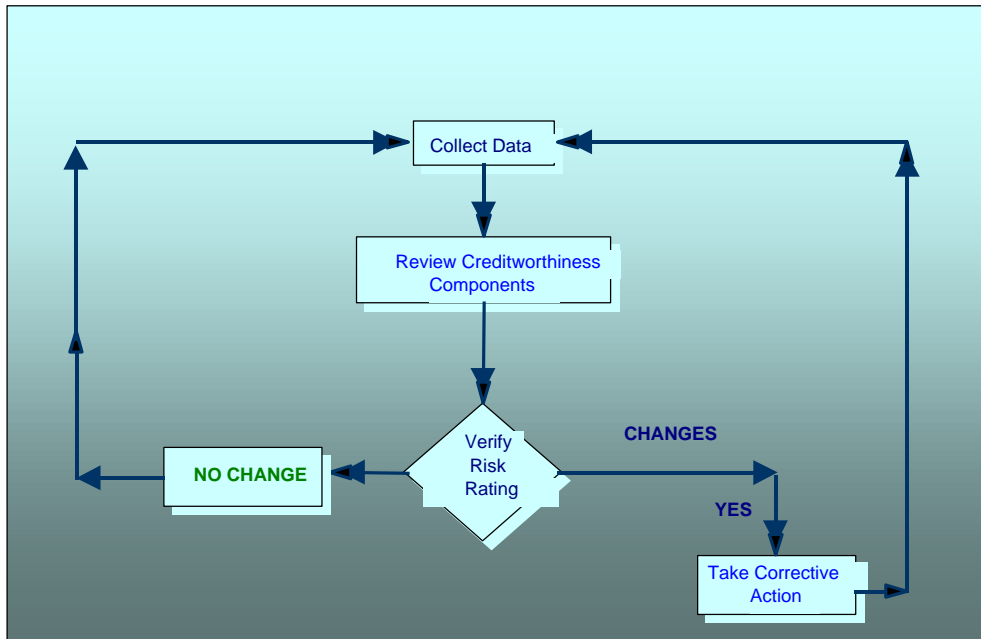
- 11 • using warning signals that help predict borrower insolvency;
- 12 • regularly structuring of management information;
- 13 • establishing standards for the purpose of responsibility identification.

14 Credit scoring decisions depends on a number of key factors, such as the analysis of
15 financial statements, borrower's business position and bank account information, bank-
16 client relations, and quality of collateral.

17 Minor problems identified while credit monitoring may require discussions with
18 company management, whereas major problems may require transfer of the relationship
19 to a loan recovery (workout) department.

20 The critical element in monitoring loans is consistent information collection and
21 review on a regular basis. In Figure 22 is presented algorithm of the credit monitoring
22 process.

23



1

2

Figure 22 Credit Monitoring Process

3 The bank should preferably have one senior officer personally responsible for credit
 4 monitoring. This function can be combined with the monitoring of other banking
 5 activities, especially in smaller banks. This monitoring officer must receive the following
 6 information:

- 7 • gross credit risk exposure;
- 8 • credit exposure after security;
- 9 • initial credit ratings;
- 10 • reviewed credit ratings;
- 11 • brief analysis of current financial position of the major borrowers;
- 12 • debt service coverage indicators and reports on loan loss reserves.

13 All of the factors affecting loan portfolio should be reviewed on a regular basis,
 14 perhaps semi-annually or annually, in order that the portfolio limitations remain current
 15 with conditions in the marketplace. A regular review is especially important in the NIS
 16 because of the rapid pace of change in so many sectors - governmental, legislative, legal,
 17 economic, fiscal, and financial.

1 Priority portfolio management seeks to improve overall bank profitability by
2 migrating the portfolio to the most attractive market segments and avoiding, or reducing
3 exposure to, the least attractive market segments. (Examples of market segments include:
4 project financing, credit card issue, and mortgage loans.) It attempts to:

- 5
- 6 • identify high return/low risk portfolio areas within market realities;
- 7 • base the priority segments on historical profitability and risk analysis;
- 8 • adjust the priority segments over time for strategic objectives and bank priorities;
- 9 • proactively guide relationship managers in pursuing growth in attractive areas and
10 limiting or reducing growth in unattractive areas.

11 Credit analysis and loans scoring are crucial for the bank. Having classified its loan
12 portfolio by quality category, and having estimated statistical average share of problem,
13 overdue and bad loans in each of the categories, the bank can then make certain steps to
14 minimize loan losses.

15 Credit quality analysis is primarily focused on reducing:

- 16 • credit risk on each particular loan;
- 17 • loan losses at the level of bank portfolio.

18 The former objective implies careful control both on lending and on direction of
19 using borrowed funds (it refer to loans to businesses as well as individuals), including
20 continuous monitoring of clients' financial status, creditworthiness and directions of debt
21 financing throughout the whole term of loan agreement. In the case of monitoring quality
22 scoring of the loan portfolio makes it possible to apply different degree of control based
23 on credit rating. Bank management establishes credit control procedure for each loan
24 category.

25 After the loan is granted, the following trouble signals are relevant to the bank:

- 26 • Credit limits are routinely exceeded.
- 27 • The borrower does not follow debt servicing schedule: repayment of the
28 principal or interest is delayed.

- 1 • Unfavorable trends in financial ratios are observed, such as a lack of liquid
- 2 assets or diminishing of working capital.
- 3 • Income from sources other than sales is unexpectedly high.
- 4 • Unregistered transactions are increasingly practiced.
- 5 • Taxes are not properly paid.
- 6 • The borrower fails to submit reliable, current financial information or auditor-
- 7 validated accounts in due time.

8 The bank should constantly watch out for these symptoms. But, apart from
9 monitoring, management involves taking steps to alleviate negative consequences.

10 Such corrective steps may include:

- 11 • renegotiating the loan, changing the loan structure;
- 12 • cutting down indebtedness by improvement of working capital turnover;
- 13 • involving technical, marketing or financial consultants;
- 14 • selling assets;
- 15 • assets liquidation;
- 16 • holding consultations on possible government support;
- 17 • obtain additional collateral;
- 18 • granting prolongation of credit conditioned on careful control of the
- 19 borrower's operations (this control may vary from organization of regular
- 20 meetings and receiving detailed financial information up to "hands-on"
- 21 management technique and nominating bank representatives on key positions
- 22 in the borrowers management).

23 These measures banks is in a better position to correctly set the optimum level of
24 loan loss reserves and develop credit policies which are justified from the economic
25 point of view.

1 Assessment of Impact of Credit Risk Exposure on Return on Loan Portfolio

2 In order to quantify the impact of credit risk on loan portfolio, bank needs to use a
3 system of ratios.

4 The most important aggregated ratio, which indicates loan portfolio profitability, is
5 net interest margin taking adjusted for credit risk. It is calculated as net interest margin,
6 adjusted for the amount of loan losses, divided by the volume of loan portfolio. This ratio
7 can be used to assess the general level of the bank's risk management system
8 performance, as it takes into account both losses caused by credit risk and rewards
9 resulting from credit risk taking.

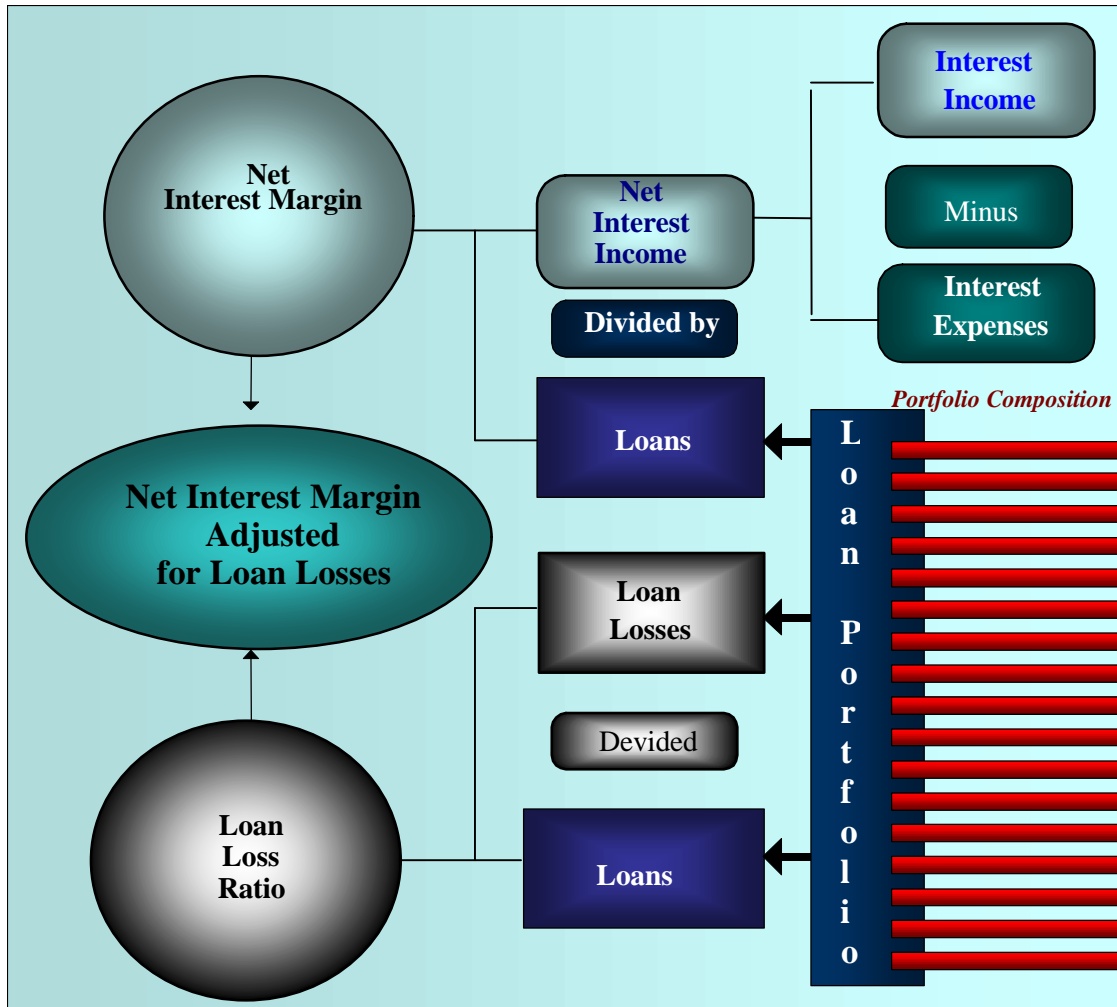
10 Equation 2

$$11 \quad \text{NET INTEREST MARGIN ADJUSTED FOR LOAN LOSSES} = \frac{\text{Interest Income} - \text{Interest Expenses} - \text{Loan Losses}}{\text{Loans}}$$

12 Net interest margin adjusted for loan losses is, in turn, defined by a set of ratios²,
13 with each of them describing one particular aspect of credit risk management.

15 The loan loss ratio, which represents bad loan write-offs and the nonperforming
16 part of loan portfolio, is in turn derived from several following ratios.

² In analysis of general bank performance often makes use of a different variant of given ratio:
Net interest margin = (interest earned - interest paid + balance of other income and expenditure - reserves) / (average total earning assets for period)



1

2

Figure 23 Assessment of Credit Policy Efficiency

Equation 3

$$\text{BAD DEBT RATIO} = \frac{\text{Overdue Loans}}{\text{Loans}}$$

4

5 This credit risk adjustment ratio can be used by commercial banks as a measure of
 6 credit policy efficiency and indicate the minimum level of loan loss reserve (from the
 7 internal bank management perspective).

1 Equation 4

$$\text{PROTECTION AGAINST LOAN LOSSES} = \frac{\text{Reserves for Loan Losses}}{\text{Loans}}$$

2
3 It is important that when the bank creates additional reserves for loan losses, those
4 funds should be converted into most reliable, liquid assets. This should be considered
5 while developing and implementing credit policy, which should prescribe the way to
6 build and manage such assets.

7 Equation 5

$$\text{RATE OF GROWTH OF LOAN PORTFOLIO} = \frac{\text{Net Loan Balance in Previous Period}}{\text{Net Loans Balance in Current Period}}$$

8
9
10 The growth of net loan balance means higher credit risk that requires optimization
11 of the reserves against loan losses. By analyzing this ratio, which describes current trends
12 of the loan portfolio, one can forecast future reserve requirements and make adjustment
13 to the credit risk protection ratio.

14 Equation 6

$$\text{RATIO OF LOST INTEREST INCOME} = \frac{\text{Non Received Interests}}{\text{Interests Received}}$$

15
16 The numerator includes interest revenue forgone as a result of nonperforming
17 loans, prolongation and write-offs.

18 For last years CBR has prescribed detailed procedure for building reserves
19 requirements against loan losses. Nevertheless banks should organize internal and
20 independent analysis of management information data to make timely accurate decisions
21 in loan portfolio management.

1 ASSET AND LIABILITY MANAGEMENT

2 Geary Vance

Vladimir Platonov

3 *More and more domestic banks achieve that degree of maturity,*
4 *both in volume, and in the degree of complexity of operations, when the*
5 *concept of asset and liability management becomes one of the most*
6 *urgent problems of management. This chapter on problems of Asset and*
7 *liability management (ALM) is intended to present a logical approach of*
8 *the given process and to consider the key moments of its practical*
9 *procedures. The chapter discusses the organizational structure of ALM,*
10 *methods and approaches to risk management in the ALM framework,*
11 *reporting requirements as well as the problem of implementing asset and*
12 *liability management in a bank. Special attention is focused on*
13 *management of each of the main risks and on the most important*
14 *accompanying questions.*

15 Even in the conditions of a stable economic situation the turbulent growth of
16 banking sector would have presented great challenges for any bank. However, when it
17 occurs simultaneously with the fall in annual inflation rates from 2000% down to less
18 than 30% and in the conditions of deep crisis in the real sector the powerful external
19 factors affecting the commercial bank finance arising. That is why the problem of
20 management of bank assets and liabilities has now acquired paramount significance. The
21 control and minimization of financial risks (see the chapter Risk Management in
22 Banking) mainly depends on implementation of the asset and liability management the
23 concept in bank's activity. Otherwise, the purpose of risk reduction can be achieved only
24 via a crushing fall of profitability and volume of activity.

1 Organizational Structure for Asset and Liability 2 Management

3 Assets and Liabilities Committee

4 The implementation of asset/liabilities management process begins with the
5 establishment of a formal organizational unit – special committee attached to the Board
6 of Directors. This committee referred to as the assets/liabilities committee or ALCO and
7 has the responsibility for establishing policies and procedures pertaining to ALM. It is
8 also responsible for monitoring the bank’s compliance with those policies. As ALCO is
9 the structure of the Board of Directors, the latter should authorize the documents
10 developed by the Committee. The ALCO should meet at least twice a month. All
11 meetings should be documented with written minutes.

12 Generally, the membership of the ALCO includes those senior officers of the bank
13 who are responsible for obtaining resources, investing those resources, planning,
14 forecasting, and controlling the process. Usually this Committee includes:

- 15 • the bank’s chief executive officer;
- 16 • senior liability operations, deposits and transaction officer;
- 17 • treasurer or deputy of CEO responsible for finance;
- 18 • chief of the assets/liabilities department;
- 19 • senior economist – the head of economic department;
- 20 • senior accountant;
- 21 • senior loan officer;
- 22 • heads of large branches.

23 Other senior officers may be included on the ALCO on a constant basis if
24 necessary.

25 The ALCO is responsible for:

- 1 • adopting written policies regarding the risk exposure of the bank relative to all
2 of the financial risks;
- 3 • analysis and monitoring the bank’s efficiency and firstly, profitability;
- 4 • analysis and monitoring relative to the goals and objectives, as established by
5 the short-term (operational) and strategic (long-term) plans;
- 6 • accounting for maximizing profitability under implementation of the pricing
7 policies regarding bank products;
- 8 • establishing the interest rates on loans and deposits and communicating these
9 approved rates to the appropriate bank personnel;
- 10 • determining liquidity needs of the bank and monitoring the bank’s liquidity
11 position relative to the CBR of Russia’s limits (under Regulations 1 and 17
12 etc.);
- 13 • monitoring the bank’s exposure to interest rate changes in the market and
14 determining strategies to maximize net interest income within the established
15 risk tolerance levels;
- 16 • reviewing the short-term forecast of sources and uses of funds;
- 17 • establishing a short-term and long-term forecast for market interest rates,
18 using this forecast to establish the interest rates on the bank’s loans and
19 resources.

20 ALM Reporting Requirements

21 A critical requirement for a successful ALM program is *accurate* and *timely*
22 reporting. The ALCO cannot fulfill its responsibilities if the proper data is not available
23 for the committee to use in making its decisions.⁵

24 The data requirements may vary between banks; but at a minimum, the ALCO
25 should have the following reports available:

⁵ The reporting of historical data of the bank’s financial statements must be adjusted for inflation especially following periods of hyper-inflation.

- 1 1. Interest rate sensitivity reports.
- 2 2. Schedule of assets and liabilities, which are sensitive to market interest rate
- 3 changes (this schedule must include multiple time periods).
- 4 3. Liquidity management reports:
 - 5 • status of primary and secondary reserves;
 - 6 • schedule of maturing assets and liabilities;
 - 7 • historic data of sources and uses of funds;
 - 8 • volatile resources compared with availability of liquid assets.
- 9 4. Problem assets reports:
 - 10 • nonperforming loans and other idle assets;
 - 11 • fund reserve for outstanding loans charge offs;
 - 12 • loan and other assets charge offs;
- 13 5. Economic reports
 - 14 • current yield curve;
 - 15 • inflation forecasts.
- 16 6. Interest rate reports:
 - 17 • cost of funds analysis;
 - 18 • bank's current interest rates;
 - 19 • main competitors' interest rates.

20 Risk Management within the Framework of ALM

21 Asset and liability management is firstly viewed as short run in nature,
22 concentrating on the day-to-day process of managing a bank's balance sheet. ALM is
23 focused on the achievement of maximum profit within the acceptable risk limits. So the
24 main financial goals are:

- 1 • maximization of return;
- 2 • risk minimization

3 On a slightly longer-term basis, ALM is part of the profit planning of the bank and
4 looks forward through the bank's fiscal year. And at last, ALM questions are rather
5 important in the long-term strategic planning process.

6 ALM begins with the analysis of how the bank attracts resources, liabilities and
7 capital, and how it deploys those resources to make a profit. Simply put, it is the study
8 of the bank's sources and uses of funds and the accompanying risks associated with this
9 process.

10 The asset and liability management is directly connected with management of
11 financial risks. the definition and essence of bank risks is considered in the second
12 chapter. Here we shall concentrate only on some essential features of the main types of
13 risk associated with ALM.

14 The *liquidity risk management* can be accomplished on the asset side by selling
15 liquid assets such as GKO, or on the liability side by fast obtaining new funds. However
16 not less important approach to liquidity management is the maintenance of the certain
17 proportions between the assets and liabilities. Throughout the world recently a number
18 financial innovations have been implemented, such as *securitization*, which have
19 provided new instruments for management of bank liquidity.

20 *Interest rate risk* management is performed by a number of methods. One of the
21 most important approaches is refers to as gap management. As long as this method
22 continues to remain a basis for interest rate risk management for the last decades, as well
23 as in the case with liquidity risk management, there have been many financial
24 innovations, contributed greatly to the arsenal of the bank managers. Key parameters for
25 measurement of this risk impact are net interest income of a bank and its net interest
26 margin.

1 Equation 7 Key Parameters of the Risk Impact of Interest Rate Change

2

$$\text{Net Interest Income} = \text{Interest income} - \text{Interest expenses}$$

$$\text{Spread} = \text{Return on Assets} - \text{Cost of Funds}$$

$$\text{Net Interest Margin} = \frac{\text{Net Interest Income}}{\text{Interest Earning Assets}}$$

3

4 In the Russian banking the term margin, as a rule, means spread. In the
5 international meaning, net interest margin refers to Russian ratio profit margin for
6 interest earning assets.

7 *The market risk* is closely related to interest rate risk. The importance of
8 adjustments for this risk under ALM is stipulated by the fact that the changes in interest
9 rates reversibly affects on market price of previous debt issues comparing with return on
10 loans. When the current interest rate falls, the price of these issues grows. This
11 circumstance makes more difficult the process of asset and liabilities management, but at
12 the same time it provides new choices for minimization of the adverse impact on the
13 bank of changes interest rates.

14 A comprehensive discussion regarding *credit risk* management is presented in a
15 separate chapter. ALM is not directly focused on management of this type of risk.

16 *Foreign currency risk* refers not only to cash reserves denominated in foreign
17 currencies, but also to foreign currency investments and liabilities of a bank. In those
18 countries, where, similar to Russia, the percentage of foreign currency items in bank
19 assets continues to be a double-digit figure, the record of this risk considerably
20 complicates the process of asset and liability management.

21 *Solvency risk* (or risk of capital inadequacy) may be viewed either from an
22 economic perspective, or from the regulatory point of view. A bank gets unsatisfactory

1 balance sheet structure, and its capital decreases, when its expenses during critically long
2 periods exceed its net incomes. This occurs because of three main economic factors:

- 3 • Customers withdrew their funds from the bank, causing a liquidity crisis;
- 4 • Loan losses are increasing;
- 5 • The bank's equity is gradually eroded because of bad management, when
6 there are too many decisions or activities that does not make economic sense.

7 From the regulatory perspective, solvency risk, and consequently danger of
8 bankruptcy, is associated with the bank's inability to meet *capital adequacy*
9 requirements. This means that there is not enough equity to fulfill main functions of bank
10 capital:

11 1). To maintain general confidence in the bank's stability. It is directly associated
12 with CBR requirement for the minimum capital adequacy that level has recently
13 approached the international standards (limit ratio H_1 according to the CBR Regulation
14 1);

15 2). To provide additional protection the bank liquidity (H_4).

16 3. To protect individual depositors in case of bank liquidation or restructuring
17 (H_{11}).

18 4. To protect interests of all creditors in case of losses under the loans and
19 investments with the subsequent liquidation or restructuring of a bank ($H_6 - H_{10}, H_{12}$).

20 5. To maintain the adequate source of financing of premises, equipment and other
21 non-earning assets.

22 From an economic perspective, insolvency arises when accumulated losses of
23 banking organization exceed its equity, and, consequently, it becomes negative. From a
24 regulatory perspective, insolvency proves to be a more tough concept and appears when
25 the bank's capital falls below regulatory minimum level, or when bank violates certain
26 mandatory limits that represents by ration calculated on the basis of the bank capital.

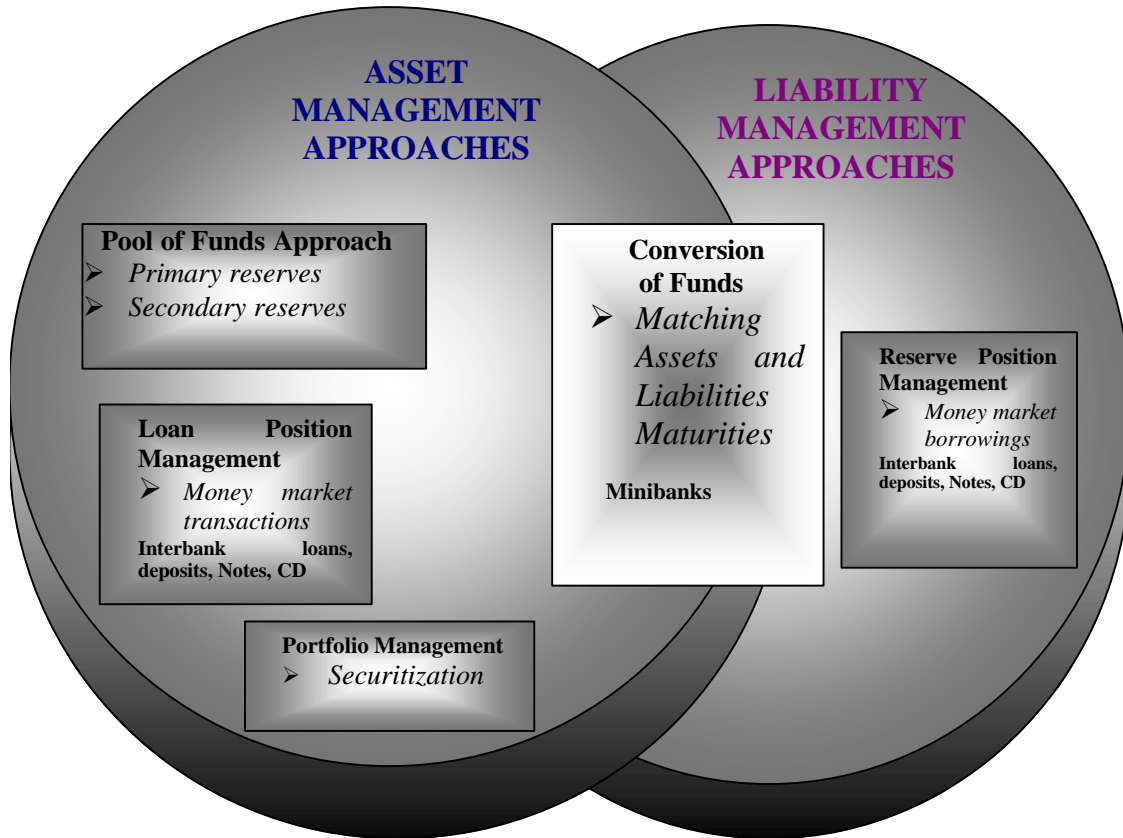
1 Liquidity Risk Management

2 Methods of Liquidity Management

3 The liquidity policy deals with the solution of the liquidity-profitability dilemma.
4 As the result bank faces a task of maximization its profitability under this constraint.
5 Furthermore much uncertainty presents here, because the bank managers cannot predict
6 for certain when and to what degree a need in liquidity will occur. When the latter arises,
7 it is possible only to undertake actions based on the measures that have been
8 implemented in advance: when there are sufficient reserves, appropriate composition of
9 assets and liabilities or bank has in its disposal especially designed transactions and
10 instruments.

11 A number of approaches for managing liquidity have been implemented. They are
12 based on management of assets, liabilities or both. Any of these methods have both
13 advantages and disadvantages. The economic sense of application of that or other
14 method in management of liquidity is stipulated by the characteristics of a bank portfolio,
15 features of bank's business directions and a bank external environment. For example
16 when bank uses essentially various means of attracting funds, the problem of liquidity
17 management becomes more sophisticated. Then there can be consider the asset
18 conversion approach that involves management of both asset and liability side. On the
19 contrary, when resources of a bank are quite homogeneous, and the opportunities of use
20 of transactions in the money market are limited, then more sense could make
21 implementation of less complicated method of pool of funds.

22



1

2 **Figure 24 Methods of Management of Liquidity**3 **Pool of Funds Approach**

4 In practice a number of approaches to the assessment and management of liquidity
 5 risk have been developed. They are approaches to manage the bank's ability to get cash
 6 quickly at a reasonable cost in order to meet its current obligations. Liquidity
 7 management could be handled by simultaneous control of asset liquidity and volatility of
 8 liabilities. It is named *pool of funds approach*. This method involves comparing total
 9 liquidity needs with total liquidity sources available at the bank. Common ratio
 10 measures of bank liquidity are applied for this purpose. (See the chapter "Risk
 11 Management in Banking").

12 The essence of this method is that all bank funds received from various sources are
 13 considered as a uniform pool of funds available at the bank. Then the problem is to
 14 create primary and secondary reserves for provision of liquidity. The primary reserves
 15 consist of absolutely liquid assets – vault cash and demand deposits with other banks.
 16 Secondary reserves consist of highly liquid assets, which can be quickly converted into

1 cash and which have a high reversibility. In Russia, the latter mainly include government
2 short-term and medium-term securities. Sometimes they may also contain banker's
3 acceptances, commercial papers as well as investment grade bonds. In market
4 environment when the long foreign currency position provides income during
5 sufficiently long periods of time, the additional reserves of highly liquid foreign
6 currencies can be considered as income earning secondary reserves. The vault cash
7 reserves are necessary for daily banking business, but their certain surplus provides the
8 first boundary of protection if a problem of liquidity occurs. Primary reserves are non-
9 earning assets though secondary reserves provide a certain income for the bank.

10 For assessment of a general liquidity position in bank it is necessary to consider all
11 four liquidity ratios in system. For example, if the loans/deposits ratio is higher than
12 standard, we can assume that either the bank has a large loan portfolio, or the bank is
13 relying on non-deposit liabilities or borrowed funds (most likely it relies on balances in
14 customer's settlement accounts or on borrowing from other banks). Therefore to
15 understand what is actually take place, we analyze the loans/nondeposits ratio. If this
16 ratio is also high, then we can conclude that the loan portfolio is large, rather than a
17 heavy reliance on nondeposit funds.

18 To continue the evaluation, if we look at the unencumbered (non-pledged) liquid
19 assets/nondeposit liabilities, it will reveal if the bank has considerable secondary reserves
20 in the form of short-term government investments. If this ratio is low, the bank has little
21 secondary reserves to use in the case of a liquidity squeeze.

22 ***Measurement of Cash Flow***

23 Another approach to measuring liquidity is to account for changes over time in both
24 liquidity needs and sources. One way to do this is for the bank to prepare a schedule of
25 its forecasted liquidity needs for the coming weeks and months along with a
26 corresponding schedule of known liquidity sources for the same periods of time. In
27 some cases the liquidity needs are guaranteed to happen, such as the need to fund a loan
28 commitment at a certain date or a large deposit maturing where the client has notified the
29 bank that the deposit will not be renewed.

1

Table 16 Cash Flow Statement Forecast

Bank Branch.....	Unit of measurement		
	Actual Quarter	Actual Quarter	Forecast Quarter
The name of items			
CASH INFLOW			
Cash Receipts			
Increase of the Bank Capital::			
Increase in Deposits			
Increase in Balances on Customer's Settlement			
Interests Received			
Income on Securities			
Loans Redemption			
FX Income			
The Other Incomes			
Total Cash Inflow:			
CASH OUTFLOW			
Increase of Fixed Assets			
Funds in Settlements			
Operating Expenses			
Loans Extended			
Deposits Withdrawals			
Investments			
Interest Paid			
Taxes			
Dividends			
Total Cash Outflow:			
Accumulated Cash Flow			

2

3 Further detailed elaboration of the Table 16 is the division of its items into
4 subcategories. For example, the line containing “deposits withdrawals” is divided into
5 subcategories according to the types and of deposits. Finally, the Table 16 is divided into
6 items refer to the management accounting information.

7 ***Liquidity Plan***

8 Management, under the direction of the ALCO, must prepare a formal *liquidity*
9 *plan*. It is necessary to prepare two liquidity plans: one- for operational liquidity, the
10 second - for crisis liquidity, with the emergency contingency plan for a liquidity crisis
11 having the first priority. Both plans must include:

- 12 • evaluation of the cost of liquidity, from both the asset and the liability sides
13 of the balance sheet;

- realistic time table for converting assets into cash considering realistic terms of raising cash from new deposits and borrowing, critical liquidity ratios and their limits.⁶

Conversion of Funds Approach

When a bank attracts essentially different sources of funds, the problem of liquidity management becomes more complicated. In that case, conversion of funds approach is justified. The distinguishing feature of this method is that it considers funds attracted from each source separately and matches sources of funds and types of assets. For example, the funds acquired through demand deposits, which have high reserve requirements and higher volatility are allocated differently than funds generated from the term deposit which more permanent.

In order to apply the conversion of funds approach it is necessary:

- to allocate all funds considering their volatility depending on given account turnover and mandatory reserve requirements;
- to allocate funds from each source for financing the “matched” assets.

Thus, the "risk-income" dilemma is tackled separately for each source of funds, as if it were a separate bank. Hence there is another name for this approach – the minibank approach.

Other Approaches to Liquidity Management

The method of *reserve position management* involves a lot of advantages and disadvantages. Its steps are follows: to calculate a reserve position, that is, we do not form secondary reserves beforehand but forecast the amount of funds which we can purchase in the money market to finance probable outflow of funds. First of all, it means obtaining of funds in the inter-bank market and borrowing from the CBR.

The advantages of the method are obvious:

⁶ These limits are developed by the bank itself. The set of these ratios should not be limited to the minimum liquidity mandatory ratios of the CBR and reflect desired depth of management control and the

- 1 • The percentage of low-earning and non-earning assets is reduced;
- 2 • In case of withdrawal of deposits, the currency of the bank's balance is not
- 3 decreased or decreases slightly, because the secondary reserves are not
- 4 liquidated, and, on the contrary, the bank attracts additional funds;

5 However if this method is implemented the liquidity risk is replaced by other types
6 of risk:

- 7 • interest rate risk;
- 8 • the risk of availability of funds (which is defined, first and foremost, by the
- 9 capacity of the inter-bank market that in Russia is not high).

10 The method of *management of a loan position* consists in defining the separate
11 loan position – that amount of cash which a bank can during a short-term period, if it will
12 not renew the short-term credits. In this approach to liquidity management there is also a
13 factor of risk of availability of funds and, as in the previous case, its urgency grows in
14 accordance with the development of the money market.

15 A key word for use of the method of portfolio management is securitization. The
16 term derives from the English word “securities” and means converting bank loans into
17 securities. Securitization of assets involves the allocation of bank's funds not only by
18 conclusion of loan agreements, but also by replacement loans with such financial
19 instruments as notes (in short-term lending) and bonds (in long-term lending). Closely
20 relative strategy to securitization, is the application of the right of conveyance. For
21 example, conveyance or selling out of loans. Thus, broadly speaking, securitization
22 designates not only conversion of loans into securities, but also their conversion into
23 such form appropriate for selling them to a third party in the marketplace.

1 Management of the Interest Rate Risk and Other Types of 2 Price Risks

3 Gap Management

4 **Concept of Gap**

5 The objective of interest rate risk management is minimization of the negative
6 effect that fluctuations of the market interest rates have on bank's profitability. The
7 distinctive feature of this risk is that its impact can be negative as well as positive for the
8 given bank. Therefore management of the interest rate risk can have direct impact on the
9 interest rate margin.

10 Key technique of measuring the exposure to interest rate risk is *gap analysis*.

11 The gap analysis process begins with determining the planning horizon for which
12 we are measuring the risk. For example, management may want to assess the impact
13 upon the bank's profits if interest rates change during the coming month, or one calendar
14 quarter. The measurement of the gap position will be critically determined by the
15 planning horizon. Hence the following dilemma occurs: *the longer the period we choose*
16 *the larger the part of the assets and liabilities being the sensitive to the interest rate risk.*
17 *However, at the same time, if the planning horizon increases the accuracy of the analysis*
18 *decreases, as the small fluctuations are eliminated.* Therefore it is necessary to find "the
19 golden mean" – optimum planning horizon for the given bank or a bank organization
20 unit. It is possible to develop some variants of the analysis for various horizons.

21 **Determination of the Assets and Liabilities Sensitive to the Interest** 22 **Rate Change**

23 The next step of this process is to divide the bank's assets and liabilities into two
24 broad categories: those which are sensitive to interest rate changes in the coming quarter
25 and those which are not sensitive (accordingly RSA and RSL).

1 *Rate sensitive assets and liabilities* are those which will be revalued during the time
2 period being measured. Examples of RSL are maturing deposits, variable rate deposits,
3 maturing inter-bank borrowings. Some examples of RSA are maturing loans or
4 investments, repayments of principal of non-maturing loans, or any variable rate asset.

5 In other words, all assets and liabilities sensitive to interest rate changes are those
6 with a variable interest rate and those which will be redeemed during the given time
7 period. Long-term loans and deposits can be the part of assets sensitive to changes in
8 general level of interest rates only when their maturity is within the planning horizon.

9 **Gap Measurement**

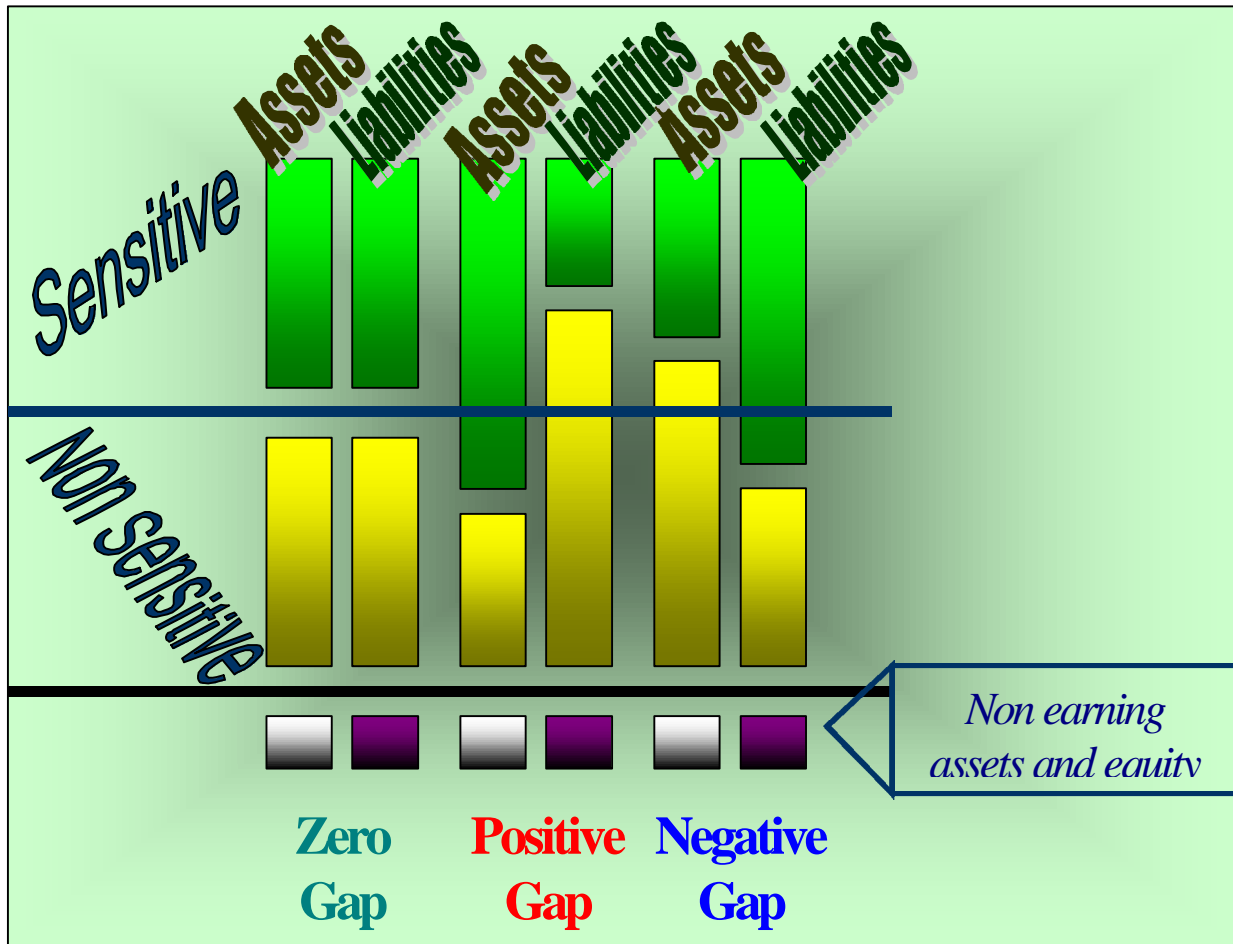
10 The third step in performing a gap analysis is to calculate the gap by subtracting the
11 total interest rate sensitive liabilities from the total interest rate sensitive assets. The
12 difference is referred to as the *gap*, hence the term *gap analysis*. The formula for this
13 computation is:

$$\text{Gap} = \text{RSA} - \text{RSL}$$

14 where, **RSA** is the total rate sensitive assets and **RSL** is the total rate
sensitive liabilities for the given period of time.

15 If the amount of the rates sensitive assets is greater than the amount of the rate
16 sensitive liabilities, the result of the calculation will be a positive, and, therefore, it is
17 known as a positive gap.

18 Conversely, if the calculation results in a negative, meaning rate sensitive liabilities
19 exceed rate sensitive assets, it is known as a *negative gap*.



1
2
3
4

Figure 25 Gap

As a convenient format to forecasting and gap analysis it is possible to recommend submission of data in the format illustrated in Table 17.

1

Table 17 Gap Analysis

		Volume (million roubles.)							
		Value Date (01.		February		March		Total:	
		Volume	Rate	Volume	Rate	Volume	Rate	Volume	Rate
Loans to	Corporation								
	Banks								
	Individuals								
Investments	GKO								
	OFZ								
Other									
TOTAL: RSA									
Liabilities									
Settlement and current									
Term deposits									
Borrowing from banks									
Individual Deposits	Term								
	Demand								
TOTAL: RSL									
GAP									
INTEREST ON RSA									
INTEREST ON RSL									

2 *Aggressive Gap Management Strategy*

3 Once the gap position of the bank is determined, the management of the bank
 4 should turn its attention to controlling the interest rate risk within its portfolio. With so-
 5 called aggressive interest rate risk management strategy involving two steps:

- 6 • First, the level of future interest rates are forecasted;
- 7 • Second, adjustments are made in the mix of interest rate sensitivity assets and
 8 liabilities in order to take advantage of the forecasted interest rate changes.

9 If interest rates are anticipated to rise, the bank can benefit from a positive gap. If it
 10 is forecasted downward trend, a negative gap can produce additional profits

11 This dependence is shown in the Table 18.

Table 18 The Impact of Change in General Level of the Interest Rates on Bank**Profitability**

Gap	General Level of Interest Rates	NIM
Positive	<i>Increase</i>	<i>Increase</i>
Positive	<i>Decrease</i>	<i>Decrease</i>
Negative	<i>Increase</i>	<i>Decrease</i>
Negative	<i>Decrease</i>	<i>Increase</i>

A general principle to remember regarding the gap position and projected interest rates is: with a *positive gap*, the bank's profits will go in the same direction as interest rate movements in the market. With a *negative gap*, profits will go in the opposite direction as interest rates in the market.

In order to remember four possible combinations of interest rate changes and bank gap it is convenient to apply a simple arithmetical rule of multiplication: *minus times minus equals plus, plus times minus equals minus, etc. on analogy.*

Table 19 The Impact of Change in General Level of the Interest Rates on Bank**Profitability (Arithmetic Example)**

Gap	General Level of Interest Rates	NIM
+	+	+
+	-	-
-	+	-
-	-	+

Defensive Gap Management Strategy

Defensive gap management attempts to prevent rate movements from reducing profitability. This strategy does not attempt to predict the movement of future interest

1 rates and is prudently employed when interest rate movements are highly volatile or
2 when management of the bank is not confident in forecasts for future movements.

3 A defensive strategy attempts to keep the volume of rate sensitive assets in balance
4 with the volume of rate sensitive liabilities over a given period. This condition when rate
5 sensitive assets and liabilities are equal is referred to as a *matched or zero gap*. If
6 successful, increases in interest rates will produce equal increases in interest revenues
7 and interest expenses, with the result that net interest income and the net interest margin
8 will not change. Similarly, falling interest rates will reduce interest revenue and interest
9 expense by the same amount, leaving net interest income and the net interest margin
10 unchanged.

11 A name "defensive strategy" does not mean it is a passive management approach.
12 It requires very active management of the portfolio to keep the rate sensitive assets and
13 liabilities in balance across all planned periods. The condition of the precise match of
14 assets and liabilities sensitive to changes in the interest rate cannot exist as a temporary
15 phenomenon. In order to maintain similar conditions during long periods without
16 sacrificing the profitability of banking activities, special management skills and
17 experience are required. Moreover, the ratio between RSA and RSL is objectively
18 influenced by the business features of bank being under consideration and composition
19 banking products and services mix typical for the given financial services industry at this
20 time. So, during a greater part of previous development of the Russian banking system,
21 Russian banks have had a positive gap. In conditions when it is extremely difficult to
22 obtain term deposits, and a major source of funds are the balances on the current
23 accounts, it is problematic to achieve a match between RSA and RSL. It is possible to
24 speak only about the control over the positive gap.

25 ***Approaches for Managing the Gap***

26 Banks traditionally use the pricing of their products and services to manage the gap.
27 For example, the bank has an excessive positive gap during a certain time period,
28 meaning rate sensitive assets exceed the rate sensitive liabilities. Then ALCO can
29 encourage clients to increase their variable rate deposits by raising the interest rates on

1 those types of deposits relative to deposits with fixed rates and the same maturity. Also,
2 this approach can be applied to credit policy. The possible actions here are:

- 3 • to extend variable rate loans;
- 4 • to use longer maturities;
- 5 • to change the repayment schedule of principal.

6 This process should narrow the gap position. However the possibilities of using this
7 approach in day to day operations are limited. In stable and competitive financial
8 services industry this constraint may be associated with market competition or strong
9 client preferences for certain products and services which do not coincide with the
10 bank's priorities from a risk management perspective. The same influences present in
11 transition economy but the choice for banks here is even narrower because of weak real
12 demand for loanable funds as well as problems of marketing many products and services
13 conditioned by overall economic factors. For example deep recession in real sector and
14 lack of well-prepared investment proposals reduce the opportunities for longer-term
15 lending. The other factor hindering the long-term lending is high political risk.

16 When this happens, a non-traditional way to narrow the gap position, but one that is
17 very effective is to use *interest rate swaps*. First developed in Europe in 1981, swaps
18 have literally exploded in volume since then with the current volume in excess of \$3 000
19 billions world wide. In an interest rate swap, two firms that want to change their interest
20 rate exposure in different direction get together (usually with the help of some financial
21 intermediary) and exchange or swap their obligations to pay interest. In this transaction
22 just the interest payment obligations are swapped, not the principal.

23 Assume that:

- 24 • one firm has long-term fixed assets financed with short-term variable rate
25 liabilities. (Negative gap);
- 26 • there is another firm has short-term variable rate assets financed with long-
27 term fixed rate liabilities. (Positive gap).

1 Both parties are exposed to interest rate risk, but their exposure is quite different.
2 The first firm gains if interest rates fall, whereas the second firm loses if interest rates
3 decline. And the opposite is true if interest rates increase.

4 For firms having this type of interest rate exposure, the swap of interest payments
5 allows each firm to benefit.

6 The party in swap agreement can be two credit organizations, non-financial firms or
7 for example bank and manufacturing firm. As with any contractual agreement between
8 the bank and another firm, the bank should perform due diligence to evaluate its interest
9 rate swap counter-party's ability to fulfill its obligations.

10 Management of Foreign Currency Risk

11 Foreign currency risk is a type of price risks, and the principles of management of
12 risk due to changes in the exchange rates of foreign currencies are in many respects
13 similar to the approaches used to control risks caused by a fluctuations in the general
14 level of interest rates.

15 As defined in the chapter Risk Management in Banking, it is possible to single out
16 three basic components of foreign currency risk. They are risk of depreciation of assets
17 denominated in foreign currency due to unpredictable changes in the exchange rates, risk
18 of convertibility related to restrictions imposed on foreign exchange transactions, risk of
19 an open currency position arising when there is a mismatch in the volume of foreign
20 currency assets of a bank and its liabilities denominated in foreign currency.

21 When the amount of foreign currency bought by a bank at its own expense exceeds
22 the sum of foreign currency sales, the bank has a *long position*. If the amount of foreign
23 currency sales exceeds the sum of purchases, a bank *has a short position*. *In both events*
24 *the bank is said to be in an open currency position (OCP)* and, accordingly, the limit of
25 OCP is imposed on both types of the open position. The bases for regulations of an open
26 currency position by credit organizations were introduced in the CBR Regulation 15.

27 The adverse movement of the exchange rate on one of the foreign currencies may
28 be compensated by the opposite tendency on other currencies. A bank can limit its

1 trading exposure in foreign currencies by using hedging techniques, by imposing
2 monetary limits on positions in particular foreign currency, by imposing monetary limits
3 on regions in the world, and by imposing monetary limits on particular customers.

4 In greater extent, the movements of exchange rates are caused by the differences of
5 the dynamics of the interest rates among countries. When the interest rates in one country
6 grow in comparison with the rates in another financial market, the demand for the first
7 currency grows, and consequently, does its exchange rate to the latter foreign currency.
8 Thus, a risk of a relative change of the interest rates results in foreign currency risk.

9 The given risk is similar to interest rate risk. However, it refers only to the risk of
10 gap between foreign currency assets and liabilities.

11 *Management of Other Types of Price Risks*

12 *Dynamics of the Price of Debt Securities*

13 There is inverse relationship between changes in general level of interest rates and
14 the price of previous debt issues. If new debt issues bring higher return to investor then
15 to encourage investors purchase securities of previous issues the sellers compelled to
16 reduce their prices. On the contrary when, in the opposite situation, the interest rates go
17 downwards, and it is possible to lift the price of sale of the previously issued notes, and
18 thus profitability remains acceptable for the buyers.

19 Thus, alongside the growth of the interest rates and increase in interest received on
20 RSA there is a fall in the market value of a portfolio of a bank's debt liabilities and, on
21 the contrary, alongside the fall in the general level of interest rates market value of bank
22 investment portfolio grows. Sometimes the risk involved here is referred as investment
23 risk.

24 As a result, securities purchased when there is slack loan demand and interest rates
25 are relatively low may need to be sold later at a capital loss (to meet loan or liquidity
26 needs) in a higher interest rate environment. In light of this potential pitfall, securities
27 should be timed to mature during anticipated future business-cycle periods of increased

1 loan demand. Price of the Bond as Net Present Value of the Future Cash Flow is
 2 determined by the following formula.

3 **Equation 8** Price of the Bond as Net Present Value of the Future Cash Flow

$$P = \frac{C_1}{1+r} + \frac{C_2}{(1+r)^2} + \dots + \frac{C_i}{(1+r)^i} + \dots + \frac{C_n}{(1+r)^n} + \frac{PV_n}{(1+r)^n}$$

, where

P - price of bond; **r** - discount rate

PV - par value; **C** - coupon

4

5 ***The Analysis of Duration***

6 To evaluate the amount of price risk of an investment security, it is necessary to
 7 consider not only the expected change in interest rates in the market, but also the
 8 duration. Proceeding from the concept of a *net present value* of future cash flow (NPV),
 9 it becomes obvious that one bond with maturity of 10 years and quarterly payment on
 10 coupon has a some characteristics of duration from the perspective of the investor. The
 11 second debt security, with the same term but with the interest paid at maturity, has
 12 completely different characteristics of duration. The concept of *duration* was introduced
 13 at the end of the 1930s. It considers not only the time left before a bond matures, but also
 14 a schedule of cash inflows to the investor. The analysis of duration is important for a
 15 bank not only because of the market risk associated with its investment portfolio, but
 16 also because of the fact that it enables detailed gap analysis within the whole portfolio of
 17 assets and liabilities.

18 Duration for financial instrument is calculated as weighted net present value of cash
 19 inflows to investor divided by the price of the security defined as its net present value.
 20 The duration of an instrument can be calculated by multiplying the time until the receipt
 21 of each cash flow by the ratio of the present value of that cash flow to the instrument's
 22 total present value. The duration is calculated under the formula:

1

Equation 9 Calculation of Duration

$$D = \sum_{t=1}^n \frac{PV(CF_t) \times t}{P},$$

where

D = duration

CF_t = cash flow received in period t

PV = present value

$$PV = CF_t \times 1/(1 + R)^t,$$

where $1/(1 + R)^t$ = discount rate

R – current market interest rate

P – bond price calculated as net present value of future cash flow to investor to

t – number of periods until cash flow is received

2

3

The algorithm of duration calculation is presented in Figure 26.

PAR VALUE OF BONDS		1000 thousands roubles		
DISCOUNT RATE R		35%		
COUPON		4 YEARS		
TIME TO MATURITY (N)		4 YEARS		
t	Cash flow for the period Step 1	Discount Rate Step 2	Net Present for the Period	Weighted Net Present for the Period
1	350	0,769	269	269
2	350	0,592	207	414
3	350	0,455	159	478
4	1350	0,350	473	1891
Weighted Net Present Value to Maturity (CF_t)			Step 3	3052
Net Present Value of the Future Cash Flow			Step 4	1108
Duration 2.8		Step 5		

Figure 26 Algorithms of Calculation of Duration

To calculate duration as it is illustrated above, it is necessary step by step to calculate cash flow, discount rate, net present value and weighted net present value. At the final step the weighted present value is divided by the net present value of a bond. Duration is a indicator used not only in investments but in asset and liability management as well.

Once the duration for a security is defined, the next step is to evaluate the change in price of the security caused by a change in interest rates. Here it is applicable the following formula.

Equation 10 Definition of the Projected Change of the Bond Value

$$\Delta P = P_0 \times (-D) \times (R_1 - R_0) / (1 + R_0)$$

where
P₀ - bond price; **D** - duration; **R₀** - current interest rate; **R₁** - future interest rate

1 In other words, the change in price of security can be calculated by multiplying the
2 minus duration by the current price of the bond and the change of the interest rate. Thus,
3 if a bond is currently selling for 1000 thousand roubles has a duration of three years, and
4 the interest rates in the coming year are expected to fall from 30 % down to 25 %, the
5 bond's price will increase by approximately at 115 thousand roubles. [$1000 ((-3)((-0.05)/1,3 = 115384,615$ roubles].
6

7 High-coupon bonds have shorter duration than low-coupon bonds of the same
8 market yield. Therefore high-coupon bonds have relatively less price volatility and,
9 hence, lower price risk. On the contrary, low-coupon bonds may generate the high yield
10 under the change of the market interest rates, but thus they are exposed to higher price
11 risk. Therefore the former is good for the conservative investor, and latter for those wish
12 to receive a high speculative income. They were nicknamed Ferrari in analogy with the
13 car that is good for driving at high speed.

14 *Duration in Gap Management*

15 The valuation of duration not only plays a key role in management of a market risk.
16 At the same time, the analysis of duration enables to apply the advanced toolkit of an
17 estimation of gap as applied to all assets and liabilities sensitive to change in the interest
18 rates.

19 When analysis of duration is applied to bank assets and liabilities at it deals with
20 timing of cash inflows from bank assets and cash outflows as payment for borrowed
21 funds and even to the shareholders.

22 The duration analysis allows precisely quantifying the gap between RSL and RSA
23 according to the above-mentioned approach. The applied formula based on cash inflows
24 from assets and outflows corresponding to interest bearing liabilities looks as follows.

1

Equation 11 Calculation of the Net Present Value of the Bank Portfolio

$$\Delta \text{NPV} = \Delta \text{NPV}_A - \Delta \text{NPV}_L ,$$

where

ΔNPV – changes in net present value of bank portfolio

ΔNPV_A – changes in net present value of bank assets

ΔNPV_L – changes in net present value of liabilities

2

3 Applying formula Equation 11, it becomes clear that the change in NPV of a bank's
 4 portfolio, and, hence, the net interest income, is determined by the difference between Δ
 5 NPV_A and ΔNPV_L adjusted for duration of assets and liabilities and multiplied by the
 6 increase in the general level of interest rates. It involves an important management
 7 considerations: if the duration of assets is equal to the duration of liabilities, with the
 8 planning gap management period equaling to duration, the bank is protected from any
 9 change in the general level of the interest rates. It takes place even when the cost of
 10 borrowed funds and the return on assets do not change absolutely synchronously. This
 11 situation is called *immunization of bank*.

12

Equation 12 Immunization

$$D_A = D_L = P$$

13

Where D_A – duration of assets, D_L – duration of liabilities, P - planning horizon.

Management of Solvency Risk

15 The bank appears insolvent or de-facto bankrupt when its own capital is reduced to
 16 zero or becomes negative. However risk of insolvency can be displayed in a less serious
 17 case when the bank's capital is not sufficient enough that the bank can continue to
 18 increase the volume of its operations on the asset and liabilities sides.

1 Capital Adequacy as a Solvency Measure

2 Capital adequacy is defined as the ratio of the bank capital to the total volume of
3 assets weighed with consideration of the risk of the counterparts. Procedure of weighing
4 assets according to risk (by multiplying the cost volume of separate assets by the risk
5 weight) is based on the following philosophy. It is assumed that the deployment of bank
6 resources involves risk. Therefore the bank's capital, among other functions, should
7 perform the function of providing protection to the depositors against possible bank's
8 asset losses. However, banks can also invest in some types of assets, which have minimal
9 likelihood of losses. It is on this understanding of the essence of risk in banking the
10 philosophy of weighing of assets is based. The risk associated with lending is assumed as
11 standard level and as starting point for calculation of weights. Hence its risk weight is
12 stated as 100%. Consequently corporate and consumer loans under calculation of the
13 capital adequacy standards are accounted in full amounts. However the less risky assets
14 are accounted in smaller amounts according to the degree of risk: two times less, if the
15 factor of risk is assessed as 50%; five times less with the factor of risk – 20% and so on.

16 Basle Agreement of 1988 provided common framework to define capital adequacy.
17 This important document was signed by the representatives of the leading European
18 countries, the US, Canada and Australia under the aegis of the Bank for International
19 Settlements, with its headquarters in Basle (Switzerland). If the capital adequacy
20 standard is equal to 8%, each rouble in bank assets should be at least financed by 8
21 kopeikes of bank capital, that is, by the owners of bank, rather than by the bank's
22 depositors and creditors. At the same time, if the bank allocates funds into lower risk
23 assets, it is possible to lower capital adequacy requirements. For example, if the risk is
24 equal to 50%, such assets need only 4 kopeikes of bank capital. Finally, no risk is
25 inherent for some assets. The simplest example is government debt securities. These
26 investments can be completely financed from the depositors' funds.

27 *The Peculiarities of the Russian Banking Industry*

28 By 1999 the capital adequacy requirement of Russian banks will rise to meet
29 international standards, and in some aspects will exceed them. This will essentially

1 influence the management of bank's funds. On April 1, 1996, the new procedure for
2 calculation of the mandatory "economic" ratios (limits) for credit organizations was
3 introduced. The CBR's Regulation 1 "The Guidelines of Regulation of Activity of Credit
4 Organizations" established a minimum mandatory level of capital adequacy
5 corresponding to international standards. However, the components of the capital
6 adequacy ratio in Russia are not the same as in developed economies. Indeed, recent
7 significant changes of the capital adequacy requirements for Russian banks have resulted
8 in more rigid standards in comparison with International standards. If to take into
9 account that until recently the standards of capital adequacy in Russia were considerably
10 lower than International ones, by year 1999 there will be a multiple toughing of this
11 standard. At the same time, due to the some specific features of the domestic financial
12 market, the influence of rigid capital adequacy standard on bank's financial management
13 is not straightforward.

14 Earlier Russian regulations were quit different from the Basle approach. The
15 "starting point" for weight determination was assumed not the risk inherent in
16 commercial lending, but the highest risks in banking i.e. overdue loans and overdue
17 promissory notes. Thus, all other assets were weighed with lesser risk weights. So the
18 volume of assets accounted in calculation of capital adequacy was significantly
19 underestimated in comparison with international standards. For example, weighted
20 volume of the short-term bank loans was reduced more than three times comparing with
21 International approach. Though at glance, the standard of the capital adequacy was as
22 rigid as 4%, its actual level comparing with Basle standards would be about 12-15%. As
23 the result the regulatory role of the capital adequacy was reduced practically to zero: if a
24 Russian bank stated that they met ratio H_1 requirement as set by the CBR, they really
25 were accomplishing very little.

26 The new CBR Regulation 1 in many respects is similar to the European standards,
27 though some essential distinctions still remain. In the future they will have a serious
28 effect on the ALM of Russian banks.

29 According to the criteria of the Bank for International Settlements, the standards of
30 the minimum bank capital adequacy are established at a level not lower than 8%. In other

1 words, bank loans that extended to businesses and individuals are to be backed by
2 minimum 8% of bank capital. Mortgages under a pledge of personal property are
3 regarded as carrying lower risk and require twice smaller coverage by a bank capital.
4 Essentially the same approach is applied concerning municipal obligations. The loans
5 given to other banks i.e. to the institutions that are being under the close control of
6 regulators are considered even less risky and on each 100 ECU require only 20 ECU of a
7 bank's capital. Finally, all obligations of the CBR and loans to the Federal Government
8 or loans that are completely guaranteed by them, and securities of the Federal
9 Government are considered to be risk-less assets, and therefore do not affect the bank's
10 capital adequacy.

11 As far as the definition of risk weights for particular categories of bank assets and
12 calculation of risk weighted assets are concerned the new CBR rules do not essentially
13 differ from those accepted in Basle. Though some essential differences do exist. In
14 Russia, inter-bank loans to domestic banks are considered to be more risky. The
15 heightened risk is quite reasonable is quite reasonable, because of the lower reliability of
16 Russian banks. According to the same criterion of the Bank for International Settlements,
17 the obligations of Russian banks are weighed for their foreign bank-creditors with a risk
18 coefficient of 100%. Another Russian difference is that mortgages have the same risk
19 coefficient as commercial loans. This is caused by the absence of a developed real estate
20 market and effective legal enforcement due to the continued creation of real estate law,
21 coupled with legal precedent only now being established.

22 *Nature of Bank Capital;*

23 There are important differences concerning what is considered to be bank capital.
24 Or say differently, what to consider as the denominator calculating capital adequacy ratio
25 H_1 ?

26 In Russia bank capital is much more narrowly defined. Equity capital is clearly
27 more consistent with what a Russian bank would have as capital. This can actually result
28 in more rigid capital adequacy requirements for domestic banks. According to
29 International approach the bank capital is neither its equity, nor debt capital. It is a

1 completely new definition, which takes into account the specific nature of a bank's
2 activity while measuring bank solvency.

3 According to the Basle approach equity capital is only one of two constituent parts
4 of bank capital. The first part is the tier A capital, that is, core capital, is closest to the
5 concept of bank capital for Russian banks. However there is the second part of bank
6 capital or tier B capital, sometimes refers as supplemental capital. It involves reserves for
7 loan losses and preferred shares. However its basic component and here lies the
8 important difference with the Russian approach, dealing with part of borrowed funds of a
9 bank called subordinated debt. The borrowed funds can be included in the bank capital
10 when the claims of given creditors are redeemed after meeting obligations to depositors.
11 Bank's borrowed funds can be included in their tier 2 bank capital when the claims of the
12 creditors are subordinated to the depositors. The interest rate on the given instruments is
13 fixed, and the obligations are long-term.

14 Therefore, given these equity limitations, it can be argued that the current CBR
15 capital adequacy requirements for Russian banks are not less rigid than International
16 standards, but actually more rigid.

17 *Capital Adequacy as the Factor in A&L Management*

18 Until recently, the capital adequacy ratio has not been a serious constraint in
19 managerial decision making. However, the increasing CBR minimum rate will gradually
20 change the situation. What will be the impact of higher minimum capital adequacy ratios
21 on Russian banking? Will Russian banks find themselves in unfavorable conditions as
22 the result of the introduction of the new standards? The answers are not obvious.

23 Given the general absence of subordinated debt in a Russian bank's capital
24 structure, the capital adequacy requirement would be more difficult to achieve than in the
25 United States. What is the possible impact of this difference? At the end of 1980s, the
26 capital adequacy of U.S. banks was lower than in Western Europe. The minimum capital
27 adequacy ratio in the U.S. was established below what would become the Basle
28 Agreement's minimum. As a result, negotiations led to a delay in U.S. banks

1 implementing the new Basle Agreement with applying of transition ratio of 7,25% that
2 was only 0,75% lower.

3 However, the exclusion of subordinated debt from a Russian bank's capital
4 structure is not necessarily a bad thing. As a matter of fact, it represents strong
5 protection to depositors. At the same time the higher capital adequacy weakens
6 competitive advantages. By collecting the same amount of funds from shareholders,
7 banks can attract less borrowed funds than foreign banks.

8 Given Russia's still developing capital market, conditions do not exist for most
9 banks to issue significant amounts of bonds. The lack of a well-developed bond and
10 stock market limits the ability of Russian banks to raise the capital needed to fulfill
11 minimum capital adequacy ratios. The result may very well be a curtailing of loans being
12 offered, thus choking off credit to deserving companies, which results in limited growth
13 and slower economic growth.

14 At the same time there are a number of environmental influences, which offset
15 negative impact of the higher capital adequacy standard on A&L management of Russian
16 banks. However the problem of maintaining capital adequacy can affect not only
17 undercapitalized banks but also those Russian banks which first approach in their lending
18 activity to the level of banks from developed countries. For them more rigid capital
19 adequacy will represent a strategic restriction. The negative consequences for these
20 banks would be temporary delay of growth or certain financial losses associated with the
21 need of additional public offerings of their stocks. However for them these consequences
22 will not be too serious.

23 Russian banks operate in conditions of transition economy, and there are other
24 more important constraints to their growth. Even before adverse developments of last
25 two years the financial leverage (assets to equity ratio) of domestic banks was 2/3 of the
26 Western European level and only 1/2 of the average ratio for Japanese banks. Assets and
27 liabilities of typical domestic bank now are not so good optimized that changes of capital
28 adequacy standard could adversely affect on its portfolio composition.

29 For a long time to come, the positive internal influence easing capital management
30 of Russian banks will be the lack of large off balance sheet assets comparable to the size

1 of on balance sheet items compared to foreign banks. In other countries off balance sheet
2 assets are taken into account for calculating capital adequacy by using special credit
3 equivalents. Due to the initial stage of development of the Russian markets for derivative
4 financial instruments (futures, options and others) the off balance sheet assets and
5 liabilities of Russian banks are insignificant. On the contrary, in the case of turbulent
6 growth of one of these markets, the accepted approach to calculating capital adequacy
7 could be turn out too soft from regulatory point of view.

8 As follows from the international practice the regulating role of capital adequacy
9 mainly depends on the effectiveness of external audit and possibilities for bank to avoid
10 restrictions.

11 **Asset and Liability Checklist**

12 The following questionnaire can be used as a self-evaluation checklist for the
13 bank's management in assessing its ALM program.

- 14 1. Does the bank have a formal committee, consisting of the senior management of the
15 bank to provide oversight of the bank's asset and liability management process?
- 16 2. Does this committee meet on a regular basis with written minutes recorded?
- 17 3. Does the bank have written ALM policies and guidelines approved by the bank's
18 board of directors?
- 19 4. Has management established financial goals and objectives regarding profitability,
20 liquidity, and major types of risk?
- 21 Do these written policies and guidelines include:
- 22 5. Lines of authority for decision making?
- 23 6. A formal procedure to communicate the committee's ALM decisions, including the
24 interest rate decisions for loans and deposits?
- 25 7. Risk exposure limits for interest rate risk (gap position)?
- 26 8. A liquidity plan

- 1 9. Emergency plan in case of a liquidity crisis?
- 2 10. Guidelines to comply with all CBR limits?
- 3 11. Investment management objectives?
- 4 12. Permissible types of investments for the bank?
- 5 13. Investment authorization;; limits?
- 6 14. Security valuation procedures including the frequency of the valuation?
- 7 15. Foreign exchange limits for each currency?
- 8 16. Total aggregate foreign exchange limits?
- 9 17. Stop loss limits on open currency positions and maturity limits on foreign exchange
- 10 contracts as to mismatching of forward contracts?
- 11 18. Limits on foreign exchange activity as to volume with clients and other banks on an
- 12 overall and settlement limit basis?
- 13 19. Does the supervisory board of directors review the above policies and guidelines on
- 14 at least an annual basis?
- 15 20. Does the board's review process include an examination to determine if policies are
- 16 compatible with current market conditions and with CBR instructions?
- 17 21. Does the budgeting process include liquidity considerations?
- 18 22. Are limitations imposed on the funds management officers assigning maximum
- 19 investment authority without additional approvals;?
- 20 23. Do the guidelines include procedures separating the trading function for securities
- 21 and foreign exchange transactions from the settlement function?
- 22 24. Does management have adequate management information reports to make informed
- 23 ALM decisions?
- 24 25. Are the management reports timely and accurate?
- 25 26. Does management have a commitment to the continued training of its staff regarding
- 26 the latest techniques and developments in ALM?

MARKETING

Thomas Barrell

Dmitry Evstafiev

To achieve success, banks have to implement new products and services. The financial market, like any other market, requires a marketing approach. The present chapter deals with marketing approach principles as well as with the most important practical aspects of the activities of a bank marketing service. The chapter covers such strategic marketing problems as the determination of target markets and bank marketing mix, functions of a marketing information system and principles of collection of external and internal information. Special attention is paid to the promotion of banking services, as well as to the preparation of marketing research, development of a bank's communication strategy, planning and budgeting of sales promotion activities.

Special Features of Marketing in Banking

Modern Financial Markets Require a Marketing Approach

In the modern economy the financial markets are different from other markets in that the market players are faced with more stringent requirements and the credit institutions have to overcome serious barriers in order to obtain and keep a share of those markets.

Financial markets are typically highly attractive and profitable, and highly competitive. They are also characterized by complicated financial transactions and activities, which require a global co-operation with partners and other market players and the use of state-of-the-art operation technologies. In recent years the financial markets have been extremely dynamic.

Over the last decade Russia has seen revolutionary changes in its financial and credit sector. Besides the above-mentioned specific features of the sector, one has seen

1 the appearance of new market players, hiring of the most able specialists by credit
2 institutions, a dynamic redistribution among the most successful credit institutions of
3 their shares of the market, constant changes in the government rules and regulations
4 concerning the market and, as a consequence, recurrent appearance and disappearance of
5 new market opportunities calling for immediate reaction and faultless decisions on the
6 part of the credit institutions' management.

7 To achieve success on the dynamic and highly competitive banking services
8 markets in Russia, one has to implement the most modern management principles and to
9 take the most effective approach to the solution of strategic and operational problems.
10 The marketing business concept, otherwise known as marketing approach to banking,
11 makes use of such principles.

12 Marketing Approach to Banking

13 The marketing approach to banking involves such planning and implementation of
14 proceduress to develop, distribute and bring to the consumers the banking services and
15 products which, the consumers' and the bank's interests being mutually advantageous,
16 make it possible for the bank to achieve its aims.

17 The marketing approach, if accepted by a bank's management, is usually evident in
18 its banking, both external and internal operations. It is consumer-oriented and implies
19 professional flexibility in finding opportunities for offering banking services and
20 products where demanded. Thus it proves to be a more suitable and effective method
21 than other, less flexible and consequently more vulnerable, approaches which are
22 directed at solving more specific internal banking problems rather than those of the
23 bank's present or potential customers. As a case in point, one can cite the concentration
24 on purely technical improvements of banking services, or just on stimulating sales
25 through advertising.

26 Being subjected to fierce competition and government regulation, banks are the
27 most developed and universal participants of financial markets. That is why, in order to
28 achieve success, they first of all require to take a marketing approach to their activities.

1 Functions of Marketing in Banking

2 To implement a marketing approach in its operations, a bank has to constantly
3 perform a number of functions, which such an approach involves.

4 Such functions include: development and implementation of a *marketing strategy*,
5 collection and processing of external and internal information, development of new
6 banking services and products and bringing them to consumers, as well as management
7 of the whole set of the bank's marketing activities.

8 ***Implementation of a Bank's Marketing Activities***

9 Successful implementation of a marketing approach to banking and a bank's
10 marketing activities it involves should begin with necessary organizational changes. The
11 bank can successfully perform its marketing functions, provided appropriate
12 organizational structures are available to plan, implement and bear responsibility for
13 specific directions of the marketing activities.

14 **Such organizational structures usually include:**

- 15 • strategic development department;
- 16 • bank's information service;
- 17 • advertising department;
- 18 • customer services department.

19 A number of banks abroad have also set up departments of personal development of
20 banking services and products which are similar to sales departments in trading
21 companies.

22 A bank's marketing activities are, of course, not limited to the above-mentioned
23 departments and services, but it is exactly those structures that are organizationally
24 crucial for planning and implementation of marketing activities.

1 **Bank Marketing Strategy**

2 A bank marketing strategy is a major precondition for planning the entire range of
3 the bank's marketing activities and for the control over such activities. Therefore, the
4 problems of choosing a marketing strategy and of strategic planning should always be
5 given appropriate time and effort. Figuratively speaking, a marketing strategy is an
6 avenue between the bank and the market, and the size of the bank's income in that market
7 will depend on how wide and straight that avenue is. A more correct definition of a
8 bank's marketing strategy can be determined through the methods formulated and
9 accepted by the bank in order to achieve its specific aims on its target markets;. They are
10 based of the use of a set of banking services and products, specially provided for
11 achieving those aims and taking into consideration the difference in profitability of
12 various elements of that set as well as the system of their distribution. And finally,
13 methods of bringing the banking services and products to the consumers are also taken
14 into account.

15 As the prime objective of any player on the banking services market is to obtain
16 profits, a bank's marketing strategy naturally becomes the basis of the entire strategic
17 planning, and thus no department or service can be found whose activities are not
18 affected in the process of formulation, modification, planning or implementation of the
19 objectives stated in this crucial internal bank document.

20 This paragraph will deal with basic elements a bank's marketing strategy,
21 approaches to its formulation and major aspects of its influence on the bank's activities.

22 *Identification of Markets and Target Segments*

23 To formulate a bank's marketing strategy one has first of all determine the limits of
24 the banking services market where the bank operates, and the target markets for each
25 kind of services and products, as well as the target segments on them, where the bank
26 plans to operate.

27 Owing to the constant changes taking place both on the banking services market
28 and in the bank itself, this objective becomes more complicated, because of the presence

1 of both the existing markets, where the bank offers its services, and the prospective
2 markets, so far considered by the bank as market opportunities but nevertheless included
3 in the number of its strategic plans.

4 Naturally, approaches to a bank's activities on existing and prospective markets
5 would be quite different, as different as are the objectives planned and achieved. That is
6 why it is necessary, in order to include absolutely all strategic directions in the general
7 strategy formulated, to be as precise as possible in determining all the target markets.

8 As far as the banking sector is concerned, it may be *national markets* of different
9 countries, as today's world economy becomes ever more *international*, requiring that the
10 banks operate not just on the domestic but also on other national markets. Besides
11 national markets, banks, as a rule, operate on a number of *regional markets*, ensuring the
12 functioning of the country's financial system in all its economic regions. And finally,
13 both national and regional markets include a number of *markets of banking services and*
14 *products*, which can be viewed by a bank as its target markets. A matrix of the principal
15 markets of banking services is shown below (See Table 20).

16 It is evident that a bank can have several target markets, while major banks can
17 have as many as several dozen. However, different behavior patterns of banking services
18 consumers can further complicate the strategic methods used to obtain profits or achieve
19 other objectives on those markets. In this case the banks implement *multi-segment*
20 *strategies* for different non-homogeneous markets.

21 These segments are characterized by:

- 22 • consumers with similar requirements;
- 23 • requirements which can be satisfied by offering certain banking services or
24 products;
- 25 • offers of similar services by competitors in this segment.

26 Considering the unique character of requirements, a bank can formulate specific
27 objectives and strategies for each segment.

1 Table 20 Matrix of Banking Markets and Samples of Banking Products and Services

2 Typical For the Russian Market

REGIONS

		Global Markets	National Markets	Regional Markets
INSTRUMENTS	Foreign Currency	Closed	Transactions on Moscow Inter-bank Currency Exchange	Currency Exchange
	Investments	Stocks Public Offering	GKO (Government T-bills)	Financial and Industrial Group (FIG)
	Lending	International Lending	Inter-bank Loans	Lending
	Deposits	International Borrowing	Government Deposits	Individual Deposits
	Clearing	International Money Transfers	Interregional Money Transfers	Local Money Transfers
	Collection	No Market Demand	No Market Demand	Collection
	Payments	No Market Demand	No Market Demand	Payment Orders
	Plastic cards	No Market Demand	No Market Demand	ATM, Retail Transactions

3

4 Identification of target segments is the responsibility of the strategy and

5 development department. Segmentation is always performed by the bank itself of the

6 basis of the concept of distinctive potentials and demands which are characteristic of

7 each target segment, and unique competitiveness factors inherent in each segment.

1 Identification of Short-term and Long-term Market Goals

2 The next important step in developing a bank's marketing strategy is to formulate
3 the bank's short-term and long-term objectives on each market and in each segment. As
4 modern universal banks offer their services simultaneously on a number of markets and
5 their segments, the task of formulating strategic goals becomes highly complicated.

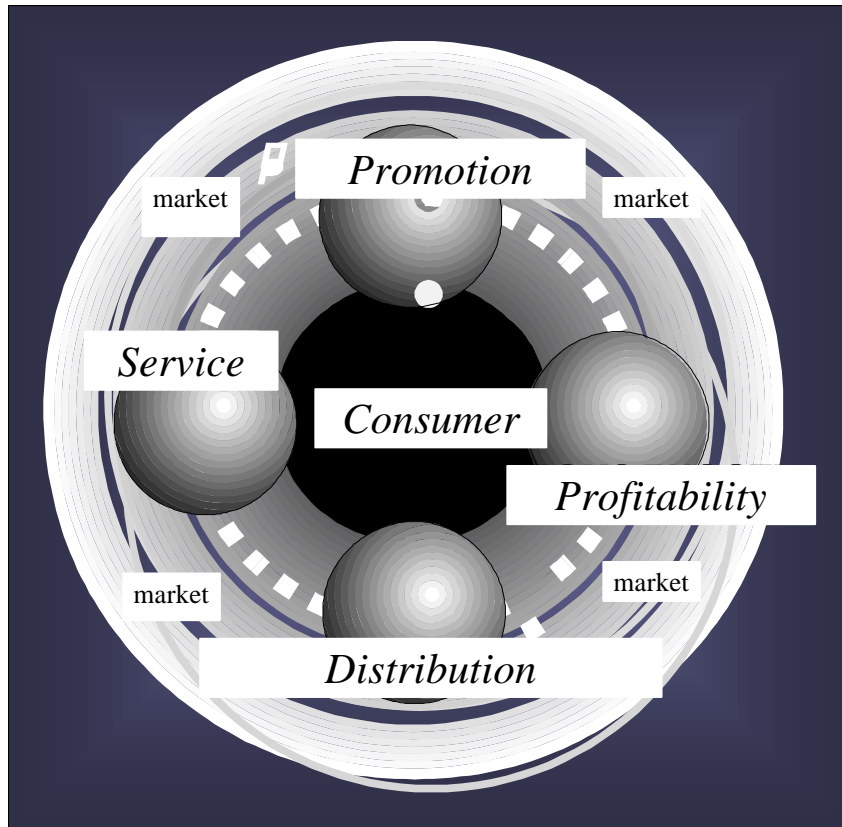
6 In most cases a bank's strategic goals on a market include the following
7 components: acquisition or retention of a certain share of the market, achievement or
8 maintenance of a certain level of profitability from rendering banking services to this
9 market's consumers, or laying the groundwork for setting the first two objectives in
10 future. The banking practice has sometimes been known to set other, less usual,
11 objectives. Among those may be the performance of a certain social mission in a limited
12 segment of a market, like, for example, using the bank's local branches in a certain area
13 to pay out government pensions or to provide grants to victims of a disaster.

14 Of crucial importance in identifying a bank's strategic goals is correct determination
15 of the time frame for their achievement. On the one hand, it is necessary to set objectives
16 that are achievable, given the bank's available resources, and on the other hand, to set up
17 a structural base for further strategic planning in order to achieve them.

18 Elements of Bank Marketing Mix

19 A third element of the marketing strategy is the so-called marketing mix which is a
20 combination of banking services, specially developed or adapted for each market and its
21 segment, with due account taken of their profitability and methods of distribution and
22 bringing them to customers. The marketing mix, being a means of achieving a bank's
23 strategic goals on every market or its segment, plays a crucial role in the bank's
24 marketing strategy (See Figure 27).

25



1

2

Figure 27 Bank's Marketing Mix

3 Each market and its segment is made up of customers with different types of
 4 consumer behavior. It is natural that, in order to maximize its profits, a bank should offer
 5 different kinds of banking services and products to different customers. Those should, of
 6 the one hand, meet the customers' needs and expectations and of the other hand - be able
 7 to bring acceptable profits to the bank.

8 The conditions, on which the banking services are offered, even if the services and
 9 the operations are of the same type, will be different when offered to customers from
 10 different regions or different market segments. For example, if one considers the retail
 11 bank deposits market, the conditions for a specific saving accumulation deposit by a
 12 Moscow pensioner will be different from, say, those of a hard currency deposit delivered
 13 to a Vladivostok serviceman.

14 Depending on the identification of target markets; and segments and of the choice
 15 of current and prospective objectives on those markets, the bank will have to create or
 16 reconsider the conditions of offering banking services for each target market and target

1 segment. This difficult task of rearrangement and reconsideration of the role of banking
2 services is aimed at helping the bank to achieve appropriate flexibility and thus
3 improving the effectiveness of its operations of the target markets and the
4 competitiveness of the services offered there.

5 The work on developing a set of basic conditions for offering services on each
6 target market has resulted in the bank achieving, in the process, definite standards of
7 operations and creating prerequisites for the development and management of other
8 components of the marketing mix, like profitability, distribution and reaching the
9 customers.

10 Profitability of banking services (products) on different markets is considered here
11 as an expression of the *price of banking services*. The thing is that the banking services
12 price for a customer is determined by the *transaction costs*, borne by the customer. These
13 costs are made up of the payment for performing the operations required to provide this
14 banking service, the share of the income which the bank retains as payment for the
15 service rendered, the opportunity costs due to the distraction of the customer's funds for
16 the purpose if he regards this as an investment against inflation expectations, or
17 expectations of ;, economically unfavorable scenarios affecting the service rendered by
18 the bank, etc. It is obviously hard, though necessary for decision-making, for the
19 customer to determine the exact cost of a banking service obtained. It is much easier to
20 determine not the cost of a specific service but rather the profitability of all services of
21 that type offered by the bank to its customers. That is exactly why the pricing of banking
22 services is considered from the supply (i.e. the bank's) side. The profitability of a
23 banking service is regarded here as the basic pricing factor.

24 By managing the profitability of banking services on different target markets and
25 their segments, a bank can make them attractive to customers and vigorously compete
26 with other banks offering similar services of the same markets.

27 Competitive prices for banking services can bring higher profits due to the volume
28 of business, even if competitors' higher prices yield more income on each separate
29 service. Besides, the banking services pricing factor is an important element of a
30 favorable image of that particular service and of the entire bank. This may promote the

1 consumers' loyalty to the bank and, in the final analysis, the growth of its intangible
2 assets.

3 The distribution of banking services includes all methods which customers may use
4 in order to obtain them. Traditionally a bank's customers were expected to make use of
5 the bank's services through its numerous, or, on the contrary, exclusive, branches. An
6 extensive network of local branches, comfortable premises, fixed operating hours - all
7 this has long been regarded as inalienable attributes of a successful bank.

8 Nevertheless, the changes in the modern world affecting not just the role of the
9 banks and the pattern of the banking services consumption, but even the very notions of
10 money and finance, require that a bank should offer its services to the customers when
11 and where required, if it wants to succeed in financial markets and meet the customers'
12 increased demands on the speed, form and content of services. Such flexibility of
13 approach to rendering banking services is expressed through development and
14 implementation of a modern system of distribution of banking services.

15 Efficient operators offer their customers at least six basic methods, together making
16 up a balanced distribution system, of obtaining banking services:

- 17 • *Traditional servicing in the main hall* of a branch. It is mostly used for
18 distribution of most retail banking services as well as for dealing with corporate
19 customers who do not require extensive accounting services or special
20 conditions for obtaining them.
- 21 • *Bank-customer telecommunication system*. It is mostly used for servicing the
22 corporate customers who are located far from the bank's branch or require
23 extensive banking services (for more detail see the Chapter "Management of
24 information technologies").
- 25 • *System of ATM; and authorized terminals* of payment systems based on plastic
26 cards. Used for customers' convenience and for maintaining the standards of the
27 international and national payment systems
- 28 • *Currency exchange offices*. This system of distribution of banking services is used
29 for customers' convenience at international passenger traffic centers, in hotels

1 and specialized shops. Due a special importance of hard currencies in Russia
2 during the period of inflation, this system has earned particular recognition.

- 3 • *Provision of certain banking services by post, phone or through computer*
4 *networks.* In spite of the fact that such methods of banking services distribution
5 are practically not yet used, they are very promising and are bound to be widely
6 applied once systems of voice, code or image identification become widespread.
- 7 • *Offering home banking services.* A classical example of such a method of banking
8 services distribution is certain kinds of collection.

9 The choice of methods of banking services distribution and of setting up a balanced
10 distribution systems is one of the basic tasks in developing a bank's marketing strategy,
11 while an uninterrupted functioning and adjustment of this system is a task for the bank's
12 marketing management department. One has but to note that the approach to solving
13 these problems in a modern bank should always be based on the study and analysis of
14 consumer behavior.

15 Promotion of banking services is a communication function. This means that the
16 basis of any banking services promotion actions, whether advertising or the operator's
17 professional code of conduct, is always the communication with the bank's existing or
18 prospective customers as well as with the general public. However, this promotion
19 involves not only communication or exchange of information, but purposeful
20 communicative activities aimed at convincing the customer of the necessity to come to
21 the bank for a financial service. *The functions of communication* with the bank's
22 customers will be described in greater detail in one of the following paragraphs of the
23 present chapter, while here the promotion is viewed from a different angle - mainly as an
24 element of the marketing strategy - and therefore calls for some comments.

25 Human consumption of material and non-material products is studied by
26 theoreticians of different sciences, among which are philosophy, medicine, sociology,
27 anthropology, history and, of course, economics. As we are concerned with the practical
28 aspects of the banking business, we would be mostly interested in the problems
29 connected with *incentives for consumers* as regards their use of banks' services and the
30 decision-making mechanisms that are involved in the choice of a specific service or

1 bank. As the result bank will be able to influence those decisions and stimulate the
2 demand for banking services. This is possible only through an active exchange of
3 information with customers, which is the immediate concern of the banking services
4 promotion system.

5 That is why the promotion is central among the array of marketing means used to
6 achieve the bank's strategic goals, and why it requires careful attention both at the stage
7 of marketing strategy development and while managing the bank's marketing activities.

8 Development of Marketing Strategy

9 Among the multiplicity of strategies one can single out some of the most
10 widespread and popular, which have helped many banks in practice to succeed in
11 achieving their objectives. Below are examples of some of the most interesting strategic
12 solutions:

- 13 • *Innovative strategies.* Implemented mostly by newcomers to the market, i.e. by
14 banks whose names are not associated in consumers' minds with certain banking
15 services standards, or by banks wishing to change their corporate image. A bank
16 makes use of new technologies and new, or retrained, personnel in order to
17 improve the quality of services, obtain a competitive advantage, and confirm its
18 image as an innovative bank
- 19 • *Strategies of aggressive expansion onto new markets.* Implemented when a
20 decision is taken to expand to other regional markets or markets of the banking
21 services not earlier provided to this bank's customers. Strategies of aggressive
22 expansion imply the use of all marketing methods to expand the bank's share of
23 a new market. In the field of strategic planning, such marketing strategies are
24 usually accompanied by coordinated investment strategies.
- 25 • *Diversification strategies.* Implemented mostly by new banks, which used to
26 specialize in certain kinds of operations and banking services. To retain their
27 customer base, be competitive and offer customers all the required banking
28 services such a bank becomes universal, performing operations on all financial

1 markets and offering their customers a comprehensive range of banking
2 services.

3 The process of developing a marketing strategy usually takes a long time and
4 requires that the bank management perform a number of consecutive steps to achieve
5 practicable results.

6 Below are listed the principal steps involved in developing a marketing strategy:

- 7 • *Preparation of analytical economic reviews.* Analytical reviews are necessary for
8 correct identification of the trends of economic development of a region, a
9 country and the world, as well as for obtaining the indicators pointing to the
10 existence of different kinds of financial markets.
- 11 • *Identification of target markets;*. Formulation of basic strategically important
12 directions of a bank's operation on financial markets and listing of those
13 banking services markets which are within the scope of those basic directions.
- 14 • *Collection and processing of internal information.* Study of a bank's potentialities
15 as to creating satisfactory components of marketing mixes on each of the target
16 markets.
- 17 • *Formulation of a bank's objectives.* While comparing the *development*
18 *potentialities* on each of the target markets and the bank's resources available
19 for ensuring satisfactory operations of those markets, the bank formulates its
20 short-term and long-term objectives for each target market.
- 21 • *Collection of information on target markets.* A detailed study of the characteristics
22 of demand for marketing services on each target market. Identification of target
23 segments on non-homogeneous markets.
- 24 • *Development of marketing mix.* A marketing mix is developed for each target
25 market and target segment, with due consideration of the bank's *objectives* in
26 these fields and the limits of the bank's resources available for achieving those
27 objectives. Determined at this stage are: the final number of the banking
28 services and products, the bank's profitability policies regarding each kind of

1 service and the outlays for distribution and promotion of those services. These
2 data are later used by the bank for planning its activities.

3 • *Strategic planning*, Development of plans and budgets for implementation of a
4 marketing strategy which are a practical instrument for the bank's activities aims
5 at achieving the stated objectives as well as a practical guide for the bank's
6 departments and officers. Strategic planning is a functional consequence of the
7 marketing strategy development.

8 • *Monitoring of a bank's market situation*. To provide the information feedback
9 between a bank's financial and economic activities and the changing market
10 situation, which is necessary for the bank management in order to introduce
11 appropriate corrections to the marketing strategy and the strategic plans, a
12 constant monitoring of the bank's market situation is required.

13 • *Working adjustments of the marketing strategy*. Made regularly according to a
14 schedule, or randomly as a prompt response to changes in the bank's market
15 situation.

16 In order to minimize the time and cost of developing a bank's marketing strategy,
17 and to successfully develop a practicable financial and economic tool i.e. an acceptable
18 marketing strategy, one has to put together an ad-hoc or a permanent working team and
19 make this task a separate internal bank project. The marketing strategy developers' team
20 should, along with the bank's top executives, always include officers from:

- 21 • strategy and development department;
- 22 • economic department;
- 23 • marketing department;
- 24 • advertising and public relations department;
- 25 • customer services department;
- 26 • accounting department;
- 27 • all business units

1 To perform certain functions, like preparing analytical market reviews or
2 conducting special marketing investigations, independent experts from consulting or
3 research companies may be invited.

4 The internal bank information also required for developing a marketing strategy is
5 usually collected and processed by the marketing or strategy and development
6 departments with the aid of a comprehensive *marketing information system*, which will
7 be discussed in a separate paragraph of the present chapter.

8 In practice, especially with banks with long-standing traditions and business
9 principles, embarking on the course of developing a marketing strategy amounts to
10 admitting that this important economic tool has been conspicuously absent in the array of
11 the bank's managerial instruments. It is obviously not easy for the management of a busy
12 bank to put aside the current day-to-day problems, admit to the absence of clearly
13 formulated long-term strategic goals, and find the extra time required to develop them.
14 However, this kind of work will never be in vain - a view supported by many years of
15 banking practice of the leading world banks.

16 Development of a bank's marketing strategy, subsequent detailed plans and
17 budgets, as well as strategy adjustments, involve substantial risks of committing system
18 mistakes with consequences which are difficult to predict. Some of the most typical
19 mistakes encountered while developing a bank's marketing strategy are enumerated
20 below:

- 21 • understanding of all marketing strategy development problems as a marketing
22 analysts' function;
- 23 • development of separate marketing strategy elements in different departments of
24 the bank without proper co-ordination or information exchange;
- 25 • violation of the sequence of the stages of marketing strategy development;
- 26 • making use of unreliable data on the target markets;. or the economy as a whole

1 Bank Marketing Information System

2 This paragraph deals with a managerial tool which is indispensable for solving the
3 problems of developing a marketing strategy, planning a marketing mix or managing the
4 marketing activities of the bank as a whole.

5 To perform those functions while avoiding costly mistakes, the entire decision-
6 making process should be based on the analysis of reliable financial and economic data.
7 This, in its turn, calls for introducing another internal bank function – that of collection,
8 verification, processing, analysis, storage, distribution and transfer within the bank, of
9 the data required for making sound financial decisions. In a bank this function is usually
10 performed by the information department or by a special management information
11 system called *Marketing information system* (MIS) .. It includes interconnected
12 organizational units responsible for the collection of internal and external information,
13 analysis and processing of the data, their storage, transfer and security, as well as for
14 supplying this information to the bank management.

15 Strictly speaking, the information available through MIS is required not only by
16 marketing analysts and the executives responsible for strategic decisions. It may be
17 required by any bank department for the purposes of forecasting or planning, provided,
18 of course, due consideration is given to appropriate levels of access to certain types of
19 data. In a number of cases, separate MIS elements may also be made accessible, through
20 telecommunication channels, to customers and to the general public, thus meeting the
21 bank's public responsibility concerning the openness and accountability.

22 *Problem of Determining the Market Parameters and the Bank's Resources*

23 The information field of a marketing information system may encompass all kinds
24 of data on the financial services markets and the development trends of the economy as a
25 whole, all kinds of data characterizing the bank's market situation, including its position
26 vis-a-vis its competitors, as well as the data on the bank's resources available for
27 effecting a change in the market situation and achieving its strategic goals. With this aim
28 in view, a system of indicators suitable for determining the market parameters and the

1 bank's internal resources is first of all developed. This system may consist of absolute
2 and relative parameters, specially calculated indices, as well as evaluations of qualitative
3 indicators.

4 In practical operation of MIS, the kinds and the structure of the indicators keep
5 changing, becoming ever more precise, perfect and practicable. However, in order to be
6 able to make use of old records and analyze not only the current value of each parameter
7 but to monitor the change in trends, it is crucial to preserve continuity and comparability
8 of the indicators observed and stored.

9 It must be noted that a bank has no need to monitor all the market parameters
10 without exception, or to calculate a huge number of various economic indicators related
11 to all situations. The marketing information system of an active bank is not a research
12 facility, it has other, primarily practical, tasks to perform. That is why the MIS budgets
13 require constant control to limit its activities to a justifiably narrow information field
14 whose borders need to be constantly reviewed and corrected.

15 Another important MIS task is to identify and service a restricted number of
16 sources of data to be collected. For most MIS purposes it is enough to make use of the
17 commercial databanks organized on the basis of global telecommunication networks, and
18 open and internal data sources. However, from time to time a bank would require some
19 data, which can be obtained only in the course of field marketing investigations, and the
20 MIS should be prepared for practical work with this specific class of data sources.

21 As a rule, access to external data sources is made available on a commercial basis,
22 though the cost of using the open sources is negligibly small. An important aspect of the
23 correct choice of external data sources is technical preparedness of the bank's MIS for
24 working with them. To connect to certain external data sources, especially to financial
25 data transfer systems, one needs costly dedicated telecommunication lines as well as
26 special computer equipment and communication terminals.

27 Internal information sources should be joined by unified data organization systems,
28 like standards for data presentation and a list of indicators, and by unified transfer
29 systems making it possible to optimize the flow of information and to control the bank's
30 officers' sanctioned access to those systems.

1 A unified methodological base for observation and registration of indicators should
2 be carefully thought out and introduced in all branches and sections of the bank in order
3 to ensure comparability of the data collected.

4 *Principles of Collection of External and Internal Information*

5 The methods used for collection of information should first of all ensure the quality
6 of the incoming data. 'Quality information' usually implies the data, which meet the
7 criteria of reliability, timeliness, completeness and regularity, as well as readiness for
8 use.

9 In practice, information reliability is achieved by using methodologically correct
10 techniques of data acquisition, and by double-checking the data obtained. Double-
11 checking methods are usually expensive, as the data acquisition process has to be
12 repeated. Therefore a MIS, in order to use its resources efficiently, must seek to improve
13 its utilization of sources as the principal method of improving the reliability of the data
14 obtained.

15 Timeliness of information depends on the nature of the decisions taken on its basis.
16 In a number of cases there is no need to obtain it immediately if no immediate decision is
17 called for. However, it is the banking sector that often requires speedy decisions for a
18 number of operations, and thus it needs exceptionally timely information which often
19 comes and is processed in real-time mode.

20 Completeness and regularity mean systematic supply and well-organized storage of
21 the data. Information, regularly supplied and kept in the archives, is required in order to
22 register the changes in the indicators observed and analyze the changing trends.

23 Preparedness of information for use provides for its more efficient application for
24 managerial decision-making and reduces the stress experienced by the decision makers.
25 A MIS should be able to present any data in a user-friendly form accompanying them
26 with illustrations and graphs for easier intelligibility.

1 Setting up Marketing Information System

2 A bank's marketing information system should fulfil a number of basic functions
3 shown below:

- 4 • Ensure acquisition of high-quality financial and economic information;
- 5 • Provide storage, transfer, distribution and protection of the data collected from
6 non-sanctioned access;
- 7 • Conduct systematic analysis of fresh and archived data calculating rated indicators
8 required for managing the bank's marketing activities and for solving other
9 managerial problems;
- 10 • Provide its customers with remote access to general information on the bank's
11 activities;
- 12 • Conduct educational work within the bank by regular distribution of information
13 bulletins on the bank's activities among its officers;
- 14 • Improve its operation methods and monitor the MIS budget to ensure efficient
15 spending

16 To set up and maintain a MIS, a number of organizational and technical backup
17 requirements have to be met:

- 18 • Availability of sufficiently powerful computerized equipment and internal bank
19 communication networks to organize integrated data flows.
- 20 • Attainment of sufficient level of skills by all MIS users in order to efficiently use the
21 system in everyday work without experiencing fear or discomfort.
- 22 • Use of sufficiently powerful communication channels for connection to global and
23 local information networks.
- 24 • Development and introduction of an adequate and internally logical system of
25 working indicators for collection, storage, calculation, analysis of the data.
- 26 • Development and introduction of an adequate methodological base for collection,
27 storage, calculation, analysis and interpretation of the data.

- 1 • Large-scale application of MIS for solving strategic marketing problems or other
2 problems of management.

3 **Functions of Communication with Customers**

4 This paragraph is devoted to the problems connected with the bringing of banking
5 services and products to customers. The scope of these problems includes not only a
6 review of traditional and innovative approaches to personal promotion, advertising and
7 public relations, but also recommendations on the use of practical methods of solving the
8 problems and ways of controlling these functions in a bank.

9 To make a bank's operation on financial markets successful requires coordinated
10 efforts by all the participants of such operations. However, the essence of the notion of
11 market implies freedom of behavior of all participants, thus making the problem of
12 successful implementation of the bank's plans dependent on the financial and economic
13 strategy and tactics of its partners. To find mutual interests and to influence the partners'
14 choice of strategy, the majority of the partners being its customers, the bank needs to be
15 able to convincingly explain to all the participants its line of behavior as well as possible
16 consequences of lack of co-ordination for all the partners.

17 Mutual achievement of optimal results and mutual advantage gained through co-
18 ordination form the economic base of the market. That is why positive results of any
19 market operations depend on partners' mutual understanding. The problems of achieving
20 better understanding between financial market partners are solved by a bank's
21 communication policies manifesting themselves through specific communication
22 activities like advertising, public relations and personal promotion.

23 **Bank's Communication Goals**

24 To achieve its strategic goals, a bank should implement an active program of
25 communication with customers, primarily with companies and main population groups
26 making up the foundation of the customer base and being the source of its future
27 expansion.

1 A bank's communication with customers can be performed in the following way:

- 2 • directly - through services rendered by the bank's officers;
- 3 • through public relations;
- 4 • by the use of appropriate advertising means

5 Within the framework of its communication policies, a bank plans to achieve two
6 basic objectives:

- 7 a) enhancement and, if required, modification of the bank's positive image in the
8 eyes of its customers on the main target markets and segments of banking services;
- 9 á) promotion of certain banking products on appropriate target segments;.

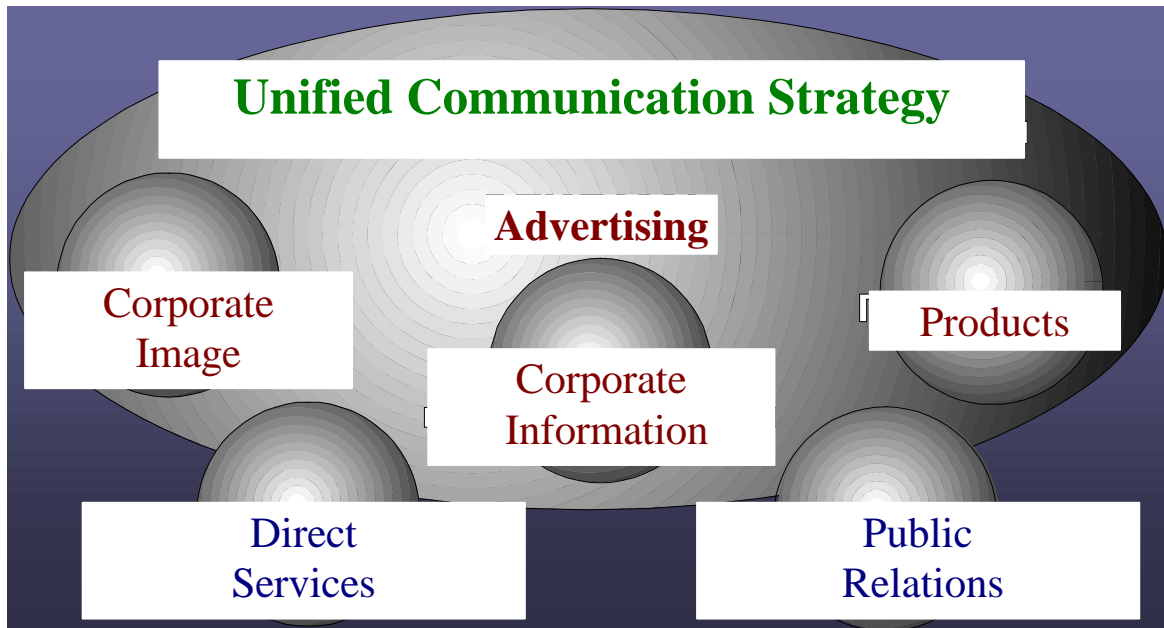
10 To achieve these objectives the bank needs to develop and implement a number of
11 interrelated actions for corporate and product advertising, and of its officers' training and
12 implementation of a system of their professional information support.

13 Having implemented these actions, the bank can count on:

- 14 • its customers applying for specific banking products and services of which they
15 became aware through the bank's promotion activities;
- 16 • association of the bank with the positive qualities expected by the customers in
17 each target segment;
- 18 • favorable atmosphere for the bank's contacts with the municipal authorities and
19 the public;
- 20 • new opportunities for co-operation with other banks and financial institutions;
- 21 • other companies' employees and college undergraduates wishing to look for career
22 opportunities within the bank;
- 23 • greater motivation of the bank's employees to better perform their duties;
- 24 • the customers making use of the general information concerning the bank;
- 25 • offsetting the possible negative press publications initiated by unfair competitors.

26

1 Below is a three-dimensional representation of a bank's communication with its
 2 customers (See Figure 28).



3
 4 [Figure 28 Unified Policy of Communication with Customers](#)

5 A *unified communication policy* is developed in order to co-ordinate all customer-
 6 oriented activities of a bank, whatever their content. It is manifested through advertising,
 7 public relations and direct contacts of the bank's employees with customers.

8 Banks usually distinguish three kinds of their promotional activities:

- 9 • ***Corporate information advertising*** aimed at promoting the bank itself as an
 10 institution ready to offer its customers the entire range of banking services. This
 11 type of communication includes signboards on the building housing the bank's
 12 branches, symbols on city maps, information in telephone directories, etc.
- 13 • ***Corporate image promotion*** aimed at forming or adjustment of the bank's
 14 favorable image in the eyes of its customers. With this aim in view, promotional
 15 activities are provided for in each target segment. As consumer behavior may be
 16 substantially different in each of the target segments, different basic promotion
 17 ideas are provided for each segment and different communication channels, to
 18 which this segment's consumers are accustomed, are used. Consistent work on
 19 promotion of the bank's favorable image in all target segments requires a program

1 of well-timed activities coordinated in style as a tool for implementation of a
2 unified communication policy of the bank. As the task of building-up and
3 maintaining the bank's favorable image requires consistent long-term efforts, it
4 makes sense to constantly participate in a limited number of carefully selected
5 long-term promotional activities. Among such activities may be programs of
6 developing the exterior design of the bank's branches, presentation of some banking
7 products, long-term regular public relations functions, as well as a few well
8 thought-out programs of sponsorships. One has to define the basic directions of
9 long-term communication programs and set their financing priorities so that later
10 one would have only to make necessary adjustments within those programs by
11 periodically adding or removing their elements as required.

- 12 • **Product advertising** aimed at promoting certain kinds of banking services, as well
13 as support for the bank's special activities. When solving the problems of
14 promoting certain kinds of banking products through advertising, one should
15 always be guided by a unified policy of communication with customers and
16 include, where proper and possible, into the advertising spots some elements which
17 promote the bank's positive image in a specific target segment.

18 The activities, which the bank plans to conduct in order to improve its *direct*
19 *services* to customers and *public relations*, should also be coordinated with the unified
20 policy.

21 A direct service to customers is a form of personal communication between the
22 bank, represented by a bank officer, and a customer, whether existing or prospective.
23 This type of communication takes place in the bank's halls, by answering the customers'
24 phone inquiries, and by visits to the customers by bank officers.

25 Public relations cover quite a wide scope of activities aimed at presenting a bank's
26 mission on financial markets and to form a positive image of the bank in the eyes of the
27 population of the region and/ or the country where it operates. As a rule, public relations
28 problems are the responsibility special teams of trained bank officers who keep up
29 contacts with the press and other mass media, as well as with the government
30 information services of all levels.

1 Principles of Activity of Bank Advertising Department

2 To plan and organize a bank's communication activities, special organizational
3 units are usually set up, mostly such as advertising or public relations departments.

4 As banks usually carry out a lot of promotional activities, they are major customers
5 on the local and national markets of advertising services. To cut costs and to better
6 organize regular promotional activities, it is advisable to carry out a part of the working
7 cycle of preparing advertising materials within the bank.

8 As a rule, a bank advertising department can successfully cope with defining the
9 objectives of advertising drives on different target markets and their segments and with
10 selecting the promotional channels best suited for communication with the customers of
11 specific markets and segments, as well as with calculating and supervising the budgets
12 for specific promotions. Moreover, a bank advertising department must always take part
13 in developing the concepts of advertising in line with the bank's unified communication
14 policy.

15 Unlike full-fledged advertising agencies, advertising departments cannot effectively
16 perform the functions concerning customer polling, advertising means, purchase and
17 timing of advertising spots, or control of certain efficiency parameters of advertising
18 campaigns. This means that the interaction between banks and specialized advertising
19 agencies is, as it were, pre-programmed by the modern division of labor on the
20 advertising services market and is a must for successful and efficient operation.

21 There are a few most popular methods of co-operation between banks and
22 advertising agencies:

- 23 • The most complicated, but nevertheless rational, interaction method is one of
24 global co-operation of an international bank with a major international advertising
25 agency, whose branches cover all major financial services markets of the world.
26 This kind of centralized co-operation allows to considerably cut the costs due large
27 volumes of business and highly effective regular use of advertising channels.
- 28 • The next method involves co-operation with independent regional advertising
29 agencies, which is a very attractive proposition for the latter. This type of approach

1 to advertising is fraught with organizational problems and probably uneven quality
2 of work of different advertising channels, but makes it possible to achieve fair
3 efficiency due to the fact that in such a partnership the interests of the bank are sure
4 to predominate.

- 5 • In the case where the bank operates on the markets of major cities or small
6 countries it sometimes makes sense to set up an own advertising agency providing
7 it with large-scale orders and simultaneously exercising control over its spending,
8 selection of customers and protection of strategically important information.

9 A number of organizational functions are the sole responsibility of the bank's
10 advertising department, and are never entrusted to professional advertising agencies:

- 11 • development of the bank's communication strategy;
- 12 • planning of communication activities and control over their budgets;
- 13 • maintenance of working contacts with partner advertising agencies;
- 14 • interaction with research institutions specializing in investigation of advertising
15 services markets and advertising audiences, government press services of
16 different levels, accreditation with news agencies and membership in
17 professional associations and clubs dealing with charity and public relations;
- 18 • initiation and control over the bank's advertising campaigns;
- 19 • evaluation of the efficiency of advertising campaigns;
- 20 • evaluation of and response to incoming business proposals concerning
21 communication.

22 The organizational structure of an advertising department should always provide
23 for the posts of advertising manager and public relations manager, unless a special
24 department has been set up for the purposes, as well as coordinators of advertising
25 campaigns responsible for their organization. A bank advertising department usually
26 numbers five to 20 employees.

1 Personal Promotion of Banking Services

2 The world bank sector has seen a number of remarkable trends over the last few
3 decades. In particular, with the opening of opportunities for minor private investments
4 the entire system of providing banking services has required complete revision and
5 reorganization, while a decrease in the customers' loyalty to their banks, along with the
6 appearance of new and powerful non-banking institutions on the financial markets, has
7 considerably intensified the competition and heightened the requirements to the methods
8 of banking services distribution and promotion.

9 Many foreign banks have discovered for themselves the practice of personal
10 promotion of their services - a practice heretofore typical mainly of other industrial
11 markets, being based on the technique of personal sales.

12 Personal promotion implies direct personal contact between a consumer, typically a
13 major company, and the bank through their authorized representatives. During the
14 ensuing negotiations the bank's officer informs the customer of the services available
15 through the bank, conditions offered, advantages and benefits to be gained by using the
16 services, and also suggests that the customer make practical steps to obtain certain
17 banking services.

18 The bank officer usually arranges a meeting with a customer's representative by
19 phone and then arrives in person to conduct a presentation and to deliver necessary
20 materials like information bulletins, booklets, forms, etc. In the course of the presentation
21 both parties exchange opinions as to the acceptability of this or that banking service for
22 the customer, possibilities of special offers concerning conditions or forms, etc. The
23 negotiations are finalized by the bank representative taking a decision and
24 recommending the customer to address the appropriate service or branch of the bank, or
25 arranging for further meetings to continue the search for mutually advantageous
26 solutions.

27 This is the most perfect form of communication as it is done in person and so can be
28 flexible enough to satisfy all the information needs of the customer and to provide him
29 with motivation for availing himself of the bank's services.

1 At the same time, personal promotion requires that, in order to fulfil his duties
2 efficiently, the officer responsible should have special abilities and training.

3 Listed below are the basic functions and duties of a personal promotion service
4 officer who must:

- 5 • look for promising corporate customers and maintain contacts with them;
- 6 • bring to the customer's attention the bank's new or traditional services which the
7 customer might find useful;
- 8 • during a presentation, arouse the customer's interest in the opening opportunities of
9 advantages or profits from obtaining the bank's services;
- 10 • motivate the customer to obtain the bank's services by helping him to find the best
11 forms of such services and optimum conditions for their acquisition;
- 12 • bring the negotiations with the customer to a successful conclusion by achieving
13 tangible results, like signing a letter of intent or agreeing on a fixed date for
14 finalizing the agreement on acquisition of the service from the bank.

15 A personal promotion service officer must:

- 16 • always maintain a tidy personal appearance conducive to business discussions;
- 17 • possess the latest information on the types and forms of financial services offered
18 by the bank;
- 19 • possess all the necessary latest information on the operation of services and
20 departments of the bank connected with offering its financial services;
- 21 • always be in possession of sufficient quantities of presentation and information
22 materials;
- 23 • make use of his powers to perform certain banking operations or services, or
24 without fail refer the customer to other departments of the bank;
- 25 • possess adequate means of transportation and communication

26 A personal promotion service must have an adequate number of employees to
27 ensure efficient promotion and distribution of banking services. Typically, for a major

1 city of several million people the number of field officers is between 7 and 15 persons.
2 Besides, the personal promotion service must have one or two managers responsible for
3 planning and organization of work of their field officers, as well as the required number
4 of technical personnel for co-ordination, reception and transfer of information and for
5 preparation of necessary documents.

6 Field officers must always be provided with vehicles and reliable means of
7 communication, typically cellular phones, to improve the efficiency of their work.

8 Besides the proper functions of personal promotion of banking services and
9 distribution of certain kinds of them, a personal promotion service solves many other
10 important problems:

- 11 1) Notification of major customers of the changes in the mode of operation of the
12 bank;
- 13 2) Delivery to customers of certain types of documents which require safe transfer
14 (against receipt);
- 15 3) Collection of information on customers and banking services market situation,
16 including offers of banking services by competitors;
- 17 4) Arrangement of interviews with and polling of customers while conducting
18 small current market investigations.

19 A personal promotion service is an effective tool for achieving the bank's strategic
20 goals on certain target markets and their segments. Setting up such a service within a
21 bank requires time and expense but, as demonstrated in practice, it brings the expected
22 results fairly quickly.

23 **Procedures of Bank Marketing Management**

24 Marketing in a bank represents a special kind of activity which, at a closer glance,
25 proves to be integrated with the activities of the bank's other functional departments.
26 Nevertheless, the marketing management activities may be regarded as independent, as
27 they presuppose a purposeful implementation of a marketing approach to banking

1 operations, as well as co-ordination, control and encouragement of the bank's officers
2 responsible for marketing operations and planned implementation of the bank's
3 marketing strategy.

4 To perform his functions, a bank's marketing manager has to develop a marketing
5 management structure and sustain its functioning. Besides, he has to solve day-to-day
6 problems of planning the marketing activities and supervising their implementation.

7 In spite of the fact that a marketing approach to banking implies the use of the
8 marketing strategy, accepted by the bank, in the work of absolutely all its organizational
9 units, there is a number of functions immediately connected with achieving the bank's
10 strategic goals by marketing means. Such functions first of all include the development
11 and adjustment of the marketing strategy itself, management of marketing mixes for
12 different target markets and segments, acquisition of marketing information, bank's
13 external communications and *personal promotion of banking services* by bringing them
14 to customers.

15 To coordinate these functions, the bank should set up a marketing service.

16 *Organization of Marketing Management within a Bank*

17 General organization of marketing in a bank should be developed with due account
18 taken of the existing market and internal bank requirements. That is why marketing
19 functions management systems substantially differ from bank to bank. However, in
20 practically every commercial financial institution one can find a division of labor system
21 for the market analysts manifested by the presence of the following departments:

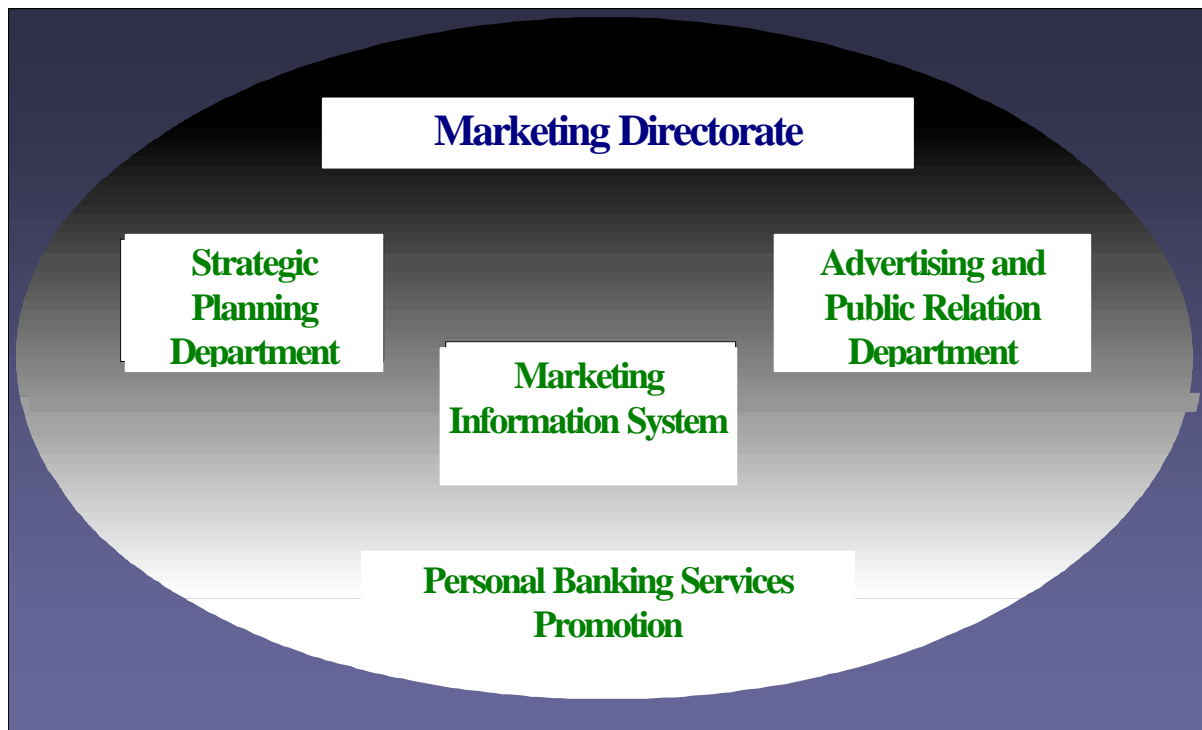
22 *Marketing directorate.* A small but important department responsible for all
23 marketing functions of the bank. Headed by one of the first deputies of the Board of
24 Directors and empowered to exercise its managerial functions in any department of the
25 bank.

26 *Strategic planning department,* is the part of the marketing management system as
27 a functional unit. Solves the problems of development and adjustment of the marketing
28 strategy and strategic planning.

1 *Marketing information system (MIS)* represents the part of the marketing
 2 management department as a functional unit. Performs the functions of collection of
 3 internal and external information, analysis and processing of data, their storage, transfer
 4 and protection, also providing the bank management with required information. MIS
 5 closely interacts with other bank departments, including the security service.

6 Advertising and public relations department. Forms part of the marketing
 7 management structure as an independent functional unit. Performs the functions of
 8 communication aiming to promote services and products of the bank.

9 *Personal Banking Services Promotion department.* Forms part of the
 10 communication with customers management structure as an independent functional unit.
 11 Supplements the traditional methods of work with customers with those of personal
 12 promotion of banking services and products.



13

14

Figure 29 Organisation of Marketing Management System in a Bank

15 Marketing Research Procedure

16 Any marketing research starts with analytical work on formulating hypotheses.
 17 This is necessary for the most efficient data collection, so as to focus on the data required

1 for verification of the hypotheses and to avoid unnecessary expense of collecting
2 superfluous information.

3 Hypotheses may be advanced in order to explain the changes in the bank's position
4 on the market, or to substantiate possible responses of the bank's customers to certain
5 moves.

6 While formulating a hypothesis it is necessary to establish a causal relationship
7 between the occurrence of certain events and the bank's market activities prior to them,
8 in order to check, by research and analysis of the information specially collected for the
9 purpose, if the hypothesis is true.

10 There many ways of checking the correctness of hypotheses advanced, the most
11 popular one being the dispersion analysis technique. The choice of the right research
12 method is an extremely complicated problem calling for real professionals if one wants
13 to avoid mistakes and obtain trustworthy information. As a rule, at this stage of research
14 the banks use the services of experts.

15 As soon as a research method has been chosen, one should start collecting the data
16 required for it. In most cases this is a sufficiently great number of results of certain
17 observations. Such observations can be carried out both the bank employees, e.g. field
18 officers of the personal promotion department, and professionals from research
19 institutions. In the latter case it makes sense to invite experts specializing in research
20 methods and in data collection from the same research facility.

21 With the research method chosen and data collected, it is time to embark on the
22 next stage of investigation involving primary processing of the data and, to achieve
23 greater processing accuracy, usually conducted by the same research workers, which
24 collected them.

25 And finally, after processing the data and entering them into a computer, it is the
26 turn of the final stage of the marketing investigation - interpretation of the findings.

27 This stage should be conducted jointly by the researchers and the bank analysts, as
28 interpretation always requires additional information and responsible supervision.
29 Interpretation of the findings, along with the choice of research methods, is the most

1 complicated part of the investigation and a possible source of serious mistakes, which
2 might have consequences that are difficult to overestimate.

3 The interpreted data confirming or refuting the initial hypothesis can serve the
4 purposes of managing the bank, or be used for resuming marketing research and
5 verification of other hypotheses advanced.

6 It should be especially noted that the outcome of any marketing investigation must
7 be a detailed report enumerating all the hypotheses advanced and checked, substantiating
8 the choice of the research method, describing the data collection mechanism, containing
9 generalized data on the observations conducted, and finally presenting interpreted results
10 of the entire investigation illustrated by graphs and drawing for easier perception.

11 Communication Strategy Procedure

12 Preparation of a bank's *communication strategy* starts with a study of the marketing
13 strategy and identification of the communication needs in each segment. The purpose of
14 developing a communication strategy is to determine the directions of communication,
15 the balance of activities on each target market and its segment and the development of
16 the principal methods of communication, that is the choice of channels and forms of
17 communication moves.

18 A major stage in the preparation of a communication strategy is the determination
19 of directions of image improvement and adjustment on each target market and its
20 segment. For this purpose a matrix is used where the horizontal rows contain image-
21 forming factors, like 'reliability', 'promptness of service', while the vertical columns
22 enumerate such target markets and their segments as 'enterprises of an industry' or
23 'military personnel'. After filling in the matrix cells with the evaluation data on the image
24 factors on a given target market or its segment expressed by figures, e.g. from 1 to 5, one
25 must rank the sums of the rows thus producing a list of the bank's image-forming factors
26 for all the markets in descending order. It will also be possible to analyze the deviations
27 in the values in each row obtaining a number of deviations from the typical values
28 observed on target markets and their segments.

1 As a rule, with the filled-in matrix data interpreted, it becomes clear which
2 communication directions require the bank's immediate attention, which target markets
3 or their segments display the greatest deviations and require an especially careful
4 approach to the determination of the principles of communication with the customers on
5 those markets or segments.

6 The procedure of developing a communication strategy is finalized by drawing up a
7 formalized document containing a list of directions of communication activities for each
8 target market and its segment, describing the distribution of communication frequency
9 between each target market and its segment, formulating the principles of forms of
10 communication with customers of each target market and its segment, and also
11 containing a list of the most suitable channels of communication with customers of those
12 markets and their segments.

13 *Procedure of Plans and Budgets Development for Promotion Activities*

14 An annual plan of promotion activities is drawn up on the basis of the bank's
15 communication strategy and actually is a detailed list of promotion activities for the bank
16 as a whole, and for target markets and segments.

17 The annual plan can be supplemented with promotion drives plans for shorter
18 periods, aimed, for instance, at entering a market with a specific new service or product.

19 While drawing up such plans, the advertising department officers indicate the form
20 of advertising address, objectives and expected results, distribution channels, starting and
21 closing times for the distribution, as well as advertising frequency and estimated cost.

22 Evaluation of the costs of an advertising campaign is made on the basis of the
23 information of the advertising services market and the planned volumes of production
24 and placement of the advertisements.

25 There may be two approaches to the preparation of promotion activities: one based
26 on the appropriation of funds according to the communication needs as defined by the
27 specialists of the advertising and strategy & development departments, and the other - on

1 the basis of the bank's limited possibilities and the evaluations of the competitors' level
2 of communication activities.

3 The common feature of both the approaches is the necessity of solving the problem
4 of efficient spending and distribution of funds between different promotion activities. It
5 is for this purpose that the bank requires a formalized communication strategy.

6 While developing plans for advertising campaigns, special mechanisms should be
7 provided to control their efficiency. For these purposes, use is made of special studies of
8 customers' response to advertising and their perception of specific advertising moves, as
9 well as of the calculated indicators based on the comparison of the costs of advertising
10 campaigns and the results of the bank's activities in the markets which may depend on
11 the communication efficiency.

12 Two more major factors also have to be considered while drawing up plans. Firstly,
13 to reduce risks of failure of specific advertising actions due to a change of prices or other
14 unforeseen circumstances, it always makes sense to reserve a certain share of the
15 advertising budget to insure such risks. Secondly, the tasks of planning advertising
16 campaigns and preparing budgets should be entrusted to the most loyal officers, as the
17 advertising sector often makes use of special influence and pressure techniques which, if
18 successfully applied to its customers' representatives, may reduce the promotion
19 efficiency and/or increase its costs.

20

HUMAN RESOURCES MANAGEMENT

Elias Awad

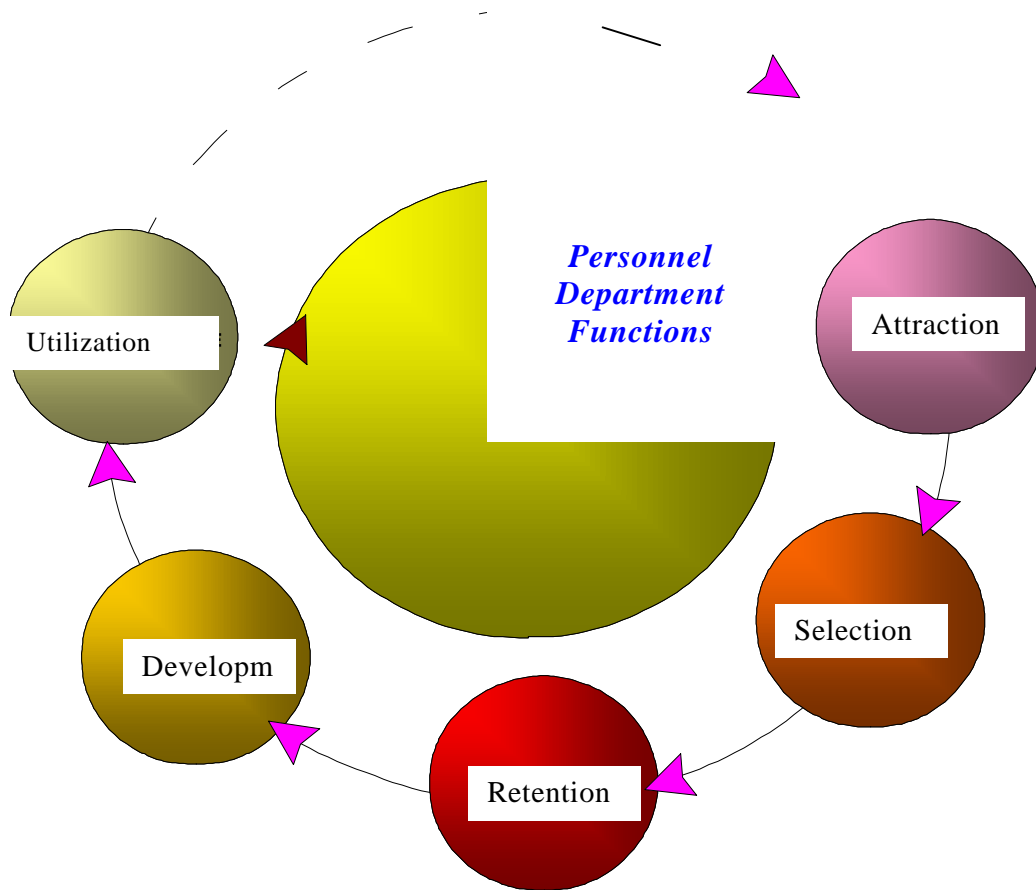
Dmitry Evstafiev

Success in banking depends directly from the people who work for the bank. This chapter provides guidelines for employees recruitment, methods of selection and placement in the bank, developing the pay system and incentive programs, rules of labor safety, ways of job analysis, as well as recommendations for solving labor conflicts and planning of personnel department activity.

Human resources management is a necessary activity in all organizations, especially in banking. The focal point is people. When a bank is really concerned about people, its total philosophy, culture, and tone will reflect this belief. So people are the lifeblood of the bank. The primary goal of this activity is to provide effective, risk-sensitive leadership in planning bank employment needs, job analysis, selecting and training qualified staff, wage and salary administration, incentives and benefits, employee performance evaluation, employee health and safety, and handling grievances and labor relations.

Russian banks today face the challenge of building an employee infrastructure and customer service base around highly qualified and reliable personnel with technology that monitors and controls mishandling of funds and money laundering. This responsibility falls on tellers, cashiers, as well as senior bank officers in the central office and branches. Implied in this effort is *risk management*, addressing poor employee performance, lack of qualified personnel, and erratic turnover that threaten the bank's integrity, viability, and accountability to owners, customers, and the public at large. With this in mind, the manager of personnel department has an important responsibility, balancing the risk/return preference of all parties including regulators. In addition, the widely dispersed branch networks of banks in the Russian Federation and the communication imperfections further underscore the importance of low-risk quality

1 employees with potential to career advancement and to the bank's growth and
 2 profitability.



3
 4 **Figure 30 The Human resources management Process**

5 The goal of the chapter is to provide to bank managers proven procedures and
 6 standards for ensuring the success and effectiveness of the human resource function
 7 within the bank. Included in this chapter is a comprehensive risk-assessment
 8 methodology embedded in the procedures and standards with samples of forms,
 9 guidelines, and graphics relevant to a variety of human resource issues are also included.

10 Human resources management may be defined as is the attraction, selection,
 11 retention, development, and utilization of human resources in order to achieve both
 12 individual and bank-oriented objectives. See Figure 30. The role of the officer of
 13 personnel department is to oversee the successful implementation of this efforts and to
 14 help bank officers at all levels manage their respective employees with the goal of raising

1 productivity through recognition, training, responsibility, and rewards. These issues are
2 also discussed in the chapter.

3 **Job Analysis and Design**

4 One of the most important tasks in managing bank personnel is to identify,
5 prioritize, evaluate, and design the various *job responsibilities* within the bank's area of
6 operation. Job analysis and design involves eight important steps:

- 7 • Look at the bank's organization structure and decide on the relationship of each job
8 within that structure;
- 9 • Describe in details the tasks and responsibilities of each job. This is called *job*
10 *description*;
- 11 • Estimate the time frequency to perform each task. Record estimates on worksheet;
- 12 • Rate each task in terms of levels of complexity, difficulty, and stress;
- 13 • Group each task by generic area of operation (e.g. bookkeeping, loan, accounting,
14 etc.);
- 15 • Design jobs with the dual objective of meeting the bank's operation requirements
16 while contributing to the employee's professional and individual needs.
- 17 • Describe in details the requirements of each job (e.g. education, skills, abilities, etc.).
18 This is called *job requirements* or *job specifications*.
- 19 • Periodically review after implementation of the job analysis and design. Modify if
20 necessary.

21 *Practical Procedures*

22 Thus job analysis is the process of collecting information on the important work-
23 related aspects of a job. A job analysis worksheet is illustrated in Figure 31.

1 *Job description* is the principal product of job analysis. It represents a written
2 summary of what job entails in a department or area of operation within the bank or its
3 branches.

4 *Job specification* is a written explanation of the knowledge, skills, abilities, traits,
5 and other characteristics required for effective performance a given job.

JOB ANALYSIS WORKSHEET

Your Name _____ Date ____/____/____

(Last) (First) (MI)

Job Title _____ Dept. _____

Supervisor's Name _____ Hours Worked ____AM ____AM

(Last) (First) (MI) PM PM

Supervisor's Title _____ Prepared By _____

Length of time in job: _____

1. What are the primary duties of your job?

- a. Daily duties----
- b. Periodic duties---(Please indicate whether weekly, monthly, quarterly, etc.)
- c. Duties performed at irregular intervals----
- d. How long have you been performing these duties?
- e. Are you now performing unnecessary duties? If yes, please describe

2. Job tasks (tasks with X in front indicate observed duties; use actual examples, indicate frequency, consequences of error (0-10), difficulty (0-10), training received, supervision)

3. How detailed are assignments? Describe the form work comes in, decisions which have been made, and what still needs to be done with the work.

4. Equivalent position(s):

5. Higher position(s) job prepares one for:

6. Physical activity: (lifting, walking, standing, operating check processing machine, etc.)

7. Supervisory responsibility, if any:

8. Education. Please check the following educational level(s) that indicates the educational *requirements* for the job, not your *own* educational background.

- a. ____ No formal education required
- b. ____ Less than 11th grade or high school diploma
- c. ____ 11th grade or high school diploma or equivalent
- d. ____ 2-year college or equivalent
- e. ____ 4-year college/university degree
- f. ____ Graduate degree or professional license

9. Please indicate the education you had when you were placed on the present job.

10. *Experience.* Please specify how long it takes to perform your job.

11. *Skill.* Please list any skills required in the performance of your job. (For example, level of accuracy, alertness, communication skills, etc.)

12. *Computer.* Does your work require the use of computers? Yes____No____If Yes, please list the level of computer literacy required.

1 **Figure 31 Guideline for Job Analysis Worksheet**

2 **Recommendations for Filling the Job Analysis Worksheet**

3 There are aspects of job analysis that should be considered:

- 4 • *Job element* is the smallest unit into which work can be divided. For example,
5 removing a personnel file prior to updating or verifying on the computer a customer's
6 savings balance, deposit, withdrawal, etc.
- 7 • *Job task* is a distinct work activity or a set of job elements carried out for a distinct
8 purpose. For example, preparing a monthly report is example of task.
- 9 • *Position* consists of one or more functions performed by a given bank employee at a
10 given time. For example, the position of a loan officer involves various functions
11 such as evaluating a loan, reviewing the loan applicant's past loans in the database,
12 etc. There are as many positions in a bank as there are employees. Sometimes a
13 position is called a *job* when the functions are similar and are clustered under one job
14 title. Such as in the case of cashier, driver or programmer.
- 15 • *Job family* is a cluster of jobs that have similar job functions. This often forms the
16 basis for a department. Usually this approach is applied in credit department, plastic
17 cards and advertising departments.

18 There are several methods of obtaining job information (in practice, a combination
19 of approaches) to launch job analysis:

20 **1. Direct observation.** Direct observation is most appropriate for jobs that require
21 a great deal of manual, standardized, short-cycle activities. For example, a clerk enters
22 information in the foreign exchange outlet. This method is useful when it includes a
23 representative sample of job behaviors and a representative sample of workers in the
24 same job classification. The method is inappropriate where the job involves a significant
25 amount of mental activity such as the work of a loan officer or systems analyst.

26 **2. Interview.** This tool is often used in combination with observation. Interviews
27 can be conducted with a single jobholder, a group of employees, or with a manager who
28 is knowledgeable about the job. Although interviews can yield useful job analysis

1 information, they are difficult to standardize; that is, different interviewers may ask
2 different questions and the same interviewer might unintentionally ask different
3 questions across respondents. The costs of interviewing can be very high, especially if
4 group interviews are not practical.

5 **3. Questionnaires.** Questionnaires are cheaper and quicker to administer than
6 other job analysis methods. When there are many bank employees in each job,
7 questionnaires provide a breadth of coverage that would be exorbitantly expensive and
8 time-consuming to obtain by any other method. There are problems, however. It is
9 difficult to follow up and augment information once the respondents return the
10 completed questionnaire. The rapport that might have been obtained in the course of
11 face-to-face contact is impossible to achieve with an impersonal instrument. This may
12 have adverse effects on respondent cooperation and motivation.

13 The format and degree of structure of a questionnaire are debatable issues,
14 depending on the personal preference of the job analyst and the nature of the constraints
15 surrounding the data gathering setting. The important items to keep in mind are:

- 16 1) keep the questionnaire as short as possible;
- 17 2) explain to the respondent what the questionnaire is being used for;
- 18 3) use simple language at the level of the respondent.
- 19 4) pretest the questionnaire with similar type of audience before administering it to the
20 final audience.

21 *Job Analysis for Managerial Jobs*

22 Job analysis for officer-type and higher-level banking jobs presents special
23 problems, since different activities occupy the bank officer's time such as planning and
24 coordinating work or resolving conflict among subordinates. In some large banks
25 involving high level positions, it is often what the incumbent makes of it. So, the first
26 step in analyzing such jobs is to describe what officers actually do on their jobs to
27 perform them effectively.

1 One attempt to use a questionnaire containing a checklist of items related to the
2 concerns and responsibilities of managers. The checklist focus on general job
3 information, decision making, planning and organizing, administering, controlling,
4 supervising, coordinating, knowledge, skills, and abilities, as well as overall ratings.

5 ***From Job Analysis to Job Description and Job Specifications***

6 Unlike job analysis which defines the job in terms of tasks or behavior and then
7 specifies the personal characteristics (education, training, experience) required to
8 perform the job, a *job description* is a brief summary of the job which includes:

- 9 • job title;
- 10 • job activities and procedures;
- 11 • working, physical, and social environment;
- 12 • Conditions of employment (e.g. hours worked, wage structure, fringe benefits, and
13 opportunities for promotion).

14 In contrast, a *job specification* document specifies the requirements for successful
15 application for the job. This includes education, training, and experience or minimum
16 qualifications. Identifying these requirements in advance play a major role in
17 recruitment and selection, which is discussed later in the chapter.

18 Job design (or-redesign) is the process of reviewing job positions and position
19 descriptions to make sure that they accurately determine the tasks to be performed. There
20 are many practical problems that can occur in job design:

- 21 • Inadequate diagnosis. Random selection of employees and jobs for job redesign is
22 doomed to failure.
- 23 • Failure to educate affected employees adequately. Officers and employees usually
24 cooperate positively if they know in advance of the procedure and goal of job design.
- 25 • Bank's limitations. For example, excessive concern over short-term productivity lags
26 (due perhaps to the learning of new skills or the assuming of new responsibilities) can
27 undermine job redesign efforts.

- 1 • Technological limitations. Job redesign sometimes require heavy investment in new
2 computers which may not be offset by increased productivity for several years.
- 3 • Superficial attempts to change the work itself. The last thing we need in job design is
4 the illusion of job changes without real substance.
- 5 • Lack of systematic evaluation of outcomes. Without such evaluation, it is difficult to
6 know what improvements to make in the near or distant future.
- 7 • Incompatibility of job design and the bank's practices. If a bank's bureaucratic
8 practice is to operate strictly from top down, this would be in conflict with the job
9 design approach which should occur within divisional or operational level of the
10 organization.

11 In summary, job analysis and job design are fundamental tools for the human
12 resource manager. Once the descriptions and specifications of each job have been
13 identified, a bank can then plan how best to use its human resources. This is condition
14 for the next step, which is employee recruitment, selection, and placement.

15 *Minimization of Risks Typical for Some Jobs*

16 With job analysis and design in mind, a bank's personnel department should pay
17 close attention to special-purpose jobs such as those of tellers, cashiers, and others
18 involving receipt and disbursement of funds. These jobs should be carefully evaluated
19 and filled by people whose previous employment record is clear of drug use or stealing
20 money from former employers. Furthermore, in situations where the job(s) being
21 evaluated is part-time or the job assignment is erratic (e.g filling for a regular employee
22 when sick), sometimes it is better to hire a full-time employee who provides backup
23 while simultaneously is available for other assignments within the bank.

24 **Employees Recruitment, Selection and Placement**

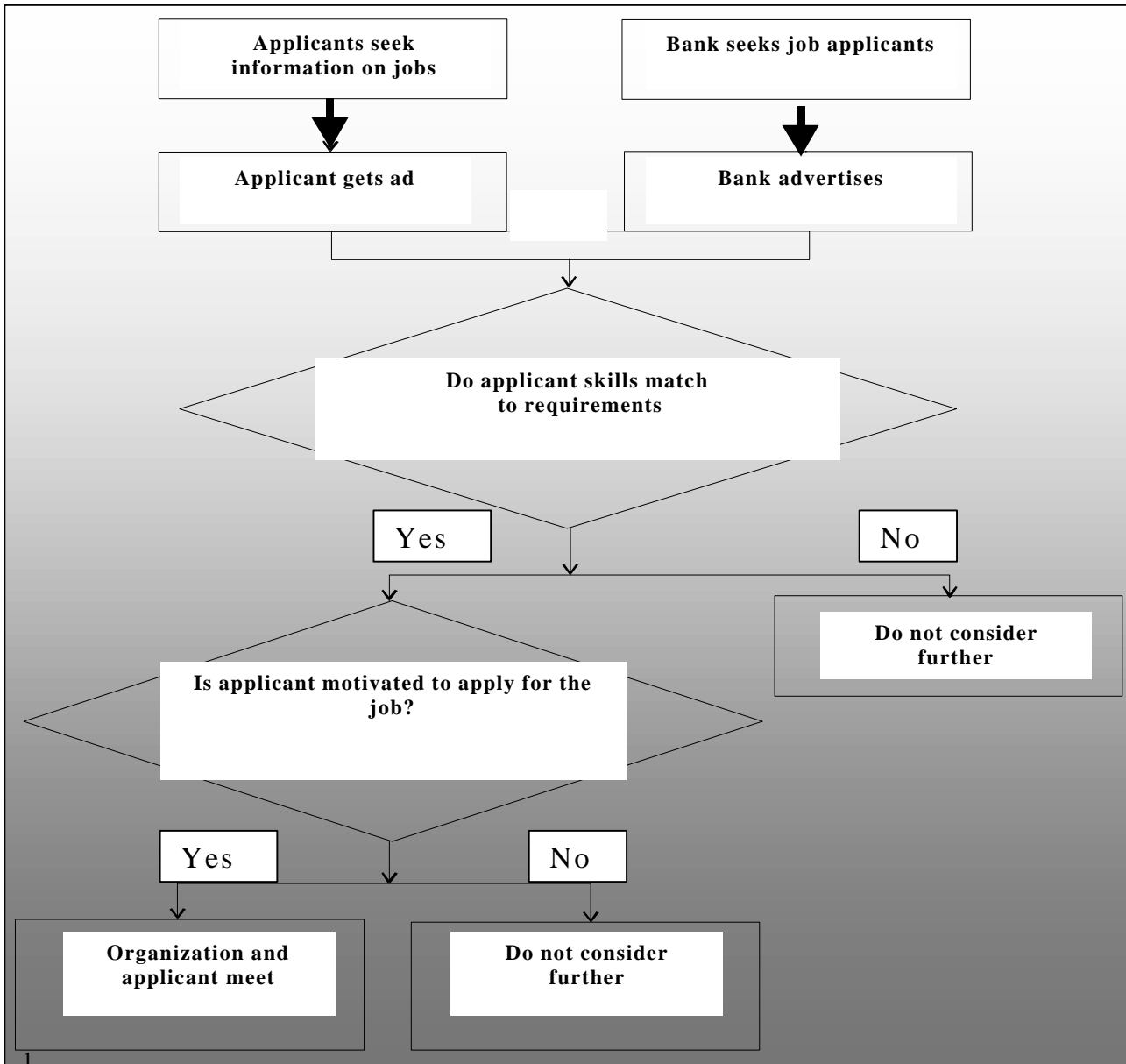
25 As a major phase of the total personnel function, recruitment, selection, and
26 placement can make or break a bank. Hiring the wrong employee for the wrong job can
27 be devastating. That is the reason for starting with strategic planning before delving into

1 this phase of operation. Strategic planning means assessing the bank's future personnel
2 needs based on projected business. Human resources policies and objectives also
3 provide support and direction for action plans and programs in recruitment, selection,
4 career path planning, and various training and development activities. Finally, planning
5 tends to bring bank officers together, as they begin to provide feedback to the personnel
6 department in terms of future personnel needs and requirements.

7 *Recruitment and Initial Screening*

8 The reality of life in banking is that all banks must recruit at some time. In fact,
9 when a bank grows in size or volume or an employee leaves (e.g., retires, change place
10 of work or quits because of health problems), a recruiting process of some kind must be
11 established. So, the goal here is to learn how banks search for prospective employees,
12 influence them apply for the job, and screen them in relation to job requirements. Of
13 course, there are constraints: government laws, unions, and labor market conditions.
14 Some laws might require the bank to hire mostly from the local community or screen
15 from some pool of unemployed persons, etc. Unions also might have agreements that
16 certain employees must come from their own pool of candidates.

17 In an open market where both the bank and the prospective candidate are looking
18 for employment via advertising, word-of-mouth, or employee referrals, the model shown
19 in Figure 32 represents a typical approach to recruitment. The bank makes known a
20 specific job opening, specifying the job's requirements. Candidates apply when they
21 perceive their skills and abilities match the requirements of the job. If the officer in
22 charge of recruiting agrees to the match and the applicant agrees to a job offer, then a
23 joint commitment (usually by a labor contract) to begin employment on a specific date.



2

Figure 32. A Typical Approach to Recruitment

3 ***Sources for Recruiting Applicants***

4 There is a wide variety of recruiting services or sources available to the bank's
5 personnel department:

- 6 1. *Advertising* in newspapers, technical and professional journals, direct mail,
7 e-mail and fax, television, radio and (in some cases) outdoor advertising.
- 8 2. *Employment agencies* including government and state bureaus, private
9 employment agencies, executive search firms, management consulting

1 firms, and agencies specializing in temporary help. In the case of
2 providing temporary employees the payment to agency equals 15 % and if
3 the agency helps to find individuals for position in bank management the
4 fee is 25 % of the first year salary.

- 5 3. *Educational institutions.* This includes technical and trade schools,
6 colleges and universities, organizations for continuing education and
7 alumni placement offices. University and College recruiting is quite
8 common and attracts a number of highly qualified candidates for junior
9 officer and higher level positions. Sending a bank representative to the
10 campus is also good and low-cost advertising for the bank.
- 11 4. *Professional organizations* such as a regional or a national banker's
12 association and annual bankers congresses.
- 13 5. *Military and government.* They includes retired officers as well as former
14 politicians.
- 15 6. *Overseas recruiting* via affiliate banks overseas, international recruiting
16 firms, or placing special advertisements in major newspapers (e.g.
17 Economist, Financial Times, Wall Street Journal or Washington Post)
- 18 7. *Walk-ins* or applicants come to the bank's personnel office and fill out an
19 application for possible employment. These are people who may have
20 resigned from a job, were released from a job, or having from another town
21 where they held a banking job.
- 22 8. *Intrabank transfers* or employees transferred from one department to
23 another. Many banking jobs are often filled this way, although it requires
24 the managers of both departments to cooperate in the transfer.
- 25 9. *Employee referrals.* For many years, bank employees have been known for
26 referring highly qualified candidates. Existing employees could be the best
27 scouts for such an effort.
- 28 10. *Interns.* They allow the bank to get specific projects done and take time to
29 assess the potential of the interns for later employment with the bank.

1 A well-coordinated administrative system for recording and controlling applicant
2 flow is essential to effective recruitment operations and subsequent evaluation. At least
3 five types of records must be kept:

- 4 • Incoming applications and curriculum vitae must be logged at some central point.
- 5 • Important activities or records such as invitations, interviews, job offers, acceptances,
6 and rejections must be recorded for each candidate at the same central point.
- 7 • Letters of recommendation must be filed with the candidates' central records.
- 8 • Job offers and acceptances must be recorded.
- 9 • Records of closed cases should be kept for a reasonable period of time for reference.

10 In a small bank, these records can be maintained manually. But in larger banks,
11 where large number of candidates are being processed simultaneously, the clerical work
12 becomes tedious. This has prompted most banks to automate such record-keeping
13 activities. Many banks include this type of automation ; as part of a *human resource*
14 *information system* – an integrated approach to managing all aspects of information
15 about the professional profile of each employee. Included in such a system are applicant
16 tracking, skills inventory, career path planning, absence records, employee attestation
17 data, compensation record, etc.

18 *Cost/Benefit Analysis of Recruiting*

19 Each of the recruiting methods listed above has its advantages as well as
20 disadvantages. It is up to the manager of personnel department to evaluate each
21 recruitment method and decide which one renders the best return on the total cost of
22 recruiting. One important analytical method of measuring the quality of recruitment
23 process is to compare indication of performance with a number of job recruitment
24 methods used. It is named Calculation the Quality of Recruits Selection (See Equation
25 13).

1 **Equation 13 Calculation the Quality of Recruits Selection**

$$QH = \frac{PR + HP + HR}{N},$$

2 where QH – quality of recruits hired; PR – average job performance ratings (go on a 100
3 point scale, where 100 would be the highest score – item ratings); HP – percent of new
4 hires promoted within the span of one year (e.g. 30 percent); HR – percent of new hirees
5 retained after one year (e.g. 60 percent); N – number of recruiting methods.
6

7 In our example quality of recruits hired QH equals:

8 $(80 + 30 + 60)/4 = 170/4 = 42.50 \%$

9 The 42.50% is subjectively interpreted by the bank's management as an
10 approximation indicator of how good (or poor) this recruitment effort is. It should be
11 noted, however, that such a rating is often beyond the control of a recruiter, as many
12 good new employees are attracted away from the bank for better employment
13 opportunities which have nothing to do with the effectiveness of the recruiter or the
14 recruitment process. Nevertheless the quality of hire measure provides some insight into
15 the recruiter's ability to attract and recruit qualified employees.

16 ***The Employment Interview***

17 The interview serves many functions – the opportunity for personal interaction
18 between the applicant and a representative of the bank, a public relations function
19 (selling the applicant on the job and the bank), and an information function (negotiating
20 the terms of employment). It takes experience, special skills, and ability to size up the
21 candidate, especially if several candidates are being considered for one job opening.

22 The use of interview guidelines improves the accuracy of observations made during
23 the interview. The interviewer should prepare for such a session by reviewing the
24 candidate's application data and decide on the type and sequence of questions to be

1 asked. He or she should be a good listener, focusing on the nonverbal cues as the
2 applicant expresses opinions, feelings, or emotions. Some of the don'ts in interviewing
3 are: jumping to conclusions, being sarcastic, overly stressing negative information,
4 interrupting the candidate, probing into areas that are unimportant for the job, using a
5 level of language far above or below the candidate's, or trying to imitate the candidate's
6 speech if it is foreign or unnatural to the interviewer. But regardless of how well or how
7 poorly the interview went, the interviewer should document his or her observations and
8 comments for future reference.

9 *Final Selection and Placement*

10 After candidates have applied for a given position by filling out the application
11 form and going through one or more interviews, the next step is for the officer of
12 personnel department to select the best qualified candidate for the position. The person
13 hired should be predicted to be a better performer than the person(s) rejected. The
14 employee characteristics stated in the job specification must accurately summarize what
15 is necessary for effective performance on the job. This is where job analysis in selection
16 becomes most important, because an accurate list of characteristics can be generated only
17 after the bank has conducted a thorough job analysis.

18 Several selection criteria that are commonly used are the following:

- 19 1. Formal education. Most recruiters attempt to screen for abilities by specifying
20 educational accomplishments. They tend to specify as a criterion a specific
21 amount (in years) of formal education and types of education. For example, for
22 a teller, the bank may list as an educational criterion intermediate special degree
23 in finance, with at least one course in accounting or math with average grade
24 point being not below 4 points. Care must be taken, however, not to use
25 standards higher than what the job actually requires.
- 26 2. Experience/past performance. Many selection experts believe that a person's
27 past performance on a similar job might be one of the best indicators of future
28 performance. Experience is also considered to be a good indicator of ability and

1 work-related aptitude. Loyalty to the organization and the job is important and
2 many banks try to fill vacancies from within the existing bank itself.

3 3. Physical characteristics. It has been known for years that a physical
4 characteristic (height, looks, character, etc.) is an important selection criterion.
5 In banking, for a teller position, an application who is handsome or attractive,
6 strong, and elicits dominance is often favored over someone who is
7 conservative, does not pay much attention to his/her own appearance, etc.

8 4. Fit or match. There is also what is called fit; that is, how well the candidate
9 will fit in the culture of the department of the bank where the job is performed.
10 A candidate might be the best of those interviewed, but his or her demeanor or
11 attitude could conflict with those in the department or place of operation.

12 5. Personal characteristics. Personal characteristics include sex, age, marital status,
13 and the like. Personality type includes extroversion versus introversion,
14 dominance, aggressiveness, warmth, etc. Some bank jobs require someone who
15 might be conservative, low profile, somewhat introspective, and would be
16 willing to work alone without feeling isolated or alienated. Other jobs in bank
17 such as officers of credit department that are responsible for direct
18 communications with borrowers involve dealing with customers and people
19 most of the time. This means congenial personality and requires excellent
20 communication skills.

21 *The Selection Process*

22 Most of today's selection decisions are based on a process that can be summarized
23 in five steps:

- 24 • Filling out an application form and the employment interview;
- 25 • Employment requirement tests;
- 26 • Background and reference checks;
- 27 • Selection decision;

- 1 • Medical examination.

2 The first step has already been explained. An employment test attempts to measure
3 characteristics ranging from motor coordination aptitudes, such as manual dexterity, to
4 intelligence to personality. Certain tests can be very expensive to develop and to
5 interpret. The main concern with tests is validity and reliability of the test itself. Despite
6 the difficulty and costs, many tests have been known to be worth the expense, for
7 example, math test in calculation of fractions is usually given to those applying for a
8 teller or a bookkeeper position where math, language, and accuracy are critical aspects of
9 the job.

10 Reference checks are used to verify and/or add information regarding the
11 candidate's past work habits, performance, etc. from previous managers or employers.
12 This may not be easy to obtain, as many times, a former employee who was not such a
13 good performer usually has few managers who would want to vouch for his or her
14 credibility. In some countries there is a practice of using Aesopian language in
15 recommendation letters. For example employees who have addiction to alcohol are
16 named as "friendly". Sometimes, a manager may also write a good recommendation just
17 to get rid of a mediocre employee. In any case, for a letter of recommendation to be
18 useful, the writer must know the applicant's performance level and must be truthful about
19 what he or she says in the letter.

20 The fourth step is the selection decision. Normally, the officer of personnel
21 department meets with the immediate manager and lists the top two or three candidates
22 and recommends the top one for the job. It is realistically that the manager's preference
23 tips the scale in favor of the applicant who will be the one to be offered the job.
24 Obviously, if the applicant turns down the offer, then the second name on the list is
25 contacted for the job. Once the job is accepted, the new employee is sent to a medical
26 facility for a physical examination. The exam is partial or complete, depending on the
27 nature of the job and the level of the position in the bank. In addition, in US banking,
28 drug testing and testing to see if the new employee has stolen money or supplies from
29 previous employers is also important tests.

1 The direct and indirect costs associated with the selection process are given in
2 Table 21.

3 ***Table 21 Costs Involved the Selection Decision***

Selection step	Costs (US dollars)
Preliminary screening and filling out an application	-
Employment interview	50/hr.
Employment tests	50-500
Background and reference checks	10-100
Physical exam	50

4

5 ***How to Place the New Employee Into the Bank***

6 Job placement is as important as selection. Placing a new employee involves
7 considerable paperwork and includes orientation to the bank and the department during
8 the first day of work. The following 4-step process has been known to be a useful guide
9 to placement:

- 10 • Employee fills out the necessary forms (personal card, application form for bank pass,
11 additional health insurance form, etc.)
- 12 • The manager of personnel department reviews with the new employee the bank's
13 rules and regulations, benefits, etc. At the end of this phase of indoctrination, an
14 employee manual is presented to the new employee.
- 15 • The new employee is given a tour of the bank with visiting important services and is
16 introduced to some managers and officers.
- 17 • The new employee is presented to the immediate manager who, in turn, introduces
18 him or her to the staff of the department.

1 The whole process may take anywhere from one hour for entry level jobs to half a
2 day for senior officer positions. The important thing to consider is focus on a smooth
3 entry of the new employee into the organization.

4 *Risk Minimization in the Selection Process*

5 In consideration of employee recruitment, selection, and placement, there are a
6 number of suggestions to minimize the risk of ending up with ill-qualified employees:

- 7 ◆ Review the existing pool of employees to see if someone from within the bank might
8 be the person to tap for the vacancy. This could be a promotion to the employee and
9 could cause a transfer for another employee to fill the old job.
- 10 ◆ Never rush into hiring permanent help as a reaction to an officer who appears in need
11 of temporary help. Usually, transferring an employee from another department on a
12 loan basis could meet the need and settle the case.
- 13 ◆ There is no need to make a selection decision or recommend a candidate unless he or
14 she is clearly an appropriate match for the job. Sometimes, none of the ones
15 interviews qualify. In this case, it is better to start all over again rather than to resign
16 to hire a mediocre person.
- 17 ◆ Provide the immediate manager for the vacant position with regular feedback
18 regarding progress (or lack of it) on finding the right candidate. This way, your top
19 choice would not be a total surprise.
- 20 ◆ The initial interview can be an effective cost-cutting step. If within the first five
21 minutes you grow suspicious of the viability of the candidate, this is the time to cut
22 your losses and remove the candidate from further processing.

23 *Employee Training and Development*

24 In most employment situations, a new employee needs coaching, training, and
25 sometimes retraining. Each bank is different in terms of culture, pattern of operation,
26 and rules and leadership style. Training can:

- 1 • Increase employees' knowledge of the bank and its culture.
- 2 • Ensure that employees have the basic skills.
- 3 • Help employees work effectively in teams.
- 4 • Provide new ways for employees to contribute to the bank when their job or interests
- 5 change or their skills become obsolete.

6 So, in a sense, the primary goal of training is matching the individual's abilities and
7 skills to present job requirements.

8 *Procedure of Training*

9 The key steps in designing an employee training program are:

10 1. Needs assessment that involves organizational, individual and task analyses. In
11 analysis of organizational needs there are several questions. How does training fit with
12 the bank's goals? Does the bank have the resources to acquire or develop training? How
13 well do managers or employees support training? The key questions of person analysis:
14 who needs training? How ready are employees for training? In task analysis, we first
15 identify the important tasks and the knowledge, skills, and models of behavior that need
16 to be emphasized in training.

17 2. Ensure employees' willingness and readiness to train. In addition to filling the
18 job performance gap employee attitudes and motivation can be critical to successful
19 training.

20 3. Create an appropriate learning environment. This includes identifying up front
21 the training objectives and expected outcomes, making available training material and
22 proper administration of the training program. The job of those undergoing training must
23 also be covered during the training period.

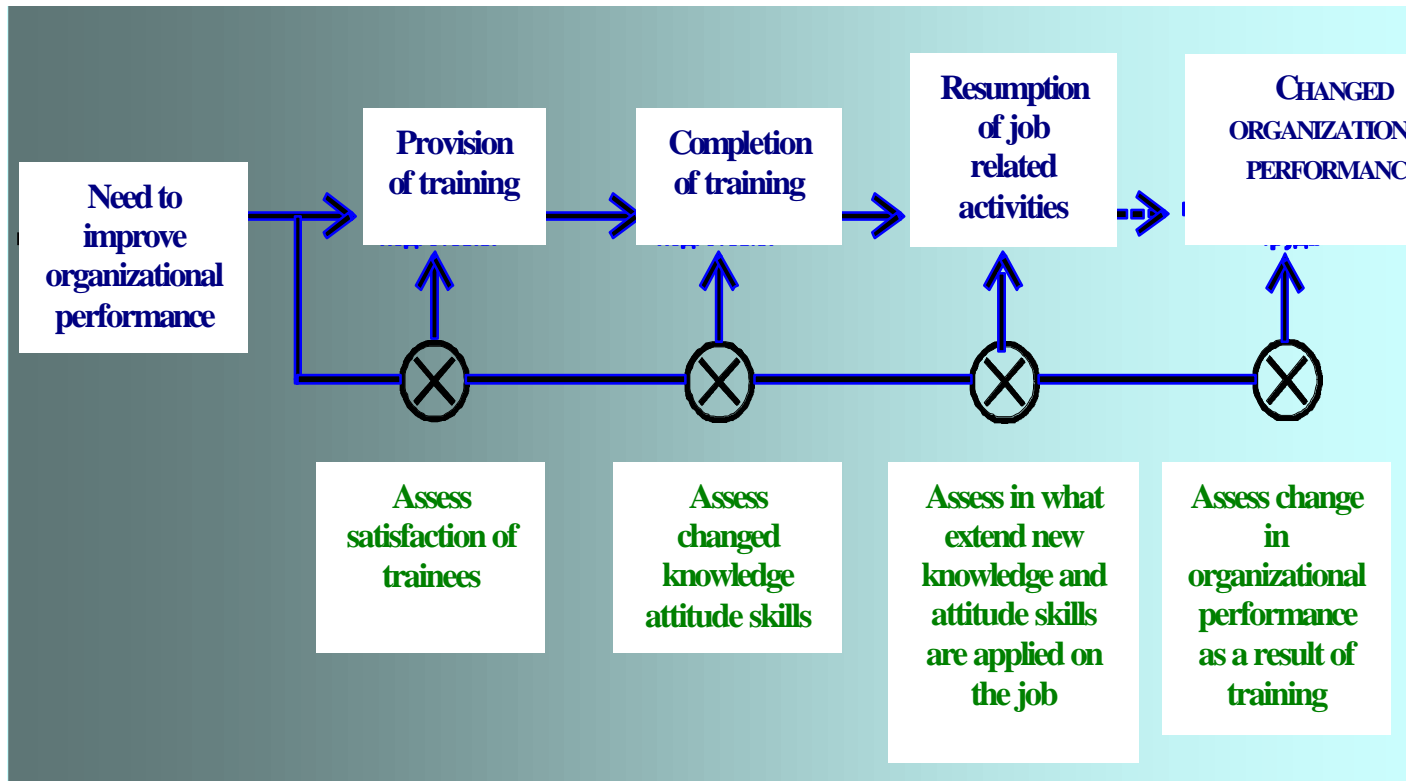
24 4. Assure successful application of training. Many training programs lose their
25 value when the newly trained employee goes back to the old job with little chance of
26 applying newly acquired ideas or methods.

1 5. Select the type of training appropriate for the employee(es). This ranges from
2 on-the-job training which is ideal for tellers, cashiers, and bookkeepers to self-taught
3 computer-assisted training. On-the-job (hands-on) training promotes learning the job
4 while contributing to it, although it ties up the trainer and the trainee into one job which
5 makes it costly. The other extreme (computer-assisted training) leaves the employee on
6 his/her own without direct individual coaching. Other types of training include job
7 rotation and job transfers as a step toward promotion. The type of training to select
8 depends on the job level and job complexity within the framework of the bank.

9 6. Evaluate training outcome that centers around two major questions: To what
10 degree was the course content consistent with stated objectives, relevant and timely, easy
11 to understand, and consistent with expectations? To what degree did the course
12 instructor present the material in an organized manner, keep the course interesting,
13 encourage participation, and use appropriate handouts and/or audio/visual presentations?
14 A final question is: how can this course be improved for future use?

15 There should always be cost/benefit analysis following training. This is important,
16 because we need to understand the total costs for training, compare the costs of
17 alternative training programs, evaluate the money spent on training for different groups
18 of employees, and ultimately compare this information with total measurable benefits
19 resulting from the training. Included among costs would be only adjustment in pay
20 resulting from the training or re-training.

21



1
2

3

Figure 33 Four Levels of Measurement of Training Outcomes

4

The levels of assessment of training outcomes are illustrated in Figure 33.

5 ***Risk Minimization in Training***

6 There are several observations regarding training and development that can be
7 important to minimize unnecessary risk or adverse outcome:

8 ♦ Know the employee and review his or her accomplishments to date to see if the
9 proposed training will likely provide of effective return on the investment.

10 ♦ Seek to the recommendations or comments of the immediate manager and compare
11 such feedback to the actual performance record of the employee who is being
12 considered for training or retraining.

13 ♦ Take time to select the employee(s) whose abilities or skills should be developed
14 through training. The final decision should not be based on age, seniority, or political
15 contacts, per se, but on the reality of the bank's need for tapping and promoting talent
16 in the interest of the bank's overall goals.

- 1 ♦ Since mostly any training program can be costly, the personnel department should
2 pay close attention to training costs and the resulting benefits and then decide
3 whether the training program should continue and whether it should be brought in-
4 house or freelanced to an outside agency, or some combination of both alternatives.

5 **Compensation and Pay Planning**

6 Designing and implementing a pay system that is at once understandable,
7 acceptable, and workable is challenging and difficult. Legal constraints, together with
8 the bank's traditions, the technology of the workplace, and local labor market conditions
9 complicate the problem further. Nevertheless an orderly and relatively objective
10 approach to pay structure design includes three interrelated steps:

- 11 • defining the amount of compensation for each job position;
- 12 • defining the principles and mechanism of compensation for each job position;
- 13 • pay system control.

14 Pay systems must continually be reviewed and maintained. Bank compensation
15 policies should be updated to meet jobs and labor market values changes.

16 A compensation system is viewed as a package which includes four major
17 documents:

- 18 • a pay structure (wage or salary received daily, weekly, or monthly);
- 19 • an employee benefit program to include health insurance, pension plans, vacations,
20 holidays, etc.;
- 21 • Incentive programs in the form of additional compensation such as bonus, profit
22 sharing, etc.;
- 23 • Policies regarding pay raises and pay secrecy.

24 Each element is explained in details below.

1 Developing a Pay Structure

2 The goal of this step is to assign a monetary value (base rate) to each job in the
3 bank staff schedule and an orderly procedure for increasing the base rate. This assumes
4 that job analyses and card of job positions /job descriptions/ have already been
5 completed. In developing a pay structure, two central elements of information should be
6 obtained:

- 7 ♦ *Survey of banking positions and pay in the city or area.* The pay for the various
8 positions is influenced by the demand for the position, available talent, and the nature
9 of the economy. In a tight economic environment, more talent is likely to be
10 available and willing to work for lower pay than in a robust economy. In any case,
11 banks have a tendency to lure highly qualified people from other banks through
12 intermediaries, specialized agencies, and through employee contacts;
- 13 ♦ *2. Determining what each job is worth.* This involves an assessment of the skills
14 requirements, job responsibilities, level of stress, and potential contribution of the job
15 to the profitability of the bank.

16 Each job should be on a salary scale with a minimum, midpoint, and a maximum
17 pay. Where an employee fits on his or her job scale depends on years on the job, job
18 performance, and the criticality of the job. The following example illustrates sample
19 positions and their respective pay scale (See: Table 22).

20 **Table 22 Pay rates**

(US dollars per month)			
Job title	Start pay	Midpoint	Maximum pay
Secretary	200	300	400
Cashier	250	350	450
Teller	300	400	500
Accountant	300	500	600
Economist /officer/	500	750	900
Head of the department	800	1000	1500

21

1 In defining the pay rates it has to be considered several items:

- 2 ♦ A new employee with no experience may start in bookkeeping at \$300/month. Based
3 on the bank's experience with past salary increases and job performance, this
4 employee might get a raise of \$30 (15%) after the probationary period which is
5 usually 30, 60, or 90 days. Within a predetermined period of time, the same
6 employee should be making a salary of \$400 or more. Other banks hopefully are
7 paying the same.
- 8 ♦ A teller, who is a high performer and has achieved an average salary (\$400) toward
9 mid point in the years expected on the job, might be tapped for training to become an
10 accountant. This might be the same, although soon after training the bank might
11 adjust the pay to say \$500. This provides an opportunity to motivate employees to
12 seek more challenging positions within the bank and, in doing so, they accumulate
13 experience across existing bank jobs and make banking career.

14 Jobs should be clustered by department or area of operation before deciding on the
15 salary range of each job.

16 Motivation of Employees

17 ***Setting up An Employee Benefit Program***

18 In addition to the salary components, banks invariably offer a benefits package to
19 full-time or permanent employees. Law requires some benefits (e.g. national holiday
20 with pay); a bank sets other benefits. Some of the important additional benefits may
21 include:

- 22 1) Additional health insurance;
- 23 2) Additional holidays with full pay. For example, full pay for the family days, which
24 number is written in labor contract;
- 25 3) The 13th month salary / *End-of-year bonus*;

- 1 4) Soft /lower/ rates on bank loans and other bank services, for example getting credit
- 2 card with overdraft exceeding normal limits;
- 3 5) Preferential rates for buying private apartment built under the bank housing program;
- 4 6) Corporate car, PC and other means of communication;
- 5 7) Lower prices in bank restaurant;
- 6 8) Refund of costs for education and sport;
- 7 9) Bank uniform;
- 8 10)Free parking.

9 Employees do not often recognize or even appreciate the value of the total package.
10 So, many personnel departments compile an annual statement to each employee detailing
11 the benefits provided for the year. The following brief statement illustrate the point:

ANNUAL STATEMENT PERSONNEL DEPARTMENT

This year, you provided your bank with $\times\times\times\times$ hours of work. For this, you have received in direct pay $\$ \times\times\times\times$. In addition, the Bank paid in accordance with government regulations:

to the State Pension Fund	$\$ \times\times\times\times$
to the Fund of Mandatory health insurance	$\$ \times\times\times$
to the Fund of Mandatory social Insurance	$\$ \times\times\times$
to Employment fund	$\$ \times\times$

In accordance with the requests of the majority of the bank's employees, we paid the following amount for each of the benefits provided to you (or through you):

Additional Health Insurance	$\$ \times\times\times$
Payments to Tennis club per one employee	$\$ \times\times\times\times$
Subsidy paid to bank	
Restaurant fee per employee	$\$ \times\times$
Refund of costs of professional books and journals	$\$ \times\times\times$

As the result:

Actual cash disbursement to you	A US dollars
Actual cash cost to the Bank to have your services	B US dollars
Total cash outlay in $\times\times\times\times$ for your services	A + B US dollars

1 ***Setting up Incentive Programs***

2 Incentives are variable rewards granted to individuals or groups that recognize
3 differences in achieving results. Bank officers who are directly engaged in asset or
4 liabilities operations sometimes get additional pay that calculated as percentage of total
5 return achieved in their business. Bonuses do not become part of the base salary, but are
6 decided upon on an annual or semiannual basis, depending on the policy of the bank.
7 Group incentives are ones based on jobs within a department that depend on one another
8 for the group's total performance. When the bonus is determined, each member of the
9 group receives a share of the bonus.

10 In banking, senior officers receive special bonus, based on the profit margin of the
11 bank at the end of the year. Such bonuses could be in the form of a lump sum or a stock
12 option.

13 ***Developing A Policy Regarding Pay Raises and Pay Secrecy***

14 In terms of pay raises, the bank must establish a policy that determines pay and
15 how often are they considered. For example, some banks decide on pay raises at the end
16 of each year or quarterly, while other banks decide monthly. Also pay raises may be
17 based on re-attestation plus adjustment to some cost-of-living index or inflation rate.
18 Many banks look at the economic market condition and how well the bank did during the
19 year. In this case the bank defines what percentage of the net profit to distribute to pay
20 adjustments. Then the personnel department manager works with the senior officers of
21 the bank to allocate a specific sum to each department, out of which each employee gets
22 a raise based on criteria such as job performance, seniority, years on the job, etc.

23 The extent to which information on employee pay is public or private is a basic
24 issue in compensation management. Pay secrecy continues to be a problem in virtually
25 every bank. Most banks discourage or prohibit employees from sharing information
26 about what they make with others. This type of information often causes dissention and
27 dissatisfaction in the work place. Inasmuch as there is no way to eliminate this problem,
28 it is still a good policy to specify in the employee manual that dismissing one's pay

1 amount with others is prohibited. Secrecy gives pay administrators more freedom in
2 administering pay since they do not have to explain their actions. If pay were to be made
3 public and is not tied to performance, it would only reduce the power of pay to motivate.

4 Those Russian banks that implemented pay secrecy has encountered with serious
5 problems of dismissal of information and this first attempts cause situation when
6 employees suspect each other. Sometimes rumors about colleagues' pay bring more
7 harms than open information. That is why many Russian banks have successfully
8 implemented indirect systems of protection information about employees' compensation
9 for example the transfer of money into payroll debit cards.

10 *Risk Minimization in Pay System*

11 Given the complexity and important of compensation, several observations can be
12 made to reduce the risk of exposure and criticism:

- 13 • standardization and consistency in the way compensation is set up and administered
14 across the bank help to eliminate all kinds of problems or future explaining;
- 15 • it is necessary to match pay rate with performance and in line with the demands of the
16 job. Pay and job reviews should also be made periodically, at least once a year, to
17 bring the whole package up to date and in line with the competition;
- 18 • it is important that officer of personnel department communicate the cost of benefits.
19 This way, the bank's managers to explain to the subordinates the full value they
20 realize by working for the bank.

21 *Attestation of Employees*

22 Employee evaluation is the systematic description of the job-relevant strengths and
23 weaknesses of employees. It is one of the most dominant issues in Human resources
24 management today, because it is difficult to find an evaluation form that is acceptable for
25 management and employees alike. In any case, performance appraisal data provide the
26 basis for promotions, training, transfers, and decisions on pay adjustments.

1 ***Requirements of Appraisal Systems***

2 There are several requirements of any employee appraisal system:

- 3 ♦ *Relevance.* The evaluation instrument should measure what is related to the job.
- 4 ♦ *Acceptability.* The key question here is does the evaluation form make sense to the
5 user?
- 6 ♦ *Reliability.* This requirement is related to validity, in that the evaluation instrument
7 should be dependable, consistent, and stable over time.
- 8 ♦ *Sensitivity.* The goal here is to make sure that the evaluation instrument can
9 distinguish between effective and ineffective employees.
- 10 ♦ *Practicality.* This requirement focuses on the soundness of the evaluation instrument
11 to provide meaningful feedback which can be used for a variety of purposes.

12 ***What Should to Evaluate?***

13 An evaluation instrument should evaluate an employee on a number of areas of
14 work:

- 15 ♦ *Quality of work.* How good is the employee's work? Any rejects or criticism?
- 16 ♦ *Productivity or the total output of the employee during an appraisal period*
- 17 ♦ *Job knowledge,* which is related to quality of work and the employee's productivity.
- 18 ♦ *Reliability* or how well can one rely on the employee to complete a job on his or her
19 own.
- 20 ♦ *Availability.* That is, is the employee available when he or she is needed?
- 21 ♦ *Independence.* How well can the employee do work on his own without coaching?
- 22 ♦ *Creativity.* How often or how well does the employee find new ways of doing a job?
- 23 ♦ *Initiative.* How likely or how often does the employee initiate a task or a new
24 project?

- 1 ♦ *Adherence to policy.* How well does the employ implement bank policy?
- 2 ♦ *Interpersonal relations.* How good is the employee in dealing with his or her peers?
- 3 ♦ *Judgment.* How well does the employee exercise good judgment? See Figure 6 for a
- 4 sample employee evaluation form.

5 ***Types of Rater Errors in Employee Appraisal***

6 Rater errors may result from some systematic bias on the part of the rater. Three of
7 the most well-known rater errors are leniency or severity, central tendency, and halo
8 error:

- 9 ♦ *Leniency or severity.* Some raters are lenient to help others promote, to control others
10 by giving the impression of doing them a favor, or to improve relations with
11 employees. The rater may feel that anyone under his or her jurisdiction who is rated
12 unfavorably will reflect poorly on his or her own worthiness.
- 13 ♦ *Central tendency.* When political considerations predominate, raters may assign all
14 their subordinates ratings that are neither too good nor too bad. The unfortunate
15 consequence is that most of the value of systematic performance appraisal is lost.
- 16 ♦ *Halo error.* This is perhaps the most pervasive error in performance appraisal. This
17 type of error means that in the eyes of rater (e.g manager), some employees cannot do
18 anything right or cannot do anything wrong. The rater had already formed a
19 subjective opinion of the employee being evaluated which determine the final rating
20 or score.

21 ***Attestation Procedure***

22 To do a credible job performing employee evaluation, the following procedure has
23 been known to be helpful as a guide:

- 24 ♦ The personnel department works with the managers of bank functional units and
25 businesses to decide who should be evaluated.

- 1 ♦ Once a decision is made, the evaluation forms for each employee are sent to the
2 immediate manager.
- 3 ♦ The head of the department evaluates each employee and returns the evaluation to the
4 personnel director for scoring.
- 5 ♦ The personnel department scores each evaluation with comments to the managers of
6 bank functional units and businesses about each employee.
- 7 ♦ The officer of personnel department meets with each manager and explains the
8 evaluation results.
- 9 ♦ The heads of the departments meets with each employee and explains the results of
10 attestation with comments or recommendations.
- 11 ♦ The employee signs attestation form (not necessarily agrees with) the results.
- 12 ♦ The signed form is sent back to the personnel director for filing.

13 ***Risk Minimization in Attestation***

14 In developing an employee evaluation system, the following observations should
15 reduce or eliminate the risk of invalid and erroneous statements about the worth of
16 employees:

- 17 ♦ An evaluation system should be based on either behavior actions or results.
18 Evaluations of religious, political or other individual traits should be deleted from the
19 appraisal instrument.
- 20 ♦ Raters should be trained in administering and interpreting the results of the appraisal
21 data.
- 22 ♦ The employee appraisal form should be subject to period review by both management
23 and the personnel director. There should also be a form of appeal, should the
24 employee feel that he or she has been unfairly evaluated.

- 1 ♦ The bank or the personnel department should provide some form of corrective action
2 or performance counseling to help poor performers improve their performance,
3 especially if they appear to be on the verge of being dismissed.

4 **Employee Health and Safety**

5 An important aspect of a bank's commitment to its human resources is to secure a
6 healthy and safe working environment on a regular basis. Healthy employees mean zero
7 absence, tardiness, or disruption in the work place. The same applies to safety and the
8 importance of operating in a hazard-free environment. Without a serious commitment to
9 these areas, the bank could incur untold costs in terms of injured or physically and
10 mentally deficient employees.

11 In terms of health and safety techniques on the job, the following guideline should
12 be considered:

13 1. *Safety and Health on the Job* includes:

- 14 • Ensuring proper lighting in the work environment, especially in the hallways.
15 • Firefighting equipment and drill exercises should be available to all employees.
16 • Smoking should be prohibited in areas where there is customer contact. Also, in
17 close quarters where employees work in an open area, smoking should be restricted.
18 • Desks and chairs, and office equipment should be of the design that meets ergonomic
19 standards. Ergonomics is the science of designing machines to match human
20 comfort.
21 • Safety to reduce work hazards. This includes clearing any boxes, brooms, etc. from
22 the hallways or areas used for traffic. Combustibles should also be restricted to
23 specific areas on the bank's premises.

24 2. *Health Program*. One of the most important contributions of the bank to its
25 employees is the establishment of a health program. Such a program has two
26 objectives:

- 1 • Preventive medicine. Employees would have an opportunity to get regular medical
2 check up. The facility would also help employees cope with stress, overweight,
3 promote sports activities, and provide exercise programs.
- 4 • Handling disabled employees. A health program provides an environment in which
5 disabled and handicapped employees can find meaning in their work.

6 **Discipline and Employee Counseling**

7 Like any other business, employees are expected to adhere to rules and regulations.
8 Those who deviate from the norm could be subject to all kinds of discipline, from a
9 simple reprimand to dismissal. In this section, we present four classes of discipline,
10 structure of a disciplinary procedure, and steps in progressive discipline.

11 *Classification of Discipline*

- 12 ◆ *Poor performance* due to limited ability, poor training, negligence, or poor
13 motivation. Sometimes, it is due to family problems, personal problems, illness of
14 children, divorce, or poor pay. This is the easiest type of discipline to handle.
- 15 ◆ *Emotional disturbance* relates to emotional problems or due to alcohol or drugs, etc.
16 Proper treatment often requires specialists or a certified clinic.
- 17 ◆ *Law violators* refer to stealing supplies, stealing from other employees, or disclosing
18 bank secrets or practices to the competition. When caught, the alleged employee is
19 usually disciplined immediately.
- 20 ◆ *The rebels* refers to employees who knowingly break bank rules, threaten their
21 colleagues and managers, and refuse to relent after repeated warnings. This is a
22 situation which invariably leads to dismissal.

1 Disciplinary Procedures

2 ***Structure of A Disciplinary Procedure***

3 The key point here is to set up rules. They include:

- 4 ♦ *Safety rules* such as no smoking, no food/drinks allowed in offices, no fighting or
5 disturbing the flow of customer traffic, etc.
- 6 ♦ *Insubordination rules* such as refusing to follow reasonable manager instructions,
7 stealing bank supplies, and slowdowns or looting.
- 8 ♦ *Behavior rules* involving prohibition of alcohol use on the job, peddling, distribution
9 of illegal literature (e.g. antigovernment or inflammatory material, pornography, etc.)
- 10 ♦ *Time rules* applicable to starting/quitting times, time for lunch/coffee break, tardiness,
11 absenteeism, etc.

12 There are also work behavior rules that are indirectly related to job performance
13 which include prevention of moonlighting, solicitation of side business on bank
14 premises, and adherence to job dress code. Once appropriate rules and disciplinary
15 action are completed, they should be made known to all employees associated.

16 ***Types of Discipline***

17 What is the price of wrongdoing? In recent years, many banks have instituted
18 progressive discipline, which specifies increasingly severe penalties, depending on the
19 infraction and frequency of repetition of such infraction. The steps in progressive
20 discipline are:

- 21 ♦ counseling;
- 22 ♦ oral warning;
- 23 ♦ written reprimand;
- 24 ♦ disciplinary layoff;
- 25 ♦ discharge.

1 In summary, discipline is a form of training. It helps the employee learn about the
2 requirements of their jobs and bank policy and regulations. The intent is to correct a
3 problem or modify a job behavior rather than to humiliate an employee. When properly
4 administered, disciplinary actions continue to be an effective tool and a means of solving
5 job-related employee problems.

6 In recent years Human resources management is among the most critical
7 competitive issues in manufacturing and financial services industries. More and more top
8 executives in both industrial and service organizations are beginning to realize that
9 education, training motivation of employees, development of corporate culture directly
10 influence on competitiveness. These are obviously human resources issues that have
11 important implications for future roles of human resources professionals.

12 In banking, the future low-risk approach of the personnel director is that of a
13 consultant-advisor and a facilitator rather than an autocrat or a bureaucrat. In times of
14 crisis, top bank officers sometimes revert to autocratic, punitive, or adversarial
15 behaviors, which tend to destroy trust in senior bank management. High trust between
16 bank employees is indispensable for high-performance banking in modern economy.

17 Another risk-sensitive item is simultaneous focus on technology, the customer, and
18 the social system of the bank. Simultaneously these tasks can be achieved only when
19 there is appropriate system of allocating responsibilities at all bank levels. To achieve
20 these tasks upper management should push for an accelerated shift toward participative
21 team-leadership styles where managers and officers at all levels become better listeners,
22 coaches, and participative problem solvers. Bank Board of directors should take a more
23 active interest in these matters for effective implementation and support.

24 Finally, the use of human resources information system can alleviate a lot of the
25 errors and oversights made by employees and promote accuracy, security and integrity of
26 the personnel data processing.

PERFORMANCE MEASUREMENT SYSTEM AND MANAGEMENT ACCOUNTING

Brant Shuman

Natalia Tsitovich

Great interest in the development of management accounting has recently been displayed in Russia. This is not surprising, as it is impossible to manage a complicated organization without collection of all pertinent information and its assessment. To achieve success in all spheres of bank management, other problems need to be solved, such problems being the subject of the present Chapter. This Chapter discusses methods and procedures of data collection within the framework of management accounting systems and assessment of a bank's activities, analyzes problems of development, introduction and implementation of a system of assessment of a bank's activities, as well as those of formation of a management accounting system in a bank. The material is presented within a context of developing bank financial management and implementing information technologies.

Much has been written about accounting and aligning Russian financial accounting with international practices. Significant progress towards that objective has been made within the academic and regulatory circles. As the market continues to develop and more sophisticated regulation is required to address business transactions, statutory accounting and reporting will no doubt evolve to meet the demands of users of financial reporting. Unfortunately, the statutory financial accounting and reporting system required by supervisory and taxation bodies, even if it fully conforms to the most up-to-date standards, is unfit to be used as an efficient internal banking management tool.

This chapter addresses the needs of users of performance measurement information characterizing different aspects of a bank's activities in a broader, and at the same time more detailed, manner rather than on focusing on statutory financial accounting itself.

Executives, division managers, department managers, branch managers and credit officers all require timely and meaningful performance measurement information on

1 which to base decisions such as product pricing, staffing levels, technology investment,
2 and employee compensation and many other spheres.

3 While statutory financial reporting capabilities are critical to banks, traditional
4 financial statements do not provide bank managers with the necessary decision
5 information to evaluate bank strategy, manage risk and improve profitability and
6 performance. To survive and prosper, they need an appropriate set of tools to manage
7 those challenges. That is why the possibility of obtaining analytical information from
8 financial reports is extremely important for them.

9 Performance Measurement System

10 Requirements to Performance Measurement System

11 Some banks have responded to market changes by introducing more sophisticated
12 organizational structures, products and technology but their management reporting
13 systems have not kept pace.

14 As banks continue to respond to market conditions, competitive pressures and
15 market demands will push them into offering new products and entering into new
16 businesses. However, new products require decisions on which products to offer, to
17 whom, where, and when and at what price. New businesses introduce organizational
18 complexities because they require managers to manage across the organizational
19 hierarchy as well as vertically.

20 Recently banks have been pressured to deliver products and services faster and
21 more conveniently because of technological advances and the ensuing demands of
22 customers. This has caused a pattern of *cross-subsidization* in most Russian banks
23 whereby profitable products and customer relationships support unprofitable products
24 and customer relationships. Without effective performance measurement systems,
25 Russian banks cannot determine which products and customer relationships are
26 profitable.

1 In order to develop *performance measurement systems* (PMS) that allow them to
2 survive and compete banks will need to assess their current and future needs, define
3 strategic goals and determine the actions required to build systems that meet those needs.
4 In general terms, an effective performance measurement system should possess the
5 following characteristics:

- 6 • the system should deliver information about elements of the business for which
7 managers are accountable – customers, products and services, profitability,
8 resources, compliance, and competitive position;
- 9 • the system should be available when and where needed and present information
10 in a manner that allows managers to take timely and appropriate actions; and
- 11 • the system should provide non-financial (e.g., percentage of market share,
12 customer satisfaction levels, cycle times, etc.) as well as financial measures of
13 performance so that managers can analyze trends which, over time, can slowly
14 erode the profitability of products and customer relationships

15 ***Current Capabilities vs. Required Capabilities***

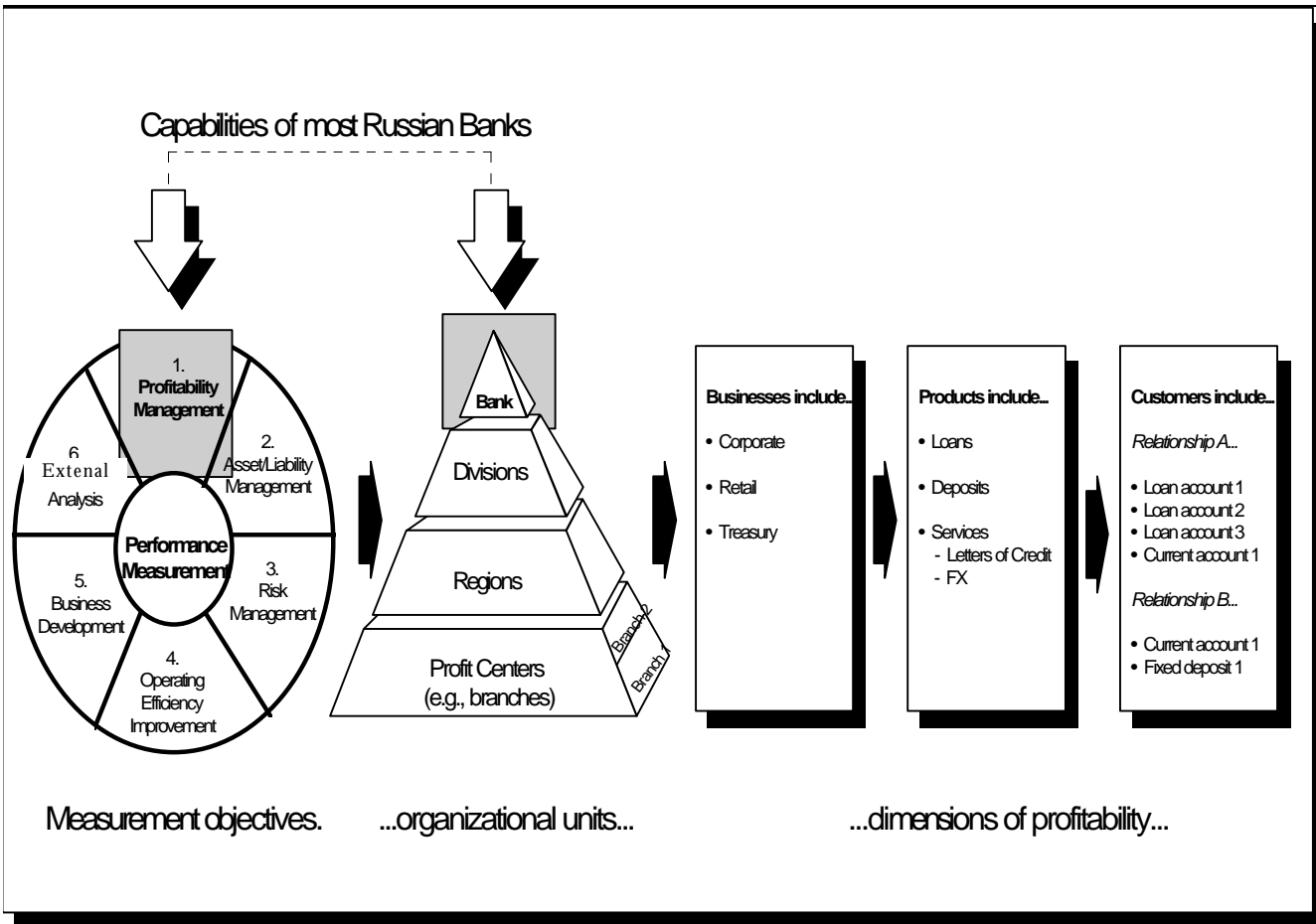
16 Considering the current regulatory environment, capital; availability, economic
17 instability and the short time that has elapsed, Russian banks have made tremendous
18 progress towards “leaping” stages in the evolutionary cycle of management and systems
19 development. Nonetheless, compared to their international counterparts, they require
20 considerable investment in developing the capacity to evaluate business process. The
21 existing systems:

- 22 • generally provide only traditional “financial accounting” information to
23 managers;
- 24 • produce manual or ad hoc reporting of key business performance information to
25 senior management;
- 26 • lack a comprehensive range of performance measures;
- 27
- 28 • do not adequately support timely responses when a problem arises;

- 1 • require considerable effort to gather and analyze information;
- 2 • cannot be used to communicate and reinforce the bank's strategic direction.

3 Russian bankers require the capabilities to manage *multi-dimensional performance*
4 *measurement system*. This will require development of an organizational vision and
5 strategy and alignment of operating practices with strategy. The tool which quantifies
6 and links a bank's vision and strategy with day-to-day business execution is the
7 performance measurement system. Most banks refer to this as the *management*
8 *information system* (MIS) ..

9 A comparison of world-wide best in class banking systems to current capabilities of
10 Russian banks reveals that significant system development challenges lay ahead. Most
11 Russian banks can only reliably measure consolidated bank profitability whereas their
12 international counterparts are capable of measuring business performance against
13 strategic objectives and achieve multi-dimensional profitability analysis. Figure 34
14 provides an MIS conceptual framework and shows reporting capabilities of most Russian
15 banks compared to international peer institutions.



1

2 *Figure 34 Comparison of Russian Bank Performance Measurement Systems to International*
3 *Counterparts*

4 *What Are the Next Steps ?*

5 The regulatory model has yet to stabilize and capital flight continues, making
6 competition for quality customer relationships more intense. Adding to these problems
7 are such conditions as volatile markets, rapid technology innovations, and competition
8 from foreign banks. Ultimately force banks to evaluate the drivers of real value rather
9 than thinking only about increasing direct revenue and reducing expenses as a means of
10 improving profitability.

11 Value emanates from products, product lines, business segments, and customers
12 and ultimately organizations must be structured so that managers have responsibility for
13 each of these business components (See. Chapter Strategic Planning). A bank should be

1 structured in a way that would make each designated manager responsible for his/her
2 specific business component, such components being called *responsibilities centers*.
3 Strategic performance information is needed on each of above-mentioned components.
4 Then decisions could be made on the basis of each center relative contribution to the
5 growth of profitability, enlargement of the scope of operations and strengthening the
6 stability of the bank's total activities. This will result in minimization of lost opportunity
7 costs. Russian bankers are faced with a critical need to develop and implement internal
8 performance measurement systems and they must do so in the midst of an unpredictable
9 legal and regulatory environment. This task will require careful planning and new
10 investment in systems and people.

11 *Characteristics and structure of a bank financial management system*

12 ***Financial vs. Management accounting***

13 Changes in the banking industry have altered the way bankers view financial
14 information. Historically, financial accounting standards and regulatory requirements
15 drove the production of accounting information. Reporting of any kind reflected the
16 legal entity structure of the bank. Over the past twenty years, bankers have been
17 experimenting with alternatives to the traditional accounting framework.

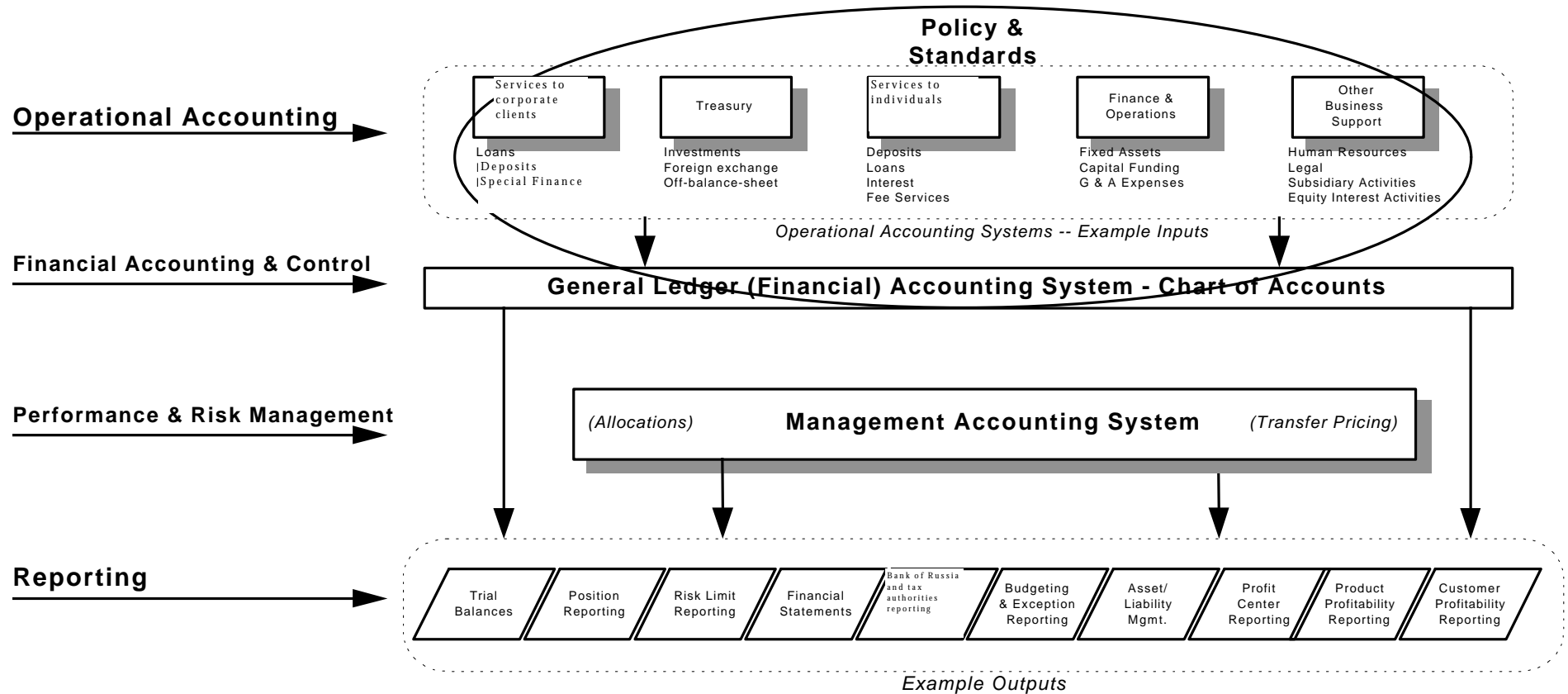
18 Bank managers are constantly searching for ways to organize financial data to
19 enhance decision making capabilities. This process has led to the segmentation of bank-
20 wide performance into product, product line, segment, and customer groups. Whereas
21 financial accounting informs shareholders and regulators of bank-wide performance,
22 management accounting data, which is typically presented in line with organizational
23 responsibilities, improves management's understanding of the components of profits or
24 losses.

25 Financial accounting has traditionally been driven by strict rules and regulations,
26 particularly in the heavily regulated banking industry. Shareholders, depositors of funds
27 in financial institutions, counterparty creditors and securities markets require a consistent
28 benchmark against which to view financial performance. Financial accounting rules

1 generally provide that objective measure. Financial accounting informs the supervisory
2 bodies, shareholders and other parties interested in a bank's total activities. Data on
3 management accounting, which are usually closely connected with the organizational
4 structure and responsibility centers, serve to provide the management with a more
5 profound insight into the factors causing this or that particular income or expenditure.

6 Management accounting information, on the other hand, is meant for internal
7 consumption by bank managers and executives. There are two prevailing conventions
8 which render management accounting information unfit for external consumption. The
9 first is the subjectivity of revenue, cost, asset and liability allocations. The second is that
10 there are no formal rules to guide the preparation and reporting of management
11 accounting information. The objective of management accountants should be to
12 reconcile management accounts with financial accounts but a precise reconciliation
13 rarely occurs in practice.

Financial Management Framework



1
2
3

Figure 35 Management Accounting in the Financial Management System

Design and Integration of System Components

In recent years, the most successful banks have redesigned their financial management systems to cut across legal entities to facilitate performance measurement by business line, product, or customer. This movement has involved going beyond the general ledger system to building management accounting systems. Product and product-line performance analysis places unintended demands on general ledger systems and thus alternatives are required.

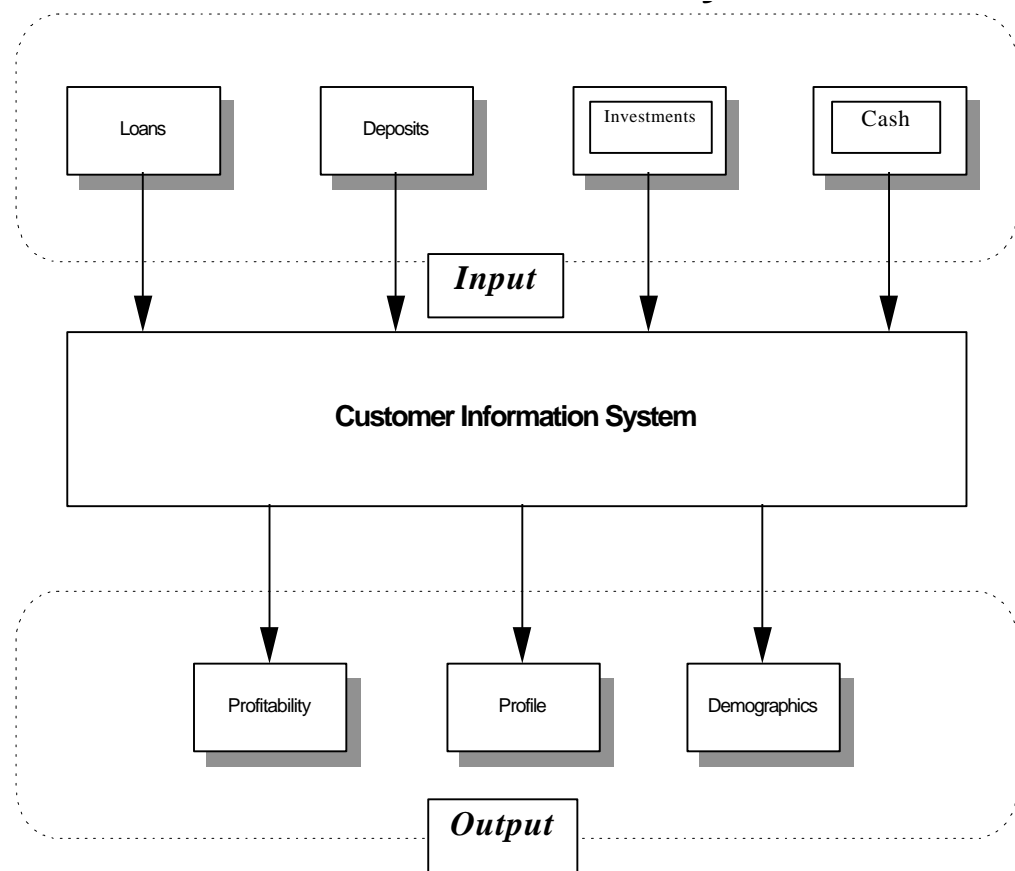


Figure 36. Customer Information System

The most effective way of obtaining multidimensional performance information (business line, product, customer) is through the use of a

central data repository that captures predefined information from various product, customer, operational, administrative and financial systems. Because of the need for flexibility and operating efficiency, the data warehouse should be built upon a *relational database management system* platform using open system standards (Informix, Oracle, etc.). (See Chapter IT management). As the performance measurement process has evolved, a banking industry standard data architecture for integrated performance reporting systems has emerged. (See Figure 37).

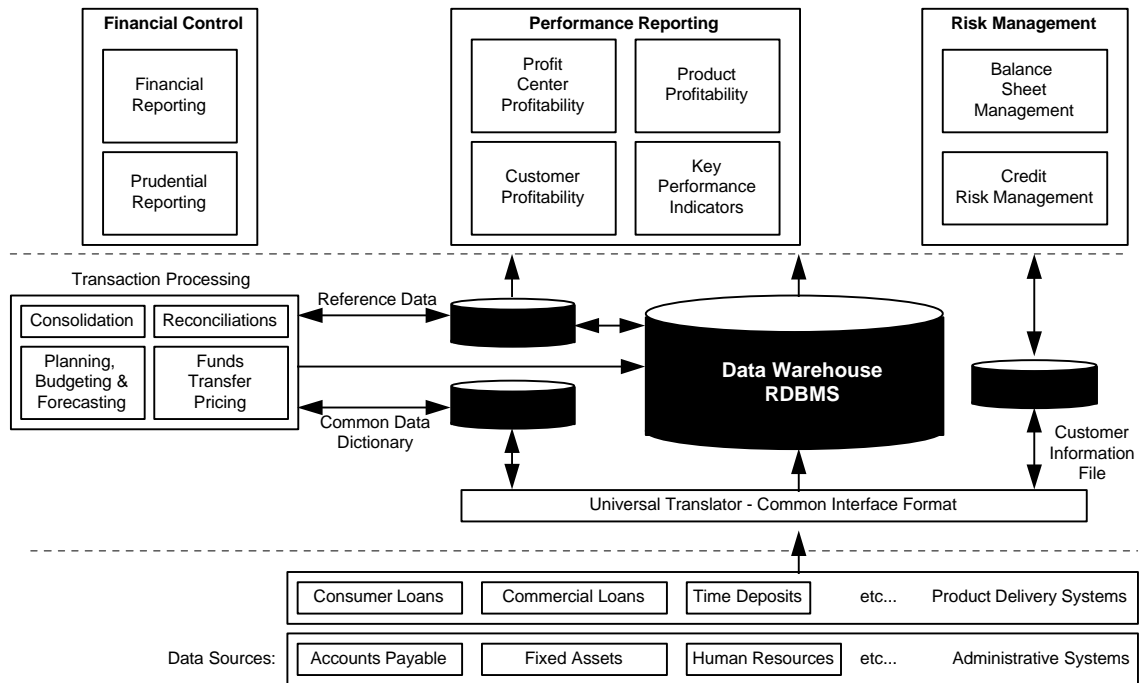


Figure 37 Performance Measurement System Data Architecture

The banking industry consists of institutions that vary in size; product profile; skill, experience, and philosophy of management; information requirements and information producing capabilities; and in staff and financial resources available to devote to developing a performance measurement system. Some banks have significant experience in cost accounting while others have none. Some banks have well developed planning and budgeting processes and product profitability systems and others do not.

Due to differences in strategic profiles and capabilities, banks have different needs for performance measurement information. This range of needs can be viewed as a continuum of management information systems development. As banks move through the competitive life cycle, their performance measurement systems tend to evolve along a relatively predictable path. (See Figure 38).

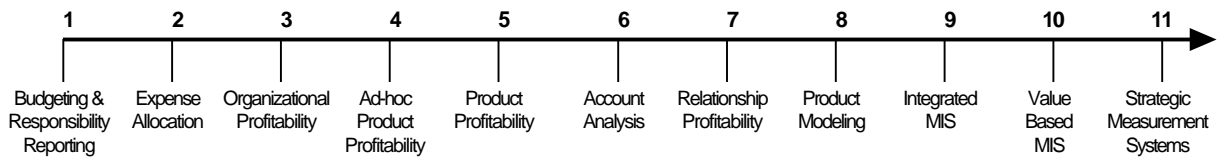


Figure 38 Evolution of Performance Measurement Systems

In general, these phases are closely linked to the development of an institution, its decision making capabilities and the consequential need for decision information to execute business strategy. Furthermore, each phase is related to an institutions technology development and management skills in developing and using performance measurement information. From the first phase of budgeting and responsibility reporting, banks typically move through the continuum to much more complex systems.

Key Issues of Performance Measurement

An important consideration in implementing a performance measurement system is its potential impact on morale and culture. Management should proactively communicate that the performance measurement process will better provide measures of the activities for which managers are responsible. Educating managers and integrating the implementation of the performance measurement system with other systems in place is critical.

The most successful means of eliminating potential adverse reactions to implementation of a performance measurement system on business culture is to proactively involve managers whose performance will be measured by the system. System implementation normally meets with resistance, in a worse case, and lack of utilization in most instances, if users and those measured by the system are not involved. Cost allocations, accounting methods, transfer pricing, and system configuration issues should be planned and developed in conjunction those most affected by the system.

Problems Facing Russian Banks

The most significant problems facing the Russian banks are:

- developing a system;
- introducing the system;
- developing a model for drawing up management reports.

Most Russian banks are only beginning to explore fully integrated retail and wholesale banking systems which have the capability of relating transaction level customer information to product delivery systems. Shortage of capital and uncertainty surrounding the statutory reporting model has prevented many Russian banks from looking outside the domestic market to world class integrated solutions. Consequently, most Russian banks are operating a collection of self-developed legacy systems that are being continually modified to keep pace with product, service and Bank of Russia regulations. Implementing a performance measurement system with modern data architecture in this environment adds a degree of complexity that international peer banks do not face.

Adding to this set of problems in most Russian banks, is an organization structure and management process that requires significant

development. Modern management culture within world class banks views a financial institution as a collection of independent businesses (SBU) that must compete and pay for resources and provide acceptable returns to equity capital. ;;For more details see the Chapter Strategic Planning). Developing a strategic planning and performance measurement process without first addressing the organizational *restructuring* and management process solutions is likely to fail. Therefore, the first step for most Russian banks in developing an effective performance measurement system will be to implement a strategic planning and budgeting process. Such issues as technology investment and platform, product development, market focus, economic outlook, statutory accounting and reporting requirements, resource requirements, and responsibility reporting should all be addressed. In this case a system to manage business performance and objectives and evaluate strategy can be designed and implemented.

Solutions to Commonly Faced Problems in Russia

Many small to medium sized banks cannot afford to make investments in fully integrated banking systems. Others are not willing to overhaul their systems until some level of regulatory stability occurs.

One cost effective interim solution to obtaining capabilities in performance reporting, financial reporting, prudential reporting, risk management, marketing analysis and other vital management processes, is acquisition and development of a data warehouse that rests atop of existing legacy systems. Data elements can be defined and routinely uploaded to a data warehouse and then combined and reformatted so that decision support applications can be used for management purposes (i.e., performance measurement, financial reporting, etc.).

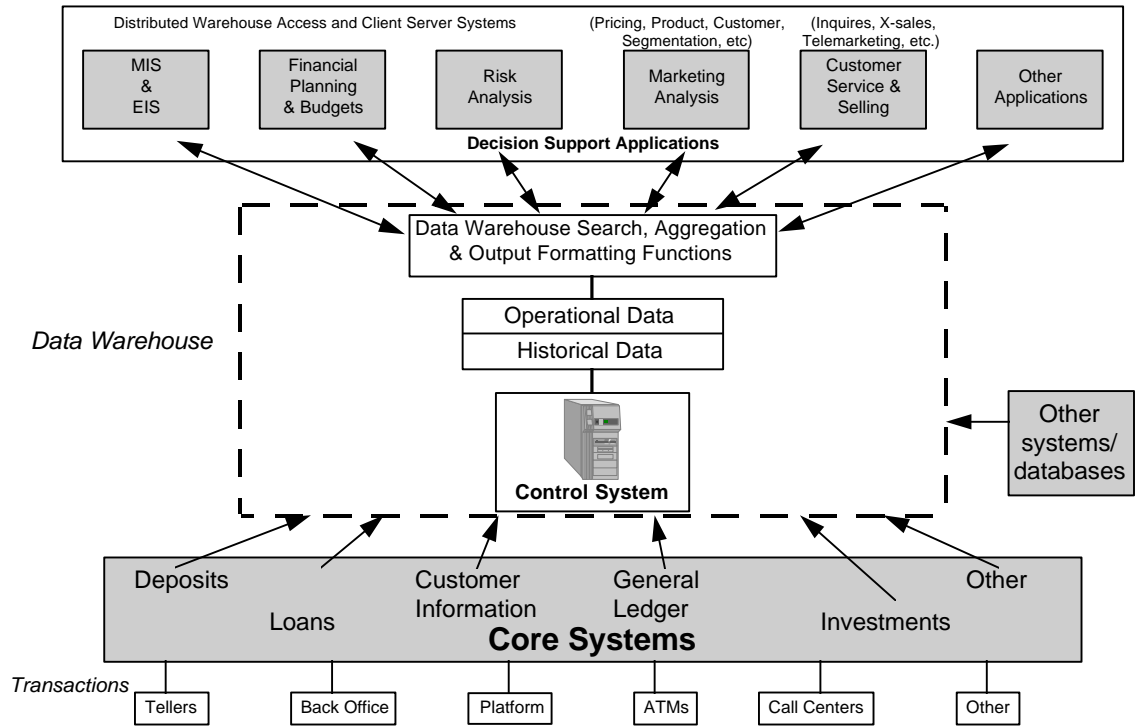


Figure 39 Data Warehouse Architecture

The benefit of this architecture is that, for the most part, existing legacy systems can be retained and one central data repository can serve multiple financial, management, and marketing purposes. The drawback of this architecture is that it is generally only an interim solution (depending upon the size and customer profile of a bank) because as the bank grows and wants to add customers and businesses, offer more products and faster service and cycle times, product variety and customer service will suffer because of capacity limitations of the older “front-end” product systems. Furthermore, the costs of building on to older legacy systems (i.e., reinventing the wheel) quickly outweighs the benefits.

Designing and Implementing a Performance Measurement System

Framework for Designing and Implementing a Bank Profitability and Performance Measurement System

The success or failure of a performance measurement system lies in timely and accurate reporting of information. System outputs should reflect measures that have been agreed by those affected by the system and should be reported accurately, in easy to understand formats and represent a degree of fairness. A performance measurement system should be well defined, carefully implemented and easy to understand.

Banks need performance management information that presents different views, including organizational, line of business, geographic, product and customers. Such information can be motivational and effective in turning around an institution. Past experience of implementing a performance measurement system indicates that profitability of certain operations may increase five times or more.

However, care should be taken in the initial stages of reporting to ensure that appropriate attention is placed on defined *performance measures* and user acceptance is achieved at all levels. Training, participation in planning and budgeting exercises, and consensus on performance measures are all necessary components to ensuring from the beginning that a new performance measurement system will be successful.

An understanding of the entire performance measurement conceptual framework and phases of implementing a system is as important as the measurement methods and analytical techniques themselves.

Apart from and understanding of the overall design and implementation process, the most important element of designing and implementing a performance measurement system is management involvement. Overall system design should reflect a high-level perspective and should provide for collaboration among senior executives, heads of departments, technology and the management accounting staff responsible for the system.

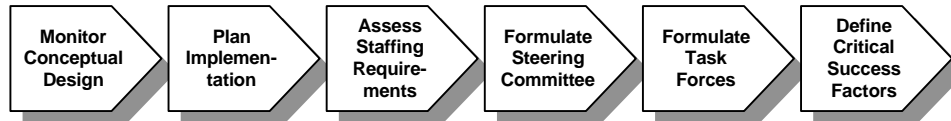
One of the most prevalent problems facing the banking industry today is leaving the system development and implementation process in the hands of information technology (IT) specialists. For example, one bank's IT group recently led a multi-million dollar investment in a proprietary architecture database management system that was inappropriately labeled and sold as an off-the-shelf management information system. Aside from the fact that the system was not open architecture and could not be modified, the technology personnel who implemented the system were only concerned with efficient and rapid production of management reports. Some users were not even aware of the system and others refused to use it on the grounds that they were not involved in defining measures and disagreed with cost allocation and funds-transfer pricing methods (transfer, internal bank prices and tariffs). Hence information users must lead system development and implementation initiatives in close collaboration with management accounting staff who have ultimate responsibility for maintaining the system.

Figure 40 sets out the steps necessary for successful design and implementation of a performance measurement system. Users of performance measurement information i.e., bank executives and managers are encouraged to study the process and get involved early on in system planning so that the end product meets their expectations and facilitates performance improvement and risk management.

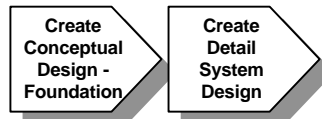
Project Planning



Project Management



System Design



System Implementation

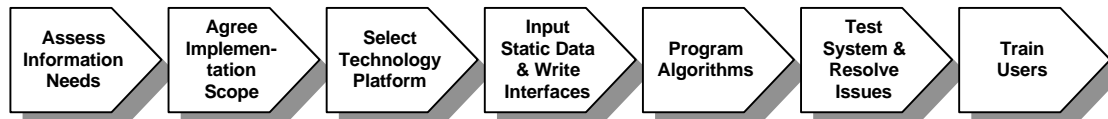


Figure 40 General Framework and Steps in the Performance Measurement Process

Incomes and Expenses Accounting

Multi-dimensional profitability analysis requires that all income statement items be assigned at the appropriate level (e.g., organization, product, customer). Funds-transfer pricing allocates a bank's net interest margin among the providers and users of funds. What is remaining in the profit and loss statement are fees, taxes, loan losses, product delivery expenses, transaction charges, and commissions. Assigning and allocating these costs is the challenge facing management accountants in arriving at the bottom line.

Banks must be able to gauge whether revenues are sufficient to cover costs of offering products and services. Without the ability to measure and accurately align costs of product and service delivery activities, management decisions can only be made on estimates.

Competitive trends, advances in technology and regulatory volatility have all impacted banks' ability to generate constant levels of net interest margins. This, combined with customer demands, product and service differentiation, and product bundling, has given foreign banks the ability to raise revenues from fees and commissions. For these reasons, the traditional method of assigning interest income is no longer sufficient to resolve revenue allocation problems among profit centers. Table 23 identifies the criteria of distribution of incomes and expenditures among appropriate profit and expense centers which could be used for solving different management problems on the basis of the data of profit and loss statements.

Table 23 A Sample Solution of the Problem of Designing a Performance Measurement System

Issue	Example	Treatment Considerations
Revenue assignment for interrelated products and services	Marketing as a single product or service: if a customer maintains a high minimum balance demand deposit account, he/she will be provided with a number of services free or at a discount.	Determining credit to underlying free products and services for their contribution to the bundled product's performance
Account ownership	A customer opens an account at one branch and conducts business at a different location	Compensation can be performed by crediting a customer's servicing branch to cover the cost of its operations and providing incentives to the customer to remit funds to the servicing branch.
Shadow accounting	Each profit center can legitimately claim responsibility for an income item – for example, revenue from a fee based product (each product or service sold at the branch to a corporate customer could be claimed by the bank departments that are in charge for these activity.	Assigning (shadow) revenue to two additional managers who can legitimately claim responsibility for the sale will cause an out of balance condition in the system. Such differences are normally handled as memorandum entries outside the automated management accounting system.

Formats of Presenting Incomes and Expenses

Management reports should be presented in different forms, for different levels of the organization and present performance measures consistent with the bank's strategy. Each manager in the organization requires a distinctly different level of detail and format of information. For example, the CEO does not have time to read through pages of accounting information detailing each expense in each profit center. He requires summary level information that reflects performance of the business against group strategy and performance of products, customers and organizational units at a high enough level to be easy to read and understand, yet specific enough to prompt questions for further research by his direct reports. Figure 41 illustrates the ascending hierarchy of management information and the level of detail required at each level of management.

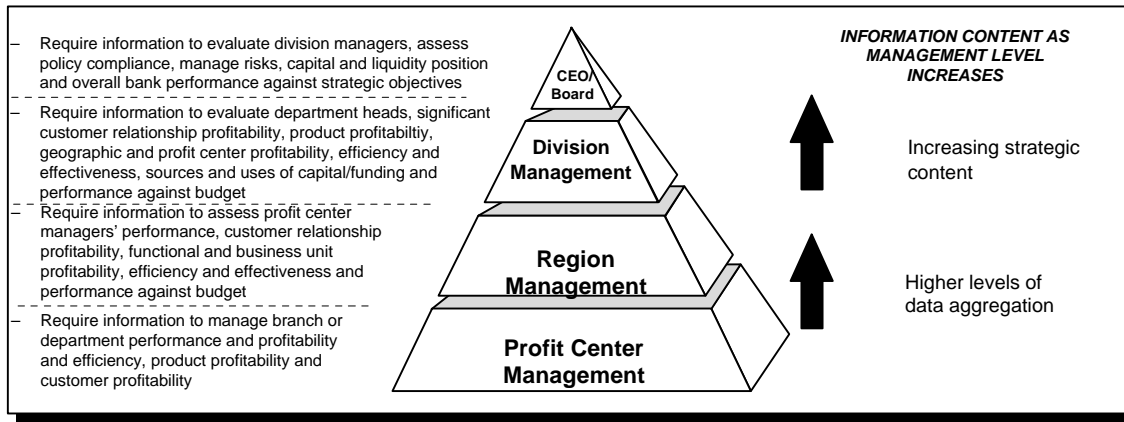


Figure 41 Hierarchy of Management Information

The perfect solution to performance measurement reports does not exist. It is up to each institution to design reports that will best communicate performance at the level of understanding of its managers. The best rule is to keep management reports as simple as possible at all levels of the organization. The following formats and example performance indicators are illustrative only. Although, these reports and performance measures have been successfully used at many banks throughout the world, in each case they were tailored to the particular circumstances and requirements of management.

Responsibilities Centers

There are many different ways to depict performance measurement information. The key to success and user acceptance is involving managers in the early stages of designing reports, making sure reports reflect measures that are aligned with business strategy and for which managers are accountable, and designing reports so that they tell a “story” about the business or particular measurement objective rather than only present traditional accounting data.

Structuring of management information is impossible without structuring the bank itself. The first thing to be done is to single out responsibility centers.

- An responsibility center is a organizational unit, or a group of subdivisions, performing a definite set of operations and capable of exerting direct influence on profitability of these activities.
- An cost center is a organizational unit, or a group of subdivisions, providing support for, and servicing of, the subdivisions which directly produce profits.
- A profit center is a organizational unit, or a group of subdivisions, whose operation is immediately connected with earning a profit.

Financial service must exert control over the quality of financial accounting, monitoring and planning of monetary movements by watching the activities of financial responsibility centers and compliance with budget regulations.

Unsatisfactory performance in the field of implementing a monetary movement budget entitles the financial service to apply sanctions and to take necessary measures to correct the situation and improve the performance.

Expenditure Report Format					Current Period Actual	Current Period Budget	PY Period Actual	YTD Actual	YTD Budget
Direct Expenditure	Staff costs - officers: salaries out of pocket allowances - clerical staff: salaries overtime - bank contribution - other cash benefits Supplies Communications (telecomms, couriers, postage, etc.) Transport Other								
	Total Direct Expenditure								
Transferred Expenditure		Unit of Charge	Unit Price	Not e i i noi					
	Premises Security	Square feet occupied							
	Personnel admin. charge Training charge Computer usage etc.	Number of staff Number of staff Number of terminals etc.							
Total Transferred Expenditure									
Total Expenditure									

Figure 42 Illustrative Cost Center or Expenditures Report

Use of Performance Measurement Information

Objectives of Performance Measurement

The primary objectives of management information are to measure and communicate performance, enhance management’s understanding of the business and focus attention to risk areas, which require prompt corrective action.

The test of whether a performance measurement system effectively measures and communicates performance to managers includes three main criteria:

- First, a performance measurement system should enable managers to understand how their units are performing against business objectives.

- Second, measures should be designed to link raw data and financial results to standard performance benchmarks and elements of the business which drive profitability.
- Finally, management information should convey measures of efficiency and effectiveness.

For a performance measurement system to enhance management's understanding of the business it must use simple presentations to demonstrate key performance results and trends (e.g., progress against goals, performance trends over time, etc.). Reports should highlight exceptions and poor performance and allow managers to "drill down" to investigate underlying causes of problems.

In identifying requirements for corrective action, a performance measurement system must provide information on the external business environment as well as internal operations. This information provides management with a perspective and benchmark of performance so that remedial action can be taken in critical areas.

Finally, an effective performance measurement system should reflect both financial and efficiency measures to provide a complete picture of performance. Financial measures present the results of actions taken while efficiency measures gauge internal processes that determine financial performance.

Management Reporting Formats

Management reports can be presented in a variety of formats and analyzed both vertically (e.g., traditional accounting statement formats) or horizontally to provide trend analysis and contribution level product line (banking products and services) profitability.

Horizontal analysis and presentation of performance information is used to:

- illustrate contribution and cost of asset and liability product lines;
- facilitate comparisons of actual asset, liability, income, and expense performance against objectives and demonstrate trends over time;
- provide management with a more precise profile of the individual components that contribute to profitability or which are not performing.

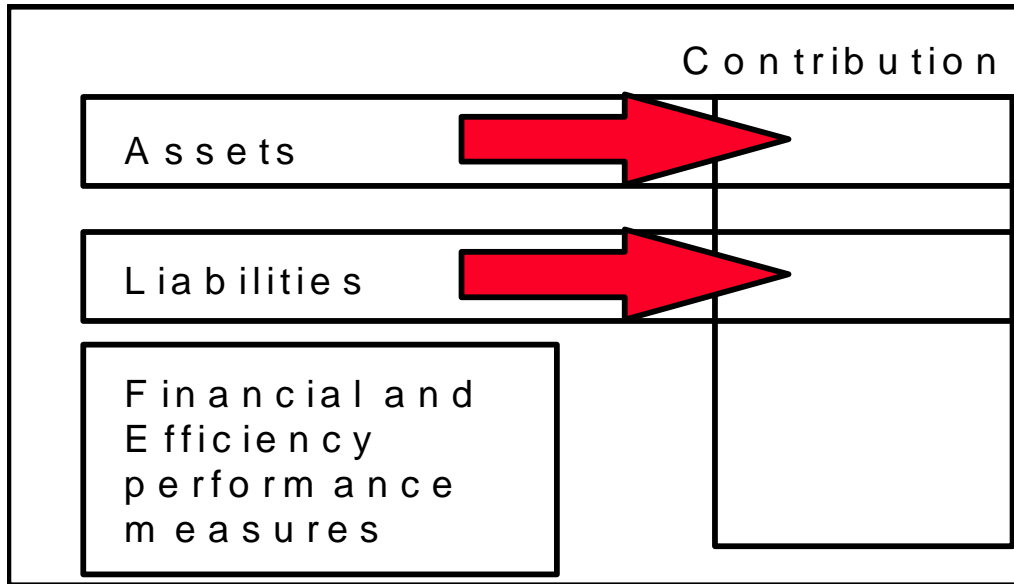


Figure 43 Horizontal Analysis

Vertical analysis and presentation of performance information is used to:

- provide profit and loss information for organizational units (especially SBU), products, and customers at each stage of the earnings process (e.g., net revenues, net interest margin, net income before provisions, etc.);
- facilitate “drill down” to the components which stimulate profitability (see);
- supply information for ratio analysis.

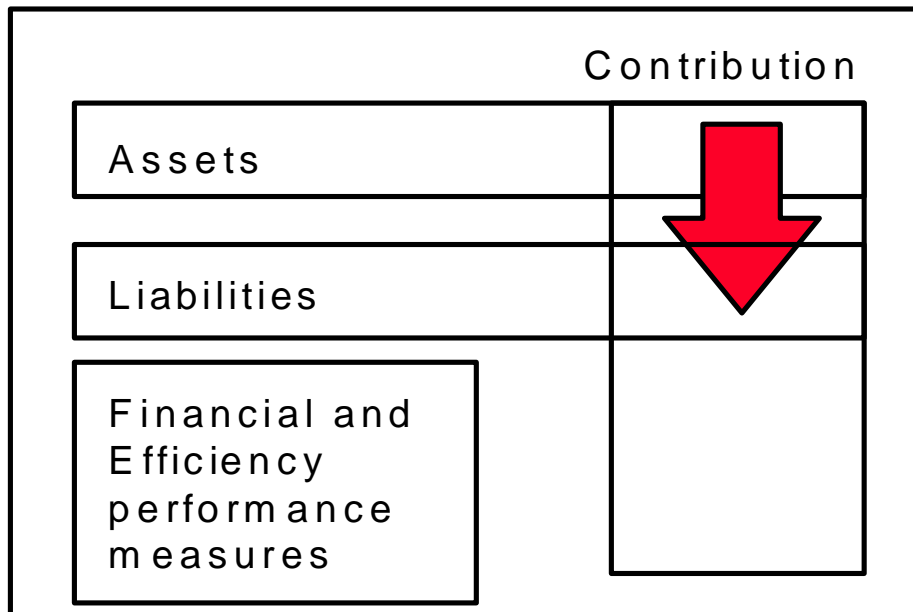


Figure 44 Vertical Analysis

In the pyramid of ratios (See Figure 45), each ratio characterizes a certain aspect of a bank's performance. For instance, a return on assets shows how efficiently the bank is using its assets. Two lower-level indicators - asset utilization and profit margin, in its turn, determine ROA. Asset yield characterizes the volume of interest and non-interest income earned by a bank on the assets it uses. However, this indicator gives no explanation at all as to how efficient the banking operations are. How effective this aspect of banking activities is determined by the indicator of profit margin/profitability of operations/. The figure shows only the top of the pyramid of ratios, for practical use it can be enlarged to show more details. The popularity of the pyramid of ratios analysis can be largely explained by the fact that it provides a format both for analysis (movement from top to lower levels, that is towards more specific indicators) and for synthesis (movement from bottom upwards, that is towards more integrated ratios).

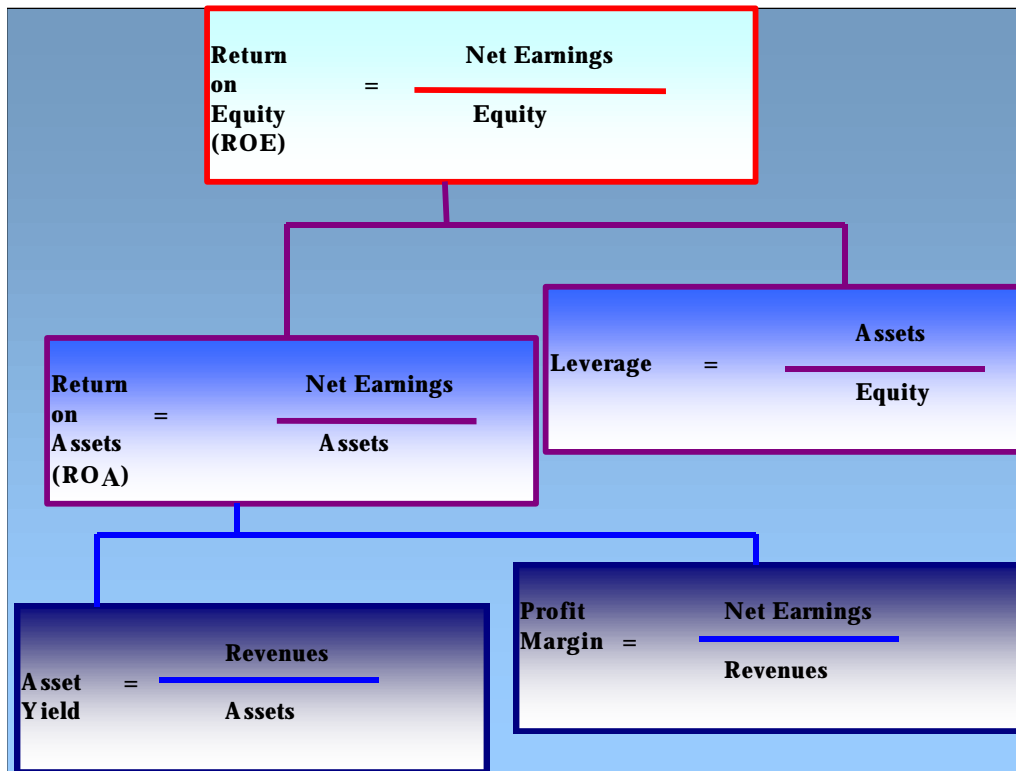


Figure 45 The Pyramid of Ratios for Analysis of Profitability

Multidimensional profitability analysis bank's performance apart of organizational performance as a whole is measured and communicated in three different main dimensions:

- profitability of each subdivision or SBU;
- profitability of each kind of products or services;
- profitability in terms of dealings with each customer/ consumer.

Each dimension has unique characteristics and is used for different management purposes.

For the management accounting is crucial well-defined organizational structure. A business unit can be defined as a group of products or set of activities that make up a self-sufficient unit or business silo. It can also be defined as a portion of an institution that because of function or geography, has been classified as a separate unit. Depending upon management's objectives and the business unit's function, many different performance measures may be

used. In defining organizational profitability criteria, a bank normally divides its organization into:

- bank as a whole;
- geographic divisions (subsidiaries and branches);
- profit/cost centers
- departments.

When the business units are defined in the financial accounting system as responsibility centers a balance sheet and profit and loss statement can normally be obtained relatively simply from the general ledger system.

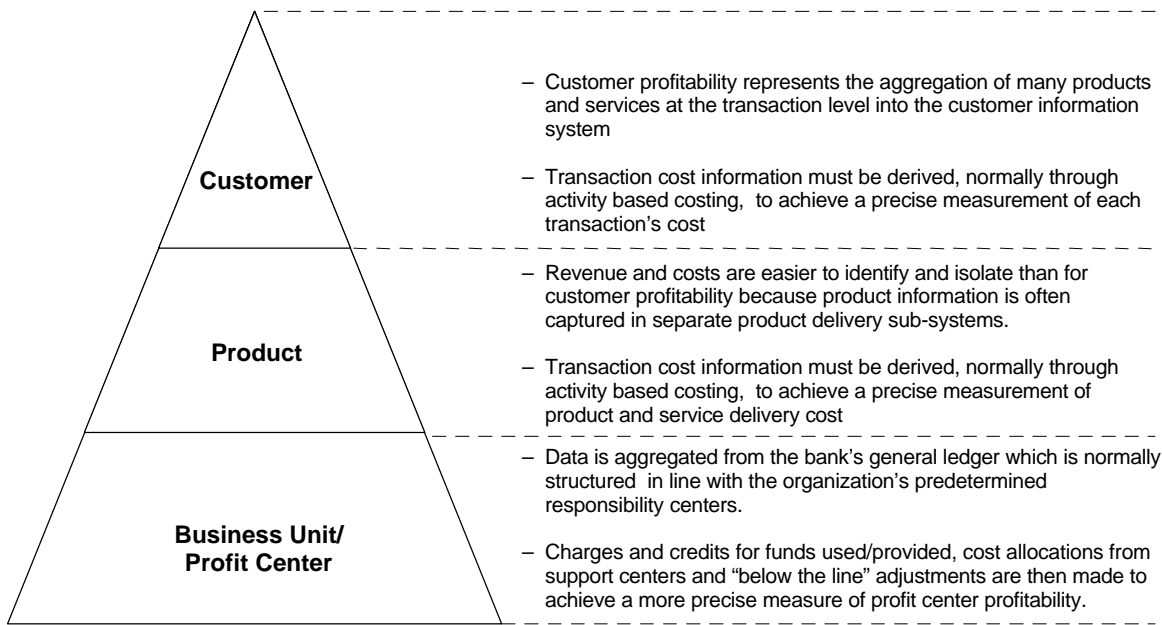


Figure 46 Value of Performance Measurement Information

Product lines and products represent the next dimension of profitability in a bank's performance measurement system. Products are offered to customers and therefore any understanding of product profitability requires capabilities in aggregating products at the customer level – the third dimension of profitability. Figure 47 illustrates the three levels of performance measurement

and ways of collection and assessment of information that are typical to particular level.

Product management processes may be seen as: product’s overall concept; design; marketing; training; monitoring; pricing; delivery. With each of these components comes specific activities that drive costs and to maximize returns from products offered, management must be able to understand, measure and control these activities.

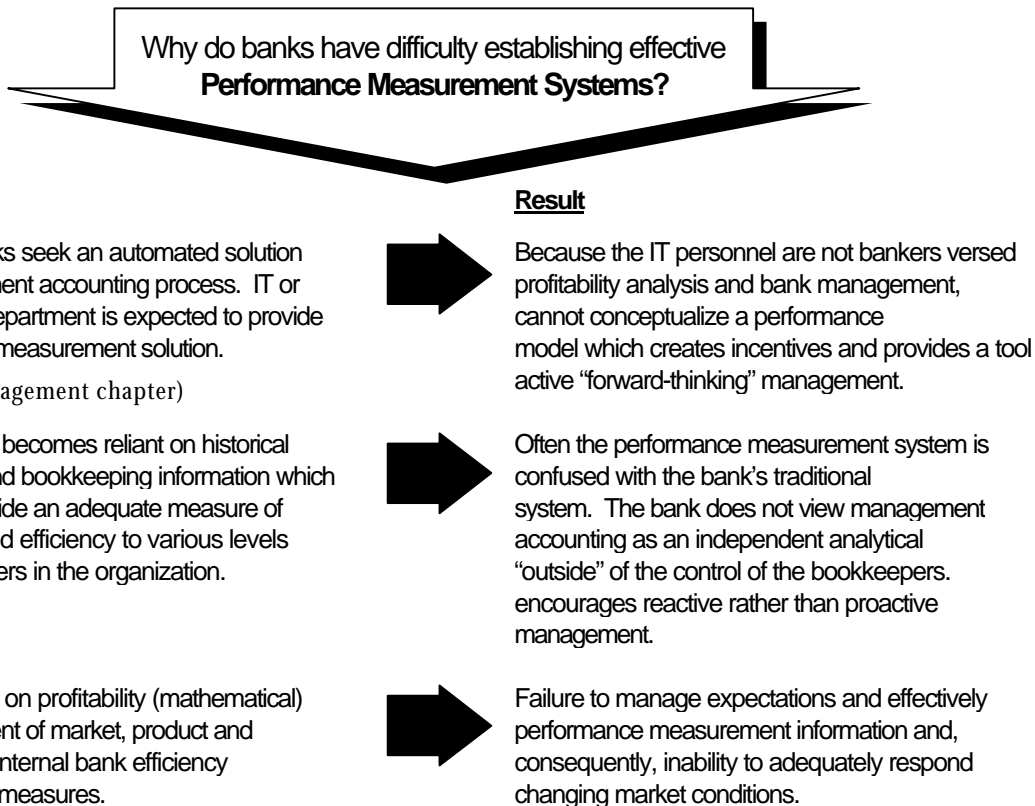


Figure 47 Typical Problems in the Implementation of Performance Measurement Systems

The exhibit in Figure 47 deals only with a few problems which need to be solved in order to implement a differentiated approach to assessing the results of operation and introduce an efficient system of collecting and processing the data on each banking activity.

By forming a three-tier profitability assessment system, a bank acquires the possibility to make managerial decisions on the basis of the data which a traditional financial accounting system is unable to provide. However, to effect such a differentiated approach to assessing the results of operation it is necessary to set up and introduce a special efficient system of collecting and processing the data on each banking business.

Customer profitability processes can be seen as:

- targeting and defining the customer group;
- setting financial goals and expectations;
- customer pursuit, packaging of services and products;
- closure and monitoring.

Customers can be grouped into segments based on different criteria e.g., upon demographics, types of products consumed corporate, individual, government, etc.)

Measuring profitability at each of the three levels poses challenges that the financial accounting system alone cannot address. However a separate system is needed to perform specific functions unique to each dimension.

AUDITING

Andrew Smith

Juri Voropaev

This chapter focuses on the audit process. Russian legislation contains obligatory requirements for the bank audit and bank managers need to understand the essence of this process. The audit process can be also of great benefit to internal bank management. By understanding the contents of the audit process the management can be in a better position to maximize profit. In the given chapter the reader will receive the information on requirements, standards and procedures of audit. We will consecutively consider the process of planning, testing and reporting. A special attention will be paid to the documentation of the results of this procedures.

Audit Regulation and Standards

Development of Audit

Auditors were first seen in Russia during the 17th century when Tsar Alexei Mikhailovich created the Ministry of Calculation Affairs (also know as Prikaz). This ministry reviewed the calculations of state organization's ledgers. This system of state control continued into the 20th century. However, during the late 1900's, a few Russian statesmen tried to establish an independent organization of accountants called the Institution of Barrister Accountants. They did not win the support of government who feared competition or the support of business that feared increased costs, and the hope of an independent audit profession disappeared.

After the October Revolution of 1917 new government continued to stress the state's control over entities in historic proportions. From an accounting

perspective government's control would be over the existence of state assets and the accuracy of its records. The new approach to control was twofold: the simple inspection of inventories, stocks, and assets; and the control of correctness of work. As such, inventories and assets are required to be physically counted and inspectors focus on the accuracy of calculations and ledgers, as opposed to the substance of transactions.

As the Soviet economy developed and the number of ministries grew, organizations could be subject to audits from various entities within the bureaucracy. It was, and still is, not unusual for an organization to be inspected by several government entities at one time.

Auditing today in Russia is still developing and is under increased scrutiny with the demand for governments to collect more taxes and prevent illegal businesses. As a market economy continues to emerge, so does an independent accounting profession. However, the audit approach from Russian statutory financial statements is still very much tax focused and is built on the ways of the past which focused on reviewing accounting ledgers and tax calculations. Many of these limitations are due to Russia's accounting standards which are also in an embryonic state.

Especially in the case of significant Russian banks, the need for audited international financial statements are a necessity either to accommodate western investors or satisfy loan requirements. As a result, this chapter focuses on the audit process in accordance with international auditing standards.

Users of Information

In the market economy emergence and development of the audit institute is caused by the vital necessity of acquiring the reliable information. Availability of the fairly presented financial information is necessary for the efficient work of the financial market. The fairly presented financial information provides an opportunity of forecasting and planning, as well as using it for the decision making process.

In business information there is a concept named the *users of the information*. A range of users of the financial information of credit organizations is rather wide. The first main user is the CBR performs the functions of control and supervision over the diligent and reliable work of the Russian commercial banks. The second and not less important user is general public. This group includes the shareholders of banks, depositors, corporations and the individuals, whose money circulates through commercial banks, and so on. The third user is the state presented by the tax authority, budget and non-budgetary funds. The fourth group of the users is market institutes, such as exchanges, financial analysts, investment and credit brokers, advisers, etc. Realizing the functional importance of the audit in a stable activity of banking systems, the countries with the developed market economy have well considered and well developed state and public *regulations* and requirements to the audit process and to the auditors.

The selection of the priority interested user is important for the establishment of criteria of accuracy and depth of the audit, and also for the determination of its purposes and issues.

The essential difference of the Russian audit of credit organizations from the international audit is that the first priority interested user of financial statement in Russia is the Central Bank, rather than public and market institutes as in the international practice.

Bank Audit Requirements

In Russia the main regulations and requirements to the audit in general and to the bank audit in particular have been issued since 1991. But the development of the norms and requirements has not been completed and still is in the process of formation. Russian banks are required to have an annual audit of their statutory financial statements performed by independent auditors. These financial statements are the basis for income tax, social fund contributions, and other government taxes. Banks may also be susceptible to

audits by the tax authority, inspections from the Central Bank, or other government organizations.

At present the auditor's activity and the audit of credit institutions is guided:

- by the Banks and Banking System of Russia Act;
- by the Temporary Regulations of the Auditor's Activity in Banking System of the Russian Federation.

The standards for the Russian banks audit are stated in the CBR Letter of February 16, 1996. No 239 Order of Provision Audit Opinion and Presentation of Reports of Credit Organizations to the Bank of Russia.

Apparently these regulations are not sufficient to maintain the normal auditing process in the Russian banking system . Currently the audit standards continue to be created in Russia.

In addition to statutory Russian financial statements, many banks are also required to have audited financial statements prepared by independent auditors in accordance with international accounting standards. These statements are often used by western investors, credit institutions, or by government authorities.

The international standards of audit are a system of norms and rules regulating the quality of professional activity of the auditors. The development of the standards and control of activity of the auditors in western countries, as a rule, lays on professional organizations of the auditors (for example, in USA - AICPA - American Institute of Certified Public Accountants).

Audit Standards

Audit standards in different countries are as varied as the cultures. With different accounting principles, different market economies, certification requirements, and audit requirements.

Russia is an excellent example of these differences. A Russian statutory audit has traditionally focused on tax calculations and bookkeeping practices. In the same way, it is not a fair expectation for an international audit to recompute every tax calculation or find all tax errors. In the audit profession, the difference in the actual procedures and the expected results is referred to as an expectation gap.

All standards of audit can be divided into three groups.

General Standards

- Standard requirements to the proficiency of the auditors;
- Requirements to auditor's independence;
- Requirements, regulating due professional care.

Practical Standards

- The standards of planning of the process.
- The test standards of the existing internal control. The standards of materiality level of the testing information and a sufficiency of the useful information to provide an independent auditor's opinion.

To understand the importance of the planning standards, testing and reporting, it is enough to examine the general sequence of the audit process shown in Figure 48.

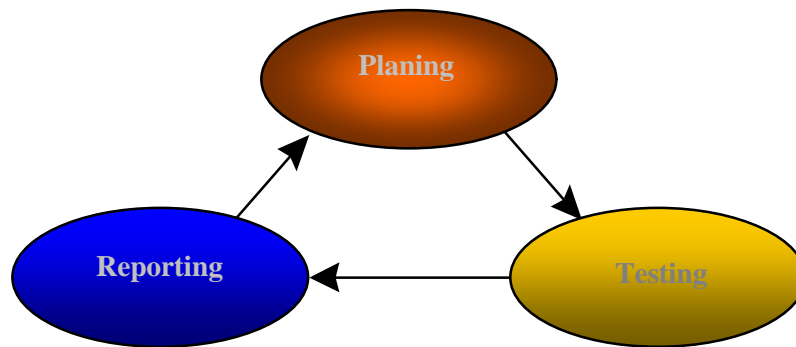


Figure 48 Steps of the Audit Process

Standards of Reporting

- The standard of compliance with generally accepted accounting principles;
- The standards for the cases that don't comply with generally accepted accounting principles;
- The standards of the adequacy of informative disclosures in the financial statements;
- The standard of an expression of opinion on financial statement as a whole.

These generally accepted accounting standards (GAAS) listed above are the basis for making a report and they are constantly amended and improved.

International Auditing : Similarity and Differences with Russian Auditing Process.

According to American Accounting Association the definition of the audit is following:

- audit is a systematic process of receiving and objectively evaluating the quantifiable information regarding the economic actions and events, which establish the level for their conformity to the certain criteria and represent the results for the users.

It is clear from this diffusive wording that the audit is a systematic process, that is the actions of the auditor during the bank auditing are „ planned and represent a system of methods, procedures and rules prescribed by the audit standards.

The standards thus determine the level of quality and reliability of the audit process.

The aim of the auditor is to receive and to evaluate the objective data on the economic actions and events of the object of audit. An auditor final report is an opinion of the fairness of financial statements in conformity with generally accepted accounting principles.

The main accounting principles are the following:

- completeness;
- accuracy of disclosures;
- evaluation of the assets and liabilities;
- verifying the availability of assets and liabilities;
- accountancy for the ownership;
- presenting reports in compliance with the generally accepted standards and rules.

The auditor evaluates the received information regarding the economic actions and events and gives his opinion relating the integrity and fairness of the bank financial statement. The auditor works for the interested user.

In the previous part we considered the main users of the bank financial statement. There is a concept of the *priority interested user* who is the

interested user of the bank financial information His priority in relation to other users is determined by the current law or business practice. The priority user can be changed alongside the changes of the audit objectives. For example the Central Bank will be the priority user under the audit of the bank financial statements, and under the operational audit a priority user will be bank management or the Board of Directors.

Types of Audits

Auditors are hired on an annual basis to provide an independent opinion on the fairness of a bank's financial statements. The Russian Law divides audit into two different types: obligatory and initiative.

Obligatory Audit

Obligatory audit is an annual audit, which is required by the law. Obligatory audit involves also the testing made on the initiative of the state authorities (including the CBR) and not connected with publicity of the annual financial statement. The Law determines the criteria of the credit organizations subjected to the obligatory audit and defines the cases when the government assigns the auditor.

The standards introduced by the Central Bank refer mainly to the obligatory audit.

Initiative Audit

Initiative audit is the audit done on the bank management or shareholders requests. As a rule the auditor faces with specific tasks differ from the general testing of financial statements, for example:

- the review of the internal bank control;
- analysis of efficiency of the credit policy;

- review of the perspective profitability of the investment portfolio;
- the efficiency of the tax policy, etc.

The forms of the financial statement in this case may not meet the Central Bank's requirements to the auditors' opinions and reports according to the auditor and the client discretion.

In the world practice the audit is classified into three types:

- financial audit;
- compliance audit;
- operational audit.

Financial Audit

Financial audit or the audit of the fairness of the published financial statement is the annual audit required by the law which has the purpose of testing the published financial statements and giving an opinion about the fairness of financial statements. In Russia it is the analogue of the obligatory annual audit.

Compliance Audit

Compliance audit is performed to determine if a bank has adhered to specific policies, laws, or regulations prescribed by the legislation and administration (bank owners).

Russian analogue is an obligatory audit on the requirement of the government authorities or an initiative audit on the request of the bank management (owners).

Operational Audit

An operational audit is a systematic review of an organization's activities and methods of the bank performance to assess the efficiency and reliability of the bank's activity. This type of audit involves the development of special criteria of which management would want an independent analysis. Examples include reviewing a bank's computer systems or credit policies.

The closest Russian analogue of this audit is the initiative audit. Though according to the CBR requirements to the auditor's report (i.e. the requirements to the obligatory audit) the auditor has to evaluate the condition of the credit activity and the quality of management of economic entities, and this is absolutely the area of a typical operational audit. Operational audit as a rule, is more similar to management consulting and usually concerned with making recommendations for improving performance. The report would also provide recommendations on the review of the loan portfolio of the bank. The importance of such audit is to improve the loan procedures and to identify credit risks.

Other Engagements

In the Russian legislation the concept of other engagements, provided by the auditor refers to the concept of the initiative audit or other engagements of the audit nature.

Reviews

In addition to providing an audit opinion on a bank's set of financial statements, auditors may also provide a review opinion. An audit opinion and review are the two ways in which auditors provide assurance.

A review involves performing inquiry and analytical procedures for expressing limited assurance that there are no material modifications that need to be made to the financial statements. Reviews are required for publicly

traded companies in the United States on a quarterly basis. Since the procedures and level of assurance are much less significant than an audit, a review is also less expensive. Reviews are often recommended for smaller businesses or quarterly statements.

When the auditor performs a review he accept limited liability with regard to the accuracy and fairness of the bank financial statements. In the review report the auditor express his limited assurance that there are no material modifications that should be made to the accompanying financial statement. Reviews can be done to study organizational management systems and cover the following issues:

- adequacy of management system (system and functional structures);
- staff management;
- efficiency of banking transactions;
- branch relationships and system of the control over branches by the head office.

Compilations (Preparing Financial Statements)

A compilation does not involve auditors giving any assurance or an opinion. A compilation merely involves preparing the financial statements based on information provided by management. Procedures are not performed to test the accuracy or completeness of the financial statements. Compilations may involve significant test work depending upon the nature of the bank's accounting records. In many cases, a bank's Russian books will be compiled in a western format. In such cases, the accounting firm has only compiled and presented the information in a western format. However, the reliability of the financial statements has not been addressed.

Special Projects

In addition to audits, reviews, and compilations, audit firms are often engaged to perform special projects. The engagements can vary from limited audit procedures to detailed financial analyses to assist in mergers and acquisitions. When hiring an audit firm, it is important to know exactly what type of engagement you have hired the accountants for and what type of report you will receive. In addition to audits, accounting firms can often provide the following services:

- services on privatization issues;
- investor search and selection;
- business process reengineering;
- bank valuations and due diligence assistance;
- consulting in human resources management;
- computer software and IT implementation services;
- actuarial services;
- personal financial planning;
- business and accounting training programs;
- tax and legal advice.

In the Appendix to this chapter there will be given the example of the report made by the audit companies under the audit process, review and reporting.

Provision of the Audit Process

Selecting Auditor and Negotiating Auditors Fee

Audit selection should be made as soon as possible. Early audit selection can not only prevent management from procrastination, but also allow the auditors and management to properly plan for the audit. Proper planning is a crucial phase in any audit and can yield significant audit savings.

The audit situation worldwide is:

The audit industry has traditionally been lead by the six largest international accounting firms, or the Big Six. These six firms are well known in the business world.

1. The Big Six are followed by about 15 large international association of audit companies. As a rule, they are not so famous but in some countries they perform the same services as Big Six firms and compete directly with them for clients. These companies are created as associations of the companies of different countries (over 100 countries). Their auditing quality is not lower than that of the Big Six as many companies have more than 100-year professional experience.
2. Independent national auditing firms are mainly of average and small size. As the rule they serve medium and small size companies and banks. In Russia only 10 national companies (most of the domiciled in Moscow) compete with Big Six. Some of them are members of international associations of auditing firms.

To select an auditor it is necessary to understand who will be the user of financial statements and what is the volume of operation of the client-bank. If the bank has all-national branch network the auditing firm should have representative offices all over country.

Bank has to pay attention to the quality of audit. It is necessary to consult the firms and banks which were the clients of the given audit firm. You need to

realize that in spite of the importance of well known firm names and advertisement you will communicate with certain persons of certain local office. It is recommended to visit offices and organize meetings with auditor management during selection. You should pay attention to style of work in the office, communication policy, training, technology (computers, software) etc.

International auditors are required to be certified. In the United States, they are Certified Public Accountants (CPA's) and in England they are Chartered Accountants (CA's). Although there are differences in the amount of required experience and the length of examinations, western countries share a common theme: their auditors must be certified, properly trained, independent, and meet the highest expectations of business, both technically and ethically. Auditors are required to attend continuing professional education classes to ensure that they are aware of the latest auditing and accounting standards and issues. Being an auditor is a highly respected profession, similar to lawyers and doctors in western societies.

Negotiating the Fees

Though there are standard audit fees they are not set in stone. Audit firms bill their clients based on hourly rates. It is important to define the amount to allocate for auditing for the current year. In order to bid for an engagement, auditors estimate the number of hours an engagement will take and multiply each staff person by their standard rate. These standard rates are different from firm to firm and are only a method to price their engagements. Audit firms often realize less than their standard rates. These rates vary from to firm and with inflation. Rates are also higher for international specialists and lower for inexperienced staff.

Table 24 Audit Fee Of the Typical Russian Audit Firm.

Staff level	Standard Hourly Rate (US dollars)	Years of Experience
Assistant	50-75	1-2
Staff	75-100	2-3
Senior	100-150	3-6
Manager	150-300	6-10
Partner	250-450	10+

Auditing firms often sell their services at rates lower than standard. In negotiating your audit fees, some issues to keep in mind in order to maximize your discount are:

- The effectiveness of the internal audit department decrease audit fees if the auditors can rely on the internal auditors' testwork;
- The quality of the bank's internal controls may allow the auditors to do less substantive, detail testwork and therefore spend less time;
- Audit fees also vary with risk. It is more risky for an audit firm to give an opinion on a bank than a non-profit organization. Accordingly, the fees are also higher.

Besides:

- Audits may be less expensive during April through December. The traditional "busy season" for audits is from January through March. Thus, they may be more inclined to discount their fees when they are not so busy.
- Try to get as many procedures performed during the "off-season." These procedures are normally referred to as interim audit procedures. Performing interim procedures will allow the audit to finish faster and be less expensive.
- Auditors need customers as much as banks need them. In emerging markets, especially in Russia, the number of clients is growing faster than

the auditors. As a result, many audit firms are often in a position to turn down clients or demand higher fees.

In Russia, it is normal business practice to pay at least 50% of the audit fees in advance. Additional fees may be requested if the audit firm experiences overages in the amount of expected time spent. Although not preferred, audit firms are often willing to accept barter (non-cash) payments. Be creative and forceful in structuring and negotiating your audit fees. However, do not impair your relationship with your auditors over fee disputes. Audit fees are another example that doing business in Russia is expensive. In the end, remember that you get what you pay for. If audit fee quotes are unusually high or low, ask why.

Independence and Confidentiality

Although having a close relationship with your auditors is important, especially when a deadline nears and it is time to resolve controversial issues, management should be aware that auditors must remain independent. The value of the auditor's final opinion relies on them being independent from their clients. An *auditor's independence* may be impaired if they have loans with a bank, they accept substantial gifts from a client, own a portion of the client's business, or a member of the auditor's family works for the client. Auditors maintain their independence by controlling the nature and extent of their procedures, requiring access to all accounting records and related documents, and remaining independent in fact and in appearance.

Auditors also have an obligation to keep all client information *confidential*. Auditors have a right to read confidential and sensitive documents and be aware of significant transactions before they may occur. Again, it is a matter of trust and the essence of their profession to keep all client information confidential.

Rotating Auditors

Many companies require their auditors to be changed every several years. In some cases, they may only require the audit to go out for bid in order to ensure that they are receiving the best audit value.

Rotating auditors ensures a fresh set of eyes to inspect your records and has many benefits. Often times, auditors will get used to routine audit processes and not see transactions or issues in a new light. Also, some auditors may not provide the highest level of service and take relationship with a bank for granted if they don't realize they may lose client.

However, rotating auditors too often has its disadvantages. Auditors gain efficiencies and learn your company, its people, and its processes better over time. Having a new set of auditors will only require them to ask all of the same questions again the following year. In addition, the quality of an audit can increase by not rotating your auditors very often. As auditors get to know your business better, they know on which transactions streams they should focus their time and effort.

Audit Value and Auditors as a Resource

The importance of an audit is often seen as obvious since law requires it. However, the audit process can yield a great deal of value if management has the proper attitude towards the audit and manages it properly. The annual audit is a unique process - how often does a bank have a team of specialized, independent business professionals review the details of its financial management processes?

Having good relationship with the auditor management has the opportunity to:

- receive valuable opinions and remarks on the establishment of the effective system of the bank internal control as a system, reducing functional risks to the appropriate level;

- identify potential problem areas that may be affecting revenues, net income, and cash flow;
- provide assistance in strategic planning and developing annual operational plans as well as assist in organizing the system of internal control.
- improve reporting systems which will allow management to receive reports in a more timely manner and be able to concentrate its time and resources on improving business processes;
- provide an independent analysis of the methods the bank reports and processes information; and
- compare your bank's accounting and business practices to financial industry practices.

Besides, bank management during communications with external professionals from the auditing firm is able to get necessary advises or opinions on the improvement of the bank's performance and to use this information in the decision-making process.

The client should insist on an experienced and professional team who is familiar with the nature of the industry. Although audit teams are usually staffed with young professionals, the larger firms only hire the best and brightest. Their knowledge should be tapped, not just during the audit, but throughout the year. Establishing a close relationship with auditors can be valued asset for a bank. In times of questions or to better understand new legislation, auditors are a valuable resource for management.

Planning of Audit

Planning is the foundation of any audit. Without proper *planning of audit* it is guaranteed to be less efficient and more expensive than it has to be. An auditor's first step in planning an engagement is understanding the bank's

business. Management can facilitate the audit by teaching the auditors about the nature of the bank's business.

Understanding the bank's business should include the bank's primary markets, products, customers, and alliances. The auditors should also understand the external factors which affect the bank including: competition, technological changes, consumer preference, legislative changes, legal and regulatory issues, and the general economic operating environment. Everything from the human resource policies to the internal audit department to internal controls to future operating plans should be discussed with the auditors. All this work should be done in planning the audit and before fieldwork begins.

One of the biggest ways in which bank management can facilitate an audit is documenting the *bank internal control* processes. Management should encourage the auditors to test internal controls in order to reduce the amount of substantive, detail testwork that has to be performed. In addition, the auditors will be in a better position to provide feedback to management about the quality of internal controls. Management should document, in detail, the primary internal control processes in order to save the auditor time and help educate them about the nature of the bank's business (Figure 49).

Planning should not only consist of narrative discussions and audit risk analysis. Auditors should also perform quantitative audit planning procedures by analyzing the bank's quarterly financial statements. Auditors also perform ratio analysis and analytical comparisons to understand the changes in a bank's financial activity and if the nature of their audit procedures will be affected by the nature of the balances. The bank's management can assist in the quantitative planning procedures by providing management's internal analyses to the auditors.

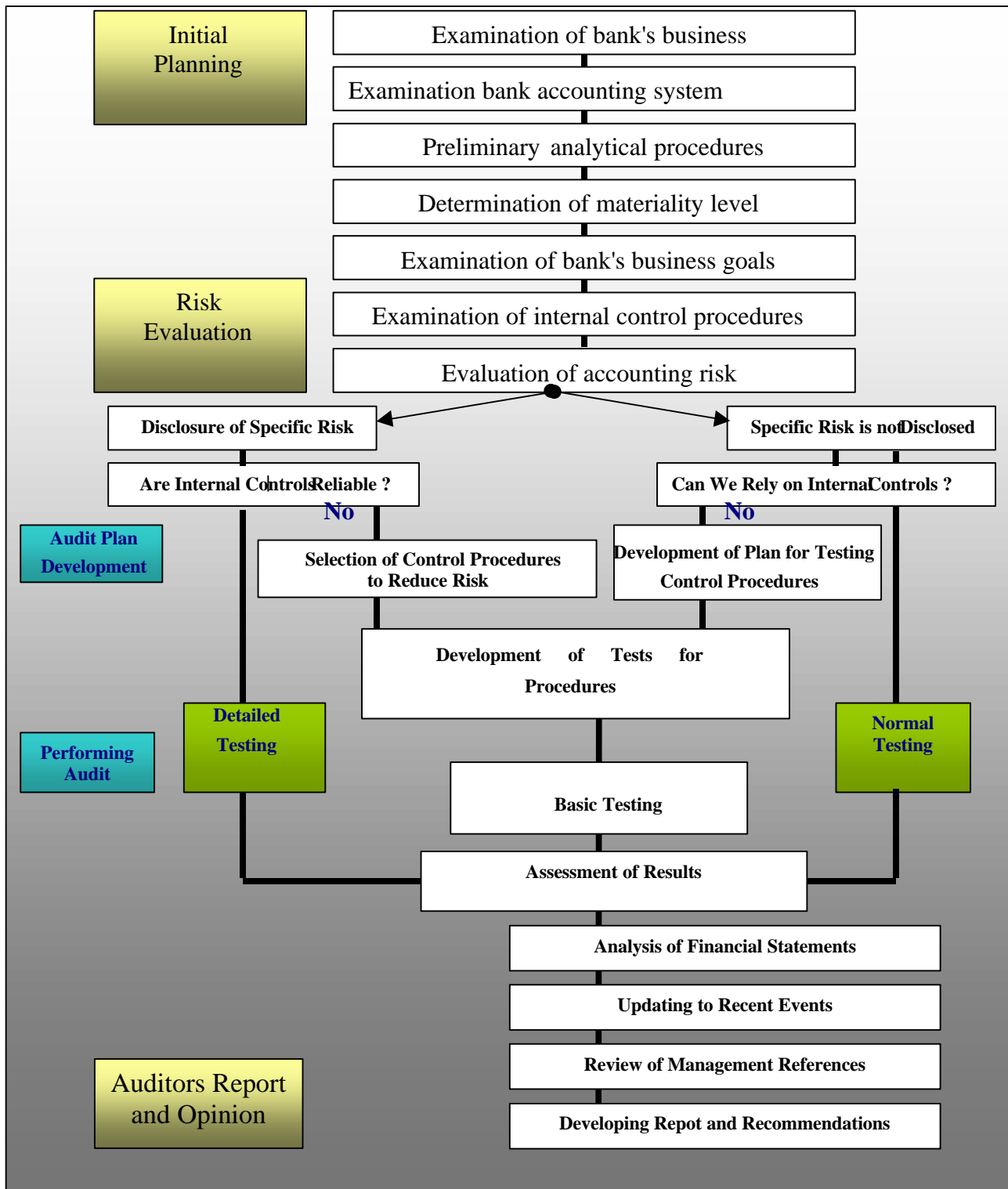


Figure 49 Audit Process

Audit planning should result in detailed interim audit procedures which can be performed several months before year end. Internal controls should be

documented and all audit planning and scheduling completed before audit fieldwork begins.

Audit Risk and Sampling.

Auditors make their opinion based on conclusions from interpreting the evidence gathered from performing their audit procedures. The amount of evidence they need to gather is based on their assessment of audit risk. Audit risk is the risk that the auditors may unknowingly issue an incorrect opinion on the financial statements.

The audit risk calculation model is defined below:

Equation 14 Audit Risk

$$\mathbf{A = C \times I \times D}$$

Where, **A - Audit risk, C - Control risk, I - Inherent risk, D - Detection risk**

Control risk is the effectiveness of internal controls over the account balance. For example, cash receipts usually have a low control risk because banks are able to implement effective controls over these transactions.

Auditors assess the *inherent risk* based on the nature of the account. The inherent risk is the risk that material misstatement may occur in the financial statements, ignoring the effects of inflation. For example, cash balances on hand have a high inherent risk since they are likely to be stolen.

Detection risk is the risk that the auditors will not detect a material misstatement. Auditors control the detection risk by increasing or decreasing the amount of their testwork.

In general, auditors face a risk of a bank reporting higher revenues and greater assets than they actually have. The risk is that assets and revenues may be overstated and that liabilities and expenses may be understated. In Russia, a tax focused audit may have these risks reversed since the auditor's risk is for

income to be understated. These risks form the basis for the auditor's procedures.

Auditors manage their audit risk by adjusting their sample sizes. Sampling is the essence of audit procedures. At the end of the auditors' procedures, they will provide an opinion if the bank's financial statements are free from material mistakes. Auditors should not and do not reach such an opinion by testing 100% of a bank's transactions. They apply their judgment, based on the audit risk model, to test transactions on a sample basis in order to make conclusions over the entire population of transactions.

Bank's management should encourage the use of computers by auditors to facilitate their procedures. Especially in a banking environment where significant routine transactions are managed by information systems, auditors should be documenting the use of computers and testing its efficiency.

Management Assertions and Audit Objectives

The auditor's responsibility is to provide an opinion on the bank's financial statements. The bank's management is responsible for recording, processing, summarizing, and reporting accurate financial information. In preparing the financial information, management is making certain assertions about the account balances and disclosures. The auditor analyzes these assertions to create audit objectives.

The management assertions are discussed below:

COMPLETENESS. Management asserts that there are no unrecorded liabilities, assets, or other transactions that should be reported in the bank's financial statements. As an example, the auditor's will test this assertion by analyzing subsequent payments to determine if the liabilities are complete.

ACCURACY. Management asserts that the details of transactions have been accurately recorded (for example, the date, price, and quantity). As an

example, auditors will re-compute interest income calculations and foreign exchange computations to determine if they are mathematically accurate.

VALUATION. Management asserts that the assets, liabilities, and transaction are recorded at a proper value. As an example, auditors will test the valuation of the loans receivable balance to determine if the balance is collectable.

EXISTENCE. Management asserts that an asset, liability, or transaction exists at a certain period of time. As an example, auditors will perform physical observations of inventory balances to test the existence of a company's inventory.

OWNERSHIP. Management asserts that the assets, liabilities, and transactions are the property of the bank and the bank has proper title. As an example, the auditors will test loans receivable and investments to determine if the bank does in fact have title to these assets.

PRESENTATION. Management asserts that the financial transactions for the period are properly disclosed in the financial statements. As an example, auditors will review the financial statement disclosures and compare to industry standards to determine if they are in accordance with generally accepted accounting principles.

Materiality

Materiality is an important concept because auditors do not attempt to determine if the financial statements are exactly correct. Auditors only perform tests to determine if the financial statements, taken as a whole, are free from material mistakes. Management should not expect the auditors to find every mistake in the financial statements. Management's responsibility is to prepare accurate financial statements. The auditor's responsibility is to provide an opinion on the fairness of the financial statements.

The concept of materiality is a major difference in the role of auditors in Russia. Historically, auditors were assumed to test the accuracy of bookkeeping transactions in precise detail. However, these audits were aimed at pleasing the tax authority and did not focus on testing the reliability of the financial statements taken as a whole.

CBR 's letter of 16.02.96 No 239 Order of Provision Audit Opinion and Presentation of Reports of Credit Organizations to the Bank of Russia allows to assume that it is possible for auditors to use sampling methods. Based on his previous experience the auditor selects a sample, determines the level of materiality and defines the main users of the financial statements.

Material information of the financial statement is the information that may influence the reasonable user's final decisions. Though in the world practice there is not a precise definition of materiality, auditors normally consider the errors and omissions in the financial statements exceeding 5-10 % as material.

In the international practice auditors record the differences they find during their procedures as audit differences. Auditors summarize these differences and determine if it is necessary to adjust the financial statements. Recently in Russian statutory audits, it has been common practice to adjust for most errors due to the smaller level of materiality. Where as, many of these adjustments may not be necessary for international audits. The auditors and bank management should discuss all audit difference towards the end of the audit procedures in order to maintain a high level of communication and determine which differences need to be recorded.

Critical Objectives of the Audit Analysis.

In order to form an opinion on the financial statements, auditors create audit objectives in order to develop audit procedures and gather evidence to determine if the financial statements are fairly stated and free from material misstatements. Hence, there is a number of the key objectives.

Most part of the bank's assets forms a loan portfolio. The valuation of a bank's loan receivable balance is always a critical audit objective for banks. The collectibility of a bank's receivables is subject to the probability of the customers defaulting on the loan. As a result, auditors will review the bank's loan files. The procedure will start like all audit procedures by first understanding the system of internal controls and then gathering evidence to support the collectibility of the loan receivable.

Auditors will select a sample from the bank's loan portfolio and inspect the original loan agreements to verify the ownership and nature of the loan. Interest owed will be recalculated and the covenants of the loan will be tested for compliance. The timeliness of the customer's loan payments will also be addressed. Analyzing the loan payment history and forecasting future payments will be one of the most important procedures during the audit. Auditors will want to see evidence such as a history of timely cash payments or loan payment guarantees to support the collectibility of the loan.

The loan portfolio is the second profitable part of the bank's assets. After analysis of the internal controls over the treasury function, the auditors will perform a variety procedures to test the reasonableness of the year end investment balances. Most often, auditors will confirm the existence and ownership of the investment with the custodian. The valuation of the investments is very important since they are recorded at the lower of cost or market. It is necessary that it should comply with the accepted standards and legislative, since there are a lot of variants of valuation of the securities; they can be recorded according to their par value, historical value, market value or lower to the market. If the market value of the securities is less than its purchase value then an expense should be recorded for the loss on the investment. Another analytical procedures are used for assessment of profitability of the investment portfolio.

Contracts and Other Documentation

Contract Letters and Contracts

All audit engagements should have an engagement letter or contract to define the terms of the engagement and help prevent any misunderstandings between the bank and the auditors. In Russia, formal, detailed contracts are more popular than short engagement letters that are used in the west. However, either form should specify the nature of the procedures, the responsibilities of each party, and the audit fees. Auditors often include a statement that it is not their responsibility to detect errors or irregularities (such as illegal acts or fraud) in order to stress the fact that they are only providing an opinion as to whether the bank's financial statements are free from material mistakes.

Audit Program

Audit program is a detailed list of the planned audit procedures for each audit area. From the auditor's perspective, the audit program is a tool to assist in the delegation, supervision, and review of the audit procedures. Audit programs also help coordinate the performance of the planned audit procedures and document the performance of the audit procedures.

Workpapers

Auditors document their testwork and conclusions in workpapers in order to support their audit conclusion. These workpapers are the property of the audit firm and not the bank. Auditors may allow the third party to review the workpapers only if the bank allows them to.

It is a normal audit standard and a requirement of international firms that all workpapers are reviewed by someone else than the preparer. The reviewer considers if the objectives of the test have been tested properly and if the procedures have gathered sufficient evidence to support their conclusions.

Documents Prepared by Clients

Prepared by client (PBC) lists are developed by the auditors before the audit and sent to the accounting department at the bank. PBC lists specify exactly what the client should prepare for the auditors before they arrive at the bank. PBC lists save auditors valuable time and allow them to focus on audit procedures, as opposed to creating schedules. Ideally, all of the auditor's workpapers should be prepared by the bank. A bank should receive a PBC list several weeks in advance of an audit and it should be tailored to the specific requirements of the bank. If the requested schedules are not prepared by the client, the final audit fees may be higher due to the extra time the auditor's had to spend preparing schedules.

Rotational and Interim Testwork

As discussed before, auditors often prefer to perform rotational or interim testwork, especially if banks are extremely large or there are tight deadlines. This testwork often includes the auditors performing tests of controls over the significant transaction cycles. Substantive procedures can also be performed at an interim period and then an overall analytical review at final.

Testing

Internal Controls and Operational Cycles

Internal Control and Audit

For auditors to test final account balances, they must understand the underlying transaction cycle. Management establishes internal control policies over the transactions cycles in order to help ensure that their objectives are achieved. Therefore, an audit which focuses on internal controls is often more beneficial since management will be able to get better feedback regarding the

reliability of its controls. By documenting and updating a bank's internal control procedures, management can help the auditors perform their procedures and decrease their fees.

For a bank, internal controls has the following directions:

- Authorization ;
- Delegation of approval authority;;
- Collection of management information;
- Monitoring;
- Internal audit.

Authorization is control procedure designed to ensure approvals from managers who are responsible to authorize the transaction. Delegation of approval authority consists in authorizing, executing, and recording a transaction by several people.

Management information plays an important role in the internal control system. Timely budget-to-actual reports allow management to identify unusual fluctuations which may be due to a breakdown in internal control. Internal audit function of a bank can also be useful for improvement the internal control in a bank. It will be discussed below, in the following sections.

In addition to these specific controls which can be used throughout a bank's operations, it is important for management to collect the factors which establish, enhance, and mitigate the effectiveness of internal controls. This additional information concerns :

- strategic management;
- day-to-day management;
- organizational structure;
- incentive compensation plans;
- human resources management;

- corporate culture.

Analytical Procedures.

Analytical procedures should be used throughout the audit process, from planning to testing transactions to performing final reviews. Analytical procedures include comparisons, computations, inquiries, and observations which auditors use to develop estimations of account balances in order to determine if the accounts are reasonable. The most valuable analytical procedures can be budget-to-actual comparisons if the bank has a strong budget process.

Bank management on a regular basis in reviewing their own financial statements should also perform analytical procedures. Management should share their reporting packages and internal financial analysis with the auditors. Sharing internal analysis information will help the auditors increase their understanding of the bank's business and may save the auditors time which will lower the bank's audit fees.

One of the most important analytical procedures is ratio analysis (See the chapter Performance Measurement Systems and Management Accounting and the chapter Credit risk management). Analytical procedures should not be limited to financial ratios. Statistics and other non-financial information should always be used in analyzing a bank's financial activity. These ratios often explain changes in fundamental financial analysis. Statistics such as the number of transactions on a daily basis and average dollar size of transactions can be very useful. In addition, operating statistics such as the number of employees is also helpful.

Treasury and lending controls are of primary importance because they are the bank's primary transactions cycles and also have the highest inherent risk.

Effective treasury controls include:

- Daily reconciliation of purchases and sales of securities.
- Monthly agreement of investment positions between the accounting system and third parties.
- Budget-to-actual comparison of the number of transactions, size of investment portfolio and investment income for the period.

The bank's management should ensure that the internal controls are documented in flowcharts or memorandums and are communicated to all applicable employees. The internal control documentation should be updated and reviewed on a regular basis. Having the bank's internal controls effectively documented will also save the auditors time in testing the controls and may potentially lower the audit fees.

Internal Audit

More and more banks understanding the inherent risk in banking, establish internal audit departments to review various aspects of the internal control system. These departments should answer directly to the board of directors. Part of the system of internal controls of the bank, where the work completed by internal audit is considered to be an integral part of the overall system of internal control.

A means of reviewing and testing the operation of internal controls on behalf of the auditors to provide evidence to lower the assessment of control risk and thus, decrease the amount of detailed audit work.

Thus, an effective internal audit function helps to facilitate an audit by either strengthening the internal controls, which will allow the auditors to decrease their testwork, or by performing testwork on behalf of the auditors. When internal auditors are used to complete work on our behalf, auditors have to address the quality of their work, the nature of their procedures, and often directly supervise the internal audit staff. Consideration of the internal audit

function plays an important role in the nature and extent of audit procedures for a bank.

Substantive Procedures

Substantive procedures are tests of details where auditors perform procedures on the documentation with supports the transaction or account balance. Auditors may re-compute, confirm, inspect, or physically observe evidence to support account balances. Auditors normally vouch the supporting documentation for significant balances. Vouching refers to procedures performed to tests the details of a transaction and usually includes inspection, comparison, and re-computation procedures.

Search for Unrecorded Liabilities

The search for unrecorded liabilities is an important year-end audit procedure which should also be performed by management. The procedure tests the complete of year-end accruals. Auditors will analyze the January and February cash payments to determine if any of the payments relate to the prior year for accrual accounting purposes. If the payments relate to prior year expenses, the necessary adjustments will be made. These procedures should be performed by management in order for management to obtain comfort over the completeness of year-end accruals. If management performs these procedures, the auditors can often use the procedures to reduce their testwork and consequently their fees should be reduced as well.

Confirmations

Confirming accounts balances is also a common substantive procedure. The procedure is a method of gathering evidence from a third party about an account balance or transactions. It is a normal method of testing accounts receivable, investments, and debt. Due to the poor mail system and business practices in Russia, other procedures are more cost-effective (such as testing

subsequent cash receipts). However, do not be alarmed if your auditors ask to contact your bank, significant customers, or your attorney's to confirm year-end account balances or significant activity during the year.

Representation Letters

Auditors will also request the bank's management to write a *representation letter* to the auditors. The representation letter summarizes significant assumptions that have been made to the auditors, that all relevant information has been provided to the auditors, and includes the bank acknowledging that the bank's management is responsible for the presentation and accuracy of the financial statements. If a signed representation letter is not provided to the auditors, the auditors may qualify their opinion. An example of representation letter is attached in the Appendix.

Audit Opinions

The Audit Report

The standard audit report consists of the three paragraphs: opening paragraph, analytical paragraph, and opinion paragraph.

The Opening Paragraph.

The opening paragraph includes general information:

- about the audit firm (the name, legal address and the telephone of the firm, date of the license issue and its validity; state registration certificate number; account number; first, second and last names of the auditors and senior managers of the audit firm executed auditing; duration of the audit testwork specifying the dates of auditing; information about the auditor who works independently (his/her name,

first, second and last names; date of the license issue and its validity; state registration certificate number; account number; the duration of the audit testwork specifying the dates of auditing);

- about the client (name of the credit organization, its organizational and legal form; number and the date of the license for banking activities issued by the CBR, number of branches).

Analytical Paragraph.

Analytical paragraph includes the following information.

1. The scope and volumes of work that the auditor has performed and the types of audit (sampling or overall). If a sampling audit is performed on the definite transactions of the credit organization it is necessary to denote the transactions subjected either to a sample or an overall audit.
2. The description of the following main issues:
 - adherence to the current legislation on the performance of the credit organization operations;
 - condition of the accounting and reporting system, the adequacy of the analytical accounting to synthetical accounting;
 - correctness of the accounting and financial statements;
 - matching to mandatory standards (limits) prescribed by the CBR;
 - correctness of maintenance and accounting legal capital funds, reserve fund and other reserves (surpluses);
 - legitimacy of existing settlement accounts, current and foreign currency accounts for the clients, corresponding accounts (sub accounts) for the credit organizations (branches);

- fairness and correctness of the operations performed on the asset and liability side (loans, deposits, operations with securities and currency exchange , revaluation of the FX accounts and so on.);
- organization of the credit and business procedures;
- the quality of functions of the foreign exchange control;
- timely and complete depositing of funds in the obligatory reserves with CBR and building investments revaluation reserves (surpluses) and reserves against loan losses ;
- adherence to the regulations of the CBR
- provision of safe keeping of cash, securities and material values;
- correctness of the interest charges and payments of interest and fee income (expenditures);
- quality of management of the credit organization;
- condition of the internal control system (meaning that bank's management is responsible for the internal controls and evaluation of the control system is aimed at defining the scope and volumes of work to perform during the audit);
- fulfillment of the previous auditors' recommendations.

The Opinion Paragraph

The opinion paragraph has the following information.

1. The audit is performed in accordance with the Temporary Rules for the Audit in the Russian Federation approved by the Russian Federation President Act dated 22 December, 1993 2263 “About Audit in the Russian Federation”.

2. Accounts (Aggregated Balance sheet and Profit and Loss Statement) are made by the organization in accordance with the Chart of the accounts, prescribed by the Central Bank of the Russian Federation.

3. Allocation of the responsibilities among the client and the audit firm is to be defined under the concluding the agreement between them (the client is responsible for the fairness of the presented analytical and synthetical reporting data and the financial statements; the audit firm is responsible for the opinion made about the fairness of the financial statement within the audit procedures).

4. If there are no remarks on the financial statements, the audit firm witnesses his stamp and signature on each copy of the organization's balance sheet and profit and loss statement with the mark of the prior presenting them to the Chief Departments (National banks) of the CBR

The financial statement is published on the basis of the certified by the audit firm organization's balance sheet and profit and loss statement (form 2) according to the forms approved by the Central Bank of Russia which are also have to be certified by the stamp and signature of the audit firm. The text is the following: "The audit firm (name of the firm, number and date of the issued license, name of the CEO) makes assurance that the balance sheet and profit and loss statement are fairly presented "

5. In case if there are misstatements in the balance sheet and profit and loss statement presented to the Chief Regional Authority (or National Bank (in the case the credit organization is domiciled in one of Republics of Russian Federation)) of the CBR they are subjected to the correction of the statements during the accounting period. The auditor has to inform in his report about the level of materiality when the misstatement in the financial statements exists, the reason and the number of the balance accounts, which were corrected, with specifications of the amounts. Considering mentioned above the audit firm does not confirm the fairness of the financial statements presented by the credit organization to the Chief Regional Authority (National Bank) of the CBR. This information is presented to the Chief Regional Authority (National Bank) of the CBR together with indication of the reason of non-confirming the financial statements. Published financial statements are presented by the credit organization with consideration of the corrections made during the audit testing

and are certified by the audit firm's stamp and signature. The text of the audit opinion is the following: "The audit firm (name of the firm, number and date of the issued license, name of the CEO) makes assurance that the balance sheet and profit and loss statement are fairly presented considering the corrections made during the audit".

Modifications of the Standard Report

In addition to modifying the standard audit report (or unqualified opinion), auditors may issue a qualified, disclaimer, or adverse opinion on the bank's financial statements.

Qualified Opinion

A qualified opinion includes an "except for" phrase to indicate which aspects of the financial statements are not presented fairly. A qualified opinion is normally issued when a scope limitation exists and the auditors are unable to gather evidence over certain accounts or transactions.

Disclaimer

If the auditors do not express an opinion on the financial statements, then they provide a disclaimer opinion. Disclaimers are used when there are significant scope limitations or significant uncertainties in the financial statements and the auditors are unable to express an opinion.

Adverse Opinion

An adverse opinion states that the financial statements, taken as a whole, do not present fairly an entity's financial situation. Adverse opinions require additional paragraphs to fully explain the reason for the opinion. In practice, adverse opinions are very rare since auditors would usually try to correct the situation before it occurs.

Management Letters and Other Reports

Management Letters

Management letters summarize the auditors' recommendations for the bank to improve their operations. The recommendations can be very valuable since the auditors have had the opportunity to independently inspect the details of the bank's processes of financial management.

Management should have an opportunity to review the letter before it is issued. Remember that the management letter is sent to the Board of Directors. As a result, in addition to revealing potential errors in the company, it is also an opportunity to inform the auditors of situations which should be stressed to upper management. Management letters have traditionally been prepared in the course of an audit. However, some audit firms are less inclined to prepare such reports since they take additional time. Plus, in many cases, audit firms would rather sell a bank a separate service for analyzing their operations.

Other Reports to the Management

The auditor's may also issue other reports to the board of director's or audit committee. Such reports may include communicating illegal acts or irregularities. In addition, if requested, auditors may provide a letter disclosing if they noted any reportable conditions. A reportable condition is a significant deficiency in the design or operation of the internal control structure. Auditors are not obligated to find reportable conditions. However, in situations where they are aware of them, they are obliged to notify the appropriate level of management. Auditors may also be requested to present a summary of their audit plan to the board of directors since the auditors are approved by the board. Audit may develop this plan as short memorandum or an oral presentation.

Debriefing

Debriefing is an important and often overlooked step in the audit process. Before the auditors leave the client to finish their testwork, the auditors should always meet with management to discuss their initial findings and when they will issue their draft report. The bank's management should always review the auditor's report before it is issued.

After fieldwork ends and the audit report is issued, the audit team analyzes the audit process and level of client service in order to develop recommendations to perform a more effective, efficient, and value-added audit the following year. It is always beneficial for the auditors to involve member's of the client's management in assessing the delivery of the audit service.

APPENDIX

Example Standard Audit Opinion

Letterhead of Audit Firm

Independent Auditors' Report

To the Shareholders and Board of Directors of
_____ Bank

We have audited the accompanying (name of financial statements) of the _____ Bank (the Company) as of and for the twelve months ending December 31, 199x. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards required by the Central Bank of RF. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of cash flows is free from material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the schedule of cash flows. An audit includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the _____ Bank as of December 31, 199x, in conformity with generally accepted accounting principles in Russia.

/s/ signature of audit firm

Date (last day of fieldwork)

Example Representation Letter

Letterhead of Client

Name and address of auditors

Date (last day of fieldwork)

Ladies and Gentlemen:

We are writing at your request to confirm our understanding that your audits of the (consolidated balance sheets) of (name of client) (and subsidiaries), as of (current and prior balance sheet date), and the related (consolidated) (statements of earnings), (retained earnings), and (cash flows) for each of the (years) in the period then ended (balance sheet date), were made for the purpose of expressing an opinion as to whether these (consolidated) financial statements present fairly, in all material respects, the financial position of (name of client) (and subsidiaries), and the results of its operations, and its cash flows in conformity with (name of country) generally accepted accounting principles. In connection with your audits we confirm, to the best of our knowledge and belief, the following representations made to you during your audits:

We have made available to you:

- All financial records and related data.
- All minutes of the meetings of stockholders, directors, and committees of directors, or summaries of actions of recent meetings for which minutes have not yet been prepared.

There have been no:

- a. Irregularities involving any member of management or employees who have significant roles in the internal control structure.
- b. Irregularities involving other employees that could have a material effect on the financial statements.

c. Communications from regulatory agencies concerning noncompliance with, or deficiencies in, financial reporting practices that could have a material effect on the financial statements.

d. Violations or possible violations of laws or regulations, the effects of which should be considered for disclosure in the financial statements or as a basis for recording a loss contingency.

There are no:

a. Unasserted claims or assessments that our lawyer(s) has (have) advised us are probable of assertion and must be disclosed in accordance with (name of applicable accounting standard).

b. Material liabilities or gain or loss contingencies (including oral and written guarantees) that are required to be accrued or disclosed by (name of applicable accounting standard).

c. Material transactions that have not been properly recorded in the accounting records underlying the financial statements.

d. Events that have occurred subsequent to the balance sheet date that would require adjustment to or disclosure in the financial statements.

Provision, when material, has been made for:

a. Loss to be sustained in the fulfillment of, or from inability to fulfill, any sales commitments.

b. Loss to be sustained as a result of purchase commitments for inventory quantities in excess of normal requirements or at prices in excess of the prevailing market prices.

c. Loss to be sustained as a result of the reduction of excess or obsolete inventories to their estimated net realizable value.

The bank has no plans or intentions that may materially affect the carrying value or classification of assets and liabilities.

The bank has satisfactory title to all owned assets, and there are no liens or encumbrances on such assets nor has any asset been pledged.

The bank has complied with all aspects of contractual agreements that would have a material effect on the financial statements in the event of noncompliance.

All sales transactions entered into by the Company are final and there are no side agreements with customers, or other terms in effect, which allow for the return of merchandise, except for defectiveness or other conditions covered by the usual and customary warranties.

The following have been properly recorded or disclosed in the financial statements:

- a. Related party transactions and related amounts receivable or payable, including sales, purchases, loans, transfers, leasing arrangements, and guarantees.
- b. Significant common ownership or management control relationships requiring disclosure.
- c. Capital stock repurchase options or agreements or capital stock reserved for options, warrants, conversions, or other requirements.
- d. Arrangements with financial institutions involving compensating balances or other arrangements involving restrictions on cash balances and lines of credit or similar arrangements.
- e. Agreements to repurchase assets previously sold.

The following information about financial instruments with off-balance-sheet risk and financial instruments with concentrations of credit risk have been properly disclosed in the financial statements:

- a. Extent, nature, and terms of financial instruments with off-balance-sheet risk;

b. The amount of credit risk of financial instruments with off-balance-sheet credit risk and information about the collateral supporting such financial instruments; and

c. Significant concentrations of credit risk arising from all financial instruments and information about the collateral supporting such financial instruments.

Further, we acknowledge that we are responsible for the fair presentation in the (consolidated) financial statements of financial position, results of operations, and cash flows in conformity with (name of country) generally accepted accounting principles.

Very truly yours,

(name of bank)

Name

Name

Chief Executive Officer

Chief Financial Officer

and/or General Director

and/or Chief Accountant

INFORMATION TECHNOLOGY MANAGEMENT

Steven Shipley

Viktor Senkevich

Every year makes the banking business increasingly dependent on information technologies, the way they are introduced and operated. This chapter gives an overview of modern strategic IT management practices, basic principals of planning for and adoption of IT in banks, including investment analysis and specific activities. It provides methodologies that facilitate the application of relevant concepts and tools into IT strategy and deployment, as well as a process to facilitate IT integration to ensure that IT strategies are well-linked and support overall bank strategies and objectives. A detailed coverage is given to automation of banking systems and prospective uses of the global Internet.

As information technologies are developed and employed, bank managers are facing challenges of enormous dimensions. There are two primary trends in banking, which they must confront: market-oriented transformation and implementation of new technologies. The increasing advances of technology are pervasive forces, which are reshaping the marketplace from local to regional to national to super regional and global. The impact of technology is directly impacting the financial services industry and the ways to compete. Financial market and approaches to its regulation are rapidly changing. To enable rapid response to these changes it is required effective information technology management (IT-management). Being too far in front or too far behind the technology curve usually proves to be disastrous.

To successfully design and deploy technology strategy in the bank, senior IT management, apart from being trained in purely technical matters, must thoroughly understand the business of banking. The days of technical leadership without an understanding of banking are over.

Information Technologies and Bank Strategy

Role of Information Technologies in Banking

Key Linkages between Banking and Technology

Banks are becoming ever increasingly dependent upon the successful management and deployment of technology to survive in the marketplace. As markets mature and become more competitive, banks typically go through four stages of competition. During each phase, IT plays a critical part in the bank's ability to compete. Table 25 shows the four phases and the impact, which can be derived from successful use of IT.

Table 25 Technology Impact During Each Phase of Competition

Competitive Phase	Impact from Technology
Size / Access of Distribution Network	Use of Automated Teller Machines (ATMs) Payment / Transfer services via phone or PCs Loan processing, FX and several other services may be performed via electronic channels
Product / Services Availability	Quick introduction to market for new products Products can be developed “off-the-shelf” which have been proven winners in other markets Non-traditional services such as management of investment portfolio may be introduced
Pricing	Products and fees may be bundled to meet needs of individual market segments or customers Fees and interest rates may be changed and re-valued dynamically Pricing can be lowered and be more competitive due to efficiencies gained from IT
Service Quality	Universal banking – single teller service 24-hour access to basic bank services Use of Call Centers Significantly reduced queuing and wait time

Additionally, IT is now used in leading banks around the world to provide significant advantages in two other important areas to overall successful bank management

- Risk Management;
- Strategic Planning;
- Accounting and management information systems.

Through the use of techniques such as Data Warehousing and Data Mining, and the development of more sophisticated modeling techniques, the

bank can automate much of the work and document flow of the bank. These efforts can realize significant benefits in each area as follows:

- 1. Risk management
- Management of loan portfolio;
- Audit trails;
- Supervisor and branch manager overrides
- 2. Strategic planning
- Marketing;
- Customer, product, and business line unit profitability analysis;
- Assessing impact of targeted marketing campaigns
- 3. Accounting and management information systems:
- Collecting, processing and storing financial reporting data;
- Management reporting on divisions and institution levels

Linkage to Overall Bank Strategic Planning Process

Given the high degree of linkage between the bank success and its dependence on IT, it is critical that bank management becomes proficient in the area of technology management. The design of the bank's strategic plan and key initiatives needs to incorporate an understanding of the capabilities of IT.

Bank business management who understands IT must lead the Strategic Planning process in the bank. It is no longer possible for the bank's IT strategy to be dictated by technical managers who have little understanding of the critical aspects of banking. Some large Western banks that became enamored with IT and tried to "leapfrog" the maturity of the IT curve. As the result they lost billions of dollars by trying to develop and implement IT which may have been leading-edge in a technical sense, but lacked linkage to the important business values which are critical to make the bank successful. This caused the

expenditure (and subsequent write-off) of hundreds of millions, and sometime billions of dollars! Russian banks can benefit from the mistakes of the West by successfully training bankers in the area of IT and incorporating IT planning into the overall Bank's Strategic Planning process. To do this, they must be aware of how the IT infrastructure is related to bank strategy.

Profiling the Bank in Accordance with Technological Requirements

The strategy of selection IT architecture and choice of particular hardware, software, and telecommunication strategies and components should differ based on several factors:

- size of bank (in assets, number of accounts, number of branches);
- bank direction;
- type of clientele (business, consumer, etc.);
- advertising strategy;
- bank focus: commercial / investment / universal;
- domestic and / or international focus;
- desired IT positioning and branding in marketplace;
- existing IT capabilities in bank;
- financial and risk appetite of senior management team

These factors directly influence many important IT investment and management decisions which should lead to the optimal plans, budgets, and support structures for the bank with regard to IT. Key decisions that are influenced by these characteristics are:

- choice of architecture;
- buy versus build for application systems;
- in-house versus outsourcing;

- choice of tools and methodologies;
- implementation and investment strategy

Information Technology Strategic Planning Process

Overview of IT Strategic Planning Process and Principles

The Information Technology Strategic Planning Process consists of seven basic phases which will be presented below. The phases bring the bank through the process of understanding and linking the bank's strategy and business requirements to branch coordination and the definition and planning of appropriate IT solutions (See Figure 50).

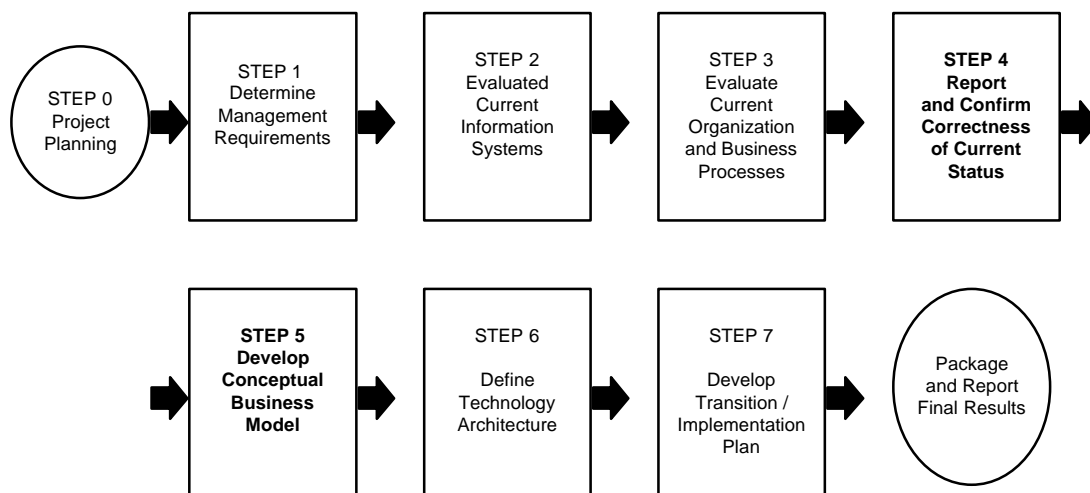


Figure 50 Steps of IT Strategic Planning Process

Following the process does not guarantee success, however. In fact, many plans are ill-conceived at the start or fail in the implementation and ability to capture the expected benefits. In fact, if the bank does not successfully complete the implementation, the bank is often worse off than they were when they started the process because they now have old and new systems in different branched or lines of business which are incompatible, higher cost structures, more errors with reconciliation, etc. than existed with the old system.

It is amazing how often the basic mistakes, which lead to failure, have been repeated around the world and even repeated within the same bank time and time again. Russian banks can avoid these failures if they can successfully follow and adhere to the following key success factors:

1. Function as “Business-Centric” instead of “Technology-Centric” -

The business must drive the technology - not the other way around. Spend more time defining the Business Processes than the supporting technology. Put in place a project sponsor of the process who is a senior banking manager - do not have the lead IT individual lead the process.

2. For the sake of economy, use proven technology instead of leading-edge and unproven technology -

The banks that fail usually do so because they want to be the first to utilize new technology. This usually leads to problems and instability which ultimately lead to the cancellation of the project. Leading edge technology does not influence business success. Innovative design of banking products, services, and processes, which utilize proven technology, does, however, influence business success.

3. Ensure that IT investment yields at least 500% returns for the bank -

If the investment in IT is marginal, it is unlikely to be positive by the time the project is complete due to problems, delays, and reworks. The investment in major IT initiatives should provide at least five times the benefits over the costs.

4. Excellent project management -

IT projects must be well managed using a formal project management tool and methodology. Definable benefits and capabilities need to be delivered at least every six months to keep users satisfied and interested.

5. Do not overly pursue technical excellence -

The pursuit of technical excellence will greatly delay or ultimately stop all projects. You must balance functional delivery with technical excellence. Many IT initiatives forget about delivery business benefit and get caught up in the perfection of technical infrastructure.

By following the above guidelines, your bank can greatly improve the chances of yielding significant benefits from new IT initiatives.

Determination of Management Requirements

Management first needs to define its business vision, and the direction that it going with the bank. A set of high-level requirements should be defined which guides the rest of the exercise in determining if current capabilities exists to support the requirements or if new capabilities need to be developed. The IT department and management and the users should all participate in this process.

Evaluation of Current Information Systems

Current information systems and capabilities need to be assessed to determine the best strategy to move forward. Gaps between requirements defined in the first step of the process and existing capabilities are determined. This step is also critical in defining the starting point for future conversions.

Current Organization and Business Processes Analysis

This step is similar in nature to the last step, but focuses on the people and business processes. A determination is made as to what processes can benefit from re-engineering or automation. Research into what leading banks are doing can act as a guide for identifying which of your processes should be improved.

Review and Confirmation of Correctness of Current Status

Once all of the information has been collected, it should be presented to bank senior management for review and consensus. This is a critical part to ensure that the proposed solutions developed during the next steps of the process support the direction and needs of the bank.

Conceptual Business Model Development

The future business model should be built upon the requirements derived from the bank's overall Strategic Planning process and an understanding of "world-wide" best practices. Bringing in expertise from the outside or visiting world-class banks can help in defining the appropriate Business Model for the bank.

Definition of Technology Architecture

This step maps the business and process requirements to a logical application and technology architecture. An analysis is then made to define and evaluate alternatives for the physical implementation of that architecture.

Implementation Plan Development

Once the target application and technology architecture are defined, plans including budget, resources, and schedules must be developed to move the state of technology and systems from the current to the targets environment. The implementation process (See Figure 50) may take months to several years to complete. All efforts should be made to both phase the delivery of benefits and capabilities, and to complete the entire process as soon as possible. Long implementation times without interim deliverables cause significant problems such as:

- loss of faith of users and management;
- diversion of critical resources;
- duplicate costs and support structures;
- unreliable and unstable banking environment

Most large IT projects have significant time and cost overruns, and this is usually influenced by poor project management. The bank should invest in a

project management system and methodology to help greatly define the plans, and to monitor budgets, plans, and issues in an ongoing manner.

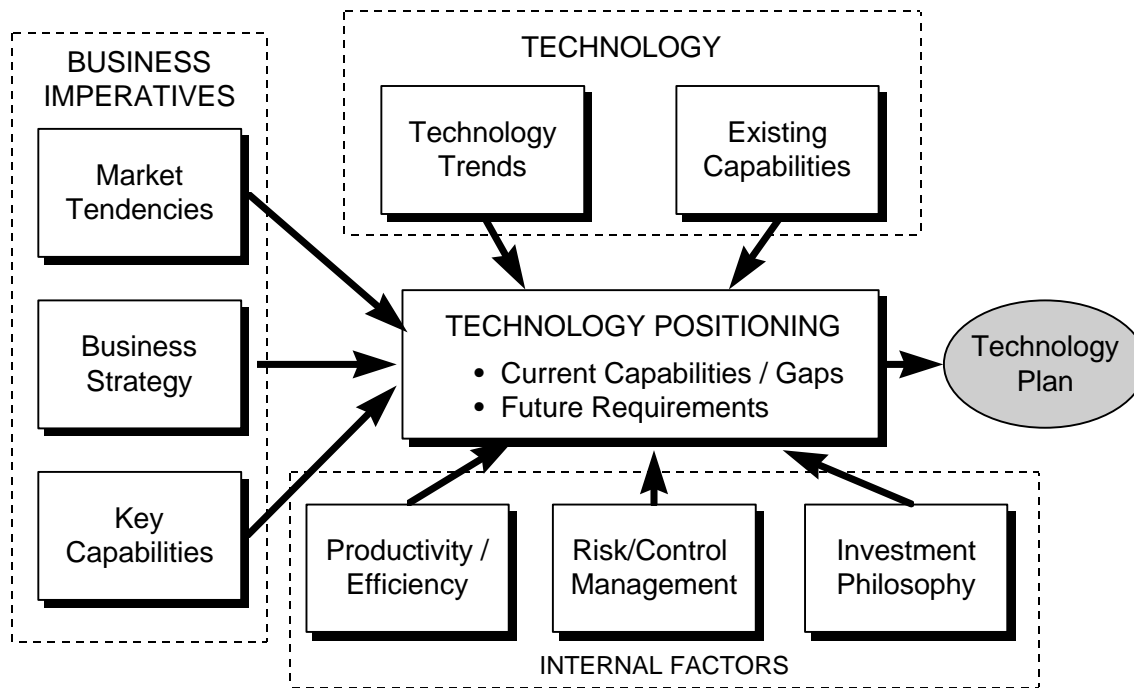


Figure 51 IT Strategic Planning Process

The IT strategic planning process should incorporate not only a consideration of the best technologies available, but must take into account the business imperatives, and the bank's internal factors such as investment philosophy. The IT strategic planning process should be ongoing in the bank. An initial plan should require several, up to six, months of work to develop. Annually, thereafter, the plan will require a couple of months each year to update and keep consistent with the bank's overall strategic plan.

Planning and Evaluating IT Investments

The largest risk that any bank faces results from the fact that not all IT investments produce expected return. The primary cause of this is that most IT decisions for new investment are made by technical management – not bank management – and the new IT initiatives are often not aligned with the key values and needs of the bank. An example of this would be a bank which has a primary goal of increasing the fees generated by international trade services

such as letters of credit, yet is investing heavily in upgrading the hardware in the branch network. Another example is a bank, which has a primary goal of significantly increasing individual deposits, but does not improve the branch customer service. However it is the better branches performance results in increase in these deposits.

In most cases, IT investments should be required to withstand the scrutiny and justification of other investments in the bank and directly tied to shareholder value. If the bank uses some methods of cost / benefit analysis, all IT investments should be run through the analysis.

There are two other important considerations in making investments in IT. The first is the concept of implementation risk. The second is the strategic importance of the IT initiative. Many western banks who have wanted to be the “largest and best” with regards to IT, and who have had deep pockets for IT investment have typically failed to realize anywhere near the value from their investment.

Banks are best positioned to exploit their IT investment if they follow the key success factors identified earlier in the chapter, i.e. use proven technology, resist urge to be the leading IT player in the market, etc. Almost every bank worldwide who has tried to “leapfrog” their competitors by using the latest and great has failed dismally. The banks with very deep pockets have survived, smaller or less capitalized banks have not.

As a general guideline, IT investment should not exceed 10% of non-interest bearing expenses for a bank, and IT employees should not exceed more than 4% of total bank employees. As banks mature and become heavily dependent on IT for success, the number of IT employees as a percentage of total bank employees may reach 6% - 8%, but this is because the higher degree of automation ; and efficiency has significantly reduced the number of total bank employees by:

- eliminating regional offices after the adoption of client-server technologies;

- consolidating back-office operations;
- restructuring head office functions

Thus, the relative increase in the percentage of IT employees reflects the reduction in the number of employees in other functional units. All of these factors should be taken into account when determining the best selection of banking technology architecture.

Management of Implementation Risk

Implementation risk is often overlooked in most IT cost / benefit analyses leading to many good IT ideas, which never get implemented, and therefore, provide no value or benefit whatsoever. There must be a high degree of the probability of success for the IT initiative or it should not be pursued.

To minimize the risk of failure, you should follow the basic guidelines associated with reducing risk:

- Always use well-proven technology which has been implemented in many other banks. Often banks feel that they must be the first to use a new technology and that it will provide them with competitive advantage;. However, 95% of leading edge technologies fail and given the cost and time involved in the failure other set the banks several years behind their competitors.
- Buy well-proven application systems from reputable vendors with a proven track record.
- Design and implement a well-defined technology architecture, which is based upon acceptable world standards and is relatively independent of hardware vendors.
- The process for doing this is presented in Section entitled “Bank Technology Architecture”.

Ensure that well defined IT investment and purchase processes are in place to minimize corruption. The worst technology in banks anywhere in the world are those that have been driven by corrupt decision making and purchasing.

Some IT initiatives are so strategic in nature or necessary for the bank to survive that they must be made. This is particularly true for Russian banks that are facing tremendous challenges from the foreign banks, which provide better services, a wider array of product and service offerings, and have cost advantaged operations and greater efficiencies. Therefore, most Russian banks will need to invest heavily in IT just to survive.

In other similar markets around the world which have gone through rapid deregulation, the foreign banks entering the market have been able to capture up to 50% of the asset base in the country within several years by attracting the most preferable customers in the country. As the result, some major IT programs should conform to the findings of a comprehensive economic analysis. To help in this regard, Russian banks can use a qualitative IT investment model developed by KPMG Barents Group to assist in the evaluation of major IT initiatives of a strategic nature.

IT Qualitative Investment Model

The IT qualitative investment model provides an additional way to evaluate and help ensure that IT investments are yielding strong business value. The approach scores and maps each major IT initiative into one of four categories, and then takes action as recommended in the category (See Figure 52). The approach involves two steps.

In the first step each investment initiative is assigned a score. One should begin with analyzing qualitative benefits of each given initiative (quantifiable benefits in this area of business are usually relatively small).

Table 26. Qualitative Benefits of IT Implementation Initiatives

Potential Benefits	Weighting Factor	Ranking (0 - 4)
Aligns strongly with bank strategy, objectives, or values	15%	Zero rating means that the outcome does not meet the criterion; rating 4 corresponds to a full match
Aligns with management's belief on technology positioning within industry	10%	
Provides a response to competitive initiative	15%	
Is a key success factor (KSF) for major goal	15%	
Can be used to radically improve <ul style="list-style-type: none"> • Management information and understanding • Customer service • Personal productivity throughout the organization 	20%	
Is necessary to re-engineer a major process	15%	
Can significantly improve communications or break down bureaucracy	10%	

This first step also involves the second part that includes cost/risk factors analysis for the initiative.

Table 27 Qualitative Cost / Risk Factors

Scope and / or Risk Value	Weighting Factor	Ranking (0 - 4)
The project can be phased and value ascertained or better defined before committing to continue with the next phase	15%	Zero rating means that the outcome does not meet the criterion; rating 4 corresponds to a full match
A prototype can be developed and used to prove value	25%	
The overall financial commitment is small	25%	
The IS initiative has been financially validated by another bank or institution	25%	
The IS initiative has been well cased as a success in banking or some other industry	10%	

As the result of this step the weighted average for both of the two factors is calculated.

The second step consists in building a matrix for IT initiative evaluation:

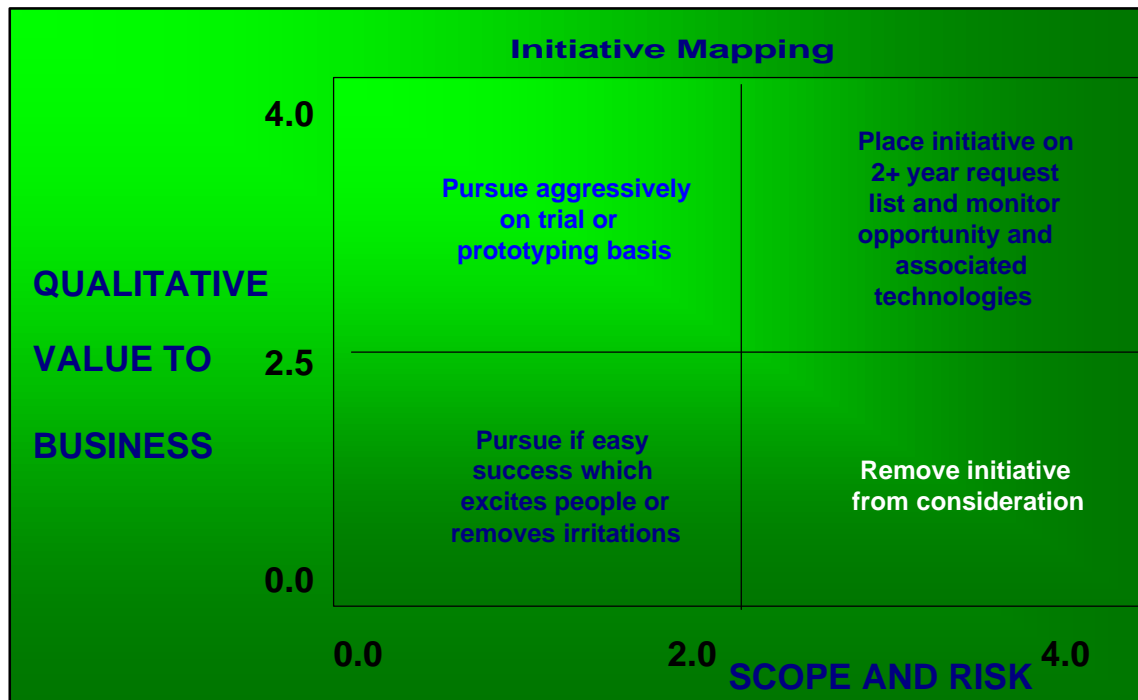


Figure 52 IT Initiative Evaluation Matrix

The purpose of this matrix is to locate the intersection point "F" which represents the resultant of both average benefit and weighted average risk and costs score (Figure 52). This analysis helps define comparative advantages of IT investment options. The IT qualitative investment model can be used independently or in addition to the standard project NPV analysis. In order to be effective, it should be part of the overall IT strategic planning process in the bank.

Putting IT Technology into Practice

Bank Technology Architecture

Increasingly, banks understand the importance and benefits of a well defined IT architecture. The IT definition is comprised of the following:

- IT processes and organization
- Information model

- Application systems
- Hardware platforms
- Telecommunications

A good banking architecture takes time to develop and costs money, without providing any direct benefit. The benefits are realized in the ease of implementation of new functionality and systems, the ease and quickness of maintenance and enhancements, and the lower operating cost structure, which is achievable.

The proper amount of time and effort must be balanced between working on architecture and working on business functionality. A recommended split of effort should be roughly 25% of time and budget on architecture and about 75% of time and budget on business functionality.

As stated previously, the direction of IT architecture and choice of particular hardware, software, and telecommunication strategies and components should be based on several factors, the most critical being the size of the bank (in assets, number of accounts, and number of branches). The following factors should be considered to help match bank's profile and business direction to its required architecture:

1. Bank focus:
 - investment / commercial / universal
 - mass retail / consumer
 - corporate / private consumer
 - domestic and / or international focus
2. Existing IT capabilities in bank.
3. Financial and risk appetite of senior management team.

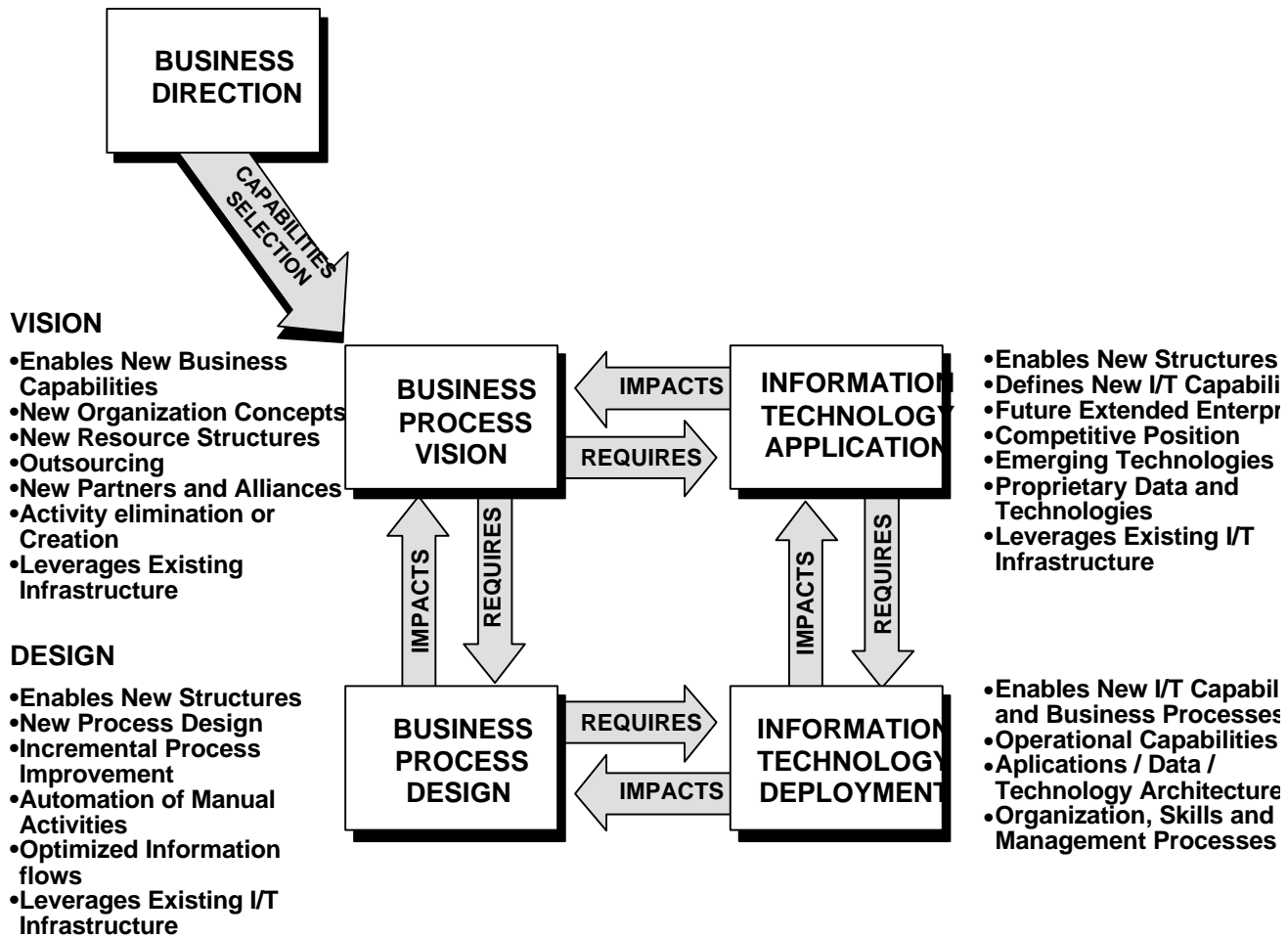


Figure 53 Linkage of Technology to Bank’s Business Direction

Guidelines for Determining Architecture

The choice of the optimal architecture for the bank is a difficult decision that must balance and address many different needs. Often the best architecture is a compromise of many conflicting issues whose balance provides the best overall solution.

Architecture planning is a two step process. The first step is the development of standards and guidelines for hardware, software, data, and communications decisions within a framework, which allows for easy integration of technologies, while taking advantage of new technologies choices while minimizing risks, disruptions, and ongoing costs. The second

step of architecture planning is the determination of specific vendors and machine models, which are optimal. This level of design is called *configuration planning*.

Some basic choices for hardware architectures are as follows: IBM (or plug compatible) mainframes.

Mid-range super servers (IBM's AS/400, Unisys, NCR).
 UNIX mid-range super servers (HP/9000, IBM RS/6000, NCR, DEC).
 Systems, which are based on local area networks: LAN – (using UNIX, Windows/NT, OS/2).
 The basic choices of data and file systems are:
 industrial strength relational DBMS (Oracle, Sybase, SQL Server, Gupta);
 “personal” DBMS systems (FoxPro, Paradox, DBASE);
 operational indexed structures (DL/I, VSAM, B-trieve).
 The basic choices for telecommunication options are as follows:
 frame relay – network;
 high-speed leased lines (HSLL) of 64KB up to T-3 capacity;
 low-speed leased lines (4800 KB up to 56KB);
 dial-up lines.
 The basic choices for telecommunication configurations are as follows:
 wide area network;
 customized or hybrid network;
 local area network ;
 Basic choices for telecommunication protocols are as follows:
 System Data Link Control (SDLC);
 X.25;
 Bysinc;
 Ethernet or Token Ring;
 TCP/IP.

These basics choices are often configured together in a hybrid architecture, which represents the best choice for particular business functions and processes. There are several other potential choices for architecture decision such as considering non-IBM compatible mainframes, but these options should only be considered in extreme situations.

Large banks should choose hardware architecture, which is an IBM mainframe or a super server alternative such as a large HP/9000 or AS/400. This is necessary to ensure adequate performance and service levels for online functions. However, as technology scalability and performance continues to improve dramatically, all but the very largest banks can consider using a super-server for the central processing capabilities.

Moderate and small banks should consider super-server hardware architecture, whereas small or very small banks should consider a LAN-based architecture.

When determining which is the best architecture for a bank, it is important to consider the growth potential for the bank over the next five to seven years, and select architecture accordingly. It is quite expensive disruptive to the bank's business to change architecture later.

The choice of operating systems (such as UNIX or Windows/NT) should be driven based on the choice of major application systems. Other operating choice decisions such as MVS or OS/400 must be made together with the choice of the hardware platform.

IT Architecture and Bank Focus

Bank focus influences application systems. Application systems are usually targeted to specific lines of businesses in a type of bank. For example, retail and wholesale systems differ accordingly.

The biggest difference in processing characteristics between banks occurs as you move from a mass-market retail and consumer focus to a commercial or corporate and wholesale focus. Moving along this focus chain changes both the volume and value of transactions. This means that even if the amount of banking business in monetary value going through a wholesale bank is the same as a retail bank, the retail bank will have many more transactions and require more hardware capacity than for a wholesale bank.

Wholesale banking is built more strongly on relationships and less on technology where retail banking is based more on technology and less on personal service. In general, the more transactions that go through a bank daily, the more computing capacity.

Desired service levels are more a function of banking operations than of technology, but can be influenced by technology. This is particularly true when faster hardware and more online connection through the telecommunication network is available.

If you desire to save time and very fast services levels, you will need to consider fault tolerant processors with RAID Level 5 or 10 disk drives. However, this is usually an overall because most problems, which can impede banking operations are caused by human failure first, with application failure as the second leading cause of downtime. Hardware failure is a very distant third place in terms of problems, which cause interruption of banking services.

IT and the Bank's Image

Many banks around the world aspire to be the most leading edge bank in the marketplace with regard to technology. The cost of being the leader is excessive and provides little competitive differentiation once the market is mature and every bank has good systems and technology. A better goal is to strive to be at technology parity with your competitors.

It is noteworthy that for Russian banks, this principle is not necessarily true precisely because banking market in Russia has not yet taken shape. As the market develops rapidly, finding a niche early in the process is vital for Russian banks. With fewer niches left unoccupied, banks have to rely on IT-intensive products to gain a competitive edge. But this means walking on thin ice: apart from obvious gains that the bank may expect if it succeeds, in the case of developing market is may also face all the aforementioned implementation risks.

Therefore, avoid new or unproven technologies. If the future benefit from such technology is beyond doubt, take proper steps to control and minimize implementation risk.

Existing IT Capabilities in Bank

The IT capabilities which reside within the bank play a very important role in determining which architecture choices to make. For example, supporting an IBM MVS environment is very, very difficult and if you are a new bank, you should consider a much easier environment such as a LAN-UNIX based solution and/or AS/400 environment. These choices require less people and skills to support the technology than does the IBM mainframe platform. When evaluating the correct description of technology architecture, and if the bank already has a large IT staff familiar with the current hardware and operating systems, you should provide strong consideration to utilizing a similar architecture in the future unless the architecture is obsolete or unable to support you into the future.

Having people already familiar with the architecture will greatly reduce training and facilitate faster development of new systems and capabilities. On the contrary, banks with obsolete technology will likely need to completely replace and upgrade their technology.

Financial and Risk Appetite of Senior Management Team

Senior management must have a consistent view of the value of IT in the bank, how much they are willing to spend on IT, and where they want to be positioned in the marketplace with regard to IT.

As a starting position, extremely large banks are usually forced to consider IBM mainframe architecture. Most moderate-sized banks should look to either the IBM AS/400 or a super-server UNIX environment (HP/9000, for example). Smaller banks should look to a LAN-UNIX based solution. The

branch networks should consider using a Graphical User Interface (GUI) model based on Windows/NT, OS/2, or UNIX X-Terminal standards.

The specific choice of hardware vendors should be made based on local access and support and the global reputation, track record, and stability of the vendor as a long-term partner for the bank.

Centralized, Distributed, and Client-Server Architectures

Much has been written about the advantages of pursuing a client-server architecture, and many of the advantages are true. However, the costs of building such systems are proving to be 3 - 6 times that of building centralized systems with the same functionality. This is due primarily to technical problems and training costs associated with the new technology sets and tools. The cost of developing client-server systems will drop over the next decade as tools and skills become more prevalent. However, banks cannot wait that long to get their technology in shape.

Most banks should look to purchase a viable and comprehensive commercially available package for their core banking systems - and not build core systems. Most of these core systems now support partially or fully implemented client-server architectures. When evaluating core systems (accounting, deposit products, loans, etc.) it is best to review and evaluate the amount of client-server capability the system has. A map for determining this is presented in Figure 54.

All good commercially available packages are at least at the “distributed function” or “remote data management” stage of development.

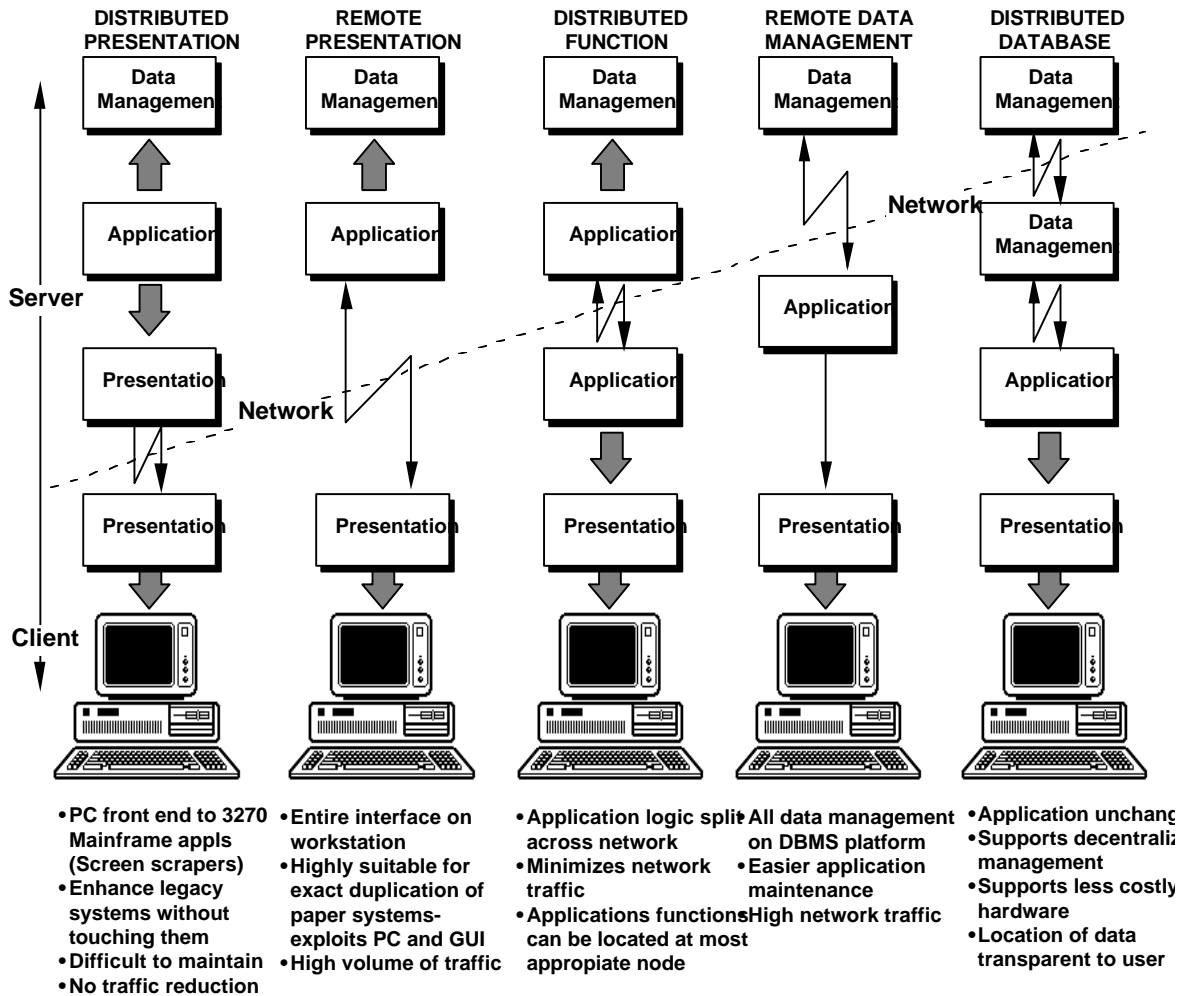


Figure 54 Client-server Capability Evaluation

Telecommunications Architecture

The telecommunications capabilities in Russia have evolved greatly over the last several years and allow for complete WAN development. Given the best balance between cost, speed, and reliability we believe that most Russian banks should consider going with an X.25 network utilizing the TCP/IP as the WAN backbone with branch LANs based on Ethernet. Optical trunk lines of very high speed may be used to connect major geographical regions to head office and each other.

To provide higher reliability, the bank should consider triangular routing of lines between major geographical locations (instead of a star network with

each line having a dedicated backup), and using dial backup modems for the branches and regional offices. This way the systems should be available a very high percentage of the time without investing significantly to provide dedicated backup.

Determining the optimal topology for the network is a very complicated process and demands a good understanding of the costs and tariffs in the Russian marketplace. It is recommended to hire a good telecommunication consultant to help design the details of the overall strategy.

Banks are increasingly using public telecommunications networks to build corporate distributed networks. This is a reversal of the earlier trend towards creating physically independent, closed lines.

Information Architecture

The information architecture of the bank is often determined by the choice of application systems and the underlying data support structures that are supported by the systems. However, with the greatly declining cost of disk and processing units, and the increased need for up-to-date information on clients, profitability, etc., almost all banks now use industry-strength relational data-base management systems for the bulk of their informational needs.

Operational and transactional systems may or may not use the same databases, or may use an indexed file structure to improve cost-performance and then copy the information as scheduled to a relational database for informational processing. In many cases such mixed architectures results from the fact that, in modernizing their IT's, banks only partially adopted relational DBMS (data base management system) while preserving some older indexed file structure.

While the cost of the industrial-strength data base management systems such as Oracle, Sybase, Informix, etc. are expensive, they are well worth the investment in terms of the value of information that can be analyzed. The

definition of the overall architecture should be based upon available and proven technology, which follows industry-accepted standards. It should also reflect the organizational and control structure of the bank. For example, if the bank has a very high degree of centralized planning and control the IT architecture should be more centralized, whereas if the planning and decision making occurs in the branches, then a distributed system may be better suited for the bank.

Further the technology architecture should not be finalized until the selection of an application system direction has been put in place. While good architecture is important to the bank's success, it is not as critical as good application system functionality. If the architecture is finalized first (which is a tendency in many Russian banks since hardware is more concrete and understandable than is software), it may eliminate from consideration very suitable application systems. The bank should follow an interactive process as defined below to finalize both the choice of an application system and the definition of the technology architecture (See Figure 55).

As can be seen, the determination of the Technology Architecture should be greatly influenced by the selection of the application system direction.

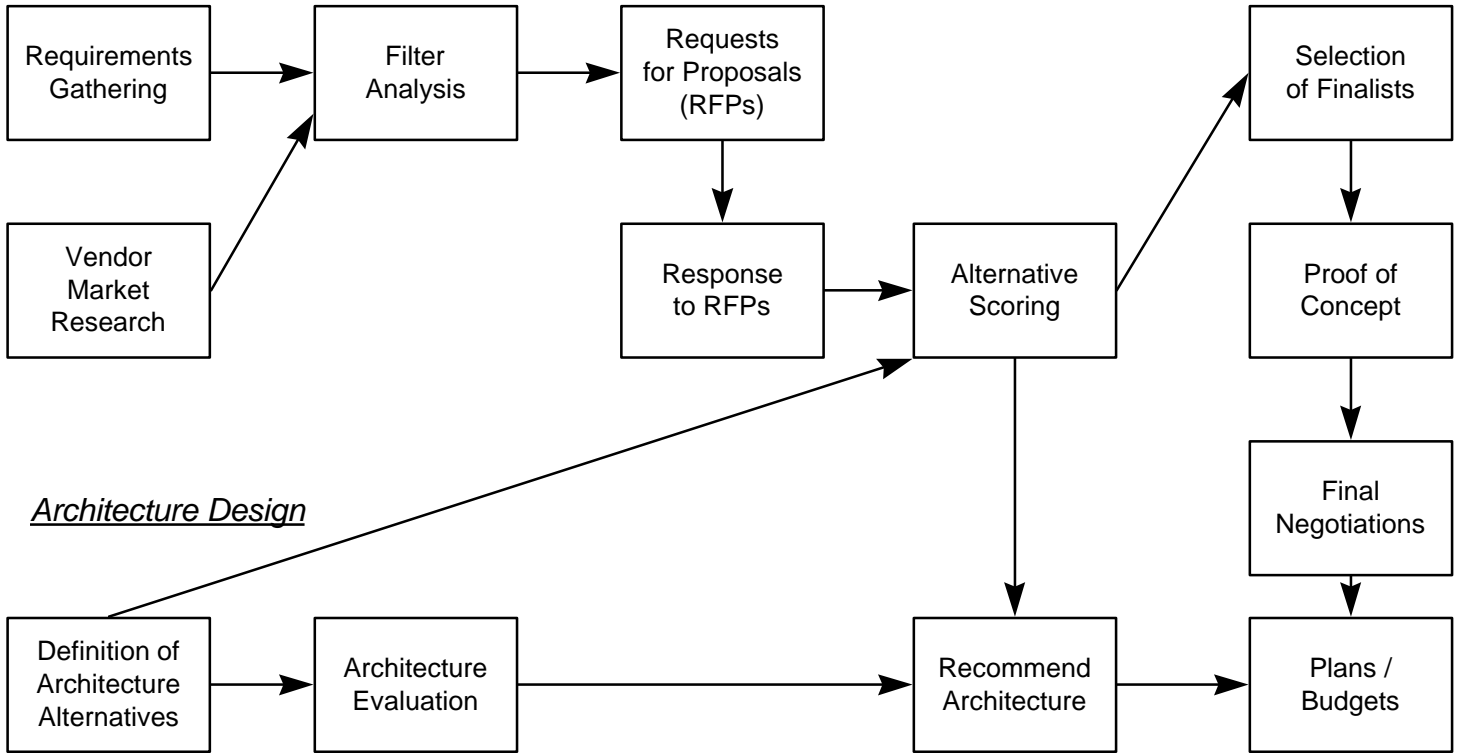
System Analysis

Figure 55. Technology Architecture Definition as Interactive Process

Application System Development

Determining how to evolve application systems is often one of the largest challenges that any foreign bank has. Applications in banks were often developed 10 - 20 years earlier and utilize obsolete technology which is both expensive to maintain and problematic to change. This makes it very difficult to respond to the needs of today's market. Additionally, application systems typically were developed to support individual products while today maintain they are necessary to maintain a product focus. This can make it difficult to understand a customer's profile with the bank. Banks are now finding it critical to understand and service customers – not products, and old application systems hinder this.

The bank is faced with a difficult decision of trying to maintain and improve old systems versus considering a wholesale replacement of application system - a time consuming and expensive project.

Surprisingly, this concerns Russian banks as well, however young they may be. The reason is that most applications they currently use were designed a few years ago with less-than-perfect tools, and were often associated with personal DBMS. Those older systems no longer meet the ever-growing needs.

Buy versus Build

In most cases the decision to buy or build is becoming easier. Almost 85% of the largest US banks now have purchased system instead of in-house developed ones. The replacement of in-house developed systems are usually made for the following reasons:

Table 28. Options Evaluation for Introducing New Banking Systems

Risks / Limitations of In-house Enhancement / Replacement	Advantages of a Purchased Package
Product-oriented packages make customer relationship management difficult	Completeness of product functionality as required for leading banks around the world
Linking products would be time-consuming, costly, and difficult to maintain and keep current	Ability to introduce / enhance products and services quickly with little or no programming
Re-engineering is often strained by limited system functionality and flexibility	Integrated product, client, and accounting information leading to robust MIS.
Complex enhancements such as multi-currency and IAS accounting standards would be extremely difficult and risky to introduce	Easy integration with other popular packages for credit cards, wholesale, trade, and delivery channels such as ATMs, home PC, phone, and Internet banking
User interfaces are often difficult to use and tiresome	Ability to more easily keep pace with regulatory changes and technology trends
Isolated, fragmented systems compromise data integrity	

Commercially-available banking systems are much more mature than for other industries, and as global markets and universal banking trends have matures, there have evolved several excellent banking system vendors who can become strong partners with the bank moving forward.

There are also poorly run companies out there with “vaporware” packages, which can lead the bank into bankruptcy. Therefore, the bank needs to use a proven process to perform due diligence on the packages and the vendors. It is also a good idea to consider the use of an external consulting expert with proven experience in selecting and implementing these systems.

The following options are available to Russian banks:

- purchase a Russian-made system;
- purchase in imported system;
- purchase a mixed system;
- design from scratch;
- use the existing system.

If the bank decides to buy a Russian-made system, it should only chose from market-proven products to avoid the recurrent problem. The choice is limited, however, and implementation costs for the period of installation and the first two years of maintenance total between \$500,000 and \$1,500,000. Which means that quality systems designed in Russia are almost as costly as those imported from the West. This option gives banks a fairly complete set of user functions and the capacity to respond to changing CBR requirements as regards accounting and reporting procedures. This is one of the best choices a bank can make.

The choice of systems imported from the West creates has the following major shortcomings:

- 1) high purchase cost;
- 2) little or no conformity with Russian accounting and reporting procedures, responsiveness to changes in CBR regulations is unlikely;
- 3) higher maintenance cost;
- 4) most western banking systems require expensive computers, which are very different from those used by Russian banks - PS (mostly), Sun (to some extent) and HP (rarely); this will entail extra maintenance costs.

This option, while being the most expensive, will still require substantial effort (in terms of labor and money) on the part of the bank to adapt the system to Russian environment. Advantages include well-designed international

banking functions, added respectability (in the eyes of international auditors), and experience of work with state-of-the-art banking technology.

Unfortunately, the market currently offers no acceptable compromise – a system that would combine sufficient reliability, multiple installation capacity and good database support. Hopefully, a well-established software developer will soon find a way to combine the merits of Russian and western programs in a convenient "hybrid" product.

Designing systems from scratch is perhaps the worst choice even for large banks, let alone medium ones. The market for such systems is already highly segmented. A bank trying to develop its own system will, on the one hand, will face competition from software producers with strong market positions - building such a system should not cost more than purchasing a commercially available product. On the other hand, the bank will enter unusual business, which inevitably leads to unproductive use of its IT division capacity.

Creating a system within a bank is more or less justifiable if:

- 1) there is a team that has experience designing banking systems;
- 2) the system is future-oriented - that is, involves modern client-server technology, features electronic document flow, automatically generates transactions (entries), and is responsive to changes in document, transaction and reporting forms;
- 3) a prototype is already in place that can be finalized and adapted to specific bank needs.

If all of these conditions are met, the bank can save substantial amount of time and money while obtaining an up-to-date system fully attuned to its business needs.

Commercial Package Evaluation Process

Every bank should use a proven process to better ensure the appropriate selection and successful implementation of vendor package.

KPMG Barents Group uses the following types of methodologies to validate the selection process that are shown in

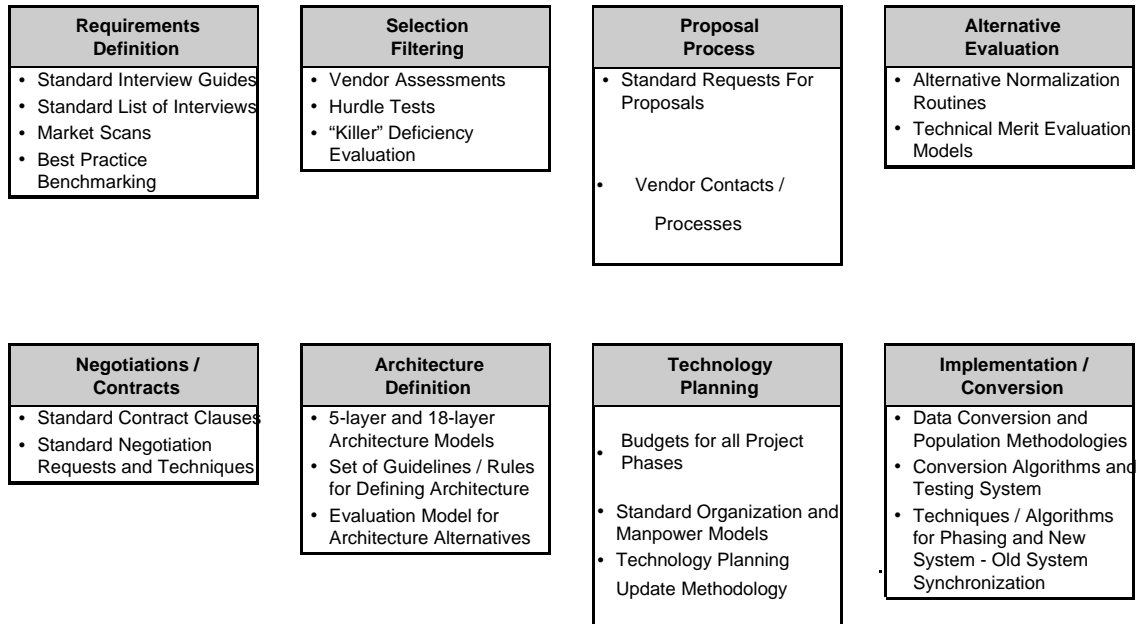


Figure 56 Methodologies to Validate IT Implementation Process

There are hundreds of potential vendor packages available, and it is a very costly (and mostly useless) process to perform due diligence on them all. Therefore, it is most practical to filter out many packages by using an initial analysis, which eliminates packages from consideration due to major flaws or deficiencies. Also, profiling the bank, in accordance with basic principals described in this chapter, you can quickly get to a step that involves serious evaluation of just four to five packages most suitable for your environment.

Once that process is complete, you should issues the *request for proposal*.

Managing the IT Function

IT Department Organization Structure

The organization structure to support a bank should be determined by bank line of business. During the last decade, more banks have been deploying

functional analysts in the line of business area of the bank with great success. In this way, the analyst is actively involved in understanding the requirements of the bank and pro-actively involved in designing banking solutions. This type of relationship has proven to yield higher quality systems, which more directly match user's needs than the old process of having the user design the functional specifications while the technical people design the technical specifications.

This Figure 57 represents a sample organization for a bank's IT function as related to its line of business.

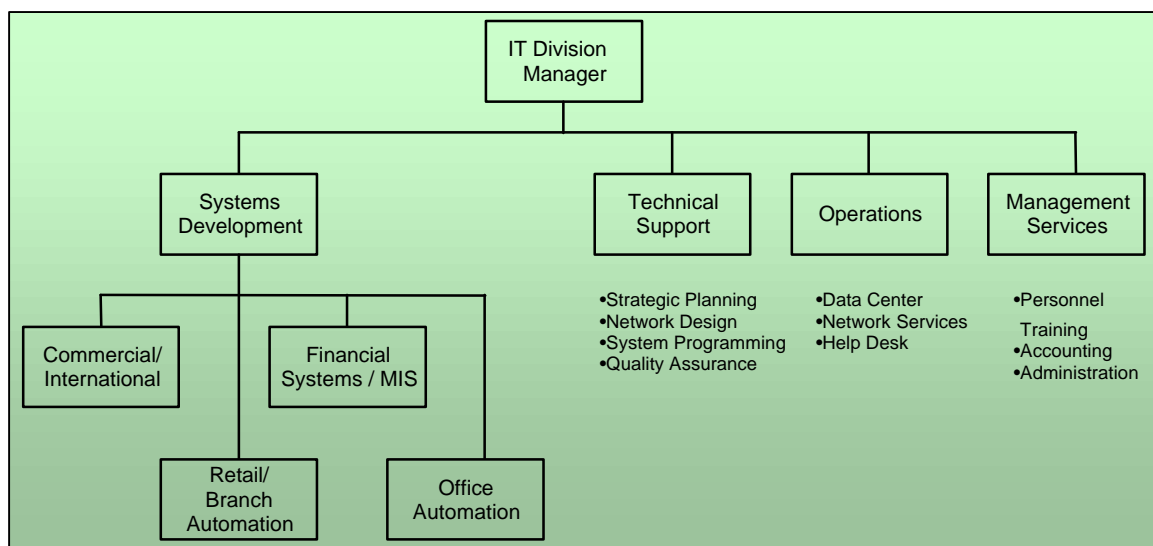


Figure 57. A Sample Organization for a Bank's IT Function

While good organization structure better aligns resources and can improve efficiencies and management span of control, the critical component of an effective IT organization is to identify, hire and retain good people!

Technology Management Processes

The management of the IT function involves planning, operational, and control functions to keep everything working as well as possible. As much as possible, the bank should establish key performance indicators to target and monitor performance within the IT function for:

- reliability;
- service levels;
- project management;
- unit costs;
- controls and security

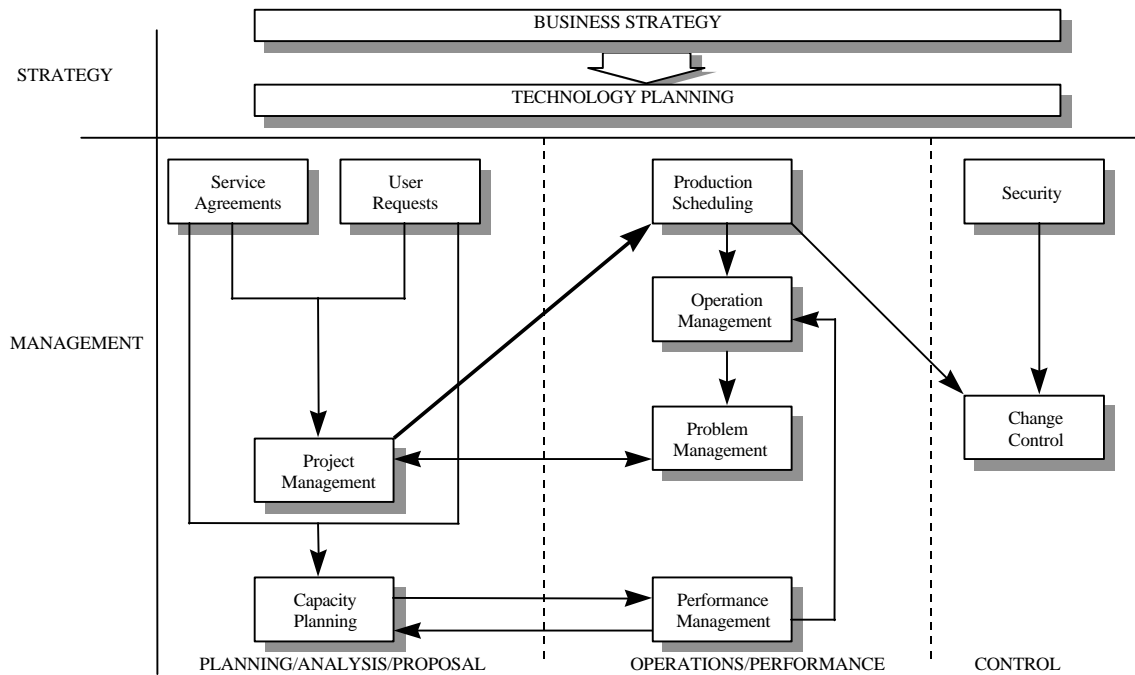


Figure 58. IT Management System

Once the monitoring system is put in place, the bank needs to establish a set of management systems to manage the IT function. A comprehensive set of IT management processes is shown in Figure 58. These processes will differ by bank, but basically need to be in place to ensure the proper management of the IT function. Without these processes, the IT function is usually less effectively managed leading to unreliability, lack of controls, and major project initiatives which are above budget and delayed.

On the other hand management of the IT function according to sound management principles should enable bank to derive the expected benefits and value the IT group should be delivering.

Developing a Modern Automated Banking System

Principles of Client-Server ABS Design

The need to adopt new automatic; settlement systems is now increasingly recognized by most banks. In response to this challenging trend in banking business, nearly all major banking software developers are already supplying their client-server automated banking systems (ABS) products to customers or have at least announced prompt release of such products. The technology in question is just one of possible ways to build data processing systems with adequate capacity. Unless a conceptual framework for the client-server type banking system is in place, certain developers will (and some of them did) regretfully find their new systems to be even worse than older ones.

Within the banking business, automation ; is proceeding along the two main lines:

- electronic payment systems that supports transfers and executes payments, and
- ABS proper that supports bank operation and accounting transactions.

We will now briefly outline a conceptual framework for an automated banking system based on the client-server technology and heavily relying on telecommunication, electronic document flow and smart cards. This conceptual framework is a prerequisite for consistently building an ABS that meets current requirements.

System design uses the following concepts:

- Document, generally understood as an authorized banking information carrier capable of generating automatic banking transaction processes (particularly, transactions entry and generation of other documents). Description of a single step in document

processing will include, among other things, an on-screen document form as well as respective processing algorithms. The form may change throughout processing because, for example, different processing steps require filling in different fields of the document.

- Electronic document flow system defined as the environment that enables the bank to generate, modify and exchange electronic documents both internally and with clients, branches, banks or settlement (payment) systems.
- Dynamically structured ABS user workplace defined as user address (name) with the designated document sets, processing steps and available options.
- Distributed servers for sharable, collectively generated internal databases (they particularly include documents, transactions (entries), accounts, procedures and triggers for database generation and integrity control).
- Bank/branch transaction day realized as the core (server) of the banking system and other banking automation subsystems, transformed into uniform applications (clients) processing relevant types of documents.
- Microprocessor card as an instrument of electronic document authorization;; and account verification.

An automated banking system should follow some basic principles listed below:

Dynamic user workplace principle. An ABS user workplace is dynamically structured (tuned) and is defined as user address (name) with the designated document sets, processing steps and available options. The user can access the system through any of the connected computers by entering his name and can then work with designated documents. If the set of documents assigned to the particular user or the whole division/unit is modified, the

workplace is readjusted accordingly. In other words, all the dynamic workplaces within the system are tuned both prior to system operation and during operation as needed. Each individual (or group/unit) identifier is assigned specific documents and processing steps.

Internal electronic document flow principle. The bank's electronic document flow system is an application environment for generating, modifying and transmitting electronic documents by means of telecommunication; it works within the bank but also connects the bank with its clients, branches, other banks and settlement (payment) systems. To follow this principle means that all incoming documents must go into the electronic document flow system and be processed, received and transmitted through the same system by other bank applications. The system itself can use external networks - such as SPRINT, Internet or BANKIR (the network of the Russian Central Bank that currently is under construction) – for global communication.

On-line plus off-line principle. The on-line method allows of real time document processing (transaction entry), as documents automatically generate transactions; while with the off-line method, documents are processed independently, transactions being generated at user workplace and sent afterwards to the transaction day core for account entry. To follow this principle means that the user workplace can be dynamically tuned (depending on the accessibility of the transaction day core and the account database server) to any of the above two methods.

Unique document identification principle. The use of a unique document identification (making book entries) system (that also applies to remotely generated documents) makes it possible to identify and analyze transactions based on any such document and see how they affect account status. Document identifiers are part of the information describing all transactions initiated by respective documents.

System component integration principle. System components – distributed core (SQL-servers of internal databases with triggers and account

administration procedures), user workplaces (client applications for document processing) and the electronic document flow system (moving documents between workplaces and databases) - must be integrated as much as possible. This means, in particular, that:

- A document travelling between two workplaces goes either directly to the target workplace (remaining in the local network) or to the electronic document flow system which can deliver it to any address however distant; the choice is made automatically and depends on the target workplace location.
- The electronic document flow system routes electronic documents of any type (including clients' payment orders) in a standardized manner within the bank-client environment. It channels documents automatically created by the banking system core (such as account statements), smart card transactions generated by a retail terminal, and electronic documents imported from outside systems like SWIFT.
- Client applications represent uniform software shell, which can be tuned to specific document forms and uses standard methods for exchanges with the core and the electronic document flow system.

Basic entities. The system discussed here incorporates the following main entries: document, user identifier, user address, account, transaction, and microprocessor card. Each of them is briefly described below.

The document is defined by its processing route (sequence) and the set of on-screen forms with relevant processing algorithms for every step.

User identifier defines access rights of the particular user. Identification is either through a password directly requested by the system or through a microprocessor card, in which case the user may be required to enter the PIN.

User address locates the individual user within a geographically dispersed banking system. Each particular address may relate to any other address as "local" (of the same local network) or "global" (physically distant).

Account - account status and history data are stored in the database SQL-server and can only be changed by way of server triggers and procedures; this helps maintain database integrity and safeguards accounts against client applications.

Transaction is understood as a sequenced chain of entries plus certain account-modifying data, related to a single step of document routing; a transaction is generated automatically as the document reaches the respective step, and is executed (entered) subject to the following conditions:

- all the entries that constitute the given transaction have been delivered to the system core (they may have been completed off-line at a remote workplace);
- the date for the given transaction (as indicated in the document) had ensued (deferred entry case);
- a general, logical condition, related to the given transaction and specified while shaping (tuning) the respective document, is met. One example of such a general condition may be transaction authorization;; by the unit chief (using a personal password or access card) in case of any given sum exceeding a certain limit.

Microprocessor card is an instrument for system user identification and authorization of non-standard electronic payment documents. This card protects the payment document with an electronic signature, while the recipient can make sure that the document (payment order, retail trading transaction, etc.) was indeed drawn up by the sender and was not changed without proper authorization. Uniqueness is the principal advantage of the card as a means of authentication, as compared to the password, which can be read from keyboard or otherwise copied.

Figure 59 illustrates structural design of the system, which includes the basic elements of ABS.

System Security

Individual workplaces, communication lines, databases and documents should normally be protected using standard firmware and hardware security devices. Such devices are installed in the recommended software products and operational systems listed below. Additional protection may be attained by using security algorithms developed by the bank together with (but not as an alternative to) standard security tools. All user-generated documents are electronically signed using the smart card. The electronic signature guarantees document integrity and authenticity. Cards with a scheme-programmed algorithm offer even higher system security.

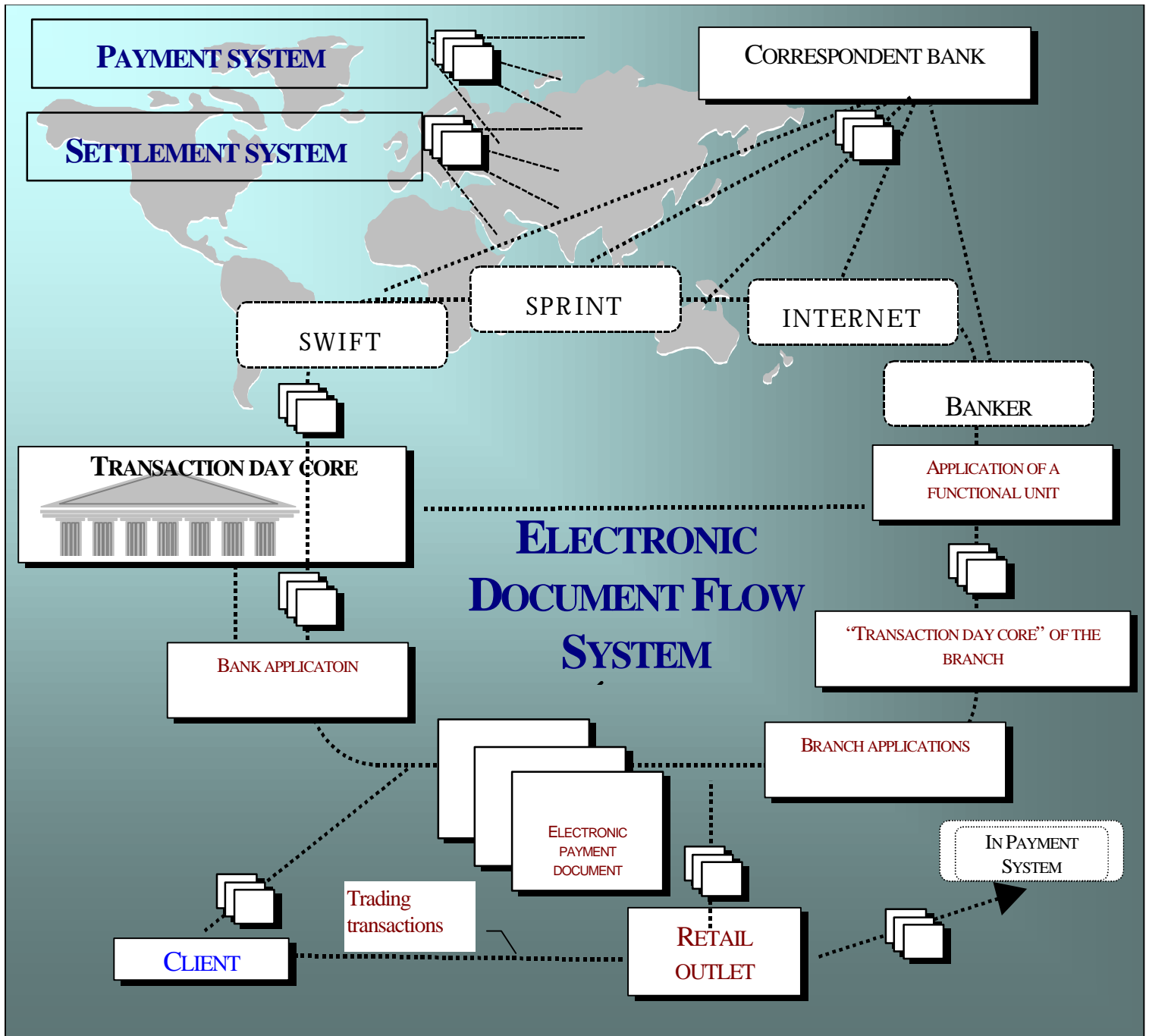


Figure 59. Structural Pattern of an Electronic Document Flow System

Hardware/software Mix

This is an overview of hardware and software tools that we would recommend as most efficient for the purpose of banking system development. Efficiency is understood here as a manifold criterion, which requires that the

product should ideally feature high processing power, reasonable price, reliable support and long-term prospective. It should be noted that these recommendations reflect the author's personal preferences, and the range of efficient hardware and software products is in fact much wider. The hardware/software mix described here is already used (as a whole or in part) by some developers and banks in designing automated banking systems.

Databases may use the Microsoft SQL Server operated from Windows NT, or the Sybase SQL Server operated from Windows/NT or Solaris, depending on the hardware type. The recommended choice for database server computer is the powerful Compaq server or the SUN server (for Sybase SQL Server). PC computers on the client side should support Windows applications.

Client user software can be created in the Windows 95 environment using PowerSoft's PowerBuilder product. Certain Microsoft products, such as Visual FoxPro or Visual Basic, are also the choices. Agroprombank was among the first Russian banks to initiate its own client-server banking system using Sybase SQL Server and PowerSoft PowerBuilder.

Introducing smart cards that meet internationally shared specifications as payment and/or identification cards will take some time. Meanwhile, banks can use PCOS microprocessor cards supplied by GEMPLUS. As regards telecommunication environment for core electronic document flow systems, Lotus Notes seems the best choice for now. Although the underlying approach taken by Notes developers – restricted script and a limited-scope database management system – does not look very productive, given the obvious advantages, the product faces no competition.

One would naturally envision an advanced communication software product that would adequately communicate (even remotely) with an external database such as Microsoft SQL Server; program electronic document forms and processing sequences with Microsoft Visual Basic; and be supported by a communication server as powerful as that of Lotus Notes. Availability of such a product would allow of higher system integration using fewer development

tools. One promising project developed along these lines is Microsoft Exchange. Lotus Notes is also developing in a similar direction.

Electronic Banking Services and Bank Development Strategies

Electronic Banking Services as Means of Bank's Survival

Development Trends in Electronic Banking Services

The ongoing development of global computer networks and banking technologies has triggered a rapid expansion of the electronic banking sector. Taking advantage of recent breakthroughs in electronic banking, financial and trading companies, as well as IT manufacturers, have joined the competition, thus making the market for electronic banking services even more volatile. As many trustworthy studies predict, emerging capabilities for remote retail banking will soon reduce the number of banks. In the United Kingdom, about 70,000 jobs in the banking sector became redundant and thousands of branches were closed over the past five years. The only way to stay in business is to build an infrastructure for electronic banking. Thus, a large British commercial bank has a "telephone affiliate" (providing client services over the phone) whose clientele grows by more than 10,000 every month, most of the new clients switching from other banks. Some experts believe that banks have less than five years to secure themselves a niche on the electronic banking market. The anticipated advent of "electronic money" within two years is becoming a reality. Electronic banking services are being introduced in the West on a mass scale. Combining these with plastic card electronic trading, the most ambitious market participants are now introducing a full range of electronic services that enable clients to select, buy and sell goods or services, manage their bank accounts and keep personal financial records, all with a single PC and a

modem. In the U.S., more than 300,000 clients prefer to pay their bills using their home PS's.

Important technological breakthroughs – such as microprocessor plastic cards with a scheme-programmed electronic signature algorithm, as well as advanced telecommunications, primarily global Internet expansion – have stepped up the development of the market for electronic services. Alarmed by this trend makes large western banks and industrial companies are making efforts to conquer the emerging market.

A leading U.S. software supplier, who recently made an attempt to buy the company that created a popular personal finance management program, recognized the value of the existing service infrastructure and clearing system. It is believed that the company in question (viewed as the market leader) is capable of snatching clientele from banks. The U.S. Ministry of Justice outlawed the merger as violating anti-trust law. The company has ever since introduced an alternative software product and is encouraging banks to use it for home banking services. It has eight partner banks, some of them in the process of developing home banking facilities using Internet. However, software developers will soon face competition from banks themselves. Two major U.S. banks have invested in their own software product for electronic banking in New York City and are building an electronic money system. Other countries are also introducing electronic banking services. One example is a British project to replace cash in transactions with an "electronic wallet" microprocessor card. User rights have been purchased by a leading British bank (to operate the new payments system in some Asian countries) and two major Canadian banks. A similar EU project is planned to circulate electronic money throughout Europe.

Not all attempts to introduce electronic banking are success stories. "Electronic banking kiosks" failed in France, where clients prefer traditional banking services. In Saudi Arabia, the project to install "intellectual telephones" (which are used to manage personal bank accounts from home)

produced an unexpected result. The innovation was much favored by women, who are not supposed (by virtue of local custom) to visit banks, while men still prefer to go to bank personally – to do business, but also to chat with bank staff and with each other.

Electronic Banking Services Offered by Russian Banks

At present, electronic banking mostly covers the types of settlements, which are listed below.

Inter-bank and Interbranch Settlements

This type of settlements is supported by specialized telecommunication systems (such as SWIFT), as well as by general-purpose global networks (SPRINT and, more recently, Internet). Some banks use their own telecommunication products (the so-called "modem links") with no external compatibility and no capacity for large-scale operations.

Prompt Services in "Client-bank" System

Exchanging current payment documents with the bank without leaving your office is an attractive option; an increasing number of banks have included this service in their standard package. There is still little congruence among them in hardware and software used. There are no consistent standards for payment documents format, no secured communications protocols, no uniform software to support those functions.

Plastic Card Payments

The turbulent increase in the use of plastic cards in many countries has been due to the obvious advantage of accessing your money in a bank account when you need it most - that is, when you buy goods or services.

The advent of payment cards has substantially broadened the market for retail banking services and allowed banks to automate such services. The earlier magnetic stripe card was initially used for making purchases or obtaining cash. The new microprocessor technology has created more uses, such as remote account management, and serves as an electronic substitute for cash. The following types of payment cards deserve a more detailed discussion.

"Electronic Wallet" Card

The card's microchip keeps the balance – the amount, which is currently "in the wallet". Payments are made through off-line terminals located at the site of transaction. This type of card implements the electronic cash model. A phone card is a simplified "electronic wallet". Full-scale implementation of this system allows the customer to recharge the card and transfer funds directly to the seller's card. One example of this model is the Mondex project in the U.K.

Identification Card

This card contains user identification data that link it to the bank account. The card holder authorizes the transaction by entering the PIN. The transaction, which is accomplished by a special terminal, is preceded by on-line account authorization; by the bank or a designated company. The on-line connection can be made through public X.25 networks (like SPRINT) or specialized payment system networks (like VisaNet). IT suppliers are actively developing new facilities that will use Internet for on-line authorization of accounts (for plastic card holders) and for safe forwarding of documents with information on the transactions accomplished. In principle, it is not absolutely necessary to process the identification card, as a physical representative of the account holder, for on-line transactions. The customer may be identified by the PIN. The card is used for additional safety. Its principal advantage over PIN is that counterfeiting a card is technically difficult (in fact, almost impossible if it carries a microprocessor), while a personal code can easily be copied or spied.

This family of cards includes any international magnetic stripe payment card with which the account owner can be identified with some degree of certainty.

Identification Card Plus "Electronic Wallet"

This is a dual function microprocessor card. The "electronic wallet" balance is kept consistent with account status, with the account being identified by the card itself. This approach permits to accomplish transactions (not exceeding the balance) in the off-line mode, that is, without on-line account authorization by the bank. Transaction information is subsequently delivered through telecommunication network to the bank that issued the card (or to a certain settlement center) for the purpose of settlement. Nearly all nationwide Russian payment systems that use microprocessor cards are based on this technology.

Virtually every remote account management functions are available to the user who has an identification card with a scheme-programmed electronic signature algorithm. He can create electronic payment documents on a PC and validate them with the electronic signature installed in the card. Payment is guaranteed if the card combines identification function with "electronic wallet" (the amount of transaction, as stated in the payment document, will not exceed the balance).

Internet Development and its Effect on the Evolution of Banking

The development of public telecommunication networks increasingly affects the direction of banking services evolution. The most spectacular example is, of course, the fast-growing Internet which provides unlimited access to telecommunication services. It is turning into a global information superhighway with an ever-expanding package of services. This process was sped up by the Worldwide Web (WWW) technology, which simplified both provision and consumption of information services. Internet is now offering financial and banking services. In particular, a leading German bank, with the

help of its contractor, has developed exclusive electronic payment technology designed specifically for Internet and is about to offer its clients electronic banking services via Internet. Examples like this are becoming increasingly frequent. High exposure to fraud or unauthorized access has been the main disadvantage of Internet restricting its usability as environment for rendering financial services. However, some successful attempts have been made to overcome this difficulty.

There are plans to build a system for safe transactions through Internet. New WWW servers introduced recently provide a protected on-line user channel. Banks are likely to respond by offering electronic services via Internet. It is natural to expect a number of new, purely electronic banks whose clientele would be confined to Internet users. The first projects of this kind were welcomed by the press but, quite naturally, were faced with skepticism by government officials who argue that such firms do not even meet standards to be called banks. Companies that pioneered credit card Internet banking are expanding their business very quickly. Today, any international credit card holder can register through Internet to buy and sell information-related goods. A full package of banking services will not be available through Internet until the safe data transmission problem is solved. Nevertheless, the results are amazing.

As electronic banks enter the market, they will offer strong competition to more traditional credit institutions. Apart from greater convenience and shorter transaction times, Internet electronic banking will feature cross-boundary capability, an important advantage created by the very nature of the global network. It means that, unlike physical commodities, information exchanges across national borders cannot be kept under control (still information is a commodity in the sense that it has a price). This is why it is extremely difficult to keep track of any services rendered through Internet.

In case of specialized electronic banks within Internet it would be equally problematic to supervise transactions if the bank and the client are not residents

of the same country; especially so if settlements are made in "e-money" - quasi-monetary units not officially recognized as currency but having an exchange rate. Experiments with e-money are well under way in the Internet world. Features such as account management from home or office (using especially designed software), including payment of bills or contract liabilities, have passed the pilot stage and are now part of the standard services package. While earlier versions carried telecommunication functions off-line, the most recent ones are integrated into Internet.

These developments clearly indicate an imminent expansion of Internet banking business. Russian banks must act quickly to get prepared to the forthcoming era of electronic banking. Foreign competition on the emergent market is already mounting. A large (in fact, unidentifiable) number of Russian residents possess international plastic cards of foreign issue and can easily open and manage (via fax or modem) accounts with foreign banks, which means that foreign banks have long been winning over clients in Russia. Making it illegal for Russian residents to open accounts with foreign banks may somewhat temper this competitive pressure, but not eliminate it. Revolutionized communications infrastructure and the global expansion of Internet have put Russian banks in a tough position where they face a tough choice: either join competition on the full-scale electronic banking market with Russian and foreign banks, or eventually lose clientele. Their chances will be better if their moves are coordinated at least technologically, if not institutionally. This coordination calls for CBR involvement. To stimulate the development of electronic banking in Russia, quite a number of tasks must be accomplished, in particular:

- develop technical standards for electronic payment document formats, including format for plastic card transactions;
- develop technical standards for communications protocols that enable transmission of electronic payment documents and permit

direct access to bank account, while relying on public networks as much as possible;

- develop technical standards for terminal equipment and microprocessor cards;
- develop standards for electronic signature and cryptographic channel security;
- develop legislation legalizing and regulating electronic banking transactions through telecommunications networks, as well as the use of electronic payment documents and electronic signature.

The CBR should elaborate an action plan to speed up the growth of domestic electronic banking and facilitate the adoption of electronic services by Russian banks. They need government support to gain momentum and join competition for this new market as early as possible.

SOME ISSUES OF MANAGEMENT BANK OPERATIONS

Elias Award

Valeri Ermilov
Tatiana Lebedeva
Anatoly Maslyanko

Even though operations management is not among the main subjects of this Manual, some strategic operation issues do receive coverage in chapters on Information Technology Management and Performance Evaluation Systems and Management Accounting. Implementing a banking strategy is impossible unless operations are properly organized. For this reason, we included a separate chapter to cover some issues relating to operations, such as: cash assets management; settlement risk and system risk; banking transactions automation ; and money laundry control with the latter increasingly becoming a most pressing strategic operations issue throughout the world.

Alongside lending and investment, operations are viewed as principal banking activities. Operation activity includes:

- settlement payments; cash settlement services for clients;
- attracting funds to deposits;
- data processing;
- application of information technologies;
- administration and maintenance.

Russian law distinguishes among different types of banking deals and banking transactions. From the legal point of view, a deal is any arrangement to establish, change or terminate some rights or obligations within civil law. Deals are accomplished through banking transactions (operations), the most

important ones involving accrual to or withdrawal from business accounts. This chapter discusses some of the issues of banking operations management.

Cash Asset Management

Organization of Cash Transactions

Despite a wide use of non-cash settlement, cash transactions account for more than 20% of Russia's total money turnover. The Central Bank sets procedures for cash transactions - receiving, safe depositing and of client's money and valuables -, makes arrangements to print banknotes and mint metal coins, makes rules for cash transfer, store and collection, ensures that banknote reserves are properly created, etc.

Regulation in force as of March 25, 1997 sets procedure for cash transactions in RF credit institutions. The Central Bank of Russia has also established rules for banknote transportation, safe depositing and validation, as well as for the replacement and annihilation of damaged notes.

A bank sets up a cashiering center to support client cash services as well as transactions with cash and other valuables. To ensure timely withdrawals from business accounts and individual deposit accounts, commercial banks are set a minimum, end-of-day operating cash balance requirement based on:

- the volume of cash turnover in the cash desk;
- schedules for cash receipts from clients, and
- specific cash turnover arrangements and cashiering practices.

1. Banks may open operating cash desks outside the cashiering center to improve private client services, such as:

- accepting and issuing deposits in rubles and in foreign exchange;

- selling and purchasing securities, and
- accepting public service and other payments.

2. Banks may open operating cash desks outside the cashiering center to improve business client services, such as:

- making payments from payroll accounts;
- providing funds for social contributions;
- providing funds for employee travel cost reimbursement, and
- performing transactions listed under 1.

Cash is handed over to mid-day and end-of-day vaults of banks, to collectors, to company vaults for subsequent transfer to bank, or to postal agencies for further remittance to bank accounts if required under the contract.

Bank economists make sure that companies hand over all their cash to banks in time. In-process control is done by inspecting cash transactions register; banks are in charge of ex-post control as they monitor client compliance with the Cash Transactions Regulations.

In order to credit all cash received by the bank and to perform proper disbursements, every branch of a given commercial bank has a ready cash vault. All cash received before the end of banking day must be put in the ready cash vault and credited to respective accounts on the same business day.

Cash from the ready cash vault is provided to business clients. The bank is responsible for creating an optimum cash turnover, which means that it should seek to satisfy client demand for cash from its own cash receipts. This is achieved through making and executing a *cash projection*. Using information and cash requests from enterprises, the commercial bank makes an estimate of a cash projection. As the latter is executed, the bank provides its cash services.

Those banks whose receipts come through collector firms, set up a recounting office. Evening cash desks only exist to receive end-of-day cash.

Receipt desks accept cash with a proper *Notification of Cash Placement*. The teller checks whether the Notification form is filled correctly, legalizes it and enters the sum in the receipts ledger; he then hands the Notification over to the cashier. Upon obtaining the Notification, the cashier verifies the presence and authenticity of the teller's signature, compares the sum indication in number to that in word, and accepts the money.

A commercial bank makes its own arrangements to collect and deliver cash and valuables, or it may do so by contract through cash collector firms specially licensed by the Central Bank of Russia.

When they coordinate with clients specific dates for issuing funds from wage accounts, banks proceed from the need to preferably evenly distribute their cash issues throughout the month. Bank branches supervise the compliance with wage money issue deadlines, thus ensuring reliable and prompt fulfillment of cash requests.

For the purposes of managing cash resources commercial banks money issue schedules to cover wages and other forms of labor remuneration. By the beginning of every business day the cash turnover department determines the amount of cash to be paid from the bank's vault.

Moneys from the expense vault are normally issued against checks from check books. As the bank redeems its bonds, payback private deposits and finances bank personnel T&A and other costs, money is provided against debit slip made out by an authorized accountant.

Those immediately handling cash are the bank's cashiers and collectors, each one bearing full financial liability under the employment contract.

A bank may install automatic teller machines or other payment-and-settlement terminals. Cash processing is done through automated cash operations. Computers can be used to process credit and debit slips (except

checks), keep receipt and expenditure ledgers and fill out reference statements and other documents at a cashier's desk.

All cash received during the banking day must be put in the ready cash vault and credited to respective client accounts on the same business day.

Managing Cash Assets

We proceed to discuss issues relating to the management of cash in hand, that is, banknotes and metal coins kept in the bank's teller's desk and vaults to meet daily demand for cash - deposit withdrawals, exchange of money, loans in cash, bank operating expenses, salaries to bank personnel, etc. The following diagrams present the asset composition of US banks as compared to that of a small Russian commercial bank.

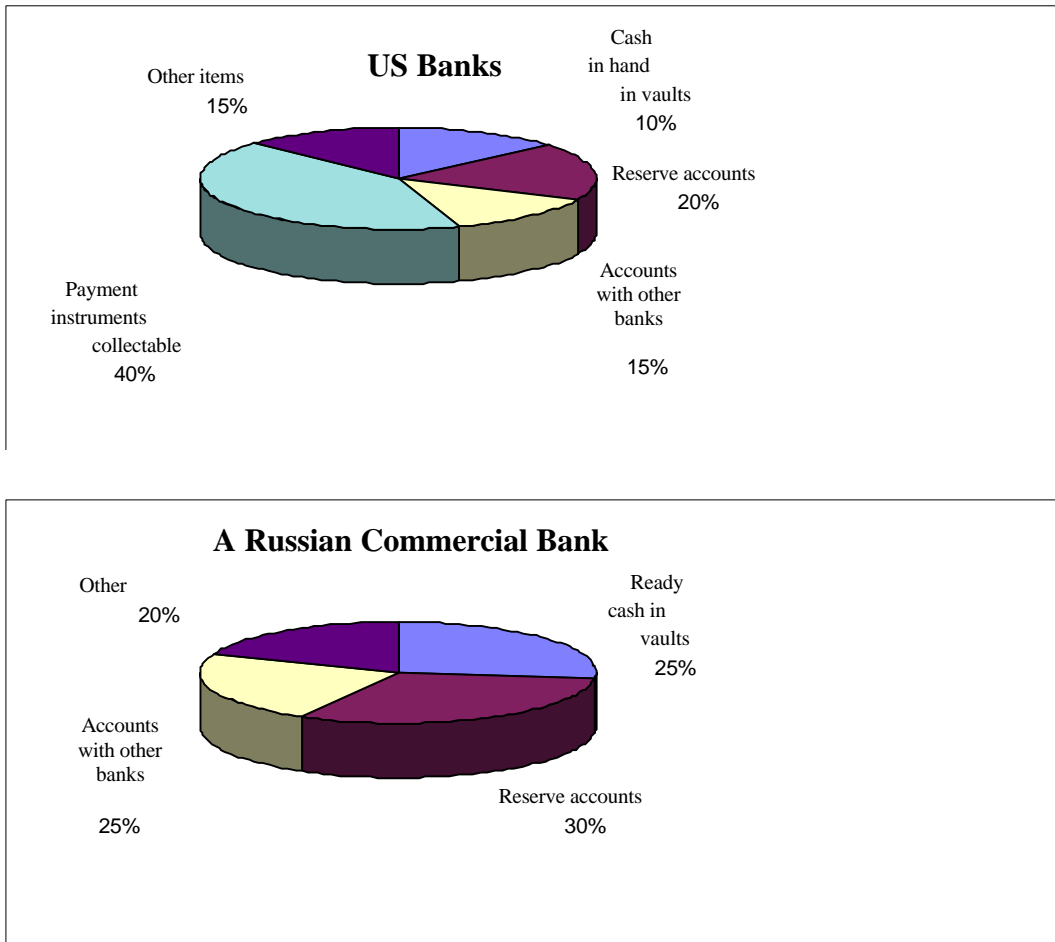


Figure 60 Average Asset Structure of Deposit-insured US Commercial Banks and that of a Small Russian Commercial Bank

A US commercial bank's demand for cash is met by the respective Federal Reserve Bank without limitation; the relevant sum is subtracted from the bank's reserve account in the FRB. This does not, however, affect the total reserve amount because cash in hand is treated as part of reserve and added to reserve account balance. For a Russian bank, cash availability is only limited to the balance it holds in its correspondent account with the CBR Settlement Center. Obligatory Reserve Fund can be used only in case of commercial bank liquidation; cash in hand is not included in obligatory reserve. This calls for a serious adjustment to cash management practices in a Russian bank.

Russian commercial banks are responsible for deductions to the Obligatory Reserve Fund to the amount of 14% of total demand deposits and time deposits up to 30 days; 11% of total deposits from 30 and up to 60 days;

8% of total deposits over 60 days, and 6% of the balance in the foreign exchange account. Under the US law, banks are required to keep reserves in their respective regional Federal Reserve Bank, in smaller proportions to their deposit liabilities compared to Russian banks. Reserve amount is calculated from total net demand deposits, minus payment instruments in collection, and from sums on the bank's NOSTRO accounts with other banks.

Like US banks, Russian banks open correspondent accounts with other banks, where they keep their working balances to support mutual services such as clearing checks, promissory notes and other payment instruments; buying and selling securities, foreign exchange, etc. Banks partially cover expenses they incur in conducting operations for their correspondents by placing funds in LORO accounts. As such revenues do not normally cover operating costs, banks increasingly apply the fee-for-service approach.

Within US banks' cash assets, payment instruments for collection represent the largest item. It consists of little else but checks drawn by bank clients for collection. Check settlements have a daily effect on the bank's reserve position. If the reserve account balance exceeds the required minimum, the bank will seek to lend such excess reserves on the Federal Funds market. In case of bank running short of legal reserves, it has to either sell certain assets to replenish the account or take short-term loans on the inter-bank market.

Russian banks prioritize timely allocations to the Obligatory Reserve Fund. For banks in industrialized economies, an important issue is also to forecast their demand for liquid assets and to ensure their reserve position. Balances they keep in a Federal Reserve Bank and cash-in-hand jointly constitute their primary reserves. Even such reserves, however, do not guarantee that the bank's total demand for liquid assets will be met. A bank may face an unexpected major withdrawal of deposits, in which case its reserve is unavailable. The bank then has to sell securities or withdraw its loans. An urgent need for additional funds may also emerge when the bank intends to give a big loan to an important client.

For this reason, banks need secondary reserves to quickly mobilize funds on the money market. (Bank liquidity management is discussed in detail in chapter «management of Assets and Liabilities".)

Organization of Plastic Cards Payments

Russia's payment system is increasingly relying on plastic cards, a convenient way for retail clients to make payments and obtain cash. All parties involved in payments get the following benefits from using plastic cards:

- Raising additional funds. Plastic card holders' money is an additional resource for banks; service charge is another source of income.

- Easier cash withdrawal. Card holders benefit from a convenient way to make payments through an extensive network of terminals.

- Secured income from funds allocated for settlements. Debit card holders can earn additional interest income on card deposits and can enjoy price discounts when buying goods at certain retail stores or paying for certain services.

- An option to issue an additional settlement instrument. Memories are still fresh in Russia of a persistent cash shortage, which was a major driving force behind the prompt introduction of non-cash payment systems with plastic cards.

The world financial market is saturated with various types of "plastic money". The market is split among principal card issuers as follows: VISA - 50%; Eurocard/Mastercard - 30%; American Express - 18%, others - 2%. As of late 1994, about 1.5 million people in Russia (about 0.9% of grown up population) had plastic cards. The Russian market is dominated by international VISA and Eurocard/Mastercard; national STB-Card, Most-Card, and Union Card. The Golden Crown card became widespread at the regional level.

Most of the international and Russian non-cash settlement systems use magnetic strip cards (e.g., VISA, STB-Card) which have one important disadvantage: their security is less than perfect. Moreover, magnetic-stripe systems have a limited range of functions which largely depends on the quality of telephone lines - a major problem Russia was facing until very recently.

Chip card (smart card) systems are better protected and have a broader variety of uses. Even though the smart card itself is almost twice as costly as the magnetic strip card, system operating costs with the former may be much lower.

STB Card one of the leaders in plastic card business in Russia, with STB Agro acting as a settlement bank. The STB Card does not limit the number of cards issued by the bank. Union Card, a joint project by Avtobank and Inkombank, incorporates more than 200 banks. The fee a new bank must pay to join the Union Card system is \$10,000. Avtobank, the system's settlement bank, opens correspondent accounts.

The smart card-based Golden Crown originated and has developed as a regional payment system. The Rossiisky Kredit bank assumed the role of the regional junction center. Following the bankruptcy of Sibirsky Torgovy Bank (the Siberian Trading Bank), Promradtekhbank became the guarantor within Moscow. The Golden Crown card is widely used for wage payments where cash is in short supply.

There is a sufficient number of recent advancements in plastic card transactions automation, including integrated hardware-software products which allow banks to perform all functions relating to plastic card business (issue, processing, etc.), as well as enter all plastic card transactions in books. Western suppliers have taken the lead in this area, however, it takes Russian banks substantial additional investments to adapt Western products to country-specific market conditions and accounting procedures.

Security problem is a major impediment to success in plastic card business. Fraudulent use of cards imposes an excessive cost burden on banks

reducing the potential for reasonable profit. Throughout the world it causes a total annual loss of more than \$1 bln.

Improvements in smart card technology promise a breakthrough in fighting card fraud. However, for smart cards to circulate globally, there must exist a single world standard. Europay, Mastercard and VISA (EMV) have joined efforts to develop an international chip standard, as well as uniform requirements to microprocessor cards and their interaction with electronic terminals. The plan will take years to implement.

Draft Regulations on Card Settlements in the Russian Federation are currently under study at the Central Bank of Russia (CBR). The document will become the basic legal source regulating card operations in Russia. The CBR is making progress toward developing a nation-wide plastic card system, but it is still a long way to a uniform Russian card standard. Unfortunately, as the plastic money market develops, to devise such a standard will become increasingly difficult, let alone have existing systems adjust to it.

Inter-bank Settlement transactions and Risk Management

Organizing for Inter-bank Settlement Operations

Inter-bank settlements take place when, in a non-cash payment, the payer and the payee are served by different banks, and also in case of mutual lending and cash transfers between banks. Such operations are currently carried out through CBR's Settlement Centers, through correspondent accounts banks open by mutual agreement, and through clearing arrangements.

There are two alternative approaches to organizing inter-bank settlements through correspondent accounts:

- centralized - settlements between banks are processed through their correspondent accounts opened with the Settlement Center;

- decentralized - based on correspondent relations between commercial banks.

Centralized Approach to Inter-bank Settlement Transactions

At present, inter-bank settlements in Russia are mostly based on the centralized approach. A correspondent account is opened at the Settlement Center nearest to the headquarters of the commercial bank. Branches have subaccount-type correspondent accounts.

At the same time the account is opened, the bank signs a *correspondence contract with the CBR Settlement Center* which specifies both parties' rights, obligations and liabilities. It is through such correspondent accounts that banks conduct the whole range of transactions to serve their clientele and those pertaining to operating a bank as an entity.

The main principle of making payments through commercial banks' correspondent accounts is that such payments are only possible with a positive account balance and must not go beyond the balance. If the funds in the bank's correspondent account are insufficient for payments, CBR may cover the bank's liabilities through an overdraft loan, charging interest in excess of the market rate. Otherwise banks would not be stimulated to go to market for loans; on the other hand, money supply would go out of control thus increasing the inflation pressure. Other functions of a Settlement Center include lending to banks, providing cashier services, conducting securities transactions, budget financing of investments, etc.

If settlements are made between bank clients who have accounts with the same branch, sums are directly written off and entered to client accounts. Intra-bank settlements may also circumvent correspondent accounts.

To facilitate payments and cashier services for clients, banks become correspondents by signing a contract whereby one party makes payments and

settlements by the order and at the expense of the other. This can be done with or without opening a correspondent account.

Decentralized Approach to Inter-bank Settlement Transactions

Payments made through correspondent accounts are either within the account balance or with an overdraft. Overdraft limit, term and interest rate (on debit and credit balance) are specified in the contract. If a debit (negative) balance resulted from client violating payment discipline, defaulting on liabilities, etc., the bank takes harsh action: it can charge penalty on debit balance, impose a fine, place the sum in the bad debt account charging extra interest, and suspend payments from the client account while redirecting all client's receipts to recover the emergent debt. This is a justified response to a real threat to the bank's liquidity and solvency.

Credit resources placed in correspondent accounts are normally treated as demand deposits. Minimum balances necessary to sustain settlements are kept in such accounts.

Correspondent bank officially notify each other of the settlements they make by way of a letter of advice. Inter-bank settlements through mutual correspondent accounts speed up cash flows but immobilize substantial funds in NOSTRO accounts with other banks.

To establish correspondent business with a foreign bank, a commercial bank must have a *general foreign exchange license from the CBR*. Originally both documentary and non-documentary transactions. For settlements with their foreign partners, Russian companies typically use documentary transactions, that is, payments based on documents certifying commercial cargo shipment, valuation, insurance and condition. Such documents include bills of lading, rail and air waybills, insurance policies, invoices, certificates of origin, quality certificates and the like.

Of a more bank-trust type are transactions between banks involving purchase and sale of foreign exchange, money market deals, deposits received and placed, security custody, loans and clearing arrangements.

Automated payment systems are widely spread in inter-bank business as they improve efficiency, speed and quality of operations; such systems are essential for increasing profit and reducing costs.

Settlement Risk and System Risk

Clearing is essential in inter-bank settlements. CBR has used and is currently using balance account 871 to enter clearing transactions between commercial banks within a city. Clearing is a method of non-cash payments for goods and services based on mutual offsetting of claims and liabilities. It may involve money orders, checks, promissory notes, securities, letters of credit, loans, etc.

According to the CBR directive as of February 10, 1993, clearing arrangements may fall under the authority of specialized, inter-bank clearing institutions, such as clearing centers or settlement houses. They are empowered to arrange between local banks as well as between regions. Such institutions have been set up in Siberia, the Urals, the Volga region and St.Petersburg.

The emergence of these clearing centers has lessened the burden on the CBR Clearing Center and increased the responsibility of banks for inter-bank transactions.

In Russia, clearing systems are still in the making, and even this short history has been marked with dramatic examples of the above mentioned types of risk. However, bearing in mind that the Russian clearing system is far from complete, it seems more relevant to discuss related risks using a country example with the most sophisticated of such system.

The USA has two systems for electronic transfer of large sums in US dollars: FEDWIRE and CHIPS. Their joint turnover in four days only equals

national VNP. Specialized, large-scale transfer systems differ from conventional check clearing in terms of security, speed and payment completion procedure. As very substantial amounts are usually involved in transfers, these characteristics are crucial and deserve special attention. FEDWIRE belongs to the Federal Reserve System. FEDWIRE settlements cover cash transfers and securities transactions. FEDWIRE, as used by the Federal Reserve System, serves as a correspondent bank for the entire US banking system. The other of the two major systems, CHIPS, is designed to process international transactions, but it can also be used for internal payments. CHIPS transfers net funds, that is, net difference between amounts sent and amounts received during a single day.

Other countries have their own electronic settlement systems. In France, a similar system was introduced in 1984; in Japan, it has been in place since 1973 and now encompasses over 5,000 large credit institutions. In the UK there are two major systems, BACS and CHAPS. The former processes clearing transactions within city boundaries and significant amounts of payments: two-thirds of all monthly payments to employees go through it. The latter, introduced in 1984, is designed for high-speed clearing of large-scale payments (at least 10,000 pounds); it encompasses 12 clearing banks in London and ensures receipts entry to accounts on the same day.

Settlement risk is understood as the risk of bank not being able to make a settlement. The primary source of such risk is day overdraft. Still FEDWIRE allows for day overdrafts as a way of achieving higher efficiency and lower cost of settlement. The Federal Reserve System has devised two approaches to the overdraft problem. First, it sets absolute overdraft limits for each day depending on the bank's capital. Second, it imposes penalty on each \$ 1,000 of unsecured overdraft.

Settlement risk is sustained either by the organization responsible for the settlement system operation or by other banks receiving payments. In the latter case, when one bank defaults on its liabilities, it is the receiving bank that runs

the risk.. If payment does not come through the bank will have to use clients' money or tap its capital base. Insufficient funds lead to bankruptcy.

System risk means that if one bank defaults on its liabilities it may trigger a “chain reaction” resulting in an overall crisis on the banking system. The failure of one bank may lead other partners to insolvency. This type of risk is typical of a CHIPS-like system. Current risk-reducing policies in the area of settlement include ceilings on overdraft and/or the bank's net debit position. By way of such ceilings, potential loss risk any credit institution is subject to within each of the systems is limited to its day credit. System risk is controlled by imposing bilateral net credit limits; potential loss risk for each individual institution is reduced because each system participant can only obtain limited credit from other participants. Finally, the system requires that participants make a pledge (such as securities) to proportionally cover their share in case of system failure. This helps reduce the probability of system risk.

Prevention Money Laundering

Russia's new Criminal Code includes a section on the laundering of illegal funds. This recent amendment to the Criminal Code was prompted by the urgency of integrating Russia into the world financial system where this issue is recognized as one of utmost importance.

The laundering issue is about legalization of whatever illegal incomes, including those from drug trafficking, illegal arms sales, financial fraud and persistent tax evasion. Illegal income mechanisms are country-specific but laundering transactions are often international: they transcend national borders and may involve a number of countries.

Policies to control laundering of illegal, or “dirty”, money aim to prevent such transactions and assist law-enforcement bodies in exposing law offenders. Laundering generates both incompatibility risk and reputation risk (see chapter on “Risk Management in Banking”). Possible consequences are:

⇒ first, conflicts with law-enforcement bodies;

⇒ second, serious damage to the bank's good name if information is published disclosing its involvement with criminal groups who use it for the laundering of "dirty" money.

Such an expose may thwart the bank's persistent effort to increase efficiency of operation. Even worse damage can be done to the bank's operations on international markets and its reputation with foreign partners.

The international scope of laundering transactions has encouraged quite a large number of states to coordinate their efforts to control this illegal business. Practical recommendations are even designed at the level of Basle Committee (Committee on Banking Regulation and Supervisory Practices). In December, 1998, the Basle Committee adopted a Declaration on the prevention of use of the banking system for the laundering of illegal funds; its main requirements to financial institutions are: verify the identity of clients, and provide law enforcement authorities with information on any deposits of illegal origin.

A special financial commission on laundering issues has developed *Forty Recommendations* to be introduced into regular practices of member countries' governments. One paragraph recommends that financial institutions, their directors, officials and employees be legally immune from criminal or civil liability for the violation of *any information disclosure restrictions* imposed by a contract or any legal, regulatory or administrative norms, *if such persons report their suspicions to law enforcement authorities*, whether or not they have precise information about covert criminal activity, and whether or not such criminal activity in fact took place.

In December, 1988 the Soviet Union was among the 106 states that signed the Vienna Convention binding the participants to develop legislative acts to counter the laundering of illegal funds. Several years passed, however, before the respective section was added to the Russian Criminal Code, and the enforcement mechanism is still to be improved.

Until recently international criminal associations had every reason to look at Russia as the most favorable environment for the laundering of illegal funds and profitable investment of capitals of criminal origin. A lack of an effective system to establish the origin of capitals plus widespread corruption at different levels and in different branches of power make it extremely easy to “legalize” criminal money by investing in the most profitable Russian businesses.

However, things are changing for the better. The Central Bank of Russia has decided to take advantage of international experience. To this end CBR generated a document entitled “Technical Recommendations on the Organization of Activities Aimed to Prevent Illegal Incomes Penetration into Banks and Other Credit Institutions”. This document was circulated among commercial banks to be executed with Regulation 479 of July 3, 1997. As they open and keep client accounts, issue bank guarantees and loans, enter in any other type of contract arrangements or render payment services, commercial banks are recommended to carefully examine business clients’ statutory documents, as well as documents describing their financial and economic performance, and to assess personal characteristics of individual clients.

When examining statutory documents of a prospective business client, special attention should be given to their official registration, including any registered amendments, and also to documents that confirm the client’s proper status as legal entity. The bank needs to analyze the list of founders and the minutes of annual meetings. If the client’s statutory capital is not paid in for a long period of time, this should signal low trustworthiness or false intentions on the part of the founders.

As the bank examines documents describing financial and economic performance of a future client, it should analyze trends in accounts payable and accounts receivable, including indebtedness to state budget and other mandatory payments, as well as loan indebtedness to other banks. An increase in the volume of overdue receivables on foreign exchange balance items may

serve as an indirect indication of illegal placement of monetary or material assets abroad and involvement in the laundering of illegal profits.

CBR recommends to perform a trend analysis of funds transfer between such accounts as “Settlement account”, “Forex account” and “Cash in Hand”, comparing account balances, noting the average balance in the “Cash in Hand” account, and checking the frequency of transfers to the latter. If cash balance exceeds account balances, it is advisable to find out the reason for this inconsistency. Disagreement between account balance data in the balance sheet and in bank statements could mean that the client reported incomplete data on the total number of open accounts.

Adverse auditor findings reveal negative aspects in the client’s operations. Penalties imposed by state supervisory bodies suggest that the client has been acting against the law of the Russian Federation. One should also check whether the client’s dominating activities are consistent with those listed in the company Charter.

A disproportional large share of cash settlements, or a lack of daily collection practices in a retail or amenities company can give an indirect clue to transactions with illegal income.

If the bank finds it necessary to analyze personal characteristics of a private client, CBR recommends that the client be asked to give information about his or her permanent employment and to present an income statement with reference to taxes paid as confirmed by tax authorities. If a client account is to be opened by power of attorney for a third party, the bank is advised to establish the third party’s identity and verify the agent’s authority. If the account holder’s identity cannot be established, the bank should exercise special control over movement of the account in question.

It is important to find out the client's motive to change his banker and, where possible, obtain information - not classified as commercial or banking secret – from client's former (or another current) bank and study information

that the client himself brings from that bank. Personal contact with the client and with those listed in his signature card is recommended.

In its day-to-day communication with the client the bank should be particularly concerned with regular and timely submission of reference notes and other requested information and check if the client complies with CBR documentation and reporting requirements.

The above recommendations are quite similar to the "Know Your Client" principles listed in "Guidelines to the Privacy of Deposits Act" issued in the United States in January, 1995. The technique is primarily aimed to enable the lending institution to anticipate, with a high degree of reliability, the types of operations that the specific client will probably practice. The bank should then establish internal operations monitoring systems to detect transactions which are not consistent with the client's "operations pattern". It is common practice for US financial institutions not to enter into any business relations until relevant information is available on the client's identity and individual characteristics. If the potential client refuses to submit any of the information requested by the bank, no business is done with such client. Moreover, if the bank fails to obtain further information it may request, the recommendation to break off any relations already established.

Recommendations of the Russian Central Bank include a list of questionable transactions and those subject to special attention, as well as the main indicators of such transactions. Any given transaction can be classified as "questionable" should its amount in one instance (or a monthly total, in case of repetitive transactions) exceed 1,000 times minimum wage for private clients, and 10,000 times minimum wage for business clients.

Special care should be exercised regarding transactions listed in the picture below.

The CBR-proposed list can be extended as each bank should find relevant. According to the CBR recommendations, each bank may avoid transactions which it finds questionable or requiring special attention. If the

bank has strong evidence of a client's criminal activity it should notify law enforcement authorities.

It is noteworthy that, while conducting transactions listed in the CBR Recommendations for its clients through correspondent accounts with foreign banks, a Russian bank can be directly involved in the laundering of illegal incomes through legal money turnover. As practically all industrialized countries have enacted laws to control illegal funds laundering, Russian commercial banks can be subject to lawsuit by a foreign state.

Finally, the document issued by the Special Financial Commission for Money Laundering includes a recommendation to develop personnel training programs in this particular area.

Cash transactions by legal entities and individuals

- cash withdrawal from or placement to a business account not justified by the account holder's normal activities;
- foreign cash sale or purchase by individuals;
- purchase of securities by a private individual paying cash;
- bearer check encashment by a private individual when the check is drawn by a non-resident or the sum is declared as "winnings"
- exchange of banknotes to those of different denominations;
- depositing of cash in packages sealed up at another bank

Transactions by legal entities and individuals involving loans given or taken in cash

- loan extension against a savings certificate or certificate of deposit;
- extension or acceptance of loan secured by the borrower's deposit with a foreign bank;
- extension or acceptance of loan at an interest rate which is higher than the average rate charged on money instruments on the domestic and foreign markets.

Securities transactions:

- offering an unusually high commission for mediator functions in securities transactions;
- one-time order for the purchase and sale of securities at prices considerably different from current market prices in similar deals; other deals involving manipulation of prices on securities markets;
- transactions where one and the same financial instrument (e.g., package securities) is sold and repurchased by the same party;
- regular cash deficit or regular cash inflow in settlements for time deals;
- transactions with bearer securities not placed with depositories

Bank account transactions by legal entities and individuals:

- Cash deposits made legal entity or individual at different branches within the same day;
- cash accumulation in a bank account with subsequent transfer to another bank or branch, including non-resident;
- deposit to an account with a bearer depository receipt drawn up;
- deposit to an account which has been dormant or used for insignificant transactions, with instructions to make payments in cash;
- opening deposit account for a third party by making deposit in cash;
- opening deposit accounts fed by paid bank checks and traveler's checks;
- transfers to and from a "numbered" account abroad;
- placement and/or withdrawal of funds by a newly-founded legal entity or by a legal entity whose account transactions have so far been insignificant;
- foreign currency receipt, declared as a commercial loan, to the account of a legal entity involved in foreign trade transactions when the payee defaults on its contract obligations;
- placement to account or withdrawal of funds received from a legal entity or private individual located, having a bank account or registered in an off-shore or free economic area, or in a region known as politically and economically unstable or as a site of illegal drugs production, when that other party has no sustainable commercial contacts with the account holder.

Figure 61 Transactions That Can Be Used For the Purpose of Money Laundering

Automation of Banking Operations

Banks throughout the world are becoming increasingly responsive to market trends, to changing demand and to competitors' moves. Those banks are switching to new, computer-based technology. They employ specialists with sufficient banking experience skilled in computer systems to organize banking information systems and achieve maximum efficiency of electronic document processing, electronic payments and computerized accounting. Information technology management is covered in a separate chapter; here the scope of our discussion is limited to the use of information technologies in banking operations management.

Automation and technological innovation is most urgent in the following areas:

- keeping current (settlement) accounts;
- bookkeeping and compiling daily balance sheet;
- making reports for clients and statements of personal accounts. For check processing: automated check registration (by account number of client's last name), check return, microfilming each check before mailing it to client, and daily verification of each account;
- managerial reporting.

The focus is on daily reports, which must be available at any moment during the day. Those include:

- preliminary balance sheet;
- report on service charges - showing how much the bank earned as service charge;
- report on commissions paid;

- report on open/closed accounts - a list of new client accounts and a list of accounts that were closed;
- overdraft report – a list of overdraft accounts and overdraft values for each account;
- report on suspended or deferred payments - deals on which the client intends to suspend or defer payment;
- report on fictitious checks - accounts where clients were placing funds after checks were drawn on effectively negative balance. The purpose of such operations using fictitious checks is to benefit from the float - time lag between the deposit of a check and actual payment;
- large sums report, covering transactions that involved removal of large sums; these may have to do with money laundering and illegal deals;
- investment portfolio report - keeping track of the bank's investment activities during the previous day;
- Trust Department report listing investments and commissions charged for trust accounts management;
- report on time and savings deposits - banks that take savings deposits may generate a daily report to determine proceeds from this specialized area of activity;
- credit card report; keeping daily track of transactions with credit cards: commissions, overdraft accounts, etc.;
- business and private loan report; can be classified by type of loan (real estate, personal, secured/unsecured, etc.), with the necessary degree of detail for credit officers;
- Security Service report; covers extraordinary events, such as alarm activated or problems with locking or unlocking vaults.

Debit cards and ATM cards This area is highly automated and requires special attention to lists of card purposes, PIN lists, verification of sums to be withdrawn from respective accounts, etc.

Electronic transfers is the most vital area for banks practicing large inter-bank transfers or working with foreign counterparts. Every electronic deal must be executed within seconds at any moment during business hours.

Automated clearing houses: a system for electronic settlements between banks designed to clear checks and other liabilities drawn to accounts with other banks. Servicing international plastic cards is regarded as a crucial area because the requirements imposed by international payment systems are very tight.

Foreign exchange department must have access to modern information and dealing systems, automated report generation tools for forex position, limits, etc. The use of PC's allows the bank to keep a minute-by-minute track of its position in various currencies and monitor transactions within each individual bank. Automatic deals processing systems enhance the bank's capacity and ensure correct and timely transfers, as well as currency inflow control. With the development of SWIFT-based communications systems, deals and transfers can be executed quicker and at lower cost. Analysts identify trends in exchange rate movement by studying general economic and political trends, while relying heavily on software products.

Working with branches is an area that requires:

- up-to-date telecommunications and software necessary to generate daily reports and consolidated balance sheets covering all the branches;
- preparation of standard reports in the format prescribed by CBR;
- verification of the bank's entire reporting documentation;
- analytical and information-generating software products to support decision making at all levels of management.

To make automation and information support of all the above listed areas possible, the bank needs a thoroughly designed program for information technology management. Networks have become the standard basis for banking automation.

Guidelines for Risk Management in Automating Banking Operations

The key issue is data security and integrity. Data protection requires that the entire system be properly organized. Introducing passwords and other methods to identify each network terminal and each user, exercising information access control and registering all transactions are vital steps aimed to prevent unauthorized access, as well as possible embezzlement or money laundering transactions. Large sums in transfer between bank accounts or between banks should be checked carefully. It is important to employ honest, competent and experienced staff to seek out instances of wrongful use of computers and electronic payment systems. Banks are strongly recommended to select auditors who are familiar with modern technologies: this makes modern software useful for day-to-day control.

Banking information technologies covering all the products offered by the head office as well as branches, are of vital importance for the bank's operations efficiency, and very often, for the sheer survival against competitors. See details in the chapter *Information Technology Management*.

GLOSSARY⁷

ANALYSIS SWOT – Procedure of strategic analysis designed to identify strengths-weaknesses-opportunities-threats (SWOT) for the given bank. This analysis defines in what degree the bank strategy and organization match to external environmental factors in which bank operates. As the result it will be clear enough to provide an understanding of opportunities which can be built upon and threats which have to be overcome or circumvented.

APPLIED SYSTEMS – Computer software for automation of the particular business (applied) functions.

ASSET AND LIABILITY MANAGEMENT (ALM)⁸ – Management of bank's assets and liabilities to maintain liquidity, minimize risks and maximize net interest margin.

AUDIT PROCEDURES – Methods and techniques used in the process of auditing. They are divided into procedures of testing client's internal controls; analytical procedures; substantive procedures. The purpose of testing internal controls is to identify reliability of bank internal control system over financial information. Substantive procedures are tests of details where auditors perform procedures on the documentation with supports the transaction or account balance, confirm, inspect, or physically observe evidence to support account balances.

AUDITOR'S OPINION – It provides an independent opinion on the fairness of a bank's financial statements. It is based on testing bank financial statements and professional conclusion of the details of bank financial documentation and its business. The form of audit opinion is defined by CBR.

BACK-OFFICE OPERATIONS – Accounting, reporting, processing of bank transactions initiated in those bank departments that directly deal with customers or work in financial market place (front office).

⁷ Typical country specific Russian terms are underlined (only in English translation).

⁸ If an acronym or abbreviation is untypical for Russian language it presents only in English translation.

BANK AUDIT – Type of audit adjusted for specific of business of banking. In Russia audit is classified into 4 categories: general audit (audit of business firms); audit of insurers; audit of banks and credit institutes; audit of investment institutes and non budgetary funds. Bank audit is subject of CBR regulatory authority. Committees of CBR are in charge of certification of bank audit professionals; granting licenses for audit of banks and credit institutes.

BANK CAPITAL – Bank’s own funds that serve to back bank’s obligation to depositors and other creditors. In Russia is synonym for primary bank capital. According to definition of Bank for International Settlements it consists of base (primary) and secondary capital (subordinated debt). The main functions of bank capital are: to maintain general confidence in the bank’s stability; to provide additional protection the bank liquidity; to protect individual depositors in case of bank liquidation; to protect interests of all creditors in case of losses under the credits and investments with the subsequent liquidation or restructuring of a bank; to maintain the adequate source of financing of premises, equipment and other non-earning assets. The mandatory limits for bank capital are established by CBR as minimum floor level of bank capital and system of ratios (H₁, H₄, H₆, H₁₀ and some others).

BANK FOR INTERNATIONAL SETTLEMENTS (BIS) – Bank for central banks of developed countries. Its membership includes CBR. It is domiciled in Basle (Switzerland).

BANK INTERNAL REGULATIONS – Internal standards and rules of activity of business firm. In other words they represents bank documentation that regulate its operations. Bank internal regulations should match to current legislation; general accepted standards of doing business; bank strategy approved by shareholders and top management. The examples of these documents are the Articles of Association; written polices and manuals approved by CEO.

BANK LIQUIDITY – Ability of a bank to meet timely claims of depositors and other creditors as well as borrowers legitimate demands for funds.

BANK PHILOSOPHY – Bank philosophy is a permanent statement developed by the bank’s senior executive management team, which addresses the principles to maintain the relationship between the bank and its primary stakeholders, i.e., shareholders, customers, employees, and the other stakeholders; broad

objectives of the bank's expected performance, primarily expressed in terms of growth and profitability; basic bank policies with regard to management style, organizational policies, human resources management, financial policies, marketing, as well as technology; a statement of bank values.

BANK PORTFOLIO – Group of bank assets that includes: loans; short-term debt securities; long-term investments. It is common practice to distinguish loan portfolio and investment portfolio. It is also used such terms as portfolio of investment projects, portfolio of government securities and so on.

BANK PRODUCT – The separate bank service or package selling to customers on standard terms. Examples are investment loan, target deposit, certificate of deposit, credit card.

BANK SERVICES – Bank operation, which directly meet some customer demands. Examples are leasing, services of guarantor or investment services. Bank services as any other services are intangible products but furthermore they deal with especial commodity i.e. money. That is why the pricing on bank services is complicated issue. For example the fee income for bank investment services for customer means costs. At the same time the value of these services for customer derives from additional income he/she plans to earn.

BANKRUPTCY (INSOLVENCY) – Bankruptcy (insolvency) arises when the debtor being unable to meet legal claims of creditors in monetary form as well as make payments to the Budgets and Non Budgetary funds. One should not confuse the bankruptcy of credit organization with the canceling of bank license. Bank and credit institutes bankruptcy cases are subjected to litigation in arbitrage court where plaintiff is a bank creditor(s).

BASE (PRIMARY) CAPITAL – Contributions of individuals and institutions serving as security for claims of all creditors and depositors against a bank. Consists of capital funds, which are permanent, subordinate to depositors and creditors. It serves three functions: financing non-interest earning assets; securing depositors claims; covering temporary losses. In accordance with CBR regulations it includes common shares, preferred shares that form authorized (statute) capital as well as retained earnings. So according to CBR standards Russian bank capital excludes permanent debentures but includes non-permanent shares. These are differences with BIS approach. In Russia only

primary capital serves for assessment of bank's solvency it is the base for calculation of capital adequacy ratios. In abroad however it has been substituting for this function by bank capital as a whole. In Russia bank's base capital is equal to equity.

BASIS RISK – Unlike interest rate risk it is conditioned by the shift in interest rate structure rather than changes in general level of interest rates. That is why in asset and liability management, it is a measure of the degree of risk that changes in interest rates while have on repricing interest-bearing liabilities versus interest-earning assets.

BUDGETING OF CASH-FLOW – Using of financial, informational and organizational techniques in balancing company's cash flows i.e. receipts and disbursements.

CAPITAL ADEQUACY – From economic perspective capital adequacy refers to as amount of bank capital needed to offset possible losses and ensure continuance performance. According to requirements of Bank for International Settlements and CBR it is defined using capital adequacy ratios

CAPITAL MARKET – Market for long-term (longer than 1 year) financial instruments.

CAPITAL PLANNING – Strategic planning procedure aimed at optimization of composition of bank assets with adjustments for risk, identifying the needs in capital and planning the process of raised funds (financial planning).

COMMUNICATION POLICY – System of actions targeted at: 1). Formation and further development of bank image among customers in key target markets and market segments; 2). Promotion of bank products and services. It usually contains such actions as advertising; public relations and personal communication with clients.

COMPLIANCE RISK – Risk that bank will fail to comply government regulations is related to possible losses resulting from new regulatory enactments or amendments to current laws and regulations or losses that are attributed to problems in internal bank management system.

CONSERVATIVE APPROACH TO LENDING – It is based on prudent assessment and control over bank-borrowers relationship as well as caution and discretionary approach to loan portfolio management.

CONVERSION OF FUNDS APPROACH – The distinguishing feature of this method is that it treats each source of funds individually by matching sources of funds with types of assets. It applied when bank uses essentially different sources for finance and have highly diversified portfolio. It also refers as profit centers or minibank approaches.

CORE STRATEGY – The purpose of the core (main) strategy is to define: the type of competitive advantage bank seeks to attain; specification of competitive advantage; the scope within which this will be done and impact of competitive advantage on level of bank future performance.

CORPORATE CULTURE – The set of values and rules determine the employees' behavior. For example credit culture translate into actions by fostering standard credit practices for initiating, analyzing, approving, and monitoring individual loans.

COST CENTER – An cost center is a organizational unit, or a group of subdivisions, providing support for, and servicing of, the subdivisions which directly produce profits.

CREDIT FILE – File with paper documentation or file of computer database that contains loan agreements and all other documentation involved in bank - certain borrower relationship.

CREDIT HISTORY – File with records of borrowers past relationship with banks. It is usually developed by bank security department.

CREDIT LIMITS – Restrictions establishing to: 1). individual borrowers and groups of borrowers taking into consideration industry or sector of economy (industry limits); countries and regions 2). lending in particular foreign currency; maturities; type of collateral. Setting limits is the key approach in managing loan portfolio. Limit can be defined as ratio or fixed amounts.

CREDIT MONITORING –System of actions that focus on ensuring that creditworthiness and other parts of loan quality is maintained and identifying

problems that should be corrected. It is based on regular collection of information on bank borrowers. In practice such terms as credit monitoring, credit review and credit administration are used interchangeably.

CREDIT ORGANIZATION – Russian Banking Act defines it as legal person that is granted a charter by CBR to earn profits from banking activities. Credit organizations include banks and non-banking credit organizations.

CREDIT POLICY – A credit policy sets goals, priorities and framework for the credit activities of the bank. Specific areas that a credit policy should address include: management of the credit process; loan portfolio management; credit authority; general credit criteria; restricted credits; credit administration; loan reserve classifications. Whereas the credit policy establishes the framework, the lending standards and credit procedures provide more precise detail to guide lending personnel.

CREDIT PROCEDURE – A credit procedure is part of methodology that clarifies algorithm (steps) of executing a credit policy. It supports one specific policy only and tends to be a workstep for executing a specific policy rather than a detailed approach on how to implement an action step.

CREDIT RATING SYSTEM – An operating model designed for scoring of bank borrowers according to their creditworthiness.

CREDIT RISK – In general means the likelihood that counterparty will fail to perform according to the terms and conditions of the contract thus causing losses. Credit risk arises from both on- and off-balance sheet transactions. It results in the losses of principal as well as losses of interest payments.

CREDIT SCORING – Method of classification of loans in bank portfolio on the basis of the borrower's creditworthiness and other factors of credit risk.

CREDITWORTHINESS – The ability and readiness of the borrower to meet his obligations. The four foundations of creditworthiness are: industry that focuses on the industry dynamics and company position within the industry; financial condition and performance determines the borrower's ability to generate sufficient cash or to draw on existing resources to repay bank borrowings; management quality determines the competence, integrity and alliances of the

key individuals running the company. Security realization determines the level of the bank's control over collateral and the likely liquidation value.

CROSS-SUBSIDIZATION – It is a pattern whereby profitable products and customer relationships support: 1). unprofitable products 2). Unprofitable customer relationships. The latter is performed through charge of preferred low lending rate or paying artificially high rate on bank's deposits.

DERIVATIVES – Financial instruments derived on the future performance of underlying asset or instrument. The most common derivatives are swaps, futures and options.

DIVERSIFICATION – Approach to reduce risk by increasing the number of loans and investments and preventing concentration on few borrowers or related borrowers. Unlike hedging the correct diversification implies financing the projects which success or failure are independent from each other.

DURATION – It takes into account both the time to maturity and schedule of cash inflows to the investor. Duration for financial instrument is calculated by dividing weighted net present value of future cash inflows to investor by the price of the security defined as its net present value. Analysis of duration is used in investments as well as in advanced gap management as the part of ALM procedure.

ELECTRONIC BANKING SERVICES – Services to remote located clients using IT technologies. It includes credit card business, home banking or system bank-client; services provided via global computer public networks (e.g. Internet), automated telephone banking.

ENVIRONMENTAL RISKS – One of the principal category of risks in banking. It includes non financial risks that conditioned by external influences of environment in which given bank operates. The most important categories of environmental risks are compliance risk and reputation risk.

EXTERNAL ANALYSIS – Type of strategic analysis attempts to assess the external influences. It is the second part of Situational Analysis. It concentrates on assessing the overall economic and regulatory environment, competition, political and other environmental factors that are affecting the bank.

FINANCIAL AND INDUSTRIAL GROUP (FIG) – The Russian legislation defines it as a group of legal entities that are organized as parent and daughter companies or merged their real and intangible assets by entering into the agreement to establish industrial and financial group. The purpose of this agreement is the technological and financial integration for provision of investment projects, other projects and programs. To be registered as industrial and financial group the amalgamation should consist of manufacturing or trade companies and credit institutes.

FINANCIAL INNOVATIONS – New financial products, instruments, ways of doing business as well as improvements in banking and finance. Banks need in innovations to reduce transaction costs or achieve competitive advantage. Domestic and international experience has shown that many financial innovations were introduced to avoid certain regulatory constraints. Many derivatives are classical examples of financial innovations. Financial innovations usually involve both higher profit potential and risk. All too often the mistakes in strategic planning cause a situation when competitors rather than innovator profiting from innovations. The Russian financial market have emerged recently so common financial products in developed economies represent innovations in Russia. For example in 1990 corporate stocks were innovation, in 1992 the first promissory notes were issued, in 1993 repos were introduced and so on.

FINANCIAL INSTRUMENT – Document that that give the holder the right for financial asset or certify contract obligations in finance. There are non-negotiable financial instruments, which circulation is prohibited, negotiable financial instruments, which are required endorsement (e.g. promissory notes), and instruments that are traded freely in the market.

FINANCIAL LEASING – Long-term lease agreement, which term is approximately equal to economic life of the asset. In contrast with operating leasing the maintenance services is the responsibility of the user of equipment and this service typically is provided by financial institutes.

FINANCIAL PLANNING – The part of capital planning to define actions for raising finance to meet forecasted need in bank capital.

FINANCIAL REPORTS – Balance sheet and income statement that represent key financial reports as well as other documents, indicating assets, sources and movements of funds.

FINANCIAL RISKS – One of the main categories of risks in banking. It includes risks that resulted from likelihood of changes in volume, availability, profitability, costs and structure of assets and liabilities.

FOREIGN CURRENCY RISK – It results from bank transactions foreign currencies. The main subtypes of foreign currency risk are: exchange rate risk arises is likelihood of depreciation of investments in foreign currency arises from adverse changes in exchange rate; transfer risk is likelihood of regulatory restrictions on conversion one foreign currency into another; position risk resulted from the mismatch between bank foreign currency assets and liabilities

FORWARD – An obligation, set to take effect at some future date, to buy or sell some commodity or financial instrument at a specified price.

FRONT-OFFICE OPERATIONS – Bank operations that involve direct contact with customers or work in financial market place.

FUNCTIONAL RISKS – One of the main banking risks category. It includes risks associated with the process of creating a product or rendering a service; they are present in every bank's operations. They are caused by inability to ensure timely and comprehensive control over financial and economic performance or to collect and analyze relevant information. Also is referred to as operational risks

FUTURES – Highly standardized contracts with deferred delivery of commodities traded on commodity exchange (commodity futures) or financial instruments (financial futures).

GAP – Key term in interest rate risk management. Difference in volumes of interest rate sensitive assets and interest rate sensitive liabilities. The gap can be zero (matched position), positive and negative. Only bank equity and non-earning assets are always non-sensitive to interest rate changes, so bank gap position changes over time. Among methods to manage gap position are to extend variable rate loans; to use longer maturities; to change the repayment

schedule of principal and so on as well as implementation of swaps, futures and other financial innovations.

GLOBALIZATION – It refers to the process that manifests itself in eroding of boundaries between national markets and introduction of similar regulations. Other part of this process is establishing of international banking branch networks that makes possible for banks to deliver services to their clients worldwide.

HANDS ON – Financing technique based on participation of lender in day-to-day management over borrowers' business. It is often assume both equity and debt finance.

HEDGING – Technique to reduce foreign currency, credit and other types of risk when investor takes two opposite positions in relation to certain exposure. If some event impact negatively on return from one asset (transaction) it will be offset by increased return in another. Example of hedge is the deal with third party that brings additional return in the case the bank would suffer loss in the main transaction because of the opposite impact of the same type of risk on return in two transactions. In hedging are widely used futures, swaps and options.

HUMAN RESOURCES MANAGEMENT – The management activity to provide effective, risk-sensitive leadership in planning bank employment needs, job analysis, selecting and training qualified staff, wage and salary administration, incentives and benefits, employee performance evaluation, employee health and safety, and handling grievances and labor relations.

INFORMATION TECHNOLOGIES (IT) – Technologies that are implemented to generate transfer and process information by using computer and telecommunication technologies. IT is involved in the most part of bank operation activity. The most part of bank activity.

INNOVATIONS – See Financial Innovations, Technological Innovations.

SOLVENCY RISK – The danger here is that the bank may find itself unable to meet its claims depositors and other borrowers because losses have exceeded equity capital. It directly refers to probability of bankruptcy. This type of risk is

kind of derived from all other risks, both financial, functional and environmental. From an economic perspective bank gets unsatisfactory balance sheet structure, and its capital decreases, when its expenses during critically long periods exceed its incomes. From regulatory perspective, solvency risk, and consequently also risk of bankruptcy, is associated with the bank's inability to meet the requirements of *capital adequacy*.

INTEREST RATE RISK – The likelihood that bank unpredictable changes in the general level of interest rates will affect adversely on bank net interest margin.

INTERNAL ANALYSIS – Type of strategic analysis attempts to assess the internal features of the bank, which constitutes the other half of the overall situational analysis. It is the second part of Situational Analysis. It concentrates on assessing the organizational structure; financial condition; products and services, and human resources.

INTERNAL BANK PRICES (RATES) – See. Transfer Prices.

INVENTIONS – New products, services, operations and organizational procedures which have not been implemented in business before. See innovations.

INVESTMENT RISK – Risk of changes in market value of securities and other investment assets.

INVESTMENTS – The initial meaning of this term refers to financing of construction, modernization, expansion and renovation deriving from Latin word "investio" – "dressing". The example of this understanding of investments in banking is the term "investment loan". Investments loans used to finance production expansion, modernization and technological innovations. Another meaning of this term corresponds to supplying capital without taking the function of day-to-day management of the given business. The terms "bank investments" and "investment bank" relate to these understanding of investments.

IT MANAGEMENT – Information technology management includes development and implementation of bank IT strategy to meet current and future

market demands, as well as monitoring and supporting bank current operations by IT technologies.

LENDING STANDARDS – Document translating bank Credit policy into actions and cover the following key elements: process of financial information collection and analysis; requirements to collateral, guarantors and co-borrowers; administrative standards and rules of organization of lending; rules for evaluation of creditworthiness; requirements for structure of documentation; regulation for special types of lending,

LIQUID AND NON LIQUID ASSETS – High liquid assets consist of cash in hand, demand deposits, hard currency reserves, as well as marketable short-term securities. Liquid assets additionally to the first group contain loans that mature in 30 days. Generally speaking it is possible to consider precious metals as liquid assets. However the market for these commodities in Russia is still underdeveloped and these assets are not really liquid. The least liquid assets are the long-term non-negotiable financial assets (shares in closed corporations, long-term loans), than premises. Bank liquidity can be improved by securitization of loan portfolio.

LIQUIDITY RATIOS – Limits in the form of liquidity ratios that are used to assess the bank's ability to meet its short-term obligations. They include ratios of assets to liabilities adjusted to their maturity and volatility, ratio of liquid assets to assets.

LIQUIDITY RISK – Risk that bank would have deficit of cash and fail to pay out deposits and meet obligations to other creditors, as well as its legitimate obligations to finance the borrowers. At the same time there is a opposite threat that bank would be too liquid. This situation also undermines profitability because the excess of non-earning assets is financed from interest-bearing liabilities.

LOAN AUDIT – Regular review of loan portfolio by person(s) that are not directly involved in lending.

LOAN LIQUIDITY – The degree of cash inflows before loan maturity. It is affected by the level of interest rate and repayment schedule.

LOAN PORTFOLIO – A collection of all bank's loans.

LOAN PRICING – Procedure of calculating the overall level of compensation to ensure bank target profitability with taking into account credit rating of the given borrower. It is a part of loan portfolio management.

LOAN STRUCTURE – The fundamental loan structure parameters: amount; repayment schedule; monitoring requirements; security; documentation; pricing. It recommended by the credit officer and approved by the authorized individuals and/or committee. The main factors affect on loan structure are the specific features of borrower's business and its creditworthiness.

LONG-TERM ASSETS AND LIABILITIES – Assets and Liabilities with maturities longer than one year..

MANAGEMENT INFORMATION SYSTEM (MIS) – System designed to collect, verify, process, analyze, store, allocate and transfer data that are necessary for effective decision making within the bank. Examples of important management information systems are: credit management information systems; performance measurement systems; marketing information system and human resources management information system.

MARGIN – 1). In Russia traditionally margin refers to absolute difference between two numbers. For example interest margin (interests received - interests spent); 2). It is ratio. For example profit margin is earning to revenues ratio, net interest margin (net interest income/earning assets).

MARKETING – The approach to planning of developing, distribution and promotion banking products and services that enables for bank to achieve its goals by accounting customer demands.

MARKET NICHE – It corresponds to bank strategy of concentration on target, narrower market segment.

MARKET RISK – Type of risk that arises due to chance of negative influence of market factors on the value of assets, liabilities and off-balance sheet items. Sometimes the terms market risk and price risk are used interchangeably. It takes place when two other sub-categories of price risk (foreign currency risk and interest rate risk) are considered independently. According to that

simplified classification the only sub-category of price risk is the market risk and terms are used interchangeably.

MARKET SEGMENTATION – The cornerstone of strategic management and planning. It is accomplished is by dividing the bank’s larger market area into distinct segments. A market segment is defined as a group of customers with largely similar product and service requirements that are different from those of other customers.

MARKETING STRATEGY – Approaches developed and adopted by the bank in order to achieve its specific goals on its target markets. They are based on the use of a set of banking services and products, specially provided for achieving those aims. They take into consideration the difference in profitability of various elements of this set as well as the system of their distribution and eventually methods of bringing the banking services and products to the consumers.

MARKETING MIX – Combination of products, operations and services that have been especially developed or adopted for particular market and bank business segment on the basis of pricing, distribution and promotion. Particular marketing mix should be developed for every target market or business segment.

MISSION – A statement of the bank's current and future expected product, market, and geographical scope, as well as the unique competencies the bank has and will developed to achieve a long-term sustainable competitive advantage, and the priorities for the strategic agenda to take advantage of identified opportunities and protect the bank from identified threats. As such, it provides basic guiding principles and a set of expectations that condition the rest of the strategic activities at all managerial levels.

MONEY MARKET – Market for short-term (shorter than 1 year) financial instruments.

NET BURDEN – Difference between non-interest income and non-interest expenses.

NET INTEREST MARGIN – The key ratio to assess bank performance. It is the ratio of net interest income to the volume of earning assets. It corresponds to traditional Russian ratio profitability of earning assets. Net interest margin adjusted for loan losses is the ratio where in nominator is net interest income and denominator - total loans. This ratio serves as indicator of success of bank's credit policy.

NET WORTH – Bank assets minus borrowing funds. It represent the value of bank owners' investments adjusted for results of its operations that are represented by retained earnings or accumulated losses.

OPERATING LEASING – Short-term lease agreement, which term is shorter than economic life of the asset. It is simplest typical lease.

OPERATIONS – One of the three major bank's activities. It includes taking deposits, transactions and settlements, cash management, accounting, information processing and implementation of IT, bank management and administration.

OPTION – A contract that gives its owner the right to buy or sell some commodity or financial instrument at a fixed price or before a given date.

OVERHEADS RISK – Type of functional risk arises from inconsistency between bank's overheads and net interest margin. In broad sense is risk of banking inefficiency.

PERFORMANCE MEASUREMENT SYSTEM – Management information system to deliver and assess information about elements of the business for which certain managers are accountable, to evaluate organizational units performance against business objectives., as well as to link raw data and financial results to standard performance benchmarks. It serves to quantify strategic goals and translate strategic plan objectives into indicators of day-to-day activity.

PERSONAL PROMOTION OF BANKING SERVICES – Marketing function which means direct communication with bank's customer typically large firm. It is conducted by contact person authorized by bank and representative authorized by client.

POOL OF FUNDS APPROACH – The essence of this method of liquidity management is that all bank funds received from various sources are considered as a uniform pool of funds available at the bank. Then the problem is to create primary and secondary reserves for provision of liquidity.

PRICE RISKS – Price risks result from the possibility of unforeseen changes in the rate of return or value of the bank's assets and liabilities. Three key risk in banking refer to this group are interest rate risk, investment risk and foreign currency risk.

PRIMARY RESERVES – They consist of absolutely liquid assets – cash in hand and demand deposits with other banks.

PROFIT CENTER – A profit center is a organizational unit, or a group of subdivisions, whose operation is immediately connected with earning a profit.

PROFITABILITY – In Russia traditionally instead of term profitability have been used term rentabelnost. In the past in agrarian country the major part of profits accounted rent and to use this term became habit. To day the term profitability and rentabelnost are used interchangeably.

PROFITABILITY RATIOS – A group of indicators refer to assessment of how effectively financial institute or borrower use funds to generate earnings.

PROLONGIROVANNIYE LOANS – The loans with deferred payments and renewed loans.

RATE SENSITIVE ASSETS AND LIABILITIES (RSA AND RSL) – Assets and liabilities, which will be re-priced during the time period being measured. The changes in general level of interest rates have direct impact on these assets. In other words, assets and liabilities sensitive to interest rate changes are those with a variable interest rate and those which will mature during this time period.

REPUTATION RISK – The chance of lost bank's reputation among customers and other financial institutes as reliable business partner.

RESPONSIBILITY CENTER – A responsibility center is a organizational unit, or a group of subdivisions, performing a definite set of operations and having direct influence on profitability of these activities.

RISK MANAGEMENT IN BANKING – It includes identifying, assessment, analysis and quantifying the bank exposure, as well as implementation of techniques and procedures aimed at minimization of risks and maximization of profitability.

RISK MANAGEMENT SYSTEMS – Group of mechanisms for decision-making that enables bank management to identify, evaluate and control certain type of risk and so to reduce the level of its impact on bank performance. Risk management system is implemented through a number of procedures (analysis, setting limits, control, monitoring and so on) at bank level as well as operational/functional level.

RISK MONITORING – Independent, regular review of risk providing feedback mechanisms.

RISK-WEIGHTED ASSETS – In accordance with approaches of CBR and Bank for International Settlements bank assets multiplied by weights that correspond to risk level for particular assets category. The risk of lending to businesses and individuals is stated as starting point for calculation of risk weights. Less risky assets are waited with less weight and risk free with zero weight.

SECONDARY CAPITAL – Bank's subordinated debt that serves as additional security for deposits. Usually bonds. Subordinated means that their holders' claims meet after depositors ones. In the West it is considered as part of Bank's capital and used with primary capital for calculation of capital adequacy ratios with taking into account that its quality are worse than that of primary (base) capital. This practice has not been implemented in Russia albeit bank's bonds are issued in limited amounts.

SECONDARY RESERVES – Reserves for provision of bank liquidity. They consist of high liquid assets with high reversibility. In Russia these reserves contain Government short- and medium-term securities. In a broad sense they can also include bank acceptances, commercial papers and some amount of investment grade bonds.

SECURITIZATION – The process of conversion of the part of bank loan portfolio into marketable securities and re-selling them subsequently to the third parties. In a broad sense the implementation of legal practices and development of markets for reselling loans to the third parties.

SHORT-TERM (CURRENT) ASSETS AND LIABILITIES – Bank assets and liabilities on demand and with maturity less than 1 year.

SHORT-TERM PLANNING – The process of setting short-term bank goals and schedule for their achievement that is divided into structural units. Sometimes it is called profit planning.

SITUATIONAL ANALYSIS – Type of strategic analysis performed annually as part of the procedure of strategic planning. Internal and external analysis constitutes two parts of the overall situational analysis. It is foundation for SWOT analysis.

SPECIALIZED FINANCE – It is a part of banking that differs from traditional businesses such as lending; investments and dealing. The most important types of specialized finance are leasing; factoring; venture financing; forfeiting.

STRATEGIC MANAGEMENT AND PLANNING – The central procedure of bank management which includes: 1. defining the strategic goals of credit institution; 2. Strategic analysis; 3. Planning and implementation. It is the managerial process of developing and maintaining a viable fit between the bank's objectives, businesses, and resources and the changing market environment and regulations. The aim is to shape and reshape the bank's businesses and products so that they promote to growth, yield target profits growth, and increase in shareholder value.

STRATEGIC RISK – Category of functional risks relates to deficiencies of strategic management including the possibility that the organization may set itself wrong objectives or allocates inadequate resources for implementation and fail implement adequate risk systems in the institutional level.

STRATEGIC VISION – The general description of the future organization, businesses and main strategy of the bank.

TECHNOLOGICAL INNOVATIONS – Inventions that have been implemented or being implemented. Technological innovations contain new knowledge or technical solutions. During last decades the banking all over the world have been transformed by implementation of new technology such as automated teller machines; management information systems and other technological innovations. Apart from technological innovation it is considered organizational innovations, innovations in design and financial innovations with the latter plays crucial role in modern banking.

TECHNOLOGICAL RISK – This type of risk is associated with the use of various banking equipment and technologies. It is resulted in possible losses due to troubleshooting costs or unauthorized access to key bank data.

TRANSACTION⁹ – (Derived from English term – transaction).

TRANSFER PRICES – In banking are internal bank prices to provision flow of funds between bank departments.

VENTURE CAPITAL – Funds designed to finance high-risk investments. Very often the meaning of this term is narrower refers to only risky finance of new business set-ups. However in real world the it is used wider to any funds which being ready to lend or invest in risky business.

WARRANTED RISKS – A warranted risk is understood by bank management and able to be controlled and identified. Unwarranted risks are not fully understood, lack appropriate controls, and/or create excessive concentrations.

YIELD CURVE – A graph showing the relationship between the yield of securities and term to their maturities.

YIELD – Ratio of income on security to market value. It should be differentiated from ratio of income to par value.

⁹Reverse translation in English of this term has no meaning.

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