

**MUNICIPAL CREDIT
SEMINAR**

OCTOBER 1997

(ENGLISH VERSION)

Prepared for



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Prepared by

Urban Research
The Urban Institute

with assistance provided by

Bankovní institut



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MUNICIPAL CREDIT SEMINAR

Prepared Under the Auspices of

**The Municipal Finance Company
MUFIS, a s**

for

The United States Agency for International Development
Municipal Finance Program

by

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October 1997

FORWARD

This Municipal Credit Seminar was prepared as part of the United States Agency for International Development's Municipal Finance Program in the Czech Republic. Through a Program Agreement between USAID MUFIS and the Ministry of Finance, USAID assistance in the Czech Republic has supported the emerging municipal credit finance system by working with private commercial banks interested in lending to municipalities, with municipalities seeking financing for priority investment projects, with Parliament and national ministries, and with the Czech Union of Towns and Cities. This assistance has included capital assistance through USAID's Housing Guaranty Loan Program and short-term technical assistance.

This seminar provides lenders with an overview of methods for analyzing municipal credit. This seminar has been developed under contract with USAID by the Urban Institute of Washington, D.C., and Urban Research of Prague.

A Message to Participants in the Municipal Credit Seminar

We have enclosed copies of the materials that we will be discussing during our seminar. The purpose of this seminar is to provide participants with an opportunity to discuss all of the factors that are important in assessing the risks of lending to municipalities. The topics that will be covered will focus on information that is important in the initial loan decision as well as information necessary to monitor changes in credit risk after a loan has been granted. Accordingly, our seminar will analyze a variety of issues, including

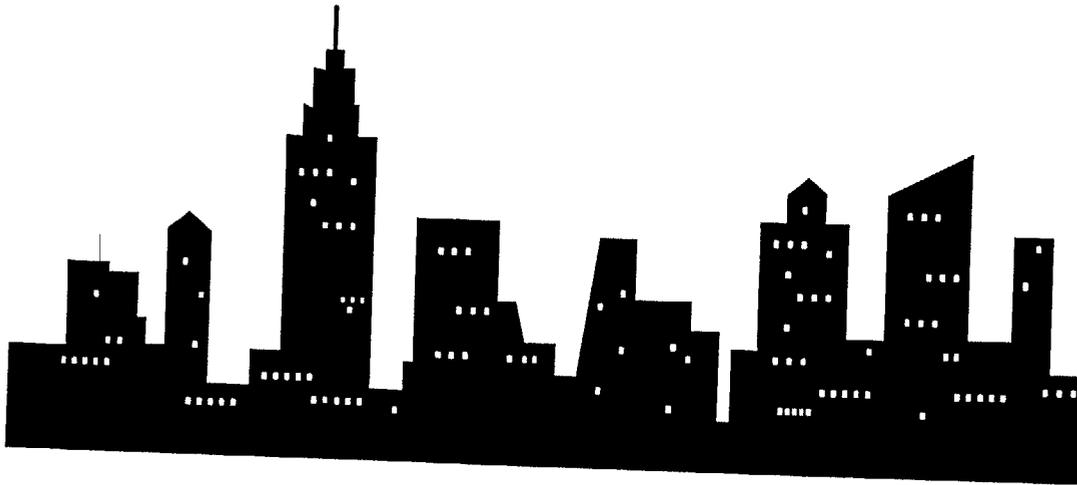
- A The use of financial statements to measure the ability of a municipality to meet future debt service payments from future revenues,
- B The evaluation of project feasibility,
- C The relevance of economic and demographic information on the municipality,
- D The importance of past loan payments history and budget performance in assessing a municipality's willingness to pay,
- E The use of collateral as additional security for loans,
- F Other contractual agreements or covenants important in monitoring risk over time,
- G The risks of changes in the legal or regulatory environment that may impact municipal revenues or expenditures

Seminar participants will explore these issues through the active discussion and in-depth analysis of case studies. The use of the case method is designed to provide realistic situations for analysis, and these cases are based on the actual experiences of a larger number of Czech municipalities. To provide each participant with a full opportunity to contribute to, and learn from, other participants, much of the discussion will be in smaller groups, with a U.S. participant joining each group. Periodically, the groups will convene together to summarize the key issues in the cases.

In a further session, we will have a presentation of a computer model for use in assessing credit risk, developed as part of the USAID Municipal Finance Program. We will also have a general discussion of factors, other than financial statements, important to bank lenders, including a discussion of legal issues surrounding municipal lending. Finally, we will have a discussion on the conditions and normal procedures followed in MUFIS municipal infrastructure finance program.

We have enclosed 2 case studies of Czech municipalities. These cases, and the information that is provided, are designed to represent, broadly, the range of credit issues that bank loan officers and investment bankers may face. We will first discuss City A. Our analysis of this city will focus on cash flow as a source of funds for repayment. As a result, the information provided excludes balance sheets. We will then turn our attention to City X. For this city, we will broaden our discussion to include consideration of specific loan terms or restrictions, and collateral requirements that we might impose on the borrowers.

Assessing Municipal Credit Risk: An Overall Perspective



Assessing Municipal Credit Risk: An Overview of the Major Factors

Statement on Budget Performance of Municipalities

Form Uc 1-12

Our major focus during this seminar will be on the analysis of municipal financial statements. Our objective is to measure and evaluate the net operating cash flow available to meet debt service obligations. We will analyze the information on revenues and expenses that is generally reported in "Form Uc 1-12" to derive alternative measures of debt service coverage.

Revenues	Own Budgetary Revenues	xxxxxx
	Total Subsidy	xxxxxx
	Purpose Means Provided During Year	xxxxxx
	Other Revenues	xxxxxx
Total Revenues		xxxxxx
Expenses	For Capital Investments of Budgetary Organizations	xxxxxx
	For Subsidies to Contributory Organizations and State Enterprises	xxxxxx
	Current Expenditures of Budgetary Organizations	xxxxxx
	Total Expenses	
Total Economic Result		
	Surplus Deficit	xxxxxx

Assessing Municipal Credit Risk: The Overall Perspective

Local Economic Base Factors



Indicators:

Trends in employment in major businesses

New construction

New business formations

Sources of Information ?

Statement on Budget Performance of Municipalities

Form Uc 1-12

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	Total Subsidy	xxxxxx
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Expenses	For Capital Investments of Budgetary Organizations	xxxxxx
	For Subsidies to Contributory Organizations and State Enterprises	xxxxxx
	Current Expenditures of Budgetary Organizations	xxxxxx
	Total Expenses	
Total Economic Result		
	Surplus	xxxxxx
	Deficit	

Assessing Municipal Credit Risk The Overall Perspective

Demographic Factors



- Indicators:**
- Trends in population
 - Personal Incomes
 - Age Distribution
 - Unemployment Rate

Sources of Information ?

Statement on Budget Performance of Municipalities

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	Total Expenses	
Total Economic Result		
	Surplus Deficit	xxxxxx

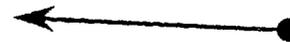
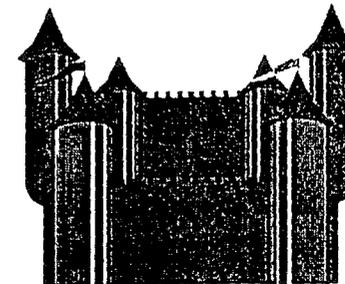
Assessing Municipal Credit Risk An Overview of the Major Factors

Statement on Budget Performance of Municipalities

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Total Economic Result		
	Surplus Deficit	xxxxxx

Intergovernmental Fiscal Relationships



Fiscal connections with other levels of government can introduce "political risk" and add uncertainty to forecasts of municipal revenues and expenditures

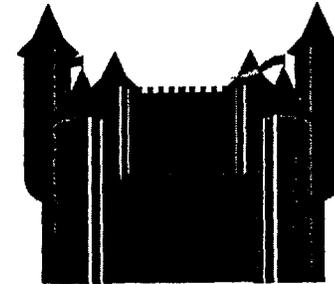
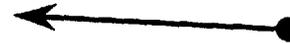
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Statement on Budget Performance of Municipalities

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	Surplus	xxxxxx
	Deficit	

Intergovernmental Fiscal Relationships



Issues concerning shared national taxes

Trends in subsidies

Assessing Municipal Credit Risk: An Overview of the Major Factors

Administrative & Managerial Factors



The ability of management to meet operating budgets, adapt to unexpected changes in revenues and/or expenses, and to formulate reasonable long-range capital budgets lend credibility to projected financial results.

Statement on Budget Performance of Municipalities

Form Uc 1-12

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	Surplus Deficit	xxxxxx

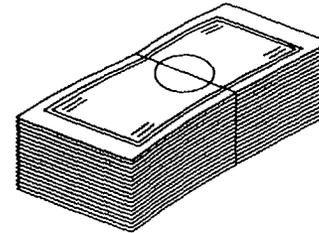
Assessing Municipal Credit Risk: An Overall Perspective

Statement on Budget Performance of Municipalities

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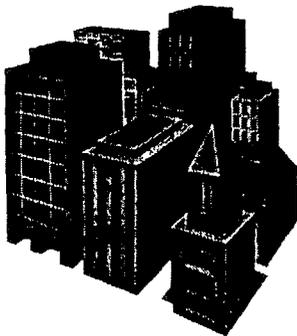
Debt Management Policies



*The purposes for municipal borrowing,
the structure of debt obligations, and
the burden of debt service on
municipal budgets are important in
assessing credit risk*

Assessing Municipal Credit Risk: The Overall Perspective

Municipal Assets as Collateral



Although loans are expected to be repaid with future cash flows from operations, collateral can serve as an added security.

Statement on Budget Performance of Municipalities

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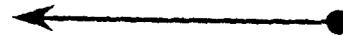
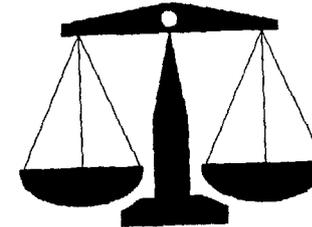
Assessing Municipal Credit Risk: An Overall Perspective

Statement on Budget Performance of Municipalities

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Total Economic Result		
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The Legal Status of Municipal Debt



*The ability to enforce loan terms
is important in facilitating credit
market access for municipalities*

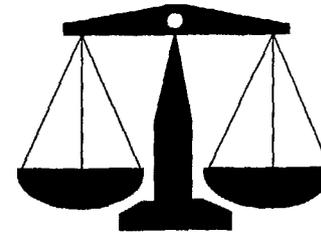
Assessing Municipal Credit Risk: An Overall Perspective

Statement on Budget Performance of Municipalities

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Total Economic Result		
	Surplus	xxxxxx
	Deficit	

Legal Issues in Municipal Lending



**Issues concerning the legal status of
municipal general revenue pledges**

Issues concerning collateral

Issues concerning other loan terms

Senior/subordinated

Limits on indebtedness

Intercept mechanisms

Assessing Municipal Credit Risk: The Overall Perspective

Evaluating Future Cash Flows



Although the analysis of past and present financial performance is a necessary part of the credit evaluation, debt service is paid from future cash flow.



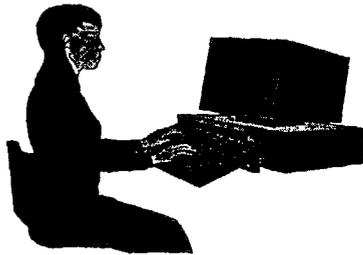
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Assessing Municipal Credit Risk: The Overall Perspective

Monitoring Changes in Credit Condition



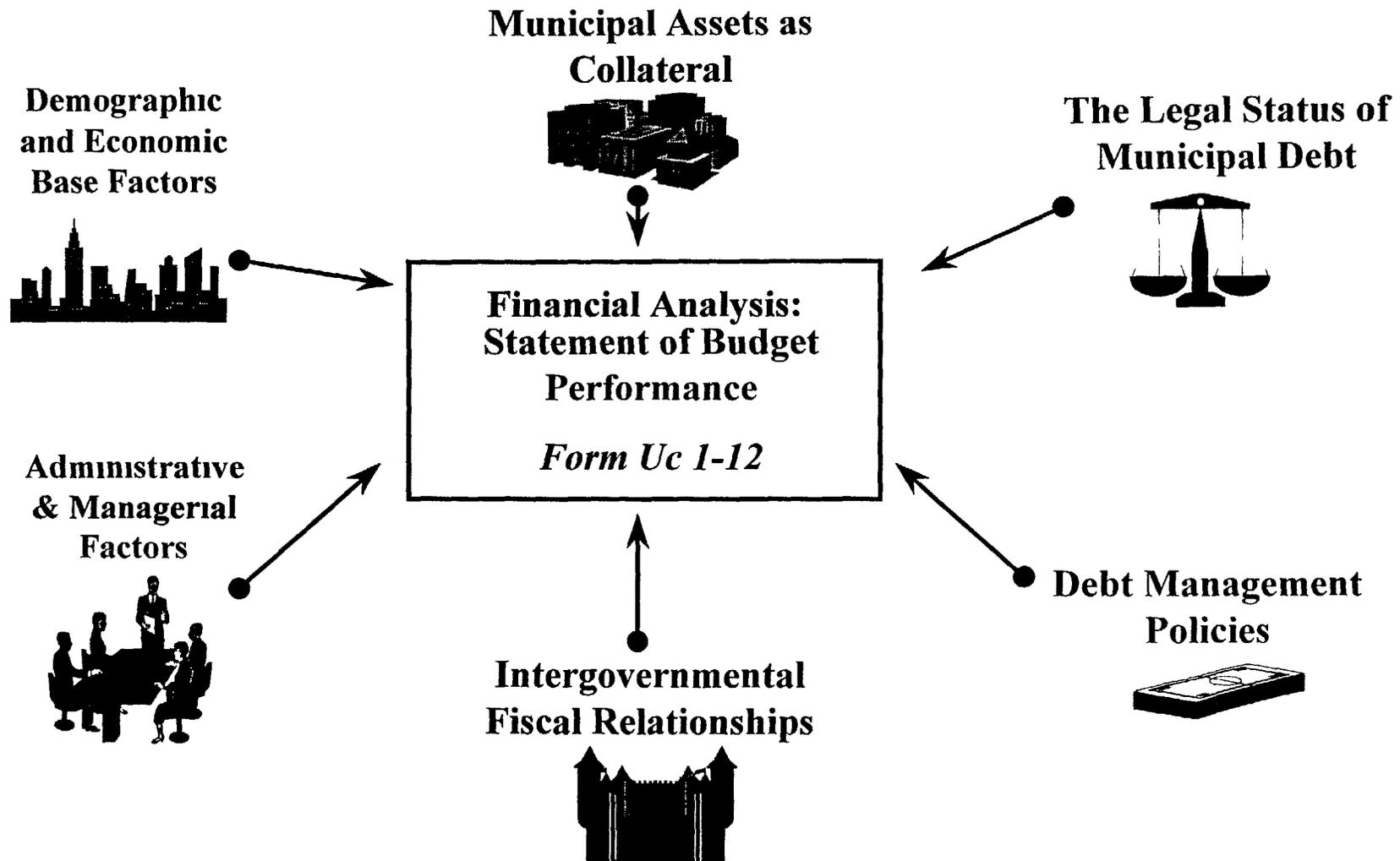
Credit analysis does not end with the initial loan decision. Ongoing monitoring can provide useful early warning signals of future credit problems.

Statement on Budget Performance of Municipalities

Form Uc 1-12

Revenues	Own Budgetary Revenues	xxxxxx
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	Current Expenditures of Budgetary Organizations	xxxxxx
	Total Expenses	xxxxxx
Total Economic Result		
	Surplus Deficit	xxxxxx

Assessing Municipal Credit Risk: An Overall Perspective



**Case Study Information for
City A**

Narrative City A

City A is applying to your bank for a credit of 7 million CK, to be repaid over 10 years at an interest rate of 11%. The city has no outstanding debt. The purpose of the loan is to finance a major upgrading of the city water supply. The city water system provides an adequate volume of piped water to all city residents from 3 municipal wells. However, testing of water quality in 1994 revealed that 1 of the city's wells was contaminated by the seepage of sewage. Therefore, in 1994, planning was completed on a new well, a water treatment plant, and connections to the city water distribution system. This project has been assigned a top priority by the city council. The total cost of the project is estimated at 9 million CK, and a state subsidy for 1 million CK was used for engineering and site development in 1994. An additional subsidy of 1 million CK is expected from the state in 1995. City A had a population of 3700 persons in 1994, and population is expected to remain stable in future years.

City A has provided, in Exhibit 1, a budget for 1995, along with actual financial results for 1992, 1993, and 1994. The 1995 budget includes investment expenditures of 6 million CK to complete the project. As indicated by the Economic Results, without this credit, the budget shows a deficit of 5.986 million CK.

As part of your analysis, you have prepared an amortization schedule for the credit, with annual payments of principal and interest extending from 1995 to 2005. This analysis is included in Exhibit 2. Further, you have revised the budget for 1995 to include the credit of 7 million CK as an item of revenue, and you have adjusted expenditures to include the estimated 1995 payments of principal and interest. This revised budget is in Exhibit 3.

Based on the information available, what do you see as the strengths and weaknesses of this municipality? Would you approve this credit? If so, what terms and conditions would you propose?

EXHIBIT 1
Financial Information for City A
 (Before Proposed Credit of 7 000 tis Kc)
 (All amounts in thousands of Kc)

REVENUES	Actual 1992	Actual 1993	Actual 1994	Budget 1995 (Before New Credit)
Revenues from RO PO	3 100	12 810	14 460	17 280
Total Tax Revenues	1 440	5 470	8 340	9 680
-Income Tax of natural person from dependent activity	1 310	4 260	5 320	6 590
-Income Tax of natural persons from business	0	0	1 720	1 800
-Property Tax	90	890	910	900
-Administrative Fees	40	320	390	390
-Tax Corrections	0	0	0	0
Total Local Fees & Other Revenues	4 050	5 750	4 750	1 880
-Local Fees	0	0	0	0
-Revenues from property sales	780	3 880	1 980	560
-Other and Random Revenues	3 270	1 870	2 770	1 320
State Subsidies	10 380	4 370	5 470	7 520
-Total General Subsidies	6 170	1 600	1 010	980
-Extraordinary & special purpose subsidies	4 210	2 770	4 460	6 540
Transfers from All Sources	1 340	3 480	3 000	3 850
-Transfers from Reserves	0	0	2 820	0
-Transfers from Joint Resources	0	0	18	0
-Other Transfers	1 340	3 480	162	3 850
Credits and municipal bonds	0	0	0	0
-Accepted Credits	0	0	0	0
Municipal bonds	0	0	0	0
Total Revenues	20 310	31 880	36 020	40 210

EXPENDITURES	Actual 1992	Actual 1993	Actual 1994	Budget 1995 (Before New Credit)
Operating Expenditures of Budgetary Organizations	7 710	28 280	31 040	38 916
-Salaries and other personnel expenses	610	2 380	3 370	4 100
-Other Expenditures	7 100	25 900	27 670	34 816
Operating Subsidies to Contributory Organizations and State Firms	40	50	100	120
Total Operating Expenditures	7 750	28 330	31 140	39 036
Investment Expenditures of Budgetary Organizations	1 850	30	2 280	7 160
Investment Subsidies to Contributory Organizations and State Firms	0	0	0	0
Total Investment Expenditures	1 850	30	2 280	7 160
-Payments of principal	0	0	0	0
-Payments of Interest	0	0	0	0
Total Debt Service	0	0	0	0
Total Expenditures	9 600	28 360	33 420	46 196
Economic Results	10 710	3 520	2 600	-5 986

Exhibit 2
Schedule of Debt Service on
Proposed Credit of 7 000 tis Kc
for City A

(all amounts in thousands of Kc)

Year	Principal Outstanding, Beginning of Period	New Credits Accepted	Scheduled Principal Payments	Scheduled Interest Payments	Scheduled Total Debt Service	Outstanding Principal, End of Period
1995		7 000	512	492	1 004	6 488
1996	6 488	0	683	685	1 368	5 805
1997	5 805	0	683	610	1 293	5 122
1998	5 122	0	683	535	1 218	4 439
1999	4 439	0	683	460	1 143	3 756
2000	3 756	0	683	385	1 068	3 073
2001	3 073	0	683	310	993	2 390
2002	2 390	0	683	235	918	1 707
2003	1 707	0	683	160	843	1 024
2004	1 024	0	683	85	768	341
2005	341	0	341	14	355	0

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EXHIBIT 3
Financial Information for City A
 (After Proposed Credit of 7 000 tis Kc)
 (All amounts in thousands of Kc)

REVENUES	Actual 1992	Actual 1993	Actual 1994	Budget 1995 (After New Credit)
Revenues from RO, PO	3 100	12 810	14 460	17 280
Total Tax Revenues	1 440	5 470	8 340	9 680
-Income Tax of natural person from dependent activity	1 310	4 260	5 320	6 590
-Income Tax of natural persons from business	0	0	1 720	1 800
-Property Tax	90	890	910	900
-Administrative Fees	40	320	390	390
Tax Corrections	0	0	0	0
Total Local Fees & Other Revenues	4 050	5 750	4 750	1 880
-Local Fees	0	0	0	0
-Revenues from property sales	780	3 880	1 980	560
-Other and Random Revenues	3 270	1 870	2 770	1 320
State Subsidies	10 380	4 370	5 470	7 520
-Total General Subsidies	6 170	1 600	1 010	980
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Transfers from All Sources	1 340	3 480	3 000	3 850
-Transfers from Reserves	0	0	2 820	0
-Transfers from Joint Resources	0	0	18	0
-Other Transfers	1 340	3 480	162	3 850
Credits and municipal bonds	0	0	0	7 000
-Accepted Credits	0	0	0	7 000
-Municipal bonds	0	0	0	0
Total Revenues	20 310	31 880	36 020	47 210

EXPENDITURES	Actual 1992	Actual 1993	Actual 1994	Budget 1995 (Before New Credit)
Operating Expenditures of Budgetary Organizations	7 710	28 280	31 040	38 916
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Operating Subsidies to Contributory Organizations and State Firms	40	50	100	120
Total Operating Expenditures	7 750	28 330	31 140	39 036
Investment Expenditures of Budgetary Organizations	1 850	30	2 280	7 160
Investment Subsidies to Contributory Organizations and State Firms	0	0	0	0
Total Investment Expenditures	1 850	30	2 280	7 160
Payments of principal	0	0	0	512
-Payments of Interest	0	0	0	492
Total Debt Service	0	0	0	1 004
Total Expenditures	9 600	28 360	33 420	47 200
Economic Results	10 710	3 520	2 600	10

City A
Worksheet #1
Separating Recurring Revenue from Non-Recurring Revenue

Recurring Revenues	Actual 1992	Actual 1993	Actual 1994	Budget 1995 (Before New Credit)
National Tax Revenues				
1 Income Tax of natural person from dependent activity	1 310	4 260	5 320	6 590
2 Income Tax of natural persons from business	0	0	1 720	1 800
3 Total National Tax Revenues (=1+2)	1 310	4 260	7 040	8 390
State Operating Subsidies				
4 Total General Subsidies	6 170	1 600	1 010	980
Local Revenues				
5 Revenues from RO PO	3 100	12 810	14 460	17 280
6 Property Tax	90	890	910	900
7 Administrative Fees	40	320	390	390
8 Tax Corrections	0	0	0	0
9 Local Fees	0	0	0	0
10 Total Local Revenues (=5+6+7+8+9)	3 230	14 020	15 760	18 570
Total Recurring Revenues (=3+4+10)	10 710	19 880	23 810	27 940

Non-Recurring Revenue				
11 Revenues from property sales	780	3 880	1 980	560
12 Other and Random Revenues	3 270	1 870	2 770	1 320
13 Extraordinary & special purpose subsidies	4 210	2 770	4 460	6 540
14 Transfers from All Sources	1 340	3 480	3 000	3 850
Total Non-Recurring Revenue (=11+12+13+14)	9 600	12 000	12 210	12 270

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City A
Worksheet #2
The Concept of Net Operating Income

	Actual 1992	Actual 1993	Actual 1994	Budget 1995 (Before New Credit)
Recurring Revenues				
1 Total National Tax Revenues	1 310	4 260	7 040	8 390
2 Total General Subsidies	6 170	1 600	1 010	980
3 Total Local Revenues	3 230	14 020	15 760	18 570
4 Total Recurring Revenues (=1+2+3)	10 710	19 880	23 810	27 940
Less				
5 Operating Expenditures	7 750	28 330	31 140	39 036
Equals				
6 Net Operating Revenue (=4-5)	2 960	- 8 450	- 7 330	- 11 096

AUGAWS2

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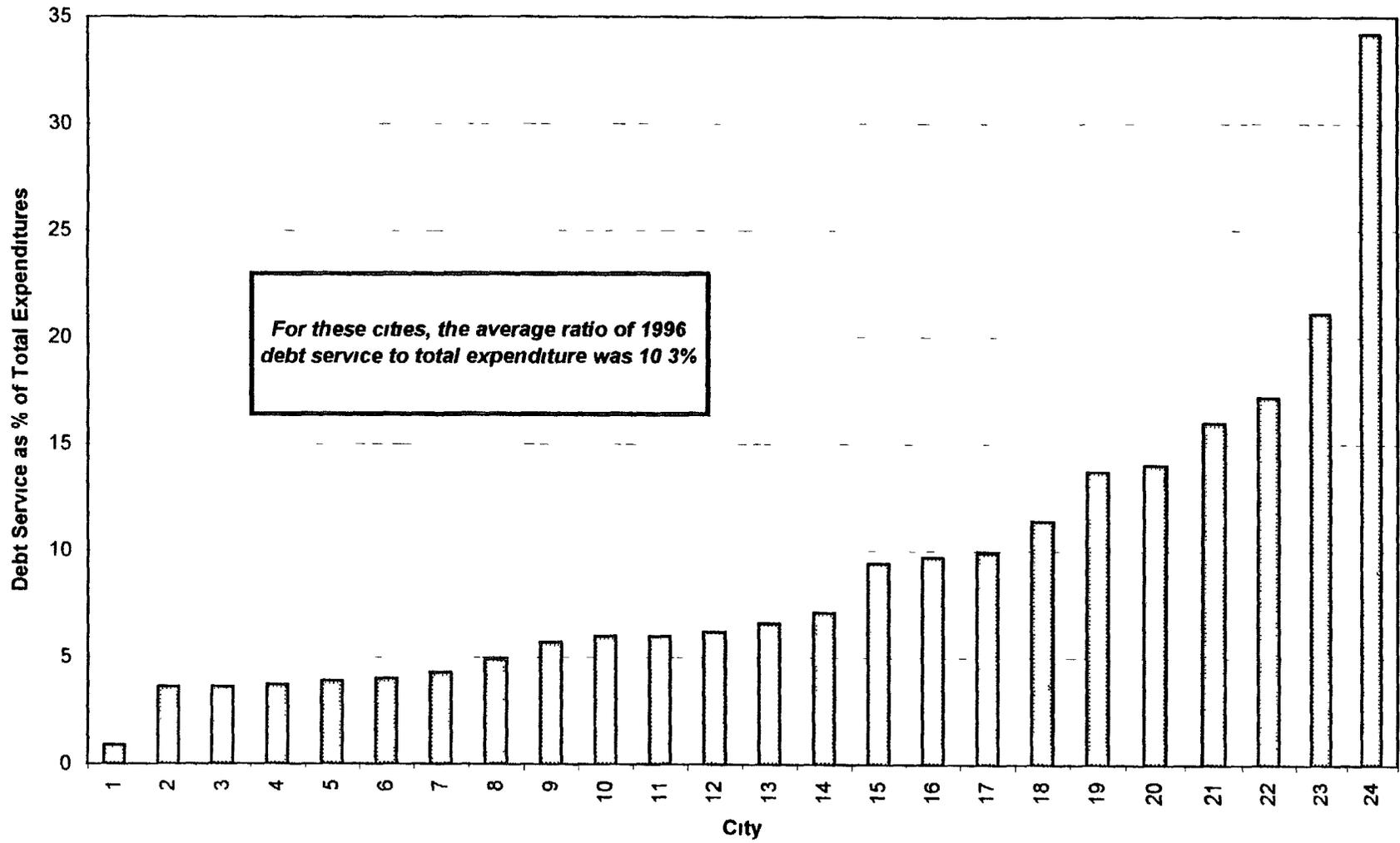
Worksheet #3
Summary Measures of City A Financial Performance

	Actual 1992	Actual 1993	Actual 1994	Budget 1995 (Before New Credit)	
Key Revenue Indicators					
1	Recurring Revenues/Total Revenues	52,7%	62,3%	66,1%	69,5%
2	National Tax Revenues/Recurring Revenues	12,2%	21,4%	29,6%	30,0%
3	Local Revenues/Recurring Revenues	30,2%	70,6%	66,2%	66,5%
4	Property Sales/Total Revenues	3,8%	12,2%	5,5%	1,4%
5	Total State Subsidies/Total Revenues	51,1%	13,7%	15,2%	18,7%
Key Spending Indicators					
6	Total Expenditures per Capita	2 595	7 665	9 032	12 485
7	Total Operating Expenditures per Capita	2 095	7 657	8 416	10 550
8	Operating Expenditures/Total Expenditures	80,7%	99,9%	93,2%	84,5%
9	Total Investment Spending/Total Expenditures	19,3%	0,1%	6,8%	15,5%
Overall Financial Performance					
10	Operating Expenditures/Recurring Revenues	72,4%	142,6%	130,8%	139,7%

Worksheet #4
Summary Measures of Debt Service Coverage
 (All amounts in thousands of Kc)

Maximum Future Debt Service (1996)	1 368
Total Revenue, 1995	40 210
Debt Service as a Percent of Total Revenue	3 40%
Maximum Future Debt Service (1996)	1 368
1995 Reurring Revenues	27 940
Debt Service as a Percent of Recurring Revenues	4 90%
Net Operating Revenue, 1995	- 11 096
Maximum Future Debt Service, 1996	1 368
Debt Service Coverage Ratio (=NOR/MFDS)	- 8 11
Target Debt Service Coverage Ratio	1 25
Net Operating Revenue Required (=1 368*1 25)	1 710
Increase in NOR from 1995 Level	12 806
Required Increase as a % of 1995 Recurring Revenues	45 83%

1996 Debt Service as a Percent of Total Expenditures for a Sample of Czech Cities



Benchmarks for Assessing Credit Quality Based on Key Indicators

Indicator	Benchmarks for All Cities of Similar Size	
	Strong	Weak
1 Net Operating Revenue as a Percent of Recurring Revenue	> +7%	< +2%
2 Recurring Revenues as a Percent of Total Revenues	>66%	<50%
3 National Tax Revenues as a Percent of Recurring Revenues	<50%	>75%
4 Local Revenues as a Percent of Recurring Revenues	>33%	<25%
5 Property Sales as a Percent of Total Revenue	<2%	>5%
6 Total State Subsidies as a Percent of Total Revenue	<33%	>50%
7 Total Expenditures Per Capita (Kc)	<9 130	>11 159
8 Total Operating Expenditures Per Capita (Kc)	<6 012	>7 349
9 Debt Service as a Percent of Total Revenue	< 10%	> 20%
10 Debt Service as a Percent of Recurring Revenues	<5%	>10%
11 Net Operating Revenue / Debt Service	>2 0	<1 1

**An Overall Risk Assessment for City A
Relative to Selected Benchmarks**

Indicator	Value for City A		Benchmarks for All Cities of Similar Size		Risk Assessment for City A	
	1994	1995	Strong	Weak	Status (1994)	Trend (1995 V 1994)
1 Net Operating Revenue as a Percent of Recurring Revenue	-30,8%	-39,7%	> +7%	< +2%	W	D
2 Recurring Revenues as a Percent of Total Revenues	62,3%	66,10%	>66%	<50%	A	I
3 National Tax Revenues as a Percent of Recurring Revenues	21,40%	29,60%	<50%	>75%	S	D
4 Local Revenues as a Percent of Recurring Revenues	70,60%	66,20%	>33%	<25%	S	D
5 Property Sales as a Percent of Total Revenue	12,20%	5 50%	<2%	>5%	W	I
6 Total State Subsidies as a Percent of Total Revenue	13,70%	15,20%	<33%	>50%	S	S
7 Total Expenditures Per Capita (Kc)	7 665	9 032	<9 130	>11 159	S	D
8 Total Operating Expenditures Per Capita (Kc)	7 657	8 416	<6 012	>7 349	W	D
9 Debt Service as a Percent of Total Revenue	0%	3,40%	< 10%	> 20%	S	S*
10 Debt Service as a Percent of Recurring Revenues	0%	4 90%	<5%	>10%	S	S*
11 Net Operating Revenue / Debt Service	N/A	-8,11	>2 0	<1 1	N/A	D*

* We use maximum future debt service and 1995 revenues for this calculation

Legend

Status

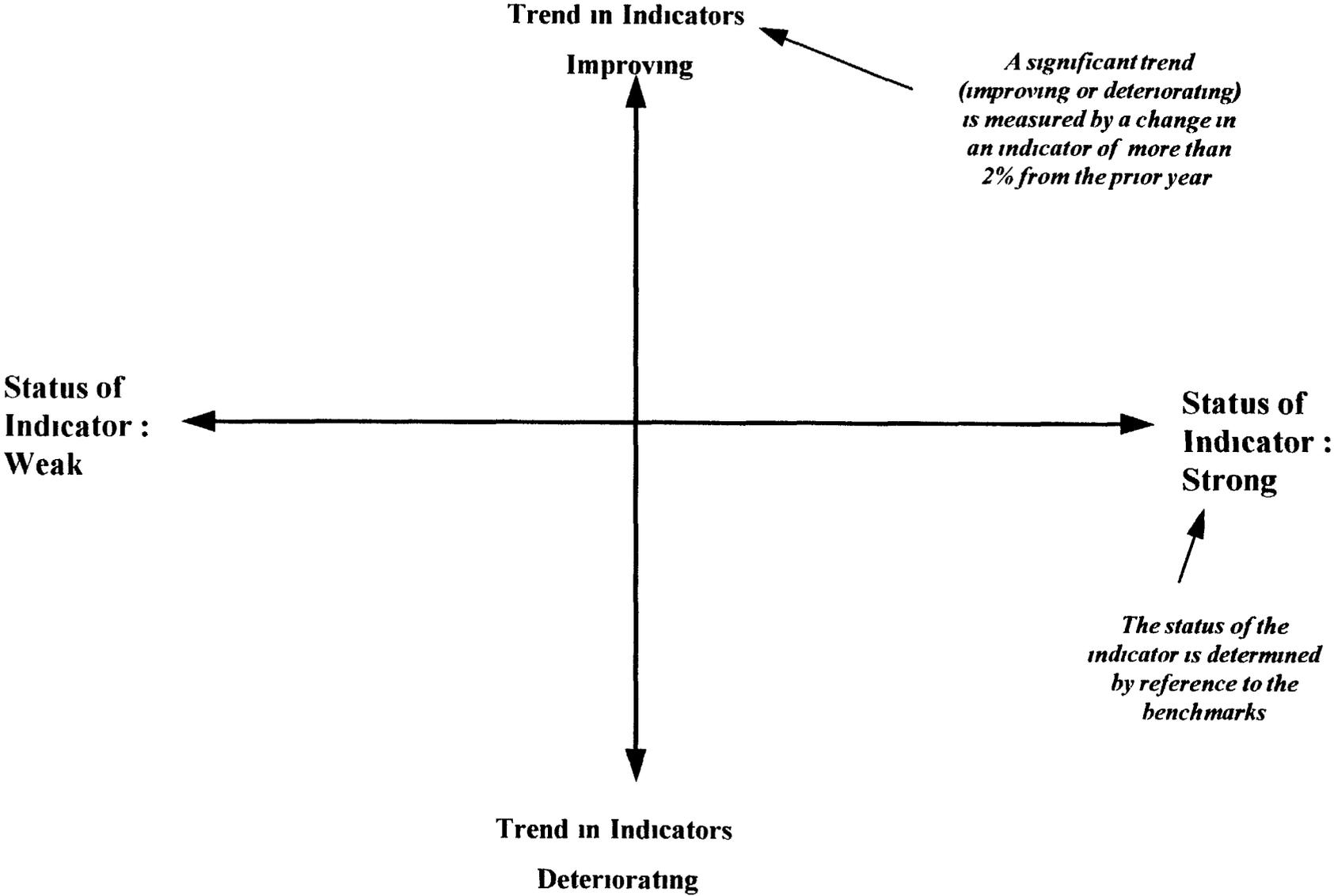
W Weak
A Acceptable
S Strong

Trend

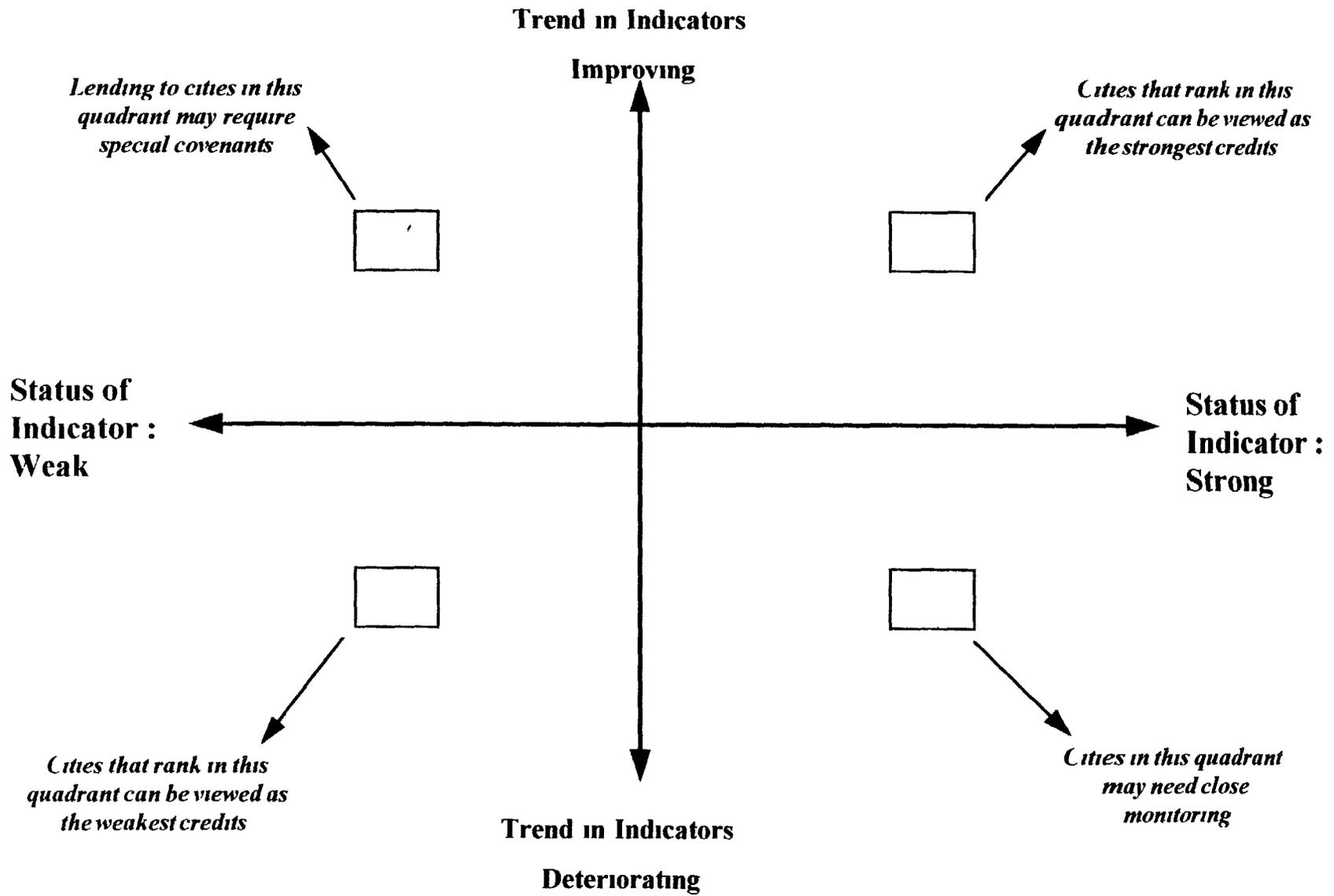
D Deterlorating
S Stable
I Improving

or

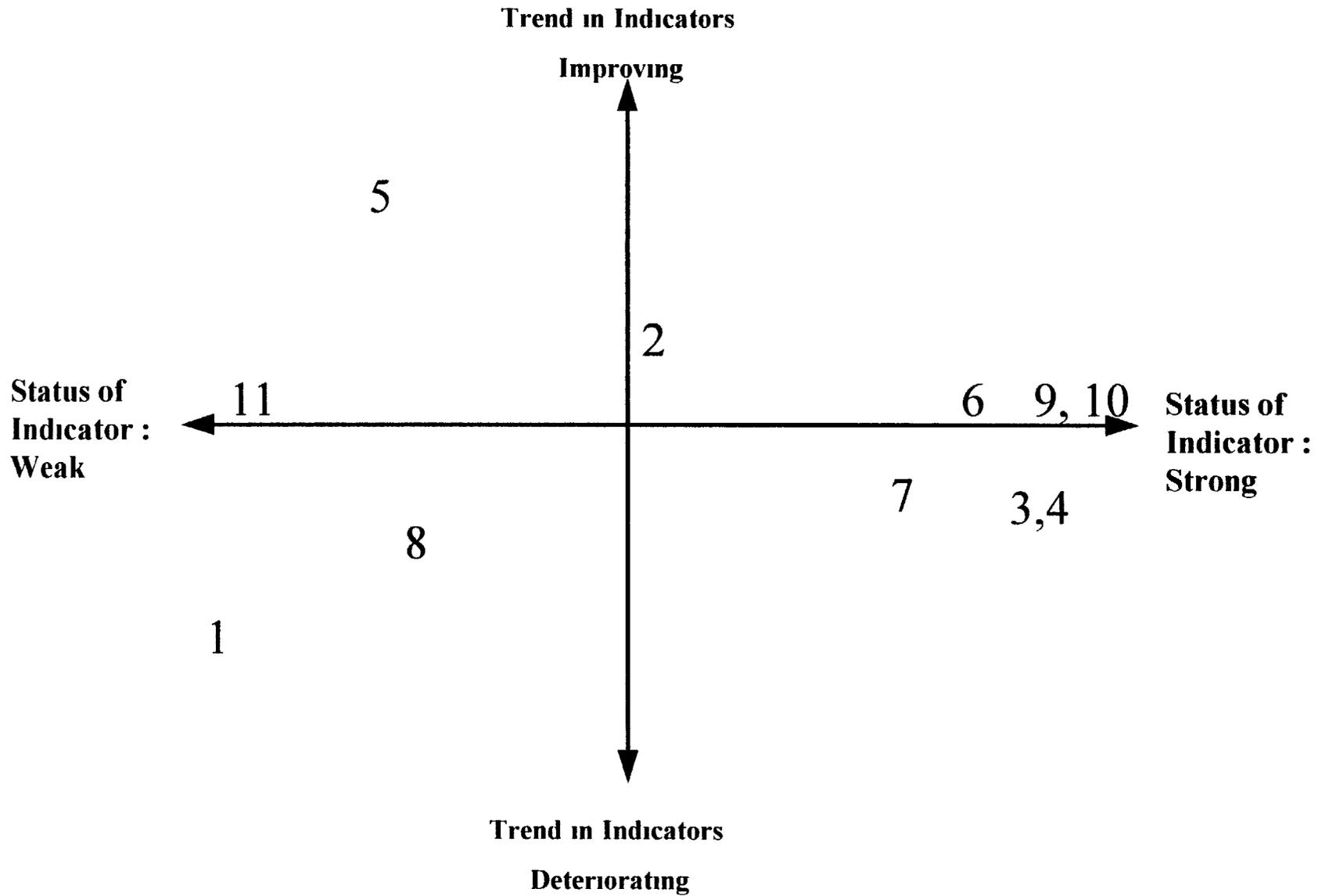
A Risk Assessment Matrix for City A



A Risk Assessment Matrix for City A



A Risk Assessment Matrix for City A



Case Study Information for

City X

Narrative
City X

City X is applying to your bank for a credit of CK 25,000,000, to be repaid over 10 years at an interest rate of 12%. The purpose of the loan is to finance a gasification project. The project will provide for a reconstruction of the central heat supply system for heating and domestic hot water supply in the city. The main part of the reconstruction is to build a new gas boiler house to replace the existing coal boiler house, and to construct new high, medium, and low pressure gas pipelines with control stations. Total budget costs amount to CK 35,000,000, including VAT, and the city expects to contribute CK 5,000,000 from its own funds.

City X has a current population of 4,100, which is expected to remain stable in future years. The city also supplies heat to a prison area which takes 27% of the total heat from the central heat supply system. The present system is being supplied from a facility owned by the city which has 3 brown coal boilers, and total system efficiency is approximately 42%. Pollution from the boilers does not meet the requirements of Law No 309/1991 Coll., and the city is facing fines of CK 1 million per year as well as penalties and the possibility of a plant shutdown. Two of the three existing boilers were overhauled in 1994, and the system has a residual value, after depreciation, of CK 9,500,000.

City X has CK 12,813,000 in outstanding principal, from loans for earlier infrastructure projects, including the boiler overhaul. Exhibit 2 provides a detailed statement of the remaining debt service on these loans, which were granted by a different bank. The city also received a state subsidy of CK 5,000,000 for this project.

As part of its application, City X has submitted, in Exhibit 1, financial information that includes actual results for 1994-1996, and the 1997 budget. The 1997 budget includes the gasification project as part of the city's investment spending plans, but does not include the requested credit of CK 25,000,000. Without this credit, the city will have a shortfall in revenues of nearly CK 20,000,000.

You have prepared, in Exhibit 3, an amortization schedule for the proposed credit. Moreover, you have also prepared, in Exhibit 4, a summary of overall debt outstanding and annual debt service requirements including the proposed credit. Finally, you have also prepared a revised 1997 budget that includes the proposed credit of CK 25,000,000 as a revenue item, and debt service on this loan has been added to expenditures for 1997. After completing these analyses, you subsequently learn that the state subsidy of CK 5,000,000 is repayable financial aid. According to representatives of City X, the repayment schedule has not been finalized, but the city is planning on 5 equal annual instalments beginning in 1998.

Based on the information available, what do you see as the strengths and weaknesses of this municipality? Would you approve the credit? If so, what terms and conditions would you propose?

EXHIBIT 1
Financial Information for City X
 (Before Proposed Credit of 25 000 tis Kc)
 (All amounts in thousands of Kc)

REVENUES	Actual 1994	Actual 1995	Actual 1996	Budget 1997 (Before New Credit)
Revenues from RO PO	5 328	7 277	8 274	9 350
Total Tax Revenues	20 235	23 662	27 943	25 740
Tax of natural person from dependent activity	6 316	8 892	6 993	6 643
Income Tax of natural persons from business	11 401	10 764	9 600	8 832
Property Tax	2 427	4 002	3 089	3 243
Corporate Income Tax	0	0	8 261	7 022
Tax Corrections	91	4	0	0
Total Local Fees & Other Revenues	10 911	9 713	9 622	4 005
-Local Fees	118	185	298	304
Administrative Fees	989	1 334	2 012	2 052
-Revenues from property sales	8 662	5 580	5 679	0
-Other and Random Revenues	1 142	2 814	1 633	1 649
State Subsidies	5 634	9 191	2 409	2 272
-Total General Subsidies	2 940	3 212	2 272	2 272
-Extraordinary & special purpose subsidies	2 694	5 979	137	0
Transfers from All Sources	9 300	5 300	5 500	1 200
-Transfers from Reserves	9 200	5 000	5 000	500
-Transfers from Joint Resources	100	300	500	700
-Other Transfers	0	0	0	0
Credits and municipal bonds	3 500	10 000	5 000	0
-Accepted Credits	3 500	10 000	5 000	0
-Municipal bonds	0	0	0	0
Repayable State Funds				5 000
Total Revenues	54 908	65 143	58 748	47 567

EXPENDITURES	Actual 1994	Actual 1995	Actual 1996	Budget 1997 (Before New Credit)
Operating Expenditures of Budgetary Organizations	18 612	24 508	25 634	26 446
-Salaries and other personnel expenses	3 140	3 606	4 292	4 464
Other Expenditures	15 472	20 902	21 342	21 982
Operating Subsidies to Contributory Organizations and State Firms	469	471	894	900
Total Operating Expenditures	19 081	24 979	26 528	27 346
Investment Expenditures of Budgetary Organizations	29 237	34 075	26 712	35 000
Investment Subsidies to Contributory Organizations and State Firms	1 000	100	0	0
Total Investment Expenditures	30 237	34 175	26 712	35 000
Payments of principal	438	1 875	3 375	3 875
-Payments of Interest	394	1 408	1 676	1 255
Total Debt Service	831	3 283	5 051	5 130
Total Expenditures	50 149	62 437	58 291	67 476
Economic Results	4 759	2 707	457	19 909

Note: Operating Expenditures do not include debt service

Exhibit 2
Schedule of Debt Service on
Outstanding Loans
for City X
(all amounts in thousands of Kc)

Year	Principal Outstanding, Beginning of Period	New Credits Accepted	Scheduled Principal Payments	Scheduled Interest Payments	Scheduled Total Debt Service	Outstanding Principal, End of Period
1994	0	3 500	438	394	831	3 063
1995	3 063	10 000	1 875	1 408	3 283	11 188
1996	11 188	5 000	3 375	1 676	5 051	12 813
1997	12 813	0	3 875	1 255	5 130	8 938
1998	8 938	0	3 438	831	4 269	5 500
1999	5 500	0	3 000	460	3 460	2 500
2000	2 500	0	2 000	173	2 173	500
2001	500	0	500	29	529	0
2002	0	0	0	0	0	0
2003	0	0	0	0	0	0
2004	0	0	0	0	0	0
2005	0	0	0	0	0	0
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0

Note Schedule does not include Repayable State Aid

Exhibit 3
Schedule of Debt Service on
on Proposed Credit of 25 000 tis Kc
for City X
(all amounts in thousands of Kc)

Year	Principal Outstanding, Beginning of Period	New Credits Accepted	Scheduled Principal Payments	Scheduled Interest Payments	Scheduled Total Debt Service	Outstanding Principal, End of Period
1997	0	25 000	1 250	2 925	4 175	23 750
1998	23 750	0	2 500	2 700	5 200	21 250
1999	21 250	0	2 500	2 400	4 900	18 750
2000	18 750	0	2 500	2 100	4 600	16 250
2001	16 250	0	2 500	1 800	4 300	13 750
2002	13 750	0	2 500	1 500	4 000	11 250
2003	11 250	0	2 500	1 200	3 700	8 750
2004	8 750	0	2 500	900	3 400	6 250
2005	6 250	0	2 500	600	3 100	3 750
2006	3 750	0	2 500	300	2 800	1 250
2007	1 250	0	1 250	75	1 325	0

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Exhibit 4
Schedule of Debt Service on
on Outstanding Debt and Proposed Credit of 25 000 tis Kc
for City X
(all amounts in thousands of Kc)

Year	Principal Outstanding, Beginning of Period	New Credits Accepted	Scheduled Principal Payments	Scheduled Interest Payments	Scheduled Total Debt Service	Outstanding Principal, End of Period
1997	12 813	25 000	5 125	4 180	9 305	32 688
1998	32 688	0	5 938	3 531	9 469	26 750
1999	26 750	0	5 500	2 860	8 360	21 250
2000	21 250	0	4 500	2 273	6 773	16 750
2001	16 750	0	3 000	1 829	4 829	13 750
2002	13 750	0	2 500	1 500	4 000	11 250
2003	11 250	0	2 500	1 200	3 700	8 750
2004	8 750	0	2 500	900	3 400	6 250
2005	6 250	0	2 500	600	3 100	3 750
2006	3 750	0	2 500	300	2 800	1 250
2007	1 250	0	1 250	75	1 325	0

Note Does not include repayable state aid

EXHIBIT 5
Financial Information for City X
 (After Proposed Credit of 25 000 tis Kc)
 (All amounts in thousands of Kc)

REVENUES	Actual 1994	Actual 1995	Actual 1996	Budget 1997 (After New Credit)
Revenues from RO, PO	5 328	7 277	8 274	9 350
Total Tax Revenues	20 235	23 662	27 943	25 740
Tax of natural person from dependent activity	6 316	8 892	6 993	6 643
Income Tax of natural persons from business	11 401	10 764	9 600	8 832
Property Tax	2 427	4 002	3 089	3 243
Corporate Income Tax	0	0	8 261	7 022
Tax Corrections	91	4	0	0
Total Local Fees & Other Revenues	10 911	9 713	9 622	4 005
Local Fees	118	185	298	304
Administrative Fees	989	1 334	2 012	2 052
-Revenues from property sales	8 662	5 580	5 679	0
-Other and Random Revenues	1 142	2 614	1 633	1 649
State Subsidies	5 634	9 191	2 409	2 272
-Total General Subsidies	2 940	3 212	2 272	2 272
-Extraordinary & special purpose subsidies	2 694	5 979	137	0
Transfers from All Sources	9 300	5 300	5 500	1 200
-Transfers from Reserves	9 200	5 000	5 000	500
-Transfers from Joint Resources	100	300	500	700
-Other Transfers	0	0	0	0
Credits and municipal bonds	3 500	10 000	5 000	25 000
-Accepted Credits	3 500	10 000	5 000	25 000
Municipal bonds	0	0	0	0
Repayable State Funds				5 000
Total Revenues	54 908	65 143	58 748	72 567

EXPENDITURES	Actual 1994	Actual 1995	Actual 1996	Budget 1997 (After New Credit)
Operating Expenditures of Budgetary Organizations	18 612	24 508	25 634	26 446
-Salaries and other personnel expenses	3 140	3 606	4 292	4 464
-Other Expenditures	15 472	20 902	21 342	21 982
Operating Subsidies to Contributory Organizations and State Firms	469	471	894	900
Total Operating Expenditures	19 081	24 979	26 528	27 346
Investment Expenditures of Budgetary Organizations	29 237	34 075	26 712	35 000
Investment Subsidies to Contributory Organizations and State Firms	1 000	100	0	0
Total Investment Expenditures	30 237	34 175	26 712	35 000
Payments of principal	438	1 875	3 375	5 125
Payments of Interest	394	1 408	1 676	4 180
Total Debt Service	831	3 283	5 051	9 305
Total Expenditures	50 149	62 437	58 291	71 651
Economic Results	4 759	2 707	457	916

Note Operating Expenditures do not include debt service

City X
Worksheet #1
Separating Recurring Revenue from Non-Recurring Revenue

Recurring Revenues	Actual 1994	Actual 1995	Actual 1996	Budget 1997 (Before New Credit)
National Tax Revenues				
1 Income Tax of natural person from dependent activity	6 316	8 892	6 993	
2 Income Tax of natural persons from business	11 401	10 764	9 600	
3 Corporate Income Tax	0	0	8 261	
4 Total National Tax Revenues (=1+2+3)	17 717	19 656	24 854	
State Operating Subsidies				
5 Total General Subsidies	2 940	3 212	2 272	
Local Revenues				
6 Revenues from RO PO	5 328	7 277	8 274	
7 Property Tax	2 427	4 002	3 089	
8 Administrative Fees	989	1 334	2 012	
9 Local Fees	118	185	298	
10 Total Local Revenues (=6+7+8+9)	8 862	12 798	13 673	
11 Total Recurring Revenues	29 519	35 666	40 799	

Non-Recurring Revenue				
12 Revenues from property sales	8 662	5 580	5 679	
13 Other and Random Revenues	1 142	2 614	1 633	
14 Tax Corrections	91	4	0	
15 Extraordinary & special purpose subsidies	2 694	5 979	137	
16 Transfers from All Sources	9 300	5 300	5 500	
17 Total Non-Recurring Revenue (=12+13+14+15+16)	21 889	19 477	12 949	

City X
Worksheet #2
The Concept of Net Operating Income

	1994	1995	1996	1997 Budget
Recurring Revenues				
1 Total National Tax Revenues	17 717	19 656	24 854	
2 Total General Subsidies	2 940	3 212	2 272	
3 Total Local Revenues	8 862	12 798	13 673	
4 Total Recurring Revenues (=1+2+3)	29 519	35 666	40 799	
Less				
5 Operating Expenditures *	19 081	24 979	26 528	
Equals				
6 Net Operating Revenue (=4-5)	10 438	10 687	14 271	

* Operating Expenditures exclude debt service

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Worksheet # 3
City X
Summary Measures of Debt Service Coverage

HISTORICAL DEBT SERVICE COVERAGE	1994	1995	1996	1997 Budget *
Actual Debt Service	831	3 283	5 051	
Total Revenue	54 908	65 143	58 748	
Ratio of Debt Service to Revenue	1,51%	5,04%	8,60%	
Actual Debt Service	831	3 283	5 051	
Recurring Revenue	29 519	35 666	40 799	
Ratio of Actual D/S to Recurring Revenue	2,82%	9,20%	12,38%	
Actual Debt Service (DS)	831	3 283	5 051	
Net Operating Revenue (NOR)	10 438	10 687	14 271	
Debt Service Coverage Ratio (NOR/DS) *	12,6	3,3	2,8	

* Use the data from Exhibit #5

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Worksheet #4
An Overall Risk Assessment for City X
Relative to Selected Benchmarks

Indicator	Value for City X		Benchmarks for All Cities of Similar Size		Risk Assessment for City X	
	1995	1996	Strong	Weak	Status 1995	Trend (1996v 1995)
1 Net Operating Revenue as a Percent of Recurring Revenue	30.0%	35.0%	> +7%	< +2%	S	I
2 Recurring Revenues as a Percent of Total Revenues	54.8%	69.4%	>66%	<50%	A	I
3 National Tax Revenues as a Percent of Recurring Revenues	55.1%	60.9%	<50%	>75%	A	D
4 Local Revenues as a Percent of Recurring Revenues	35.9%	33.5%	>33%	<25%	S	D
5 Property Sales as a Percent of Total Revenue	8.6%	9.7%	<2%	>5%	W	S
6 Total State Subsidies as a Percent of Total Revenue	14.1%	4.1%	<33%	>50%	S	I
7 Total Expenditures Per Capita (Kc)	15,228	14,217	<9,155	>11,189	W	I
8 Total Operating Expenditures Per Capita (Kc)	6,092	6,470	<5,492	>6,713	A	D
9 Debt Service as a Percent of Total Revenue	5.0%	8.6%	<5%	>10%	S	D
10 Debt Service as a Percent of Recurring Revenues	9.2%	12.4%	< 10%	> 20%	S	D
11 Net Operating Revenue / Debt Service	3.3	2.8	>2.0	<1.1	S	D

Legend

Status
W Weak
A Acceptable
S Strong

Trend
D Deteriorating
S Stable
I Improving

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Worksheet #4a
An Overall Risk Assessment for City X
Relative to Selected Benchmarks

Indicator	Value for City X		Benchmarks for All Cities of Similar Size		Risk Assessment for City X	
	1996	1997 Budget (Exhibit 5)	Strong	Weak	Status 1996	Trend (1997v 1996)
	1 Net Operating Revenue as a Percent of Recurring Revenue	35 0%		> +7%	< +2%	
2 Recurring Revenues as a Percent of Total Revenues	69 4%		>66%	<50%		
3 National Tax Revenues as a Percent of Recurring Revenues	60 9%		<50%	>75%		
4 Local Revenues as a Percent of Recurring Revenues	33 5%		>33%	<25%		
5 Property Sales as a Percent of Total Revenue	9 7%		<2%	>5%		
6 Total State Subsidies as a Percent of Total Revenue	4,1%		<33%	>50%		
7 Total Expenditures Per Capita (Kc)	14 217		<9 155	>11 189		
8 Total Operating Expenditures Per Capita (Kc)	6 470		<5 492	>6 713		
9 Debt Service as a Percent of Total Revenue	8 6%		<5%	>10%		
10 Debt Service as a Percent of Recurring Revenues	12 4%		< 10%	> 20%		
11 Net Operating Revenue / Debt Service	2 8		>2 0	<1 1		

Legend

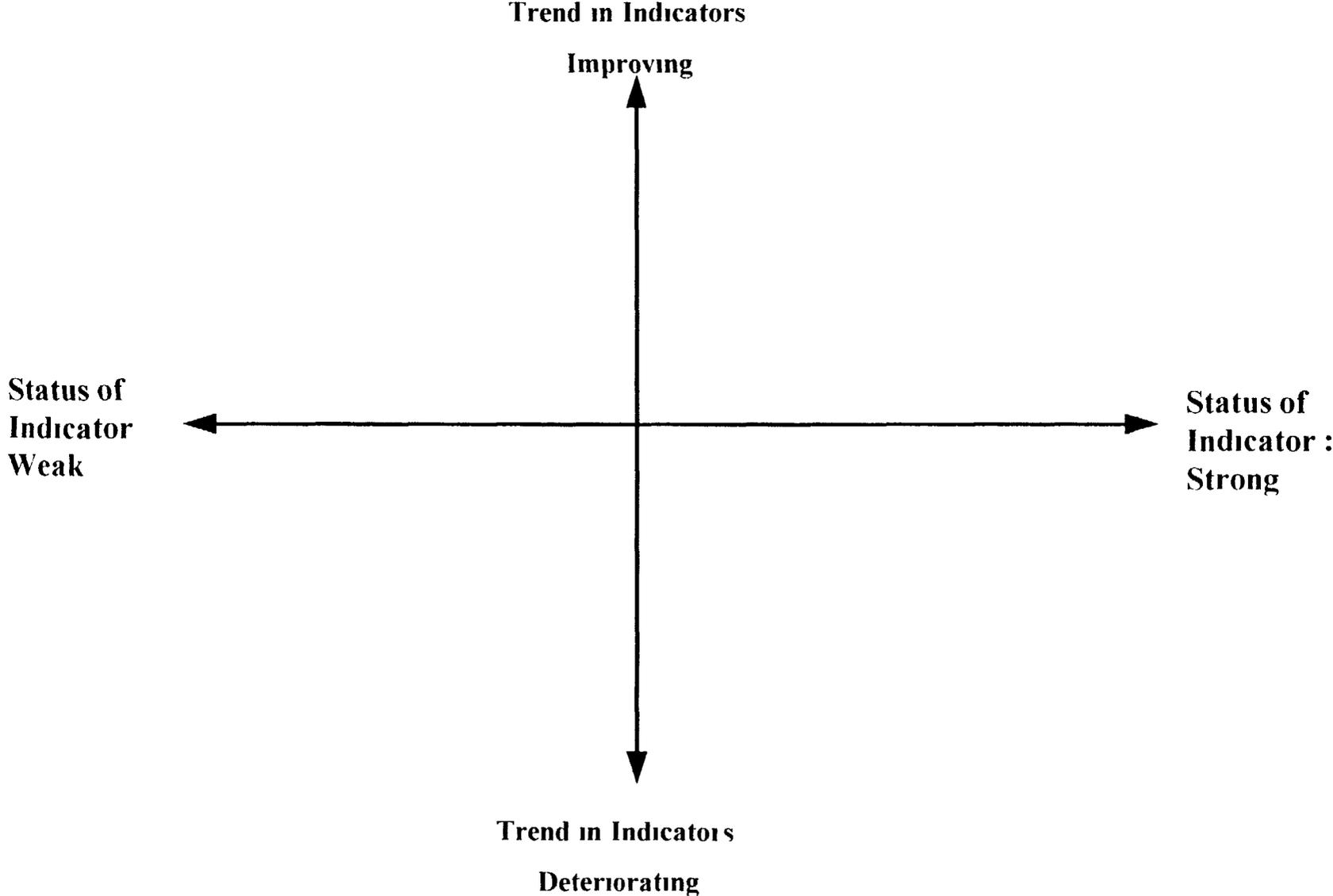
Status

W Weak
A Acceptable
S Strong

Trend

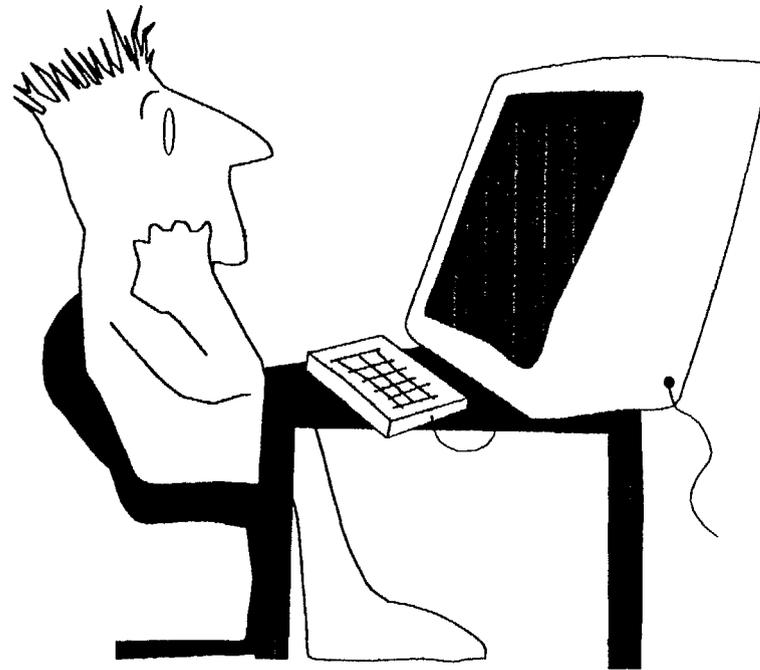
D Deteriorating
S Stable
I Improving

A Risk Assessment Matrix for City X



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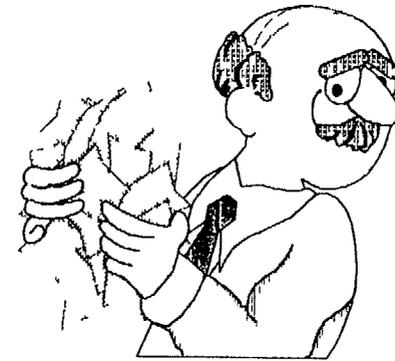
A Computer Model
Credit Finance Analysis



MODEL. XLS

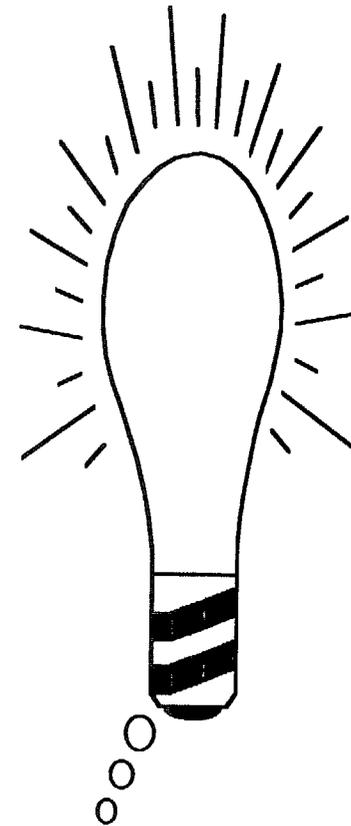
Credit Finance Analysis

- *How much can a municipality borrow?*
- *How much should a municipality borrow?*



Methodology

- Operating expenditures are paid by recurring revenues
- Debt services are paid by net operating surplus
- Investment expenditures are paid by non-recurring revenues and surplus from previous years



Can municipality borrow?

Recurring revenues

- Operating expenditures

Surplus

How Much *Can* a Municipality *Borrow?*

- Consistent net operating surplus - Lowest surplus
- Loan term assumption:
 - interest rate
 - maturity
- Total amount

Criterion of Recurring Revenues

- Derive from an existing national law
- Subtracting individual items from the financial statements
- Úč 1-12, Fin 1-12

Recurring Revenues

- *National Tax Revenues*
 - Personal Income Tax
 - Corporate Income Tax
- *Local Revenue*
 - Revenues of RO and PO
 - Property Tax
 - Administrative and Local Fees
- *State Operating Subsidy*

Non-recurring Revenues

- Proceeds from Borrowings
- Proceeds from Property Sales
- Proceeds from Gifts
- Subsidies from State Funds
- Subsidies from State Budget
- Subsidies from District Office Budget

Operating Budget Projection

Model projection

Model assumption for

- revenues
- expenditures

Own projection

Own calculation of

- revenues
- expenditures

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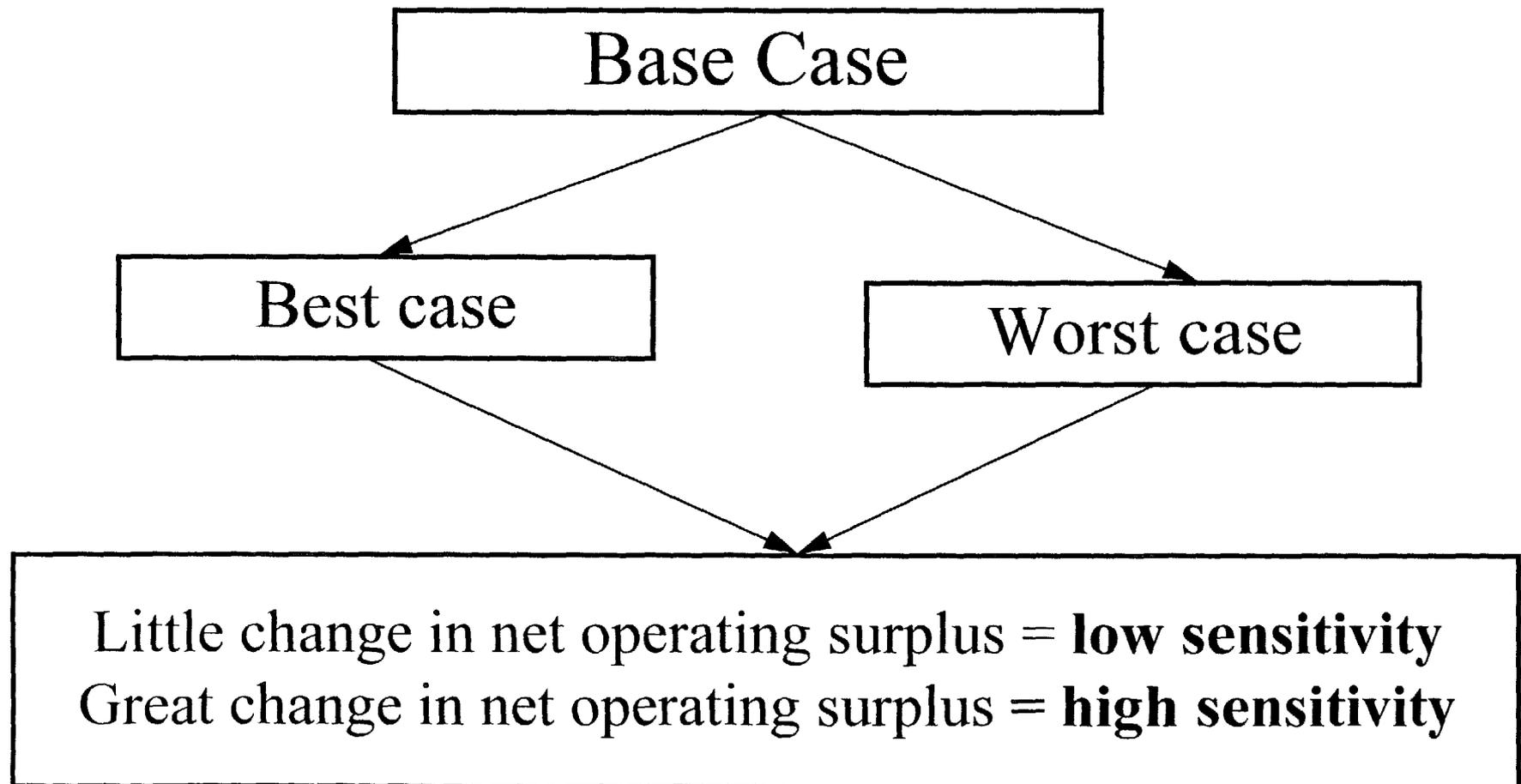
How much the municipality *should* borrow?

- Risk assessment
- Sensitivity analysis



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Sensitivity Analysis - impact on base case projection of small changes in revenue and expenditure assumption

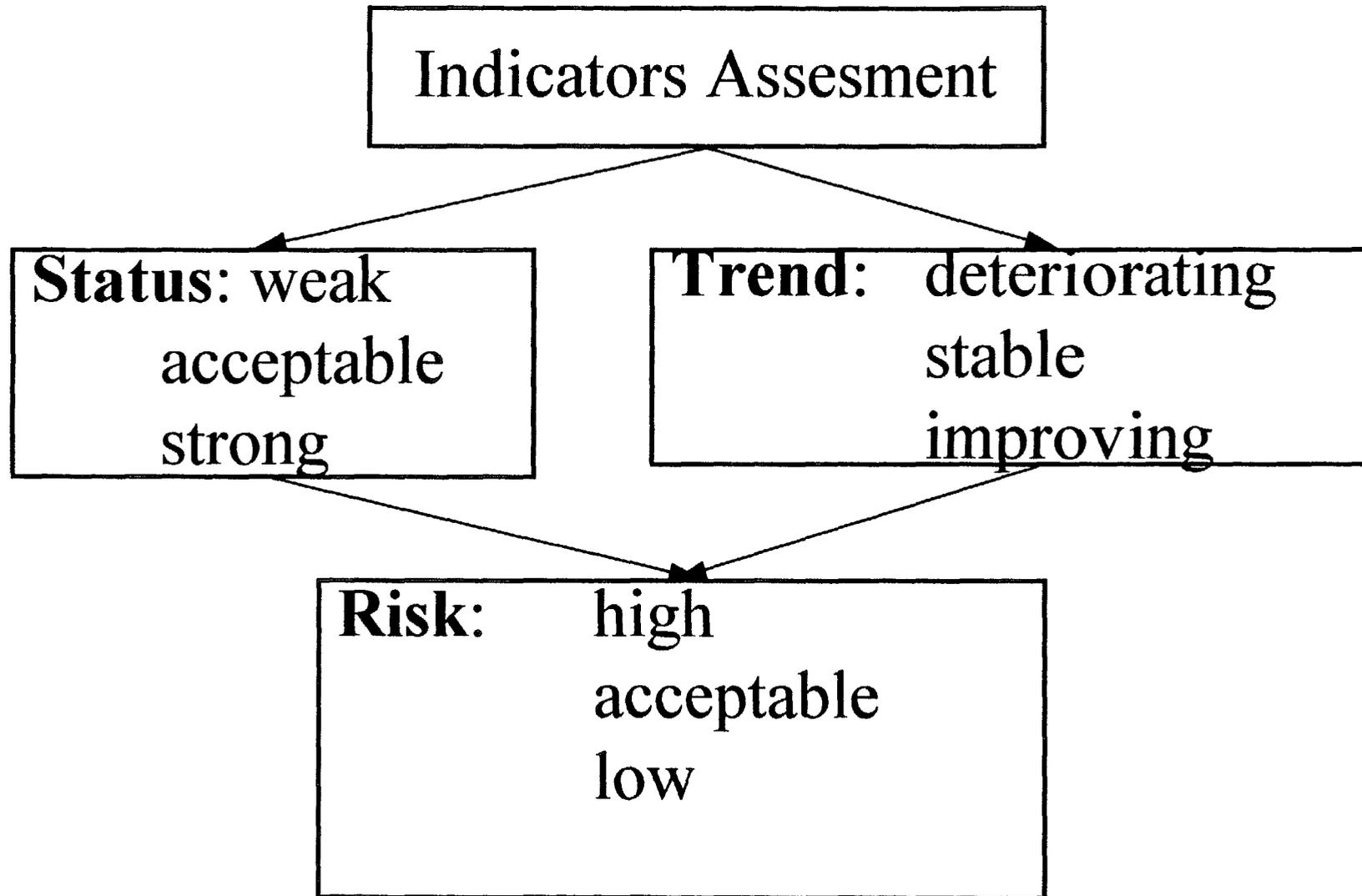


Set of Financial Indicators

- Revenue
- Expenditure
- Net Results
- Actual to Budget Performance
- Relative Growth
- Liquidity
- Outstanding Debt
- Debt Service



Risk Assessment



How much the municipality *should* borrow? Risk Assessment + Sensitivity Analysis

Low risk + low sensitivity =

borrow up to full amount

Low risk + high sensitivity =

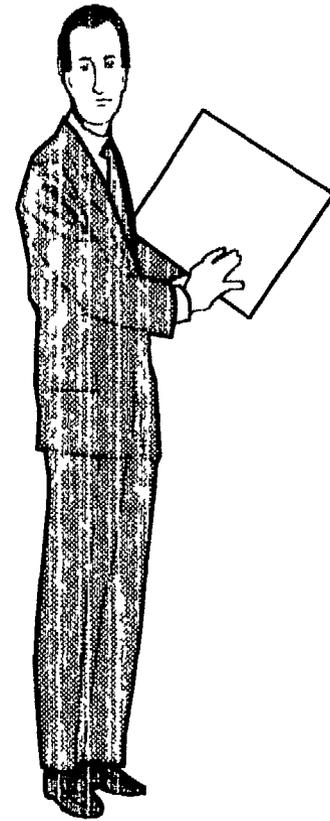
borrow somewhat less

High risk + low sensitivity =

borrow even less and establish reserves

High risk + high sensitivity =

minimize use of credit and establish strong reserves



Final Decision

- Financial director
 - excellent analysis
 - good argument
- Mayor
- Financial Board
- City Council
- City Assembly

