

PN-ACS-582

**MODERNIZING FINANCIAL
MANAGEMENT FOR
HUNGARIAN LOCAL
GOVERNMENTS**

**FINAL YEAR SEMINAR:
OCTOBER 7-8, 1998**

Prepared for



East European Regional Housing Sector Assistance Project
Project 180-0034
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MODERNIZING FINANCIAL MANAGEMENT FOR HUNGARIAN LOCAL GOVERNMENTS

Final Year Seminar: October 7-8, 1998

This report briefly describes the October seminar on Modernizing Financial Management for Hungarian Local Governments. The program aims at training Hungarian local government finance officers to improve budgeting and financial management within their cities. This seminar was the second seminar of the third years' program, which consists of five seminars from June 1998-March 1999.

The agenda, list of participants, and course material for the seminar are included in Annex A. Seventeen local governments attended the October seminar (Table 1), nine of which have participated in the previous year(s) program. Thus there are participants from eight new cities in the third year, and seven cities have sent three or more participants to the seminar.

During the third year of the Modernizing Financial Management for Hungarian Local Governments program, the US Agency for International Development (USAID) is also sponsoring a Municipal Finance Consultant Training Program to train consultants in municipal budgeting and financial reform services. The program combines theory and practice to prepare the Hungarian consultants' to address the challenges of the rapidly changing local government market. This is a nine month interactive training program that runs parallel to the municipal budgeting seminar. In addition to training at the municipal budgeting seminar, the consultants will receive specialized training in financial software packages and western style marketing and consulting techniques. The initial consultant training seminar was held on October 6-8, 1998 with 19 consultants participating.

OCTOBER 7, 1998

After the registration Ms. Andrea Tönkö, Metropolitan Research Institute (MRI) welcomed the participants, and briefly described the program for the next two days. She was followed by Ms. Katalin Zsámboki, MRI, explained the new consultant training program component to the municipal budgeting seminar participants. As part of the Municipal Financial Consultant Training Program curriculum, the consultants will partner with cities to perform a long-term consulting assignment. As many of the local government finance officers have attended the previous year(s) program and had experience implementing budgeting reforms, Ms. Zsámboki highlighted the potential benefits to municipalities in working with the consultants in a long-term project. Ms. Zsámboki concluded that she would liaison with the municipalities and consultants to identify common interests and form partnerships.



Introduction to Sector Analysis and Program Design

The first presentation was given by Mr. József Hegedüs, MRI, to introduce sector analysis and program design. In developing a methodology to undertake a sector analysis, Mr. Hegedüs emphasized the importance of financial managers' understanding sector specific issues, to ensure a useful analysis and interpretation of the results. Mr. Hegedüs suggested that participants start by investigating the legal background and regulatory factors relevant to the given sector, then analyze dynamics, financial conditions, capital requirements, and professional qualifications on both the demand and supply side. After completing a Strength Weaknesses Opportunity and Threats (SWOT) analysis and undertaking forecasting of trends relevant to the local sector, consideration of alternative financing and service provision options is useful. One critical challenge facing financial managers is determining the appropriate depth of the sector analyses as either extreme could have a negative impact on the development of the program budget. Working together, the financial manager and sector specialists should define sector strategies that are consistent with the city's overall strategic plan.

Exercise on Sector Analysis

After the presentation the participants were divided into three groups (education, social and commercial) to perform a sector analysis. The education sector group was moderated by Mrs. Kürthy; social sector group moderated by Mrs. Krajsóczki; and communal sector group moderated by Mrs. Mészáros J. Regina. All three moderators are Hungarian local trainers for the program and head of the finance department in their respective cities.

Following the sector analysis structure outlined by Mr. Hegedüs, the participants were able to explore the differences of each sector in legal sources, supply-demand analysis, financial analysis, cost structure, and special factors impacting operation and capital demand in Hungary. After a short break the exercise was followed by a panel discussion about the results of the sector analysis.

Fiscal Indicators

After lunch, Mr. Philip Rosenberg, consultant to The Urban Institute (UI), gave a presentation on the role of indicators in the program budget and explained how these indicators can help financial officers understand the municipalities' fiscal situation. To accurately identify the indicators' trends, Mr. Rosenberg suggested using a summary of the operating expenditures and the balance sheet. In a short exercise, Mr. Rosenberg demonstrated how fiscal indicators can be used to determine municipal productivity, and different financial management practices that can be used by financial officers to achieve economic vitality.



Building on Mr. Rosenberg's presentation, Mr. Robert Kovács, MRI went on to demonstrate the use of indicators in practice. Using three Hungarian cities as examples, Mr. Kovács worked with the local government officials to compare the financial situation based on dynamic and static indicators, absolute figures and indexes. Afterwards, Mr. Kovács discussed the advantages and disadvantages of fiscal indicators.

To conclude the exercise, Ms. Andrea Tönkő summarized the topics covered that day.

OCTOBER 8, 1998

The second day of the seminar started with a review of homework submissions. Following Ms. Katalin Pallai's (Hungarian local government trainer) presentation at the previous seminar-June 1998, participants were given an assignment of writing a strategic plan for their respective cities. Using examples from the homework submissions, Ms. Pallai made a short presentation to highlight the important concepts of strategic planning. The city of Ózd was commended for not only identifying city objectives, but also developing a plan to achieve those objectives.

Exercise on Fiscal Indicators

After the homework review, participants divided into four sector groups to work on a sector specific fiscal indicator exercise. The four sectors were education, social, communal and financial. The financial group was included for financial managers. The groups were provided with financial data of a hypothetical city and asked to make a short analysis of the financial situation of the community. They had to choose indicators, or create new ones that best described the financial situation of the city, compute them and represent the most important ones visually.

The social sector group examined the fiscal and non fiscal indicators of the nursing and meals service to the elderly. They agreed that the indicators quantified the community's problems. The group concluded that program goals should be defined first in order to develop the most informative indicators.

The goal of the communal sector exercise was to demonstrate how they can use indicators to define the user fees of solid waste collection. The group identified three indicators: labor time invested; weight or amount of garbage collection; and administrative cost.

The education sector group compared the subsidy of three educational institutions. The comparison revealed that the local government subsidy depended on three factors:



the number of the students and the condition and size of the building. The number of employees and the average age also has an impact on the required subsidy.

The financial sector group analyzed the budget of a hypothetical city. On the basis of the given numbers, the indicators identified some negative trends. The group decided that there are problems with the city's financial management and developed some potential resolutions to these problems.

Developing A Work Plan

The last presentation at the seminar was on work plans given by Mrs. Krajsóczy. First she defined the main elements of the work plan, and the purpose and potential results one can achieve from a work plan. In developing a work plan, Mrs. Krajsóczy underlined the importance of knowing your decision making authority; the important people who will review, contribute to, or approve your work plan; and the resources you will have to execute and accomplish the objectives set forth in the work plan. At the end of her presentation Mrs. Krajsóczy gave several suggestions about successfully creating a work plan in the context of a local government:

- Strategic collaboration
- Setting deadlines
- Developing a system to organize data collection
- Continuing to revise the work plan to reflect the changing local government environment

Homework

During the sector indicators exercise, the moderators handed out a homework sheet to the participants which required them to make a sector analysis based on the information on the given sheets. During the sector break-outs, the trainers also discussed how to use the examples as a basis for doing the homework.



Table 1

List of Cities Participating in the Final Year (1998-1999) Seminars on Modernizing Financial Management for Hungarian Local Governments

Number	Cities	Population	June 3-4, 1998	October 7-8, 1998
1.	Balassagyarmat	17,944	✓	✓
2.	Csongrád	19,112	✓	✓
3.	Győr	127,294	✓	✓
4.	Gyula	33,317	✓	✓
5.	Hajdúszoboszló	23,387	✓	✓
6.	Komárom	19,569	✓	
7.	Mezőcsát	6,586	✓	✓
8.	Mindszent	7,450		✓
9.	Nagykanizsa	53,353	✓	
10.	Orosháza	34,600	✓	✓
11.	Ózd	41,075	✓	✓
12.	Püspökladány	17,000	✓	✓
13.	Ruzsa	2,880	✓	✓
14.	Szegvár	5,285	✓	✓
15.	Székesfehérvár	107,181	✓	✓
16.	Szentes	33,000	✓	✓
17.	Szolnok	81,500	✓	✓
18.	Tiszaújváros	17,890	✓	✓
19.	Vác	33,694	✓	✓

ANNEX A

United States Agency for International Development
**MODERNIZING FINANCIAL MANAGEMENT FOR
HUNGARIAN LOCAL GOVERNMENTS**

*Hotel Gellért, 111 Budapest, Szent Gellért tér 1.
October 7-8, 1998*

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Agenda

List of Participants

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A.1 The Importance of Sector Analysis

A.2 Indicators and Program Budgeting

A.3 Financial Indicators

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B. Exercises and Worksheets

B.1 Exercise on Sector Indicators – Education

B.2 Exercise on Sector Indicators – Communal Services

B.3 Exercise on Sector Indicators – Social Sector

B.4 Exercise on Sector Indicators – Financial Sector, Case Study, Nagyháza

C. Background Reading

C.1 The Basic Elements of Program Analysis

C.2 Putting Program Analysis to Work

C.3 Budgeting as a Political Process

C.4 The Public and Private Spheres in Historical Perspective

D. Local Government Homework

Agenda
MODERNIZING FINANCIAL MANAGEMENT
FOR HUNGARIAN LOCAL GOVERNMENTS

October 7-8, 1998, Budapest
Hotel Gellért, 1111 Budapest, Szent Gellért tér 1.

October 7, 1998 _

- | | |
|--------------------|---|
| 9.30 - 10.00 a.m. | Registration |
| 10.00 - 10.30 a.m. | General Criteria for a Sector Analysis
<i>József Hegedüs</i> |
| 10.30- 12.30 a.m. | Exercise: Analysis of the Different Sectors
<i>Moderators: Mrs. Kürthy – Education</i>
<i>Mrs. Krajsóczki – Social sector</i>
<i>Mrs. Mészáros – Communal Services</i> |
| 11. - | Coffee Served During the Exercise |
| 12.30 - 12.45 p.m. | Break |
| 12.45 - 1.30 p.m. | Panel Discussion – Summary of the Exercise |
| 1.30- 2.30 p.m. | Hosted Luncheon |
| 2.30 - 3.30 p.m. | Role of Indicators in Program Budgeting
<i>Philip Rosenberg</i>
<i>Róbert Kovács</i> |
| 3.30 - 3.45 p.m. | Coffee break |
| 3.45 -4.15 p.m. | Financial Indicators
<i>Róbert Kovács</i>
<i>Philip Rosenberg</i> |
| 4.15 - 5.30 p.m. | Exercise: Developing Sector Indicators
<i>Moderators: Mrs. Kürthy – Education</i>
<i>Mrs. Krajsóczki – Social sector</i>
<i>Mrs. Mészáros – Communal Services</i> |

October 8, 1998

9.00 - 9.30 a.m	Evaluation of Homeworks <i>Katalin Pallai</i>
9.30 - 11.00 a.m.	Exercise: Sector Indicators <i>Moderators: Mrs. Kürthy – Education</i> <i>Mrs. Krajsóczki – Social sector</i> <i>Mrs. Mészáros – Communal Services</i> <i>Mr. Kovács – Mr. Rosenberg – Financial sector</i>
10.00 -	Coffee served during exercise
11.15 - 12.15 a.m.	Work Plan <i>Mrs. Krajsóczki</i>
12.15 - 12.30 p.m.	Homework assignment
12.30 - 1.30 p.m.	Hosted Lunch

LIST OF PARTICIPANTS

Municipalities

1. Mrs Kotsis
finance staff
Mayor's Office VI district
2. Lajos Germán
office manager
Mayor's Office VI. district
3. Tamás J. Kiss
educational staff
Mayor's Office VI. district
4. Dr. Marián Miklós
council member, alderman
Mayor's Office VI. district
5. Ferenc Lázi
council member, head of the finance committee
Mayor's Office VI. district
6. Éva Horinká
Mayor's Office, VI. district
7. Mrs. Szepesi
group leader
Mayor's Office, Csongrád
8. Barty Beatrix
Mayor's Office, Csongrád
9. Mrs. Tóthpál Enikő Elek
supervisor group leader
Mayor's Office, Eger
10. Mrs. Heltati
office manager
Mayor's Office, Gödöllő
11. István Tengelit
office manager
Mayor's Office, Gödöllő
12. Edina Kérdő
Mayor's Office, Hódmezővásárhely
13. Mrs. Tóth, dr. Gabriella Dávid
educational staff
Mayor's Office, Hódmezővásárhely
14. Mrs. Lajtos
budget group leader
Mayor's Office, Karcag
15. Mrs. Vincze, Julianna Hodos
educational staff
Mayor's Office, Karcag
16. Mrs. Richter, Katalin Pataki
budget group leader
Mayor's Office, Kecskemét
17. Mrs. Kovács
budget staff
Mayor's Office, Kecskemét
18. Mrs. Gátszegi, Gertrúd Gorontay
finance officer
Mayor's Office, Nagykanizsa
19. Mrs. Szányi, Mária Kovács
finance officer
Mayor's Office, Nagykanizsa
20. Mrs. Holló
finance staff
Mayor's Office, Nagykőrös
21. Mrs. Tóth, Éva Péczeli
finance staff
Mayor's Office, Nagykőrös
22. Mrs. Haklik
head of financial department
Mayor's Office, Orosháza
23. Mrs. Laluska
Mayor's Office, Orosháza
24. Mrs Gyömbér
administration group leader
Mayor's Office, Szegvár
25. Ibolya Végh
notary
Mayor's Office, Szegvár
26. Mrs. Gyömbér
Mayor's Office, Szegvár
27. Mrs. Mészáros, Regina Jasztrapszky
budget expert
Mayor's Office, Székesfehérvár
28. Varga Sándor
manager, city management
Mayor's Office, Szentes
29. Lipták János
manager, technical department
Mayor's Office, Szentes
30. Mrs. Lencse, Mária Szalontai
manager, social policy department
Mayor's Office, Szentes
31. Gál Antal
manager, Family Help Center
Mayor's Office, Szentes
32. Mrs. Krajsóczki
group leader
Mayor's Office, Szentes
33. Imre Balogh
municipal officer
Mayor's Office, Szentes
34. József Kéri
head of economic department
Mayor's Office, Szolnok

35. Péter László

Mayor's Office, Szolnok

37. Mrs. Kovács

TÁKISZ, Szolnok

36. Menyhárt István

Mayor's Office, Szolnok

38. István Hágen

TÁKISZ, Szolnok

Advisors

39. Katharine Mark

advisor, municipal finance
The Urban Institute, Budapest

41. Margaret M. Tabler

advisor, municipal finance
The Urban Institute

43. Zoltán Györgyi

advisor, education
Oktatáskutató Intézet, Budapest

45. Katalin Pallai

consultant

47. Róbert Kovács

fellow
Metropolitan Research Institute

49. Andrea Tönkö

fellow
Metropolitan Research Institute

40. Philip Rosenberg

advisor, municipal finance
The Urban Institute, USA

42. dr. Ferenc Saly

National Accounting Agency, Budapest

44. Mihály Lados

senior research fellow
MTA RKK, Regional Research Institute, Győr

46. József Hegedüs

advisor, municipalities
Metropolitan Research Institute

48. Zsolt Pataki

fellow
Metropolitan Research Institute

THE IMPORTANCE OF SECTOR ANALYSIS

- PROGRAM BUDGETING AND THE SECTORS
- SECTORAL CONCEPTS
- COOPERATION BETWEEN FINANCIAL MANAGEMENT AND LOCAL SENIOR SECTOR OFFICERS
- HOW DEEP SHOULD THE CONCEPT BE

LEGAL AND REGULATORY CONDITIONS

- “Responsibilities” of the local government
- “Rules” of the sector
 - setting fees
 - environmental protection requirements
- Local regulation

SERVICES: SUPPLY AND DEMAND ANALYSIS

- Fiscal conditions (capital need, financing operation costs etc.)
- Organizational conditions (Alternative organizational structures, advantages and disadvantages, etc.)
- Trend analysis (demography, impact of economic forecasts, etc.)
- SWOT analysis on the sector (strengths and weaknesses, options, threats)

FINANCING: COSTS AND RESOURCES

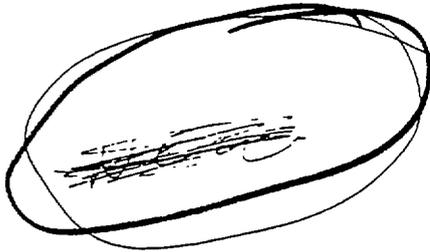
- capital costs
 - assets capacity
 - ownership rights
 - investments
- operation costs
 - general costs
 - changing costs
- “fixed” resources (normatives, centralized items, targeted subsidies)
 - local (shared revenues, fee revenues, foundations)
- other
 - cross financing
 - support

ORGANIZATIONAL TYPOLOGY

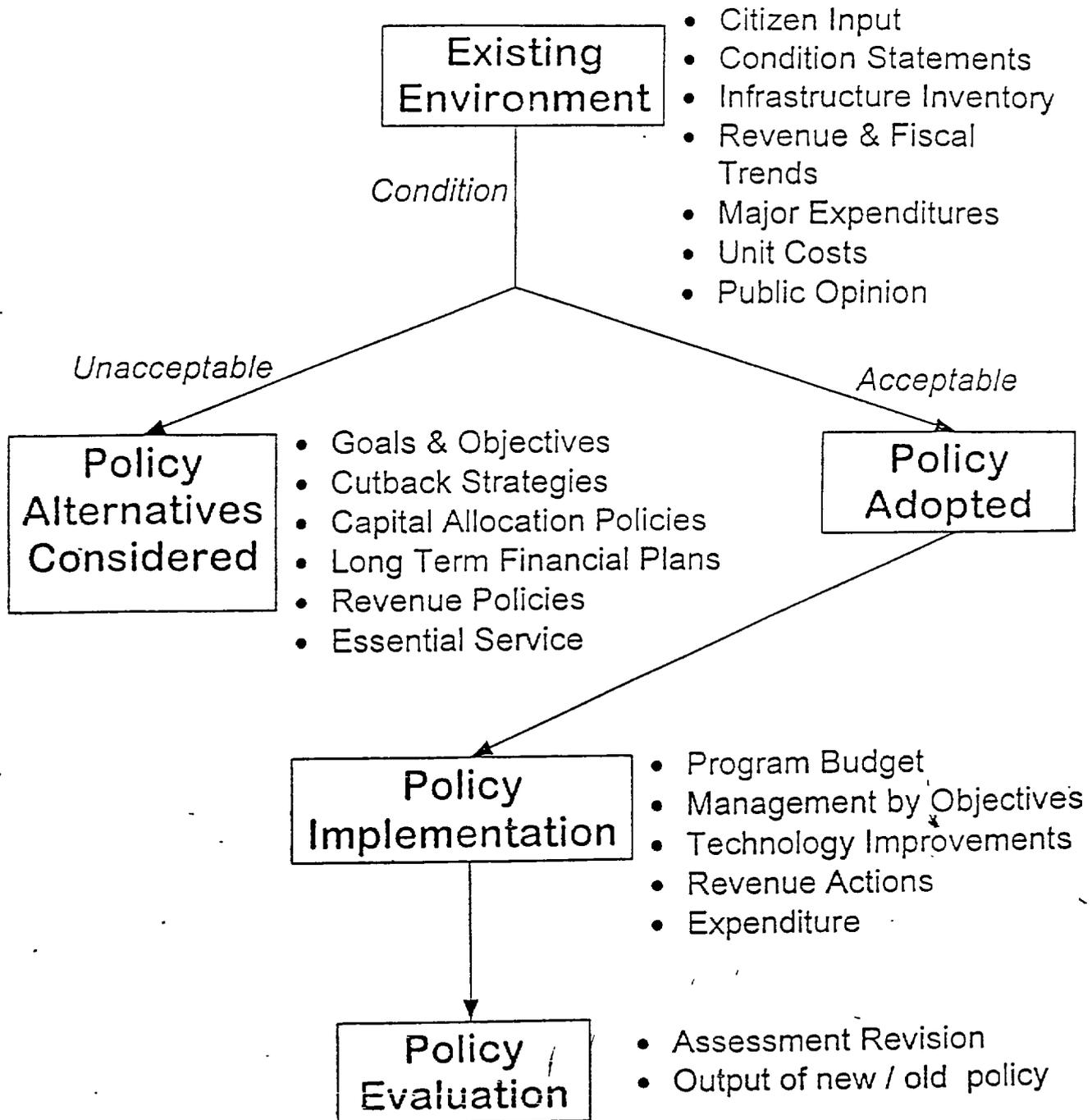
- within the mayor's office
- institution or "partial institution"
- company or foundation fully in municipal ownership
- mixed ownership company
- private company

PROGRAM ALTERNATIVES

- Why is the program necessary?
- What happens if the program is not implemented?
- What strategic goal does the program fit in?
- Define staff available for the implementation of the program
- Who will provide the service, how much of it and for how much?
- What outcomes are expected of the program, in what time, and how can these be measured?



COMMUNITY BUDGETING MODEL



OPERATING STATEMENT

		BUDGET	ACTUAL	
<u>REVENUES</u>	<u>96</u>	<u>97</u>	<u>97</u>	<u>CHANGE</u>
LOCAL BUSINESS TAX	240	200	190	(10)
LOCAL PROPERTY TAX	280	300	280	(20)
DUTIES	230	260	250	(10)
ASSET SALES	50	90	120	30
INCOME FROM ASSETS	100	120	100	(20)
LOANS	150	150	190	40
INSTITUTION OWN SOURCE	455	420	425	5
SHARED REVENUES	920	980	970	(10)
STATE SUBSIDIES	<u>2200</u>	<u>2000</u>	<u>2100</u>	<u>100</u>
TOTAL	4475	4520	4625	105

		BUDGET	ACTUAL	
<u>EXPENDITURES</u>	<u>96</u>	<u>97</u>	<u>97</u>	<u>CHANGE</u>
MAYOR'S OFFICE	2200	2320	2350	30
HEALTH SECTOR	600	620	700	80
EDUCATION	940	890	880	(10)
SOCIAL	320	390	445	55
COMMUNAL SERVICES	<u>400</u>	<u>300</u>	<u>250</u>	<u>(50)</u>
TOTAL	4460	4520	4625	105

Employment rate = 1

CITY BALANCE SHEET

<u>ASSETS</u>	96	97	CHANGE
CASH & INVESTMENTS	100	90	(10)
ACCOUNTS RECEIVABLE	25	50	25
TAXES RECEIVABLE	500	520	20
INVENTORIES	<u>50</u>	<u>60</u>	<u>10</u>
TOTAL	675	720	10
<u>LIABILITIES & FUND BAL</u>	96	97	CHANGE
NOTES PAYABLE	420	500	80
ACCOUNTS PAYABLE	50	60	10
RESERVES	120	100	(20)
FUND BALANCE	<u>85</u>	<u>60</u>	<u>(35)</u>
TOTAL	675	720	45

WHAT IS FISCAL CONDITION?

A CITY'S ABILITY TO MEET AND
MAINTAIN SERVICES

A CITY'S ABILITY TO MEET
EMERGENCIES

A CITY'S ABILITY TO MEET THE
DEMANDS OF GROWTH, DECLINE &
CHANGE

FISCAL INDICATORS

*BUILDING BLOCKS TO UNDERSTANDING YOUR COMMUNITY'S
FINANCIAL CONDITION*

FEATURES

- *GAIN UNDERSTANDING OF CITY'S FISCAL SITUATION*
- *IDENTIFY EMERGING PROBLEMS*
- *IDENTIFY EXISTING PROBLEMS THAT LOCAL OFFICIALS MAY BE UNAWARE OF*
- *PRESENT THE CITY'S STRENGTHS & WEAKNESSES TO ELECTED OFFICIALS, CITIZENS, CENTRAL GOVERNMENT, INVESTORS, LENDERS*
- *INTRODUCE LONG-RANGE CONSIDERATIONS INTO THE BUDGET & CAPITAL BUDGETING PROCESS*
- *HELP GUIDE FORMULATION OF FISCAL POLICY*

FACTORS

ENVIRONMENTAL

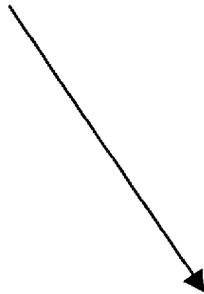
Community

External

Constraints

Political

Emergencies



FINANCIAL

Revenues

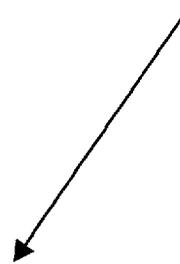
Expenditures

Operating Position

Debt

Unfunded Liabilities

Capital Condition



CITY MANAGEMENT PRACTICES AND POLICIES

FACTORS AFFECTING FINANCIAL CONDITION

ENVIRONMENTAL \longleftrightarrow FINANCIAL

COMMUNITY NEEDS & RESOURCES

- POPULATION
- EMPLOYMENT
- INCOME
- PROPERTY
- BUSINESS ACTIVITY

EXTERNAL ECONOMIC CONDITIONS NATIONAL/REGIONAL

- INFLATION
- EMPLOYMENT
- REGIONAL MARKETS

INTERGOVERNMENTAL CONSTRAINTS

- MANDATES
- TAX RESTRICTIONS
- SHARED REVENUE
- STATE SUBSIDIES

NATURAL DISASTERS & EMERGENCIES

- WEATHER
- FIRES/FLOODS
- EQUIPMENT BREAKDOWN
- STATE SUBSIDIES

POLITICAL CULTURE ATTITUDES TOWARD:

- TAXES
- SERVICES
- POLITICAL PROCESSES

REVENUES

- GROWTH
- FLEXIBILITY
- ELASTICITY
- DEPENDABILITY
- DIVERSITY

EXPENDITURES

- GROWTH
- MANDATED COSTS
- PRODUCTIVITY
- EFFECTIVENESS

OPERATING POSITION

- OPERATING RESULTS
- FUND BALANCES
- RESERVES
- LIQUIDITY

DEBT STRUCTURE

- LONG TERM DEBT
- SHORT TERM DEBT
- DEBT SCHEDULES/SERVICE
- CONTINGENT DEBT
- OVERLAPPING DEBT

UNFUNDED LIABILITIES

- DEFERRED MAINTENANCE
- OTHER?

CONDITION OF CAPITAL PLANT

- DEPRECIATION
- ASSET INVENTORIES
- MAINTENANCE & REPLACEMENT

KEY DATA SOURCES

I. REVENUES

TOTAL REVENUES

- SHARED REVENUES
- STATE SUBSIDIES (TARGETED + ADDRESSED + FUNDS)
- LOCAL TAXES (PROPERTY, TOURIST, COMMUNAL, RENT)
- DUTIES + REVENUES FROM INSTITUTIONS + OTHER OWN REVENUE
- SOCIAL SECURITY TRANSFERS/HEALTH INSURANCE TRANSFERS
- PROCEEDS FROM ASSET SALES
- INCOME FROM ASSETS
- LOANS
- NORMATIVE GRANT

SEPARATE RECURRING FROM NON-RECURRING REVENUE

II. EXPENDITURES

TOTAL EXPENDITURES

OPERATING EXPENDITURES

- CITY HALL
- HEALTH SECTOR
- CULTURE/SPORTS/EDUCATION SECTORS
- SOCIAL
- PUBLIC WORKS/UTILITIES (HEATING, ELECTRICITY, WATER SEWAGE)

CAPITAL INVESTMENT

- CITY HALL
- HEALTH SECTOR
- CULTURE/SPORTS/EDUCATION SECTORS
- SOCIAL
- PUBLIC WORKS/UTILITIES (HEATING, ELECTRICITY, WATER SEWAGE)
- TOTAL ANNUAL DEBT SERVICE PAYMENTS (INTEREST + PRINCIPAL)

SEPARATE RECURRING FROM NON-RECURRING EXPENDITURES

III. OTHER FINANCIAL DATA

- TOTAL ASSETS
- OUTSTANDING LONG TERM DEBT
- OTHER???

IV. NON FINANCIAL DATA

- POPULATION
- POPULATION GROWTH/DECLINE
- PERSONAL INCOME TAX PER CAPITA
- NUMBER OF MUNICIPAL EMPLOYEES
- UNEMPLOYMENT RATE
- NUMBER OF HOUSING UNITS CONSTRUCTED
- NUMBER OF BUSINESS LICENSES ISSUED
- OTHER???

ADVANTAGES

- *QUANTIFIES INFORMATION*
- *RELIES ON EXISTING AND AVAILABLE DATA*
- *DESIGNED FOR CITY STAFF USE*
- *DOES NOT REQUIRE COMPLICATED TECHNIQUES*
- *COMBINES FINANCIAL & NONFINANCIAL DATA*
- *TAKES A SINGLE YEAR'S EVENTS AND PLACES IT INTO A LONG TERM PERSPECTIVE*
- *PERMITS LOCAL OFFICIALS TO FOLLOW CHANGES OVER TIME*
- *INCORPORATE BENCHMARKS USED BY LENDERS*

PROCESS

- IDENTIFY KEY COMMUNITY INDICATORS
- IDENTIFY SOURCES OF INFORMATION AND GATHER DATA
- COLLECT DATA
- ANALYZE, IDENTIFY TRENDS, ASSESS UNDERLYING CAUSES
- ASSESS FISCAL HEALTH
- USE ANALYSIS IN THE BUDGETING & CAPITAL IMPROVEMENTS PLANNING AND BUDGETING PROCESSES
- HOW MUCH YOU CAN AFFORD
- FORECAST REVENUE/EXPENDITURES

ECONOMIC VITALITY

A Strong Economy Produces The Revenue To Support Services & Creates A Positive Community Atmosphere That Attracts Residents And Business

APPRAISED VALUE OF REAL ESTATE PER CAPITA

NUMBER AND VALUE OF BUILDING PERMITS

RETAIL SALES

TOTAL POPULATION

INCOME PER CAPITA

MUNICIPAL PRODUCTIVITY

It is vital for cities to provide more and better services at less cost. The goal can be achieved through steady improvement in the productivity of municipal operations.

- NUMBER OF MUNICIPAL EMPLOYEES PER CAPITA
- MUNICIPAL EXPENDITURES PER CAPITA
- MUNICIPAL ENTERPRISES INCURRING OPERATING LOSSES

FINANCIAL INDEPENDENCE AND FLEXIBILITY

A financially sound city has sufficient control over its finances to enable it to endure fiscal problems and emergencies without crises. A financially independent city is able to control its own destiny.

- % OF EXPENDITURES FUNDED BY TRANSFERS
- DEBT BURDEN - PER CAPITA AND AS A PERCENT
- RECURRENT REVENUES
- PATTERN OF BUDGET OVERRUNS IN SPECIFIC DEPARTMENTS
- ABILITY TO FINANCE SERVICE LEVELS ABOVE NORMATIVE STANDARDS

FINANCIAL MANAGEMENT PRACTICES

Sound financial management practices can help a community withstand the difficulties that arise with an eroding tax base. These practices also provide information cities need to evaluate their fiscal position and avoid problems. Poor fiscal management hides problems from officials.

- PATTERN OF BUDGET OVERRUNS OR UNDERRUNS
- ASSESSED VALUE OF REAL ESTATE VERSUS TRUE MARKET VALUE
- INCIDENCE OF ESTIMATED AND ACTUAL REVENUE SHORTFALLS
- AMOUNT OF TAXES AND FEES UNCOLLECTED AT YEAR END

MUNICIPAL FINANCIAL INDICATORS

- Defining Municipal Indicators
- Methodological Issues
- Indicators and Charts
- The Analysis of Békaháza

METHODOLOGICAL ISSUES

- Types of Indicators:
 - ⇒ dynamic or static
 - ⇒ absolute figure or index
- The Basis of Comparison:
 - ⇒ time units
 - ⇒ similar communities
 - ⇒ average values of small or big regions etc.
- Visualization

Békaháza		<i>(HUF million)</i>					
		1992	1993	1994	1995	1996	1997
Total revenues	<i>at current prices</i>	218,9	252,5	359,2	1 078,6	935,7	967,0
Total revenues	<i>at 1996 prices</i>	508,0	478,4	572,8	1 335,3	935,7	781,1

Revenues per inhabitant		<i>(HUF million)</i>					
		1992	1993	1994	1995	1996	1997
Békaháza		28,2	31,7	45,1	134,6	112,1	114,9
Szolnok		48,8	56,4	69,4	77,5	101,8	95,9
Szentes		38,9	41,9	48,2	58,6	83,3	82,9
Hungary total		12,7	16,5	19,2	25,1	25,7	

Békaháza, balance of the budget		<i>(HUF million)</i>					
		1992	1993	1994	1995	1996	1997
Total revenues	<i>at 1996 prices</i>	508,0	478,4	572,8	1 335,3	935,7	781,1
Total expenditures	<i>at 1996 prices</i>	409,8	432,2	524,1	1 155,2	917,2	781,1
Balance		98,2	46,2	48,7	180,1	18,5	0,0

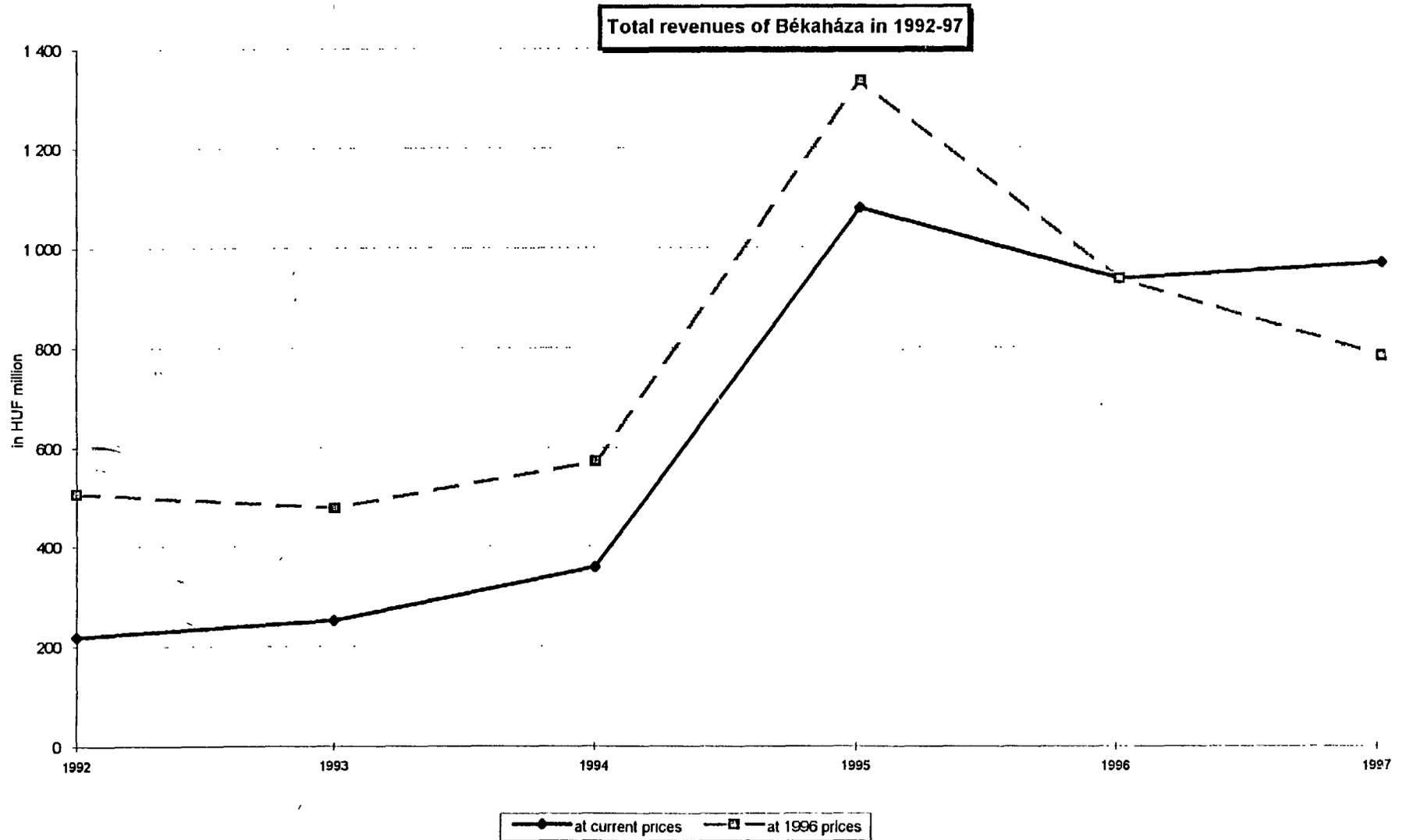
Békaháza, amount of debt service		<i>(HUF million)</i>					
		1992	1993	1994	1995	1996	1997
Debt service	<i>at 1996 prices</i>	0,5	0,8	0,7	0,5	0,4	3,4
Total revenues	<i>at 1996 prices</i>	508,0	478,4	572,8	1 335,3	935,7	781,1
Debt service/Total Rev.		0,1%	0,2%	0,1%	0,0%	0,0%	0,4%

Békaháza, amount of operating expenditures (HUF million)

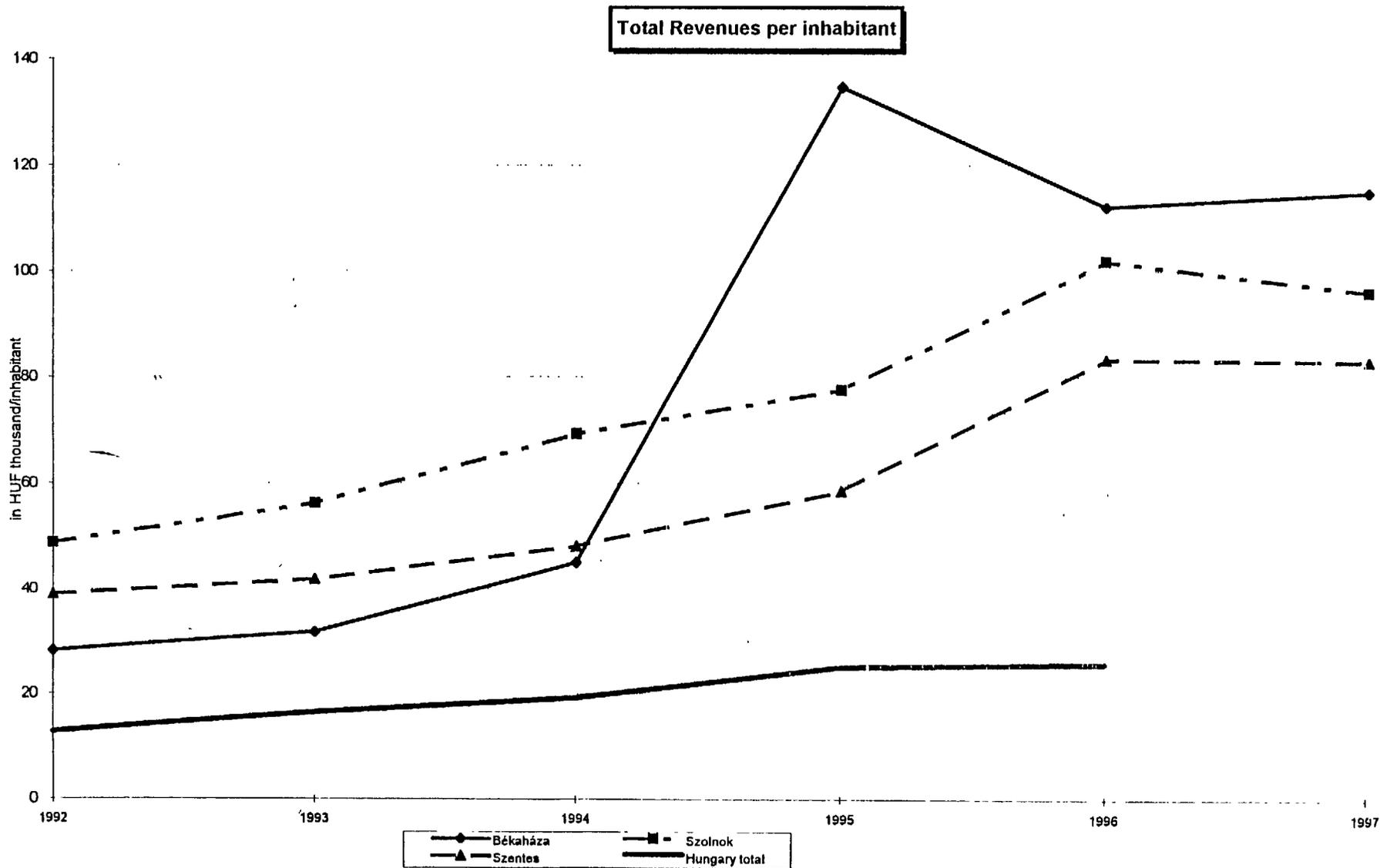
	1992	1993	1994	1995	1996	1997
Operating expenditures at 1996 prices	123,1	174,7	205,8	382,9	305,5	328,4
Total expenditures at 1996 prices	176,6	228,1	328,7	933,2	917,2	967,0
Op. exp./Total exp.	69,7%	76,6%	62,6%	41,0%	33,3%	34,0%

Békaháza, structure of operating expenditures (HUF million)

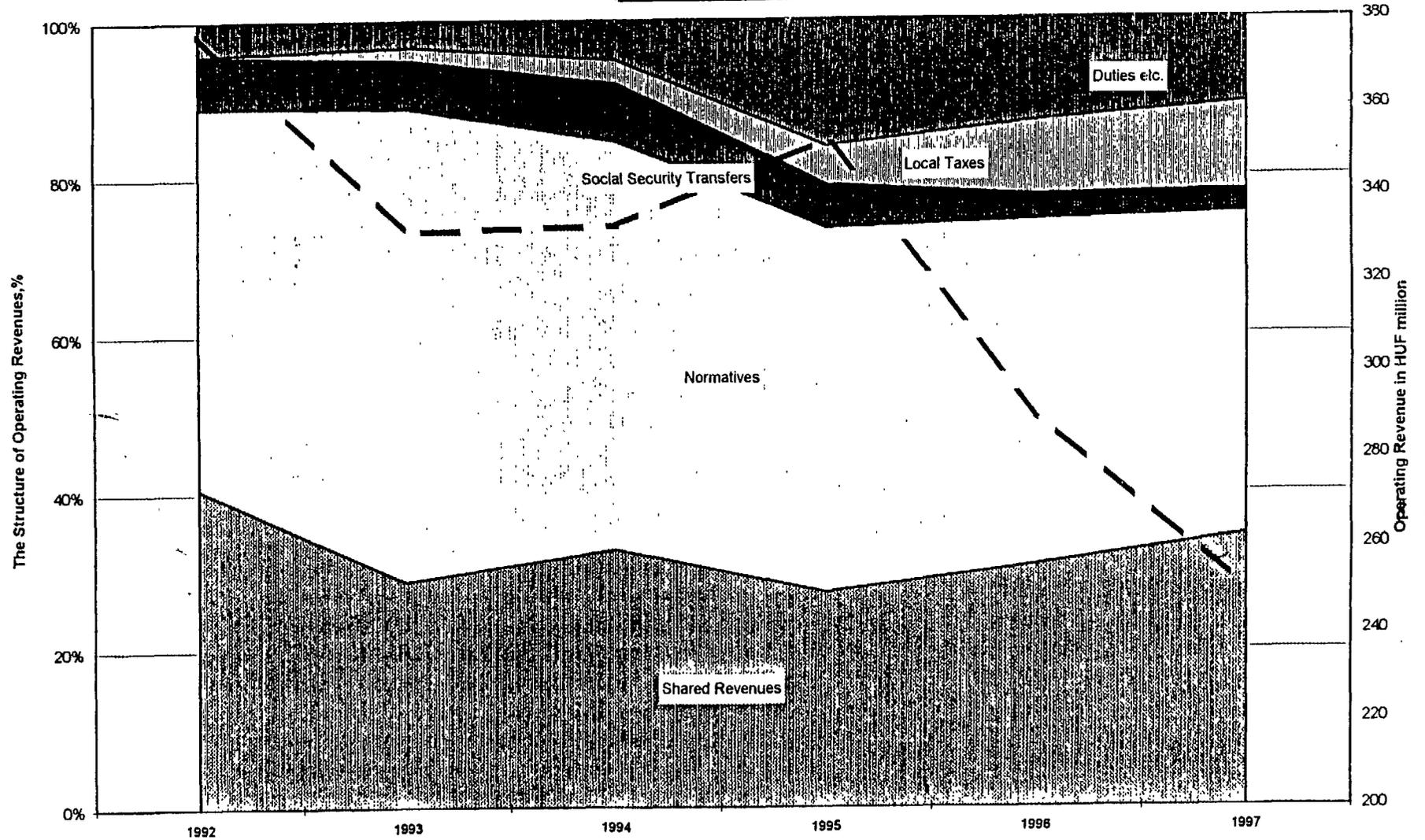
	1992	1993	1994	1995	1996	1997
Operating revenues at current prices	162,6	175,2	209,0	284,6	289,4	309,0
Operating revenues at 1996 prices	377,4	331,8	333,2	352,3	289,4	249,6
<i>at 1996 prices</i>						
Shared revenues	65,9	50,4	68,7	77,8	89,2	107,0
Normatives	79,0	105,3	108,0	131,4	126,4	125,8
Social Security transfers	10,7	10,8	15,7	15,4	8,9	8,5
Central funds						
<i>total</i>	155,7	166,5	192,4	224,7	224,5	241,3
<i>percentage</i>	41,3%	50,2%	57,8%	63,8%	77,6%	96,7%
Local taxes	0,1	2,9	6,1	13,9	27,4	34,6
Duties etc.	6,9	5,8	10,4	46,0	37,5	33,1
Local resources						
<i>total</i>	6,9	8,6	16,5	59,9	64,9	67,7
<i>percentage</i>	1,8%	2,6%	5,0%	17,0%	22,4%	27,1%



07



The Structure of Operating in 1992-97



DEFINITION

- ***What is a work plan?***
- ***Who does what?***
- ***For what purpose?***
- ***What is the result?***

ELEMENTS OF THE WORK PLAN

- ***Outputs / Goals***
- ***Activities / Tasks***
- ***Inputs / Work hours***
- ***Checkpoints / Deadlines/
Responsible persons***

CRITERIA OF THE WORK PLAN

- ***Legal background***
- ***Identifying participants***
- ***Technical background***

THE SPECIFIC WORK PLAN

- ***Identifying the topic/sector to be worked on***
- ***What is the program***
- ***What are the sub-programs***
- ***Knowing the features of the community***

THE SPECIFIC WORK PLAN

- ***Identify the indicators to be used***
- ***The budget document: content, format, structure***

SOME PIECES OF GOOD ADVICE

- ***You cannot do it by yourself***
- ***Keep DEADLINES and make others keep them***
- ***There should be a coordinator***
- ***Collecting data should be well organized: questionnaires, forms***

SOME PIECES OF GOOD ADVICE

- *Data should be ACCURATE*
- *Respect other opinions*
- *Revise the workplan in the process; it is designed to point out mistakes and undesirable phenomena in time*

EXERCISE ON SECTOR INDICATORS

EDUCATION

Analysis of primary school financing

In the community under examination, the following indicators are different in four similar institutions (primary schools):

	Primary school Petöfi		Primary school on Calvin sq.		Primary school in Petritelep	
	1997	1998	1997	1998	1997	1998
A. Total of subsidies per group of pupils	2 248	2 569	2 594	2 847	2 743	3 097
of them: state	1 851	2 126	1 922	2 222	1 787	1 991
municipal	397	443	671	625	956	1 105
B. Number of pupils per group	23,5	23,5	26	25	23	23
of them: regular	24,9	25				
special for mentally handicapped	9,5	9				
C. Number of staff per group of pupils:	2,7	2,7	3,2	3,04	2,9	2,9
of them: regular	2,85	2,85				
special	1,25	1				
D. Number of other employees per group of pupils	0,9	0,9	1,2	1,15	0,91	0,91
E. Number of employees involved in the operation of assets per group of pupils	0,47	0,47	0,6	0,58	0,75	0,75
F. Number of cafeteria employees per group of pupils	0,43	0,43	0,6	0,57	0,16	0,16

Exercise: What conclusions can you draw from these figures?

WORKSHEET

EXERCISE ON SECTOR INDICATORS COMMUNAL

GARBAGE REMOVAL IN CLEAN CITY

The municipality of Clean city plans to introduce a user fee for public cleanliness services. According to the plan, the fee would cover total costs of the service, including overheads of the Public Cleanliness Office.

Annual total costs are:

Garbage collection	HUF 800.000
Transportation and disposal	HUF 500.000
Overheads of the Public Cleanliness Office	HUF 200.000
Total	HUF 1,500,000

The local government's objective is that various users (with various types and volume of waste) pay different fees.

The Office's task: Set fees for various types of users as a share of total service costs based on external and other costs. The main consideration should be that garbage removal costing HUF 1,500,000 should not continue to drain the budget but be borne by 29,500 users in a differentiated way.

Your task is: to calculate the estimated annual fee for public cleanliness based on the worksheet attached.

Some important factors to be considered in your analysis:

- in the service the greatest portion of costs are collection and transportation since the time and costs of the job vary by location, density and volume of waste.

- overheads of the Public Cleanliness Office are not impacted by the type of the user.

When setting the fee, consider:

- Do you need other information to set fees properly?

- Do you regard it fair that fees should be differentiated and that full costs of garbage removal and disposal be borne by the citizens?

- Do you see alternative revenues other than fees; do you think alternatives should be looked for?

GARBAGE REMOVAL WORKSHEET

Known data	Multi-unit block	Family house	Commercial user	Industrial user
A. Number of users	20.000	5.000	4.000 units.	500 units.
B. Average amount of collection time per user	1 minute	1.5 minutes	0.5 minutes	1 minutes
C. Number of collections per week	2	2	2	3
D. Estimated amount of waste per user per week	0.025 kg	0.025 kg	0.025 kg	1 kg

Indicators to be calculated				
I. Amount of collection time per user per week				
II. Amount of collection time for all users per week				
III. Per type of user share in all collection time (%)				
IV. Distribution of collection costs				
V. Collection costs per user				
VI. Total weekly volume of waste				
VII. Share in all waste (%)				
VIII. Distribution of				
IX. Per user transportation and disposal costs				
X. Even distribution of overheads among users				
XI. Estimated per user public cleanliness fee				

WORKSHEET

EXERCISE

Two simple services in the social sector in a small town

General Data

Population:

1 st January 1994	33,023
1 st January 1995	33,048
1 st January 1996	32,931
1 st January 1997	32,752

Structure of the population:

Age	1994	1995	1996	1997
0-17	7,814	7,475	7,289	7,059
18-59	18,847	19,055	19,061	19,100
over 60	6,362	6,518	6,581	6,539

NURSERY SCHOOLS

Professional indicators	1995	1996	1997
Nursery schools' capacities (number of children)	100	100	100
Number of children enrolled in nursery schools	69	58	56
Number of days of service (by number of children)	16,251	13,502	13,619
The number of serviced children calculated by the actual number of days of service	55	45	49
The number of actual days of service	12,952	10,497	11,349
Number of groups of children	7	7	7
Number of teachers	21	19	17
Value indicators (HUF thousand)			
Total expenditures	18,646	21,978	22,781
Per unit indicators			
Number of children per group	8	6	7
Number of children per teacher	3	3	3.5
Expenses per child	339,000	488,400	464,900

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SOCIAL MEALS

Professional indicators	1995	1996	1997
Number of clients of social meals	191	208	210
Number on waiting lists	20	35	63
Number of staff	3	3	3
Number of vehicles	3	3	3
Value indicators			
Total expenditures	11,246	16,949	23,512
on food purchase	10,460	15,839	21,615
on operating vehicles	492	781	1,025
Fee revenues	3,973	6,314	10,482
Per unit indicators			
Meals expenditures per client	55	76	
Proportion of fee revenues to total expenditures			
Proportion of fee revenues to total meals expenditures	38	40	

1 Nursery schools

- What problems can you see from indicators?
- What is to be expected if nothing changes?
- Solutions (alternatives)
- What is the impact of various alternative solutions?

2. Social meals

- What problems can you see from indicators?
- What is to be expected if nothing changes?
- Solutions (alternatives)
- What is the impact of various alternative solutions?

DIRECTIONS FOR SMALL GROUPS

This is a case study of a hypothetical community. You will have 60 minutes to work on this exercise. During this time you will have the following tasks:

1. Break into small discussion groups as directed by the group leader
2. Read through the case study, the discussion questions, and review the two pages of indicator trends. When everyone in your group has completed this, the group should choose a recorder and begin discussing the questions. The recorder will write down (on a flip chart) any conclusion the group reaches.
3. Try to spend no more than 15 minutes on any one question. The questions require "management" decisions - you will not have to make any mathematical computations.
4. When the small group reconvenes each group recorder will briefly present the conclusions their group has reached.
5. All participants will then join the discussion.

CASE STUDY: EVALUATING FINANCIAL CONDITION

CITY OF Nagyháza

Population	15,000
Current Annual Budget	HUF 100 million
No. Employees	127
Major Local Tax Source	Property Tax
Major Subsidies	Normative, targeted and addressed

József was recently hired as the City Administrator of Nagyháza, USA. József replaced the administrator who had been with the city only 18 months. Over the last 10 years no city administrator has worked for Nagyháza more than 30 months. This was generally due to the relatively non-competitive salary Nagyháza has paid its City Administrator. The result has been a lack of long range financial planning. However, the City Council is committed to having a professional administrator and recently raised the administrator's salary to make it competitive with similar communities.

Nagyháza is a suburban metropolitan community whose population has been growing about 2-3% /year since 1970. While there is a small segment of low income families on the south side of the town, Nagyháza is predominantly middle and upper-middle income families. There are well organized neighborhood groups in Nagyháza which, for the most part, have been supportive of the town leaders. Recently these groups have been pressing for increased police protection and improved road maintenance.

Nagyháza relies on the property tax as the major revenue base, with 35% of the property taxes coming from commercial property and 65% from residential property. The commercial tax base had grown fairly rapidly until the mid 70's but has been relatively stable since that time. An upcoming property revaluation (the first in 7 years) will likely shift more of the tax burden to the residential property owners. The city owns large amounts of vacant land in town. Over the last few years city officials have sold tracts of this land to developers. However, because of a slowdown in the regional economy this land has not been developed.

Nagyháza is a full-service community except for education and electricity which is provided by the county. City employees unionized in 1995 and have won substantial increases in salaries and benefits since that time. While they are not overpaid compared to workers in adjacent towns, their benefits package is substantially better. Their pension system is administered by the state.

The city is presently building a new sewer network and resurfacing 4 kilometers of road as part of its Capital Improvements Program. In addition, a number of city buildings are being renovated to make them more energy efficient. Nagyháza is also building a water treatment plant which was required in order to meet water quality standards. Total debt service (interest and principal payable in the current year) is 13% of operating revenues this year.

The city has been relatively prosperous over the last 10 years, maintaining an average fund balance of HUF 500 million. However, the city had used HUF 80 million of their fund balance to balance last years budget and HUF 18 million to balance the prior budget. As this year comes to a close, József finds that the city will have to use approximately HUF 70 million of their reserves (fund balance) because estimated revenues are running less than projected. Both property tax revenues and fees for building permits are lower than projected. Fund Balance at the end of the current year is projected to be HUF 332 million.

One problem József has already identified is in the Finance Department. Because of a lack of established procedures, Nagyháza is probably not collecting all taxes due to the city. Furthermore, because of a lack of accurate historical data, the city has been overestimating revenues for each of the last three years.

The City Administrator, Finance Director, and Department heads are now in the early stages of planning next year's budget. In order to rebuild the city reserves and to offset the effect of inflation, József will recommend an increase in the property tax rate - the first in six years. He will also recommend reductions in a number of services. Based on his informal conversations with the city council, József feels that there will be a good deal of resistance to his proposed tax increase and service reductions. However, he also feels now is the time to get a better hold on the city's finances. József has four months before he presents his budget recommendations to the council. After the budget year begins, he would like to begin some long range financial planning for the community, and has assigned his assistant to work with him on this. József feels he will need a good deal of information before he makes his budget and long range financial planning recommendations. As a start, János, his assistant, and the Financial Director, have begun to compile the following financial information about Nagyháza (See City of Nagyháza - Selected Indicators - pages 5,6 and 7)

SMALL GROUP DISCUSSION QUESTIONS

Assume that you are a Consultant hired by the City Administrator to advise the city on financial matters.

1. In the space below list three indicators (from those graphed on pages 5 through 7) which are of immediate concern to Nagyháza. Give one reason that could explain why each indicator may have moved in an unfavorable direction. Where possible, use other indicators or information from the case study to support your reasoning.

Indicators of Immediate Concern

<u>Indicator Name</u>	<u>Indicator Number</u>	<u>Reason</u>
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

2. In the space below identify three indicator trends (from those graphed on page 5 through 7) which should have their direction reversed over the long-term if Nagyháza is to achieve good financial health. Give one reason that could explain why each indicator may have moved in an unfavorable direction. Where possible, use other indicators or information from the case study to support your reasoning.

Indicators to be Addressed Over the Long Term

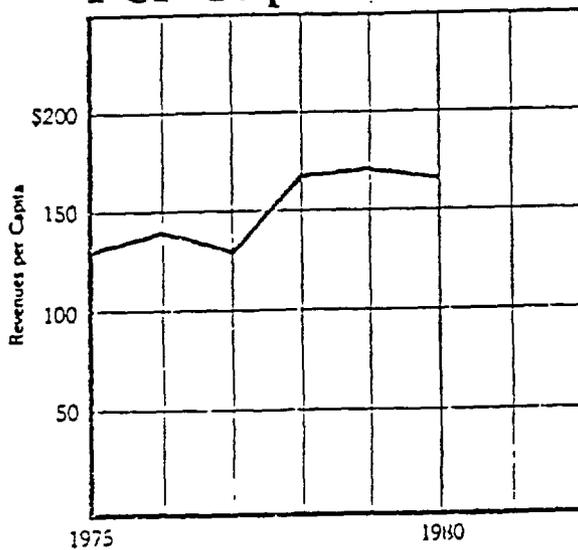
<u>Indicator name</u>	<u>Indicator Number</u>	<u>Reason</u>
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

3. József feels that he needs additional information about Nagyháza. However because of time constraints, he can only develop three additional indicator trends. Which indicators (or financial information) would you urge József to develop? Why? See Chart A (attached) for a listing of all indicators.

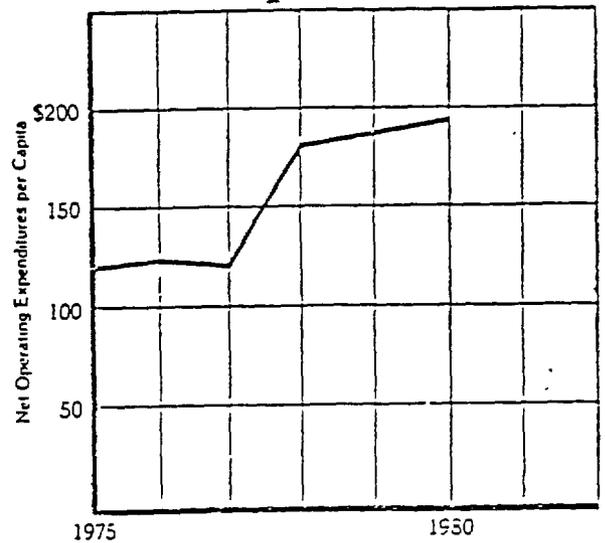
<u>Indicator name</u>	<u>Indicator Number</u>	<u>Reason</u>
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

City Of Nagyháza/ Selected Indicators

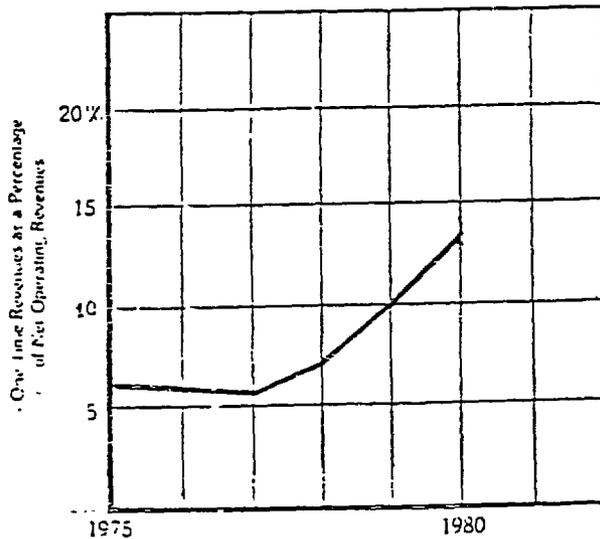
Indicator 1
Revenues
Per Capita ↑↑



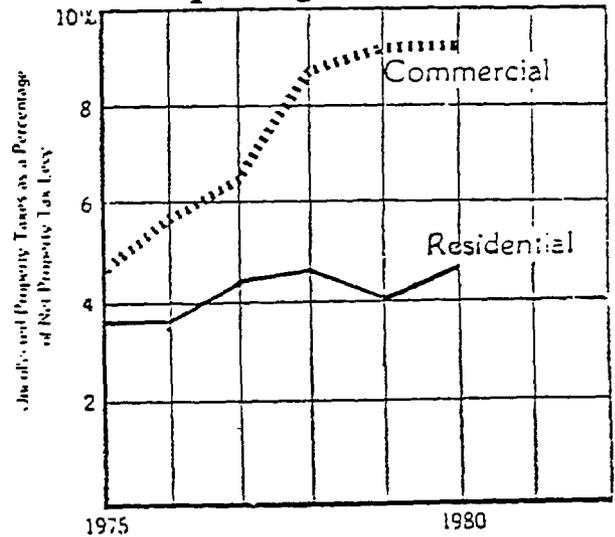
Indicator 10
Expenditures
Per Capita ↑



Indicator 5
One-Time
Revenues ↑

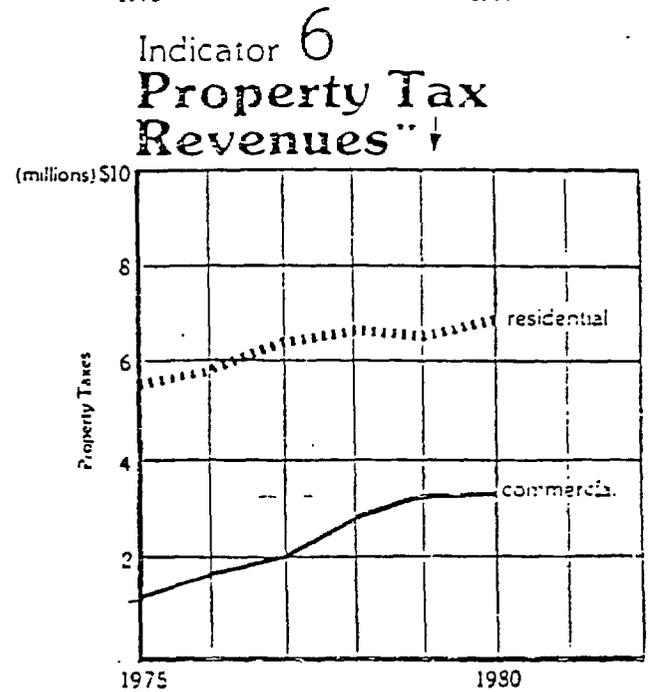
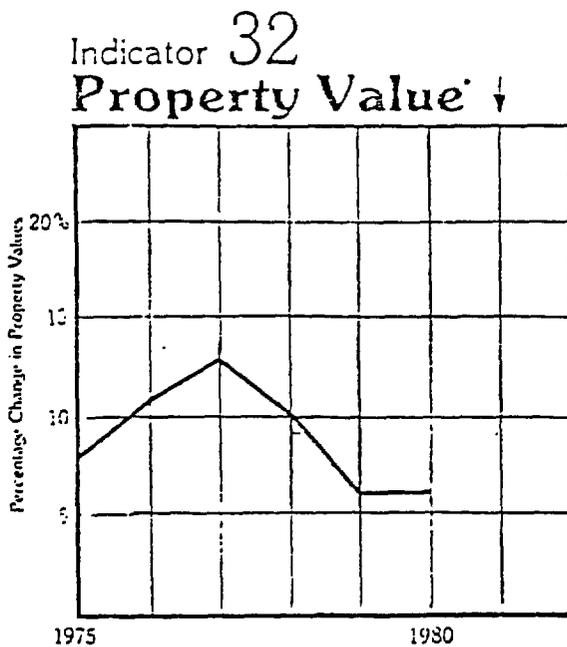
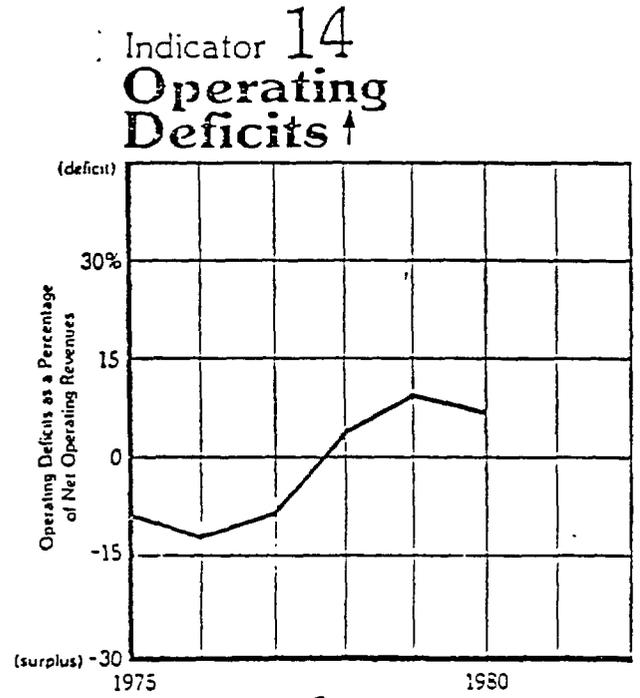
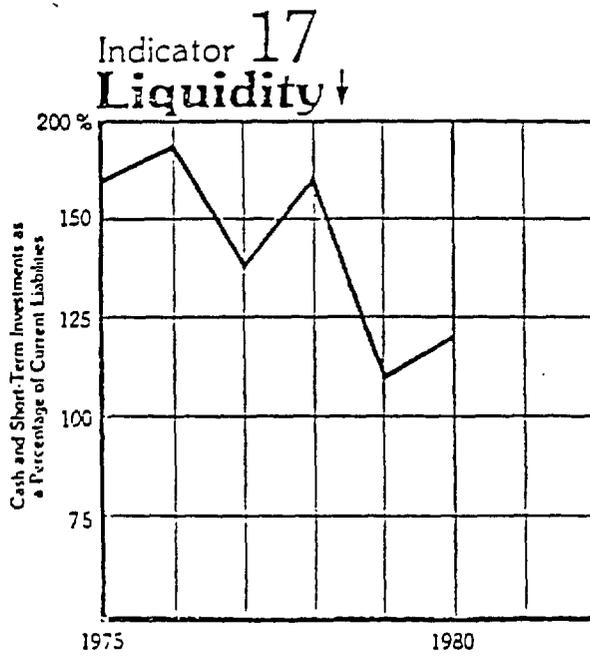


Indicator 7
Uncollected
Property Taxes ↑



Indicators moving in the direction of the arrow (↑↑) are potentially unfavorable trends.

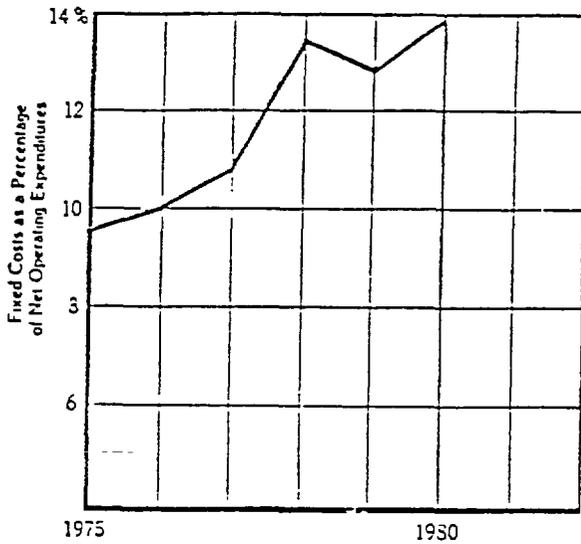
City Of Nagyháza/ Selected Indicators



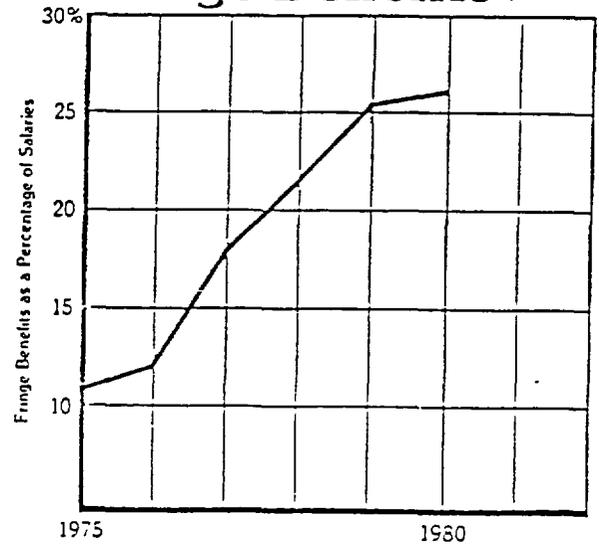
*Warning Trend: declining GROWTH in market value of residential, commercial, or industrial property (constant dollars).
**Warning Trend: declining GROWTH in property tax revenues (constant dollars).

City Of Nagyháza/ Selected Indicators

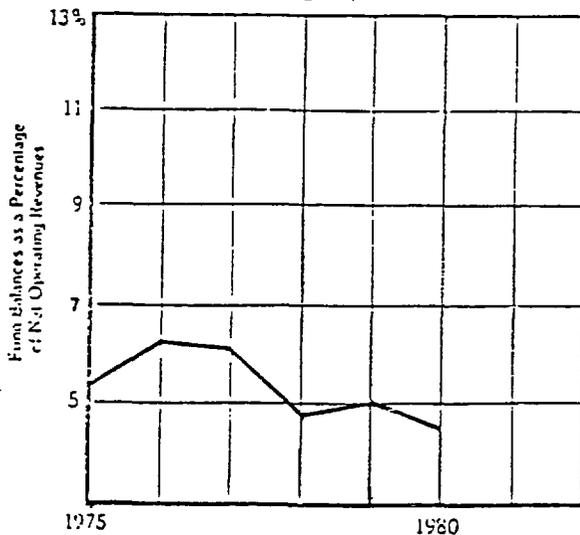
Indicator 12
Fixed Costs ↑



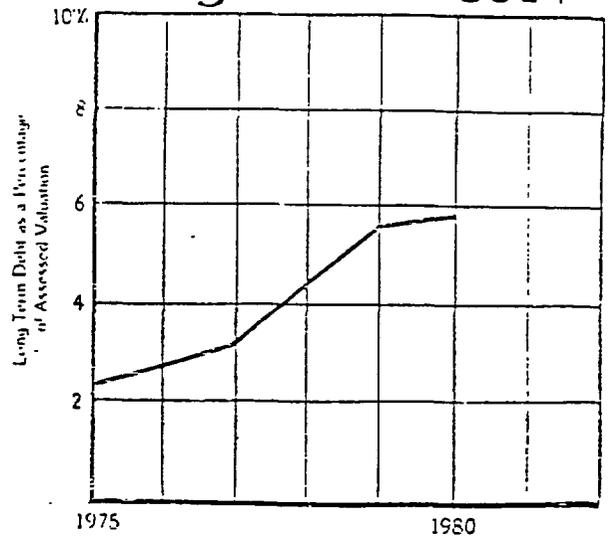
Indicator 13
Fringe Benefits ↑



Indicator 16
General Fund Balances ↓



Indicator 19
Long Term Debt ↑



BEST AVAILABLE COPY

CHART A SUMMARY OF INDICATOR FORMULAS

Indicator		Formula
No.	Title	
1.	Revenues Per Capita	$\frac{\text{Net Operating Revenues in Constant Dollars}}{\text{Population}}$
2.	Restricted Revenues	$\frac{\text{Restricted Operating Revenues}}{\text{Net Operating Revenues}}$
3.	Intergovernmental Revenues	$\frac{\text{Intergovernmental Operating Revenues}}{\text{Gross Operating Revenues}}$
4.	Elastic Tax Revenues	$\frac{\text{Elastic Operating Revenues}}{\text{Net Operating Revenues}}$
5. ^x	One-Time Revenues	$\frac{\text{One-Time Operating Revenues}}{\text{Net Operating Revenues}}$
6. ^x	Property Tax Revenues	$\frac{\text{Property Tax Revenues in Constant Dollars}}{\text{Net Operating Revenues}}$
7. ^x	Uncollected Property Taxes	$\frac{\text{Uncollected Property Taxes}}{\text{Net Property Tax Levy}}$
8.	User Charge Coverage	$\frac{\text{Revenues from Fees and User Charges}}{\text{Expenditures for Related Services}}$
9.	Revenue Shortfalls	$\frac{\text{Revenue Shortfalls}^1}{\text{Net Operating Revenues}}$
10. ^x	Expenditures Per Capita	$\frac{\text{Net Operating Expenditures in Constant Dollars}}{\text{Population}}$
11.	Employees Per Capita	$\frac{\text{Number of Municipal Employees}}{\text{Population}}$
12. ^x	Fixed Costs	$\frac{\text{Fixed Costs}}{\text{Net Operating Expenditures}}$
13. ^x	Fringe Benefits	$\frac{\text{Fringe Benefit Expenditures}}{\text{Salaries and Wages}}$
14. ^x	Operating Deficits	$\frac{\text{General Fund Operating Deficit}}{\text{Net Operating Revenues}}$
15.	Enterprise Losses	$\frac{\text{Enterprise Profits or Losses in Constant Dollars}}{\text{Net Operating Revenues}}$
16. ^x	General Fund Balances	$\frac{\text{Unrestricted Fund Balance of General Fund}}{\text{Net Operating Revenues}}$
17. ^x	Liquidity	$\frac{\text{Cash and Short-Term Investments}}{\text{Current Liabilities}}$
18.	Current Liabilities	$\frac{\text{Current Liabilities}}{\text{Net Operating Revenues}}$
19. ^x	Long-Term Debt	$\frac{\text{Net Direct Long-Term Debt}}{\text{Assessed Valuation}}$
20.	Debt Service	$\frac{\text{Net Direct Debt Service}}{\text{Net Operating Revenues}}$
21.	Overlapping Debt	$\frac{\text{Overlapping Long-Term Debt}}{\text{Assessed Valuation}}$
22.	Unfunded Pension Liability	$\frac{\text{Unfunded Pension Plan Vested Benefits}}{\text{Assessed Valuation}}$
23.	Pension Assets	$\frac{\text{Pension Plan Assets}}{\text{Pension Benefits Paid}}$
24.	Accumulated Employee Leave Liability	$\frac{\text{Total Days of Unused Vacation and Sick Leave}}{\text{Number of Municipal Employees}}$

Indicator		Formula
No.	Title	
25.	Maintenance Effort	$\frac{\text{Expenditures for Repair and Maintenance of General Fixed Assets}}{\text{Amount of Assets}}$
26.	Level of Capital Outlay	$\frac{\text{Capital Outlays from Operating Funds}}{\text{Net Operating Expenditures}}$
27.	Depreciation	$\frac{\text{Depreciation Expense}}{\text{Cost of Depreciable Fixed Assets}}$
28.	Population	Population
29.	Median Age	Median Age of Population
30.	Personal Income	$\frac{\text{Personal Income in Constant Dollars}}{\text{Population}}$
31.	Poverty Households or Public Assistance Recipients	$\frac{\text{Poverty or Public Assistance Households}}{\text{Households in Thousands}}$
32. ^x	Property Value	$\frac{\text{Constant Dollar Change in Property Value}}{\text{Constant Dollar Property Value Prior Year}}$
33.	Residential Development	$\frac{\text{Market Value of Residential Property}}{\text{Market Value of Total Property}}$
34.	Vacancy Rates	Vacancy Rates
35.	Employment Base	• Rate of Unemployment • Number of Community Jobs
36.	Business Activity	• Retail Sales • Number of Community Businesses • Gross Business Receipts • Valuation of Business Property • Business Acres Developed

* Indicators developed by Nagyháza

PROGRAM ANALYSIS FOR STATE AND LOCAL GOVERNMENTS

SECOND EDITION

by Harry Hatry
Louis Blau
Donald Fisk
Wayne Kimmel

The Urban Institute

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- The data needed to make comprehensive analyses—for example, information on each facility's physical characteristics and condition—are unavailable in most operating agencies.
- The analytical tools for using such data to undertake analyses of options have substantial weaknesses, in part because the agencies have had little experience with such tools and thus have not adapted them to their needs.
- Those parts of the analysis that require projections of the future have innate weaknesses, as do any attempts to forecast the future (including stock-market projections or projections of the economy for even several months, let alone one or more years, into the future).
- Operating agency personnel, particularly at the top level, are unaccustomed to such analysis and do not perceive its use and utility.
- Higher-level officials, both chief executive officers and other elected officials, have not insisted on the information for which the analyses are needed and are inexperienced in how the information obtained might be used, for example, to gain public support for proposals.
- Even when such analyses are undertaken and are subsequently transmitted for central review, the information may not be presented clearly and concisely so that central review officials can understand the material and its implications.

Some of these problems are inherent obstacles. Many, however, can be reduced, even if only gradually. For example, data on facility condition can be obtained, the various analytical tools such as those discussed in this report can be tried and refined, and improvements can be made in the communications between operating agencies, central review personnel, and elected officials.

The remaining chapters seek to help public personnel reduce these obstacles.

Chapter 3

Improving on Crystal Ball Gazing: The Basic Elements of Program Analysis

Thus far we have emphasized the roles and responsibilities of decision makers in carrying out successful program analyses. Even with the support of decision makers, program analysis is still fraught with difficulties. The remaining chapters are devoted to aiding the analyst in conducting the basic steps of program analysis. Exhibit 2 listed typical steps. While the elements are presented as a series of steps, actual analysis usually involves an interplay among the steps, such as backtracking to refine or redefine the problem, to specify additional client groups, or to pose additional evaluation criteria.

This chapter discusses the first five steps: defining the problem, identifying objectives, selecting evaluation criteria, specifying client groups, and identifying alternatives. In considering the suggestions in chapters 3 through 7, it may be helpful to refer to the three examples of analyses summarized in appendix A, and the checklist of technical criteria for assessing program analyses in appendix C.¹

¹ For more details on various technical procedures for program analysis see such works as Hugh J. Miser and Edward S. Quade, editors, *Handbook of Systems Analysis* (New York: North-Holland, 1985), Giandomenico Majone and Edward S. Quade, editors, *Pitfalls of Analysis* (New York: John Wiley & Sons, 1980), Theodore H. Porter, *Public Program Analysis: Applied Research Methods* (Baltimore, Maryland: University Park Press, 1978), Edith Stokey and Richard Zeckhauser, *A Primer for Policy Analysis* (New York: W. W. Norton and Company, 1978), Mathew B. Miles and A. Michael Huberman, *Qualitative Data Analysis* (Beverly Hills, California: Sage Publications, 1984), John J. Clark, Thomas J. Hindelang, and Robert L. Pritchard, *Capital Budgeting* (Englewood Cliffs, New Jersey: Prentice Hall, 1979), and Shlomo Reutlinger, *Techniques for Project Appraisal under Uncertainty* (Baltimore, Maryland: published for The World Bank by the Johns Hopkins University Press, 1970).

Defining the Problem and Its Scope

Program analysis starts with an issue or problem. The following examples from appendix A illustrate the nature of problems as they were initially posed:

1. Nashville mayor's office: Do we need to build three new cottages at our Children's Home as proposed?
2. Fort Worth City Council: *Parade Magazine* says that Indianapolis lets their police officers drive their patrol cars while off duty, and as a result the crime rate has dropped substantially. Should we do the same?
3. Dade County manager: What drug treatment program should the county encourage and support?

An analyst should, of course, respond to a problem or issue as it is initially perceived by government officials. But beyond that, analysts should attempt to identify the "real" problem which may underlie a given issue. As initially posed, a problem may be stated vaguely, incompletely, or perhaps misleadingly. Analysts will neglect part of their job if they indiscriminately accept the characterization of a problem as it is first presented. But problems and issues should not be redefined or reformulated merely to suit the analyst or to fit his analytic tools. Significant changes in problem statements should be worked out with, or reviewed by, responsible officials before the study is well under way.

One of the first problems that an analyst will normally face is determining the scope of an analysis. Should it focus on very narrow aspects of a problem or should it encompass numerous and broad dimensions? The analysis of the Fort Worth take-home police car plan, for example, focused on a very narrow issue. It considered only the existing use of police cars in Fort Worth and the variations of the basic take-home plan used in Indianapolis. The analysts might have explored other possible ways to reduce crimes, such as providing additional police officers or improving street lighting. The analysis could also have included additional options such as one-officer versus two-officer patrol cars or uniformed versus nonuniformed patrol officers. It could have been expanded to include the role of courts and prisons in deterring and apprehending criminals. The scope could have been further widened to consider the role of education, employment, and welfare in preventing crime in the first place. In fact, the scope was defined narrowly because of the specific interests of the city manager and council at the time.

The scope will be determined by such factors as the resources and time available, the amount of information that is available or that can be developed

in time, and the interests and needs of the government. But even within these limitations an analyst will usually have some flexibility in defining the scope. In practice, there is a common tendency to define a problem too narrowly. For example, an analysis of an emergency ambulance service was criticized for concentrating excessively on the response time of the ambulances. It had little to say either about provisions for medical care after arrival at the scene or hospital or about the relation of response time to health.

Conversely, an analysis may define an issue too broadly by attempting to answer all possible questions with one study that is so large and so difficult that it cannot be completed within the time and funding available. The choice of scope should be based in part on a preliminary analysis of a problem to help assess where analysts' time and effort would probably provide the largest payoff. An issue paper of the type described in chapter 2 and appendix B is one way to do this. Such preliminary analysis is seldom undertaken, but usually has a high payoff.

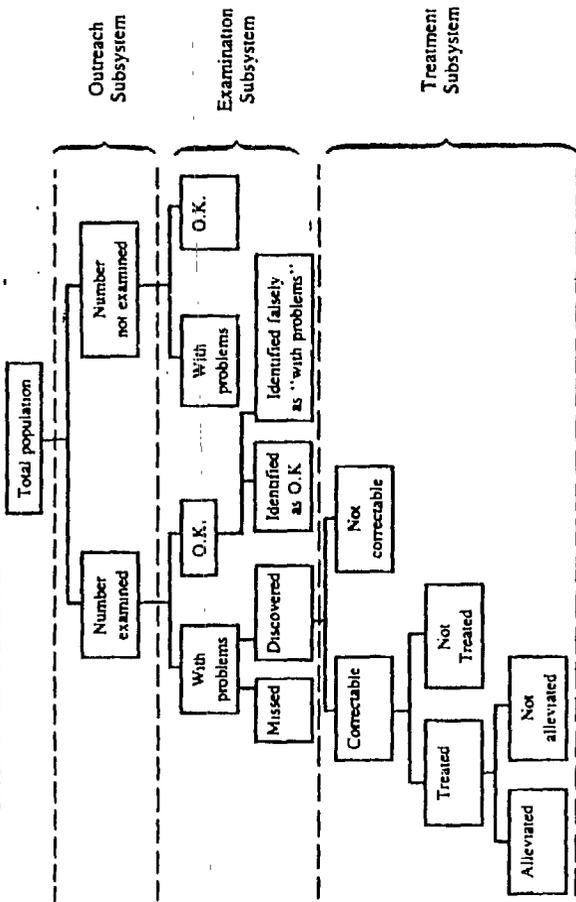
The initial scope of a study may be altered during the course of analysis, especially if important new insights about a problem arise. For example, the drug abuse treatment analysis summarized in appendix A-3 was broadened during the actual study to include the county jail when it became apparent that the jail was a major potential source of clients for treatment. As a general practice, the approximate scope of analysis should be defined at an early stage by the analysts and then reviewed by appropriate officials before a great deal of effort is expended.

One tool sometimes useful for gaining perspective on the scope of an issue is "diagramming" the service delivery system under study. This technique can help indicate how the elements of a system relate to each other and guide the selection of factors that should be considered in the analysis. Exhibit 8 is an illustration of one form of diagram. This exhibit shows various levels of a health treatment system. Each block represents a segment of the total population served by the system. If data are obtained on the number of cases falling into each block, the information could help identify those elements that are deficient and thus have priority for examination in a program analysis.

Identifying Program Objectives, Evaluation Criteria, and Client Groups

Three essential steps in program analysis are identifying relevant program objectives, criteria by which to evaluate the effectiveness of alternatives ("measures of effectiveness"), and the population or client groups that will be affected by the alternatives. These steps are closely related and will be

Exhibit 8. AN ILLUSTRATION OF "DIAGRAMMING": ONE VIEW OF A HEALTH TREATMENT SYSTEM*



Source: Ryan, P. Hain. "Overview of Modern Program Analysis Characteristics and Techniques." (Washington, D.C. The Urban Institute, 1969)

* A particular analysis might cover an, or any combination of these levels. "Subsystems" such as outreach, examination, or treatment subsystem—or it could examine the system as a whole. The overall effectiveness of the health system must be measured by comparing the number of persons with health conditions that have been identified as "with problems" with the number of persons with "with problems" who have not been examined. A hierarchy of such systems may be developed by specifying the number of persons with health conditions who have been identified as "with problems" who were discovered by the program, whose problems were alleviated, and whose problems were not.

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discussed together. In practice, they can and probably should be undertaken jointly.

Whenever possible, officials who request a program analysis should review the objectives, measures, and client groups selected by the analysts before data gathering begins. This will help ensure that the coverage of the analysis is appropriate.

The terms "objectives" and "goals" refer to the purposes of a government service. An objective or goal can be a desirable result that should be maximized, or an undesirable effect that should be minimized. Some writers distinguish between goals and objectives, but we make no such distinction in this volume.

Evaluation criteria, or measures of effectiveness, are criteria that indicate the extent to which the program is achieving its objectives.

Client groups are population groups that a program is intentionally directed toward, or groups that the program unintentionally affects.

Some suggestions for carrying out these three steps of program analysis follow:

1. *Identify objectives and evaluation criteria that are people-oriented.* Objectives and the evaluation criteria associated with them should reflect potential impacts on the program's clients, usually some portion of citizens in the community. Evaluation criteria should help address the question, "How well is the service doing what it should do for the citizens who use or are affected by it?" Exhibit 9 lists some characteristics of services that such criteria should address.²

Objectives and evaluation criteria should cover the public conditions that a program is designed to maintain, achieve or change. For example, criteria should measure how well a program meets the objectives of increasing the health and safety of citizens, or the cleanliness of the streets, or the satisfaction of citizens with the quality and variety of recreational opportunities.

Unfortunately, there is a widespread tendency to concentrate either on workload measures, such as tons of garbage collected, number of cases handled, or number of persons processed at intake; or on immediately available physical measures, such as number of acres of playground or number of hospital beds. While these measures may be useful for indicating some aspects of program performance, they provide little information about the extent to which citizens and the community are served effectively.

2. A number of candidate evaluation criteria for individual state and local government services are presented in Butt (1981), Grems et al. (1977), Hain et al. (1977), Millar and Millar (1981), and Schambblatt (1979).

2. Explicitly consider potential "unintended" consequences of programs—particularly negative effects. For example:

- Major new road building programs may result in displacement of large numbers of citizens, noise and air pollution, and disruption of the community.
- Urban renewal or housing code enforcement programs may reduce the amount of low-income housing available in a community.
- Increased arrest activities by public safety officials could, without proper safeguards, cause undue citizen harassment.
- New solid waste disposal technology may cause objectionable amounts of air or noise pollution.

The key point here—one that is often neglected—is that an explicit objective should be to control a program's negative consequences. Objectives are usually expressed as the beneficial effects that are intended but most programs

Exhibit 9. CHARACTERISTICS THAT EVALUATION CRITERIA SHOULD ADDRESS

1. To what degree does the service meet its intended purposes, such as improving health, reducing crime, or increasing employment?
2. To what degree does the program have unintended adverse or beneficial impacts? For example, does a new industry increase water and air pollution or cause inconvenience to citizens?
3. Is the quantity of the service provided sufficient to meet the needs and desires of citizens? What percent of the eligible "needy" population is actually served?
4. How fast does the program respond to requests for service?
5. Do government employees treat citizens who use the service with courtesy and dignity?
6. How accessible is the service to users?
7. Do citizens who use the service, or who might use the service, view it as satisfactory?
8. How much does the program cost?

also have negative consequences. Each program alternative should be examined to assess possible side-effects, both beneficial and harmful. Explicit consideration of negative consequences will help put the overall worth of a program into proper perspective and help governments design programs that reduce negative consequences.

3. *Consider more than one objective and evaluation criterion.* Most programs have several purposes, some of which may be interdependent or even conflicting. A single objective will rarely describe adequately the effects of the program, nor will a single evaluation criterion fully measure its impact. Some of the many aspects of a program that may need to be covered by evaluation criteria were listed in exhibit 9. Exhibits 10 and 11 illustrate evaluation criteria from two program analyses summarized in appendix A.³

4. *Do not reject evaluation criteria because of apparent difficulties in measuring them.* Evaluation criteria should be identified without initial concern for how or whether they can be measured. There are generally ways to partially measure even qualitative, subjective criteria, for example, by estimates based on ratings by experts or on systematic surveys of former clients. In any case, analysts should identify evaluation criteria even where they can provide no information on them. This will help ensure that decision makers using an analysis will be aware of important omissions and will remember to consider those aspects that are relevant but not measured.

5. *Too many objectives or criteria are better than too few.* It is probably better to err initially on the side of including too many objectives or evaluation criteria for consideration than to eliminate some that might be important when examined more closely. Neither public officials nor program analysts should be quick to eliminate a potential evaluation criterion on the basis of their own personal opinion. Criteria that become irrelevant or insignificant during the course of an analysis can be discarded, but it is often difficult to introduce new ones midway in the process without repeating data collection efforts.

6. *Specify client groups on which the analysis should attempt to estimate program impacts.* A program usually affects different groups in different ways and to different degrees. An analysis should identify these groups and collect information on how the program will affect them. For example, the

³ These are not presented as examples of perfect objectives or evaluation criteria but only as reasonable ones that appeared to have been relevant, reasonably comprehensive, and useful for the analyses in which they were applied.

Exhibit 10. ILLUSTRATION OF OBJECTIVES AND EVALUATION CRITERIA: NASHVILLE NEGLECTED AND DEPENDENT CHILDREN PROGRAM ANALYSIS^a

Objectives

- A. Reduce the number of neglected and dependent (N-D) petitions filed and the number of children subjected to the system by screening out those cases in which a petition is not justified.
- B. Keep the child in his or her home or in a family environment when possible until a thorough study can be conducted and the disposition of the case is decided. Seek to avoid institutional placements.
- C. Keep the child in his or her home or an appropriate environment when longer-term care is required.
- D. Place all children in a stable environment to which they can adjust, where they will not become neglected again, and where they will not become delinquent.
- E. Operate the system efficiently so as to minimize the costs of achieving all of the preceding objectives, or to achieve these objectives for the largest number of children when resources are constrained.

Measurement Criteria

Objective A

1. Number of N-D petitions filed.
2. Number of different children named on N-D petitions.
3. Number of cases screened where a petition was not filed.

Objective B

1. Number and percent of children kept in their own home until Juvenile Court hearing, after which they remain in their home.

Exhibit 10. (continued)

2. Number and percent of children avoiding institutionalization because of emergency caretakers.
3. Number and percent of children avoiding institutionalization because of placement in emergency foster homes.
4. Number and percent of children avoiding institutionalization because of homemakers.

Objective C

1. Number and percent of dispositions by the Juvenile Court that are considered to be good, questionable or bad as determined by professional opinion.

Objective D

1. Number and percent of children whose adjustment in placement is judged to be satisfactory, questionable, unsatisfactory.
2. Number and percent of children moved from one placement to another.
3. Number and percent of children who develop delinquency records.

Objective E

1. Total cost of system.
2. Cost per child for each type of treatment.

Source: Adapted from Marvin R. Butt and Louis H. Blau, *Options for Improving the Care of Neglected and Dependent Children* (Washington, D.C.: The Urban Institute, March 1971).

^a See appendix A-F for a summary of the program analysis in which these were considered.

average crime rate or unemployment rate for a jurisdiction masks differences among subgroups of a population. The following points should be considered

- Each program will be directed toward some groups that are *intended* beneficiaries (clients) of the service.
- The program may have some impact on other groups that are *not* intended beneficiaries but are nonetheless affected beneficially or detrimentally by the program.

Exhibit 11. ILLUSTRATION OF OBJECTIVES AND EVALUATION CRITERIA: FORT WORTH TAKE-HOME PATROL CAR PROGRAM ANALYSIS^a

Objectives

To reduce the amount of crime, particularly street crime; to prevent automobile accidents and personal injuries and deaths resulting from them; to improve citizen feelings of security; to improve the public image of the police; to improve police morale; and to operate the plan as efficiently as possible to minimize the cost of achieving the preceding objectives.

Measurement Criteria

1. Number and rate of crimes of various types—especially those potentially deterrable by the presence of a police car in the vicinity, such as auto theft, robberies, and street accidents.
2. Crime clearance rates.
3. Number of traffic accidents, injuries, and fatalities.
4. Index of citizen feeling of security, such as percent of citizens feeling safe walking in the streets at night.
5. Index of police-community relations, such as citizen ratings of police responsiveness, fairness, and courtesy.
6. Index of police morale, based on survey.
7. Program costs.

Source: Adapted from Donald M. Fisk, *The Indianapolis Police Fleet Plan* (Washington, D.C.: The Urban Institute, October 1970)

^a See appendix A-2 for a summary of the program analysis in which these were considered.

- The citizens of a community or state considered as a whole often comprise a category that should be explicitly identified.
- In some cases, *future* clients (such as those who will become eligible, who will move into the city or state, or perhaps be born there) may be important groups to consider explicitly if their interests are likely to be affected by the program.

- Even internal administrative support activities (such as building maintenance, data processing, vehicle maintenance, and personnel) have clients whose needs should be considered. The clients of these support activities are government personnel served by those activities.

A list of typical characteristics for classifying client groups is presented in exhibit 12. Each program is likely to be directed toward some unique client group or groups. Examples of groups that are likely to be affected by specialized programs are presented in exhibit 13.

Analysts should try to estimate the impact of a program on different client groups according to each of the evaluation criteria—at least those criteria for which the impact seems likely to differ significantly among client groups.

7. *Always include dollar costs as one criterion.* Program costs should be estimated for each alternative. Estimating cost is discussed in chapter 4.

Sources for Identifying Relevant Objectives, Criteria, and Client Groups

It is rare to find program objectives, criteria, and client groups neatly described and packaged. A variety of sources may provide important clues to them:

- Legislative statements, such as ordinances, laws or resolutions sometimes discuss objectives. These are more likely to be available for state and federally originated programs than for local ones.
- Statements made by legislators, citizen groups, or individual citizens at public hearings discussing the program may indicate objectives. These may have been reported in press accounts.
- Program personnel will often be aware of many intended or unintended impacts that need to be considered as well as of population groups that are likely to be affected.
- Government executives sometimes express program objectives and intended beneficiaries in statements to the legislature, the press, and the public, and in internal executive communications.
- Concerns expressed by clients of the service, perhaps obtained by an examination of government complaint records or by interviews, may identify service qualities of importance to them.

Exhibit 12. TYPICAL CLIENT GROUP CLASSIFICATION CHARACTERISTICS

1. Residence location—clients grouped by neighborhood, service area, precinct, etc., for local governments or by county, region, planning district, etc., for states.^a
2. Sex
3. Age groups, such as youth and the elderly
4. Family income
5. Racial and ethnic groups
6. Problem or handicap groups—for example, individuals with alcohol problems or physical disabilities
7. Education level
8. Homeownership and type of dwelling
9. Employment status
10. Family size
11. Usage of particular facilities—for distinguishing among citizens with varying degrees of use of the service (including nonusers).

a. In addition to reflecting residential location directly, this category may be a reasonable proxy for other socioeconomic characteristics

• Program evaluations and analyses conducted by other governments (including the federal government), academic or research institutions, and professional associations, will have identified objectives, criteria, and client groups.

Exhibit 14 contains a set of questions that might be asked by program analysts to help identify objectives, evaluation criteria, and appropriate program clients.

Exhibit 13. ILLUSTRATION OF CLIENT GROUP CHARACTERISTICS OF SPECIALIZED SERVICE PROGRAMS

Type of Service	Client Groups Likely To Be of Special Relevance for Program Analysis
Recreation	Individuals in different neighborhoods or regions Sex—males and females often have different recreation interests Age—the very young and elderly have special needs Individuals with handicaps Individuals without access to an automobile Low-income families Users of specific types of recreation (e.g., golf, tennis, or hiking)
Drug abuse treatment	Individuals with different lengths and types of addiction Different age, sex, income class, or racial groups Families of addicts or potential addicts Citizens as a whole, particularly as potential victims of drug-related crime
Transportation	Individuals in different neighborhoods or regions Individuals without access to an automobile (e.g., the very young, the elderly, housewives left without an automobile, or those who cannot afford or do not want to drive) Individuals with physical handicaps Low-income families Individuals with unusual working hours
Solid waste collection	Individuals in different neighborhoods Elderly and physically handicapped individuals who may require special collection services Single vs. multiple housing unit customers Residential vs. commercial customers Rural vs. urban customers

Selecting the Final Set of Effectiveness Measures

Analysts who follow the previously discussed steps will probably develop an extensive list of measures of effectiveness. The complete list may have to be narrowed to a relevant and manageable number so that data collection is not overwhelming. Some criteria for selecting a final set are shown in exhibit 15.

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Exhibit 14. QUESTIONS TO HELP IDENTIFY OBJECTIVES, EVALUATION CRITERIA, AND CLIENT GROUPS

1. What are the purposes of the program? Why was it (or should it be) adopted?
2. What is to be changed by the program, in both the immediate future and the long run? How would the program manager know if the program was working or not working? What would be accepted as evidence of success?
3. Who are the targets of the program? Is the community as a whole likely to be affected either directly or indirectly? Who else might be affected by the program?
4. What are possible side effects, both immediate and long-run?
5. What would be the likely consequences if the new program were introduced or if an existing program were discontinued? What would be the reaction of citizens in the community? Who would complain? Why would they complain? Who would be glad? Why?

Search for Alternatives

Central to every useful program analysis is the development of an appropriate set of alternatives that might achieve the program objectives. The following sources often help identify program alternatives:

1. If the analysis has been initiated by specific proposals by government officials, these officials may also identify alternatives they wish considered.
2. Program personnel often have specific ideas on alternatives as well as a thorough knowledge of what agencies in other governments are trying.
3. Individuals and groups outside the government, including citizens, community organizations, public interest associations, and the news media will often make proposals.
4. Approaches of other governments to the same problem should be explored. Ideas being tried by others can often be identified through profes-

Exhibit 15. CRITERIA FOR SELECTING FINAL SET OF MEASURES

Importance

Does the measure provide useful and important information on the program that justifies the difficulties in collecting, analyzing or presenting the data?

Validity

Does the measure address the aspect of concern? Can changes in the value of the measure be clearly interpreted as desirable or undesirable? Is there a sound, logical basis for believing that the program can have an impact on the measure?

Uniqueness

Does the information provided by the measure duplicate or overlap with information provided by another measure?

Accuracy

Are likely data sources sufficiently reliable or are there biases, exaggerations, omissions, or errors that are likely to make the measure inaccurate or misleading?

Timeliness

Can data be collected *and analyzed* in time for the decision?

Privacy and Confidentiality

Are there concerns for privacy or confidentiality that would prevent analysts from obtaining the required information?

Costs of Data Collection

Can the resource or cost requirements for data collection be met?

Completeness

Does the final set of measures cover the major concerns?

sional meetings, journals, government professional interest groups, and word of mouth.

5. Different sizes of the same alternative, such as expansions or contractions of an existing program, often need to be considered.

6. Combinations of individual alternatives may be defined as new alternatives.

7. During the analysis, new variations or new ideas may be suggested to alleviate the apparent weaknesses of basic alternatives that are found. Modifications in an alternative may be made to hedge against these weaknesses. For example, if construction of a new facility seems risky, an alternative might be renting facilities until key uncertainties have been reduced or eliminated. Or, a program may be adopted on a trial basis; the decision on whether to adopt the full-scale program can be made when better information is obtained.

8. It might be useful to hold "brainstorming" sessions where analysis and agency personnel and perhaps others try to generate ideas. The purpose of such sessions would be to encourage imaginative, innovative, even radically new options.

An old story, and one we cannot vouch for, concerns a fish processing plant. It brought in live fish and kept them that way until needed. To reduce costs it wanted to reduce storage space but found that when the fish were packed tightly, they became inactive and food flavor suffered. Many shapes and sizes of tanks were tried to get active movement of the fish without requiring large amounts of storage capacity. The alternative finally hit upon was to put a small sand shark in the tank. It worked wonders. It kept the fish quite active in a small area with only a small loss in fish.

9. Pilot tests of a new approach, rather than full-scale implementation, may be appropriate in some situations. This option is desirable when uncertainties about the workability and performance of a new approach are major, and when such a trial is feasible. Generally pilots are scaled-down versions of an approach. For example, the new approach might be introduced for a trial year in one part of the community, while using the existing approach elsewhere.

10. Hard, knowledgeable, and careful thinking about a problem is often a neglected source of worthwhile alternatives.

For any given set of objectives a large number of conceivable alternatives (or variations) can be proposed. As a practical matter, it is necessary to restrict

the number of alternatives to be analyzed.⁴ Most analyses consider no more than five or six alternatives. An analyst will have to make some early judgments, perhaps supported with preliminary, informal analysis and guidance from decision makers, to reduce a large list to a reasonable size.

Sometimes the program finally selected by government officials for implementation will *not* be among the alternatives explicitly examined in the analysis but a variation of one or more of them. This may be a result of political compromise, or because the analysis itself suggests that a new variation be generated, or it may occur because the initial alternatives are no longer appropriate.

A caution: Decision makers sometimes have preconceived ideas about which alternative is preferable. Other alternatives might then be offered that are merely "sops" to analysts-- impractical alternatives or minor variations of the preferred one. For meaningful analysis, however, only alternatives that are valid options, that actually address the problem under study and represent a range of possible actions, should be included.

The degree to which a set of alternatives includes departures from existing programs will significantly affect the task of estimating the alternatives' costs and effectiveness. To provide a preliminary basis for discussing the problems of, and approaches to, making estimates of costs and effectiveness, we categorize alternatives into five types:

- Type 1. Present program extended at same level of effort;
- Type 2. Present program extended but at a different level of effort;
- Type 3. Other variations of the present program;
- Type 4. New programs with traditional concepts; and
- Type 5. New programs with new concepts

A program analyst could study alternatives from a number of these categories. An emergency ambulance study proposed four alternatives of three different types:⁵

- 1. Maintain the status quo (Type 1);
- 2. Increase the number of ambulances at the district's hospital (Type 2);
- 3. Redistribute the existing ambulances in the district; locate some ambulances at satellite garages (Type 3); and
- 4. Increase and redistribute ambulances (a combination of Types 2 and 3).

⁴ A useful discussion of ways to screen alternatives is presented in Walker (1984).

⁵ See Burt et al., "Factors Affecting the Impact of Urban Policy Analyses."

While there is not always a clear distinction between these five types, we will briefly examine each, especially in terms of the problem involved in estimating costs and effectiveness.

Type 1. Present program extended at same level of effort. The alternative most commonly considered in analyses is the existing program continued into the future with no significant change. This provides a baseline against which other alternatives can then be compared.

In this case, estimating costs is usually straightforward, at least for the near future. Many governments already project costs of current programs for at least one year as part of budget preparation; some state governments with biennial budgets make two-year projections. Where program cost projections do not exist, it is usually possible to estimate them without great difficulty. Still, quantitative estimates should be made of the effects of such factors as future inflation, pay raises, changes in workloads or caseloads, and replacement of equipment or facilities that might alter costs.

While cost of an existing program may be easy to assess, estimating its effectiveness is likely to be difficult. Few programs in state or local government have been the subject of recent program evaluation that might serve as an adequate basis for future projections of effectiveness. But with existing programs, at least crude assessments of past performance can often provide a basis for estimates of future performance. While estimates of future workload (caseload) or program demand are needed, they can often be based on past service experience.

Some external factors may change a program's effectiveness in the future and should be considered. For example, the closing of local industrial plants may change the future effectiveness of existing employment programs. Even the analysis of continuing an existing program is likely to involve more than projecting current costs and effectiveness in a straight line on the basis of past experience.

For example, in the Fort Worth take-home police car analysis, the new proposal was compared to the existing police car arrangement. Costs for the existing arrangement were projected six years into the future, a fairly simple task since there were no planned increases in the size of the force, number of patrol officers, number of police cars, or time on patrol. But it was not so easy to estimate what future effectiveness would be. As in most other jurisdictions, crime and automobile accidents were increasing; however, the analysis simply assumed that these increases would continue at recent rates.⁶

6. See appendix A-2 and Fort Worth Research and Budget Department, "The Use of Police Patrol Cars by Off-Duty Patrolmen" (Fort Worth, Texas, 1970).

Type 2. Present program extended at a different level of effort. An option commonly examined is the continuation of the same program concept but with a higher or lower level of resources. Some examples would be proposed increases in the number of motorized patrol units, reductions in the number of institutional facilities, and increases in the number of recreation facilities. Though straightforward, such actions affect both program cost and effectiveness.

Problems of estimation related to continuing the existing program apply equally to this one. There are also additional problems of estimating the costs and effects of revised program size. How much does it cost to add fifteen more police officers, or keep playgrounds open two additional hours per day, or train fifty additional persons? Usually, these questions cannot be answered reliably simply by using past average costs. Additional issues must be addressed: Are more facilities, equipment, or supervisory personnel also needed, and of what type? With respect to future needs for facilities or equipment, what unused capacity currently exists, and how much money can be saved by using this capacity? If a program alternative calls for a cutback, an analyst must be realistic and face up to the perennial stickiness in cutting back resources—considering vested interests within and outside the government that may effectively resist cutbacks.

Similar problems exist in estimating effectiveness. An alternative which calls for another recreational facility or a new fire station will have an impact on effectiveness, but probably at a diminishing rate compared to previous additions. There may also be unevenness or "nonlinearity" in changes in effectiveness. For example, adding a few police may have virtually no impact on effectiveness, while drastically increasing the number in an area may lead to a substantial impact.

A radical version of this type of alternative is to *eliminate* the program. On occasion, a program may have outlived its usefulness or be completely ineffective.

Type 3. Variations in present program procedures. This type of alternative involves a modification in the design of the existing program, not simply a change in its level of operations. For example, police might revise their preventive patrol procedures; employment agencies might modify their training programs; or the sanitation department might change from back-door to curbside pickup of garbage.

Costs and effectiveness for this type of alternative will be more difficult to estimate than for the previous types, but estimates can continue to draw on experiences with the current program.

Type 4. *New programs with traditional concepts.* Changes in current practices eventually become so great that they no longer represent mere variations of an existing program.

For example, a county's analysis of water recreational opportunities for children of low-income families considered three alternatives: (1) build six small community-size pools, (2) build three Olympic-size pools, and (3) bus children to a local beach. Neither of the latter two alternatives had been previously used by the government, but each was based on well-known elements. They could be considered alternatives of this type.⁷

This type of alternative formulation is one relatively safe way for governments to innovate. While the risks are larger than those of merely varying an existing program, they are not likely to be major. Since the proposed basic concepts often have already been tried somewhere, estimates of their costs and effectiveness can be based, at least in part, on past experiences of other governments.

Type 5. *New programs with new concepts.* This is the least common type of alternative. It presents the greatest difficulties in estimating costs and effects. The risks for a government prevent its frequent use. However, options of this type may be the best way to make major progress over the long run, either in reducing costs or in increasing effectiveness. New drugs for treating some forms of mental illness and radical new approaches to rehabilitating inmates or alcoholics would fall into this category. New concepts are often tied to new technology, but they need not be. A proposed change from delivery of a service to contracting the service to a private firm probably also belongs in this category.

The costs and effects of new programs with new concepts are particularly difficult to estimate, simply because they are "new" and thus largely untested. Whether a concept will really work at all may be unknown. Most new concepts take a long time to implement, refine, and test. By the time they are perfected, conditions may be quite different from those today. As will be noted in chapters 4 and 5, techniques used to estimate the costs and effects of new concepts may be quite different from those used to estimate more familiar program alternatives. The problems with new concepts are vividly portrayed by past attempts to introduce computer controlled traffic signals in several U.S. cities. Costs were greatly underestimated, and where the automated

7. See Burt et al., "Factors Affecting the Impact of Urban Policy Analysis"

signals worked, it is not obvious that the intended effects were achieved.⁸ Small pilot tests of such alternatives often may be appropriate as a way to obtain better cost and effectiveness information before committing resources on full-scale programs.

8. See Harry P. Haty et al., *Practical Program Evaluation for State and Local Governments* (Washington, D.C.: The Urban Institute, 1981)

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Exhibit 2. BASIC STEPS IN A PROGRAM ANALYSIS:
MATERNAL AND INFANT CARE EXAMPLE

1. *Define problem.* What should be done to reduce a high infant mortality rate—relative to the national average—that is occurring in the county hospital?
2. *Identify relevant objectives.* The primary objectives are to minimize maternal mortality and infant mortality and abnormalities.
3. *Select evaluation criteria.* The criteria selected were infant mortality, maternal mortality, infant abnormalities, and program costs.
4. *Specify client groups.* Different client groups were mothers and children. Client groups typically have different needs and are served at different levels of effectiveness. (Although this study did not break down mortality and abnormality estimates by major demographic groups, this preferably should be done, for instance, age and ethnicity race of the mother.)
5. *Identify alternatives.* Alternative 1 extends the current program into the future. Alternative 2 has a prenatal care emphasis, including getting expectant mothers into clinics earlier, providing nutrition services, etc. Alternative 3 has a postnatal care emphasis. (The alternatives examined should be specific, potentially operational programs. For example, Alternative 2 might call for the formation of a new clinic of certain size and location, plus a specific type of campaign to publicize it.)
6. *Estimate costs of each alternative.* In Exhibit 1, annual costs could have been shown for each of the next three to five years. They might be presented as either the average annual cost or the total cost over the period.
7. *Determine effectiveness of each alternative.* As shown in Exhibit 1, none of the three alternatives is better than the others for all the evaluation criteria. This will happen in most program analyses. Decision makers must now make a judgment using this and other information available to them. Showing the estimated effectiveness of each alternative for each of the next several years would be desirable since the effectiveness of different alternatives might vary over time.
8. *Present findings.* Exhibit 1 is a tabular method of displaying the estimated costs and effectiveness of alternative programs. Various graphic forms as well as text also may be used. (In this simplified example, the amount and nature of the uncertainties in the effectiveness and cost estimates are not indicated but should be presented.)

the time period to be considered in an analysis, and the handling of uncertainty when estimating cost and effectiveness. Chapter 8 discusses three major basic applications for state and local government program analyses.

Appendix A presents summaries of three actual program analyses, pointing out some of the problems likely to be encountered in a "real world" situation. Appendix B presents an outline for an "issue paper," suggested in chapter 2 as a means to begin the analysis process. Appendix C presents a checklist for assessing a program analysis.

Chapter 2

Putting Program Analysis to Work: Institutional Issues

Some of the most sophisticated and technically competent program analyses are unused and unusable. The reasons are varied: the main findings of the analysis may have vanished in a thicket of technical jargon, the recommended alternatives may be politically infeasible, the report on the analysis may have come too late; or the bureaucracy that must use the findings may be uninterested or resistant. In brief, program analysis can be elegant but irrelevant.

To avoid this danger, both the analyst and the public officials who are to use the results of the analysis must pay attention to institutional issues dealing with the ways in which studies are initiated, managed, reviewed, and used. These issues range from the way topics are selected for study to the organization of the analytic staff.

We will start with a fundamental issue: the role of the officials who require a program analysis and who will be primary users of its findings. The comments in this chapter apply primarily to executive officials, both chief executives and department heads, but many should also be of interest to legislative officials.

Role of the Executive and Staff in Program Analysis

High ranking and key officials are the people who make decisions. They choose among policy and program alternatives that consume scarce resources both immediately and in the future. These decision makers have a vital interest in getting timely, relevant, and reliable information on the costs and consequences of major decisions. This is what program analyses can help provide.

Of course, these officials will not have time to get involved in the details of the analytic process. But they can take steps that contribute to the success

of program analysis. The steps are listed in exhibit 3 and are discussed here. Officials should:

1. *Participate actively in the selection of program and policy issues for analysis.* There is no substitute for the perspective which a chief executive can bring to the selection of program and policy issues. At a minimum, the executive can usefully screen lists of candidates for analysis to eliminate studies of issues which are considered to be trivial or peripheral, and to help ensure that policy questions of greatest concern are considered.
2. *Assign responsibility for the analysis to a unit of the organization that can conduct the study objectively.* If a program analysis cannot be undertaken with reasonable objectivity by the operating agency that will deliver the service, responsibility should be placed in a central staff office or with a multi-agency study team.
3. *Ensure that participation and cooperation are obtained from relevant agencies.* Even when the analysis is assigned to a central unit, staff members of agencies concerned with the issue can contribute significantly to the analysis, and their participation should be obtained whenever possible. Furthermore, their participation can help overcome some of the difficulties associated with implementing a particular alternative. The chief executive can assist an analysis by helping obtain the cooperation of these agencies.
4. *Provide adequate staff to meet a timely reporting schedule.* The effort should be staffed with enough competent people who are allowed sufficient time so that the analysis can be completed and reviewed before a decision has to be made. The chief executive should discourage the diversion of staff who are undertaking analyses to day-to-day "firefighting."
5. *Insist that the objectives, evaluation criteria, client groups, and program alternatives considered in the analysis include those of prime importance.* The executive should review the study plan early to ensure that it includes these major factors. (The selection of objectives, evaluation criteria, client groups, and alternatives is discussed in chapter 3.)
6. *Have a work schedule prepared and periodically monitored.* This ensures that interim and final study findings are available in a timely way for key decisions. A member of the executive's staff should be assigned responsibility for monitoring the effort.
7. *Review results, and if findings seem valid, see that they are used.* This helps ensure the program analysis is taken seriously within the organi-

Exhibit 3. ROLE OF CHIEF EXECUTIVE IN PROGRAM ANALYSIS

1. Participate actively in the selection of program and policy issues for analysis.
2. Assign responsibility for the analysis to a unit of the organization that can conduct the study objectively.
3. Ensure that participation and cooperation are obtained from relevant agencies.
4. Provide adequate staff to meet a timely reporting schedule.
5. Insist that the objectives, evaluation criteria, client groups, and program alternatives considered in the analysis include those of prime importance.
6. Have a work schedule prepared and periodically monitored.
7. Review results and, if findings seem valid, see that they are used.

zation. It is wise to circulate analysis results to interested agencies to permit reviews and comments before final actions are taken.

Selecting Issues for Analysis

While analytical resources are inevitably scarce, program issues are pervasively abundant. The usual problem is not to find issues but to select those that are most important and that could be clarified significantly by systematic analysis. Some analyses will have to be done on policy problems whose importance emerges because of sudden events; these analyses cannot be scheduled in advance. But generally, waiting for issues to reach a boiling point before undertaking an analysis is likely to prohibit in-depth analysis. State governments and most medium and large local governments will find it useful to have regular, systematic processes to identify issues before they "come to a head" and to select appropriate ones for analysis.

An inexpensive tool for identifying and describing potential topics for analysis is the "issue" or "problem-definition" paper. It describes the major

features of a significant problem likely to require government action in the next several months and suggests alternative actions that the government should consider—but stops short of the actual analysis. A suggested outline for an issue paper is presented in Appendix B.

The following seven criteria, summarized in exhibit 4, should help a government select issues and programs for analysis. Criteria 1 through 3 relate to the importance of an issue; criteria 4 through 7 relate to the feasibility of analysis.

Importance of an Issue

1. *Is there a decision to be made by the government? Can the analysis significantly influence the adoption of various alternatives?* In some instances, key decision makers, such as governors, mayors, city managers, agency heads, legislators, or council members, may have clearly made up their minds. Similarly, strong and controlling interest groups may have already mobilized behind or publicly committed themselves to a single course of action. In such circumstances, the results of analysis will probably have little influence on the final action. However, if there is some suspicion that a course of action has serious defects or major hidden costs and if no decision has been made, a chief executive may wish to proceed with analysis.

2. *Does the issue involve large costs or major consequences for services?* Issues that involve large outlays of resources or hold substantial consequences for the future level, quality, or distribution of public services should receive priority for analysis. Programs that are "analytically interesting" but unlikely to have substantial impact on services or budgets are usually not worthwhile topics for program analysis.

3. *Is there substantial room for improving program performance?* If a program is of major importance but there is little room for improving it, examining a program of less "importance" but with more room for improvement may have a higher payoff. Clues to the improvement needed could come from preliminary data indicating the costs or service quality compared to those of similar jurisdictions. Similarly, if many problems or complaints arise about the service, improvement would appear to be needed.

Feasibility of Analysis

4. *Can the problem be handled by program analysis? Does it lend itself to measurement? Can reasonable estimates of effectiveness be made?*

Exhibit 4 CRITERIA FOR SELECTING ISSUES FOR ANALYSIS

Importance of an Issue

1. Is there a decision to be made by the government? Can the analysis significantly influence the adoption of various alternatives?
2. Does the issue involve large costs or major consequences for services?
3. Is there substantial room for improving program performance?

Feasibility of Analysis

4. Can the problem be handled by program analysis?
5. Is there time for the analysis to be done before key decisions must be made?
6. Are personnel and funds available to do the analysis?
7. Do sufficient data exist to undertake the analysis, and can needed data be gathered within the time available?

5. *Is there time for the analysis to be done before key decisions must be made?* Program analyses completed and reported *after* officials commit themselves to a course of action can be useless. Studies should consciously be scheduled to allow time for final results and findings to be circulated, reviewed, and evaluated before a decision. It is possible to be too pessimistic about timing, however. A "late" study now may be an early one if the same issue or a comparable one arises again.

6. *Are personnel and funds available to do the analysis?* There is little point in considering analyses that require technical skills that government personnel lack and that cannot be obtained at reasonable costs. Many governments have personnel with most—if not all—necessary analytical skills to undertake a wide range of analyses. In those instances where a technical specialty such as

features of a significant problem likely to require government action in the next several months and suggests alternative actions that the government should consider—but stops short of the actual analysis. A suggested outline for an issue paper is presented in Appendix B.

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Feasibility of Analysis

4. *Can the problem be handled by program analysis? Does it lend itself to measurement? Can reasonable estimates of effectiveness be made?*

Institutional Issues

Exhibit 4. CRITERIA FOR SELECTING ISSUES FOR ANALYSIS

Importance of an Issue

1. Is there a decision to be made by the government? Can the analysis significantly influence the adoption of various alternatives?
2. Does the issue involve large costs or major consequences for services?
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Feasibility of Analysis

4. Can the problem be handled by program analysis?
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6. *Are personnel and funds available to do the analysis?* There is little point in considering analyses that require technical skills that government personnel lack and that cannot be obtained at reasonable costs. Many governments have personnel with most—if not all—necessary analytical skills to undertake a wide range of analyses. In those instances where a technical specialty such as

conducting sample surveys is required, outside assistance might be obtained from consulting firms, universities, or research organizations.

7. *Do sufficient data exist to undertake the analysis, and can needed data be gathered within the time available?* Most existing government data records have been designed for administrative, financial, and other control purposes. Few have been designed for measuring and presenting program effectiveness. Even available cost data are often not in a form usable for program cost analyses. Required data, if available at all, may have to be extracted laboriously from existing records or obtained from new sources. Before deciding whether to undertake an analysis, the data that are available should be compared to what will be required; a judgment should be made as to whether available data are adequate, or whether it will be too difficult or expensive to generate new data.

Illustrative Issues for Analysis

Exhibit 5 gives examples of issues that might be selected for analysis. Whether a specific issue contained in the list is worth analyzing depends in part on the application of the seven criteria identified above.

Staff Time Required and Number of Analyses

The amount of staff time a study will require should be assessed in advance. Many analyses can be done within three to twelve person-months, but a complex study may require considerably more effort, possibly straining a government's analytical resources. The time required for data collection is often difficult to estimate. Where data are fragmentary, special collection efforts may be necessary. Even with experienced analysts, the time for data collection sometimes becomes excessive, at the expense of time for data analysis.

How many studies might a government undertake in a given year? This depends in large part on the resources available to do analysis and on the number of "crash" analyses arising. If a government relies primarily on one or two analysts in a central staff, one or two analyses a year may be the limit. If studies are done at the agency level as well, one study a year in each major agency may be taxing, especially where there is no prior experience with program analysis. On the whole, an approach allowing sufficient time to complete assigned analyses is probably more sensible than a broadside approach that attempts more studies and crash analyses than can possibly be

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finished. The latter approach results in superficiality and discredits the usefulness of analysis in both the short run and the long run. Realism is a necessary antidote to the enthusiasm of those who tend to bite off more analysis than they can chew.

Locating Responsibilities for Program Analysis

There does not appear to be a single best place to locate analytical activities in the government. Variations in the development, experience, and operating style of an organization make varying arrangements appropriate. Some basic points, however, should be considered.

1. *The sole responsibility for analysis should not be put into the hands of individual operating agencies.* Agencies may be tempted to give priority consideration only to alternatives or policy actions that are in their self-interest, and which tend to continue their current ways of operation. Operating agencies may overlook effects and impacts beyond their scope of interest or responsibility. Single-agency analyses may define problems too narrowly or employ restricted alternatives and criteria. For example, a police agency might not give full consideration to the disposition of arrests; traffic control agencies might neglect the air and noise pollution spillovers of their programs; housing authorities might be more interested in enlarging the stock of community housing than maintaining what exists in a liveable condition. It is unlikely, for instance, that a single operating agency would have had adequate perspective to undertake the analysis of drug abuse treatment programs described in appendix A-3.

A unit *outside* or *above* an operating program should direct, participate in, or at least monitor analyses. In all states and in local jurisdictions with more than about 100,000 population, at least a small central staff for program analysis and the allied functions of evaluation, program planning, and research is probably desirable. A central staff can itself conduct analyses with participation from operating agencies and possibly outside consultants; stimulate, monitor, and review agency-level studies; and provide such agency studies with technical assistance. In smaller jurisdictions, where a full-time central program analysis staff may not be feasible, these functions could be carried out part-time by one or two staff members in the chief executive's office or budget office who do not have direct operating responsibilities.

In addition to a central staff, there are often analytic capabilities available at the agency level in states and in larger jurisdictions. Some units, such as police or health planning and research units, are often engaged in gathering

Exhibit 5. ILLUSTRATIVE ISSUES FOR PROGRAM ANALYSIS

Law Enforcement

1. What is the most effective way of distributing limited police forces—by time of day, day of week, and geographical location?
2. What types of police units (foot patrolmen, one- or two-man police cars, special task forces, canine corps units, or others) should be used and in what mix?
3. What types of equipment (considering both current and new technologies) should be used for weaponry, for communications, and for transportation?
4. How can the judicial process be improved to provide more expeditious service, keep potentially dangerous persons from running loose, and at the same time protect the rights of the innocent?
5. How can criminal detention institutions be improved to maximize the probability of rehabilitation, while remaining a deterrent to further crime?

Fire Protection

1. Where should fire stations be located, and how many are needed?
2. How should firefighting units be deployed, and how large should units be?
3. What types of equipment should be used for communications, transportation, and firefighting?
4. Are there fire prevention activities, such as inspection of potential fire hazards or school educational programs, that can be used effectively?

Health and Social Services

1. What mix of treatment programs would do the most to meet the needs of the expected mix of clients?
2. What prevention programs are desirable for the groups that seem most likely to suffer particular illnesses?
3. How extensive should eligibility and quality control procedures be?

Exhibit 5. (continued)

Housing

1. To what extent can housing code enforcement programs be used to decrease the number of families living in substandard housing? Will such programs have an adverse effect on the overall supply of low-income housing in the community?
2. What is the appropriate mix of code enforcement with other housing programs to make housing in the community adequate?
3. What is the best mix of housing rehabilitation, housing maintenance, and new construction to improve the quantity and quality of housing?

Employment

1. What relative support should be given to training and employment programs which serve different client groups?
2. What should be the mix among outreach programs, training programs, job-finding and matching programs, antidiscrimination programs, and post-employment follow-up programs?

Waste

1. How should waste be collected and disposed of, given alternative visual, air, water, and pollution standards?
2. What specific equipment and routings should be used?
3. Should collection be contracted or done in-house?

Recreation and Leisure

1. What type, location, and size of recreation facilities should be provided for those desiring them?
2. How should recreation facilities be divided among summer and winter, daytime and nighttime, and indoor and outdoor activities?
3. What, and how many, special summer programs should be made available for out-of-school youths?
4. What charges, if any, should be made to users, considering such factors as differential usage and ability to pay?

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and tabulating statistics. Except in the very largest cities and some state agencies, such units typically do little full-fledged program analysis or evaluation. These units can serve, nonetheless, as the nucleus for building an agency's analytical capability. Many state governments have analysis and/or evaluation staffs in some of their larger agencies.

2. *Analysts should have access and be exposed to the needs and policy views of key decision makers.* The staffs performing analyses should probably report directly to the chief executive, department head, or to a principal advisor. Analyses are then more likely to reflect managerial and political realities.

3. *The time spent by analysts on daily "firefighting" operations should be limited.* The demands for responses to daily issues are unending and can inhibit or even prevent in-depth examination of issues. Analysts should be in touch with the dynamics of policy making, but should not be swamped with daily rush jobs.

4. *Analysis units should maintain a close relationship with budget offices.* Budget offices often have a strong voice in implementing the results of analyses. And experienced budget examiners may be very knowledgeable about program operations. Some governments have tried to make budget examiners into part-time program analysts or to give new program analysts some regular budgetary responsibilities. While appealing in principle, this arrangement sometimes creates difficulties, at least initially, because the routine burdens of budget administration require so much time.

Analysts and the budget staff can, of course, interact during the course of a study. Budget staff members can, for example, advise the analysis team on costs of alternatives. It may be possible to merge the budget staff with the analysis staff once a tradition of analysis has been established and accepted. But experience suggests that at least initially the program analysis staff should be separate.

5. *The functions of program evaluation and program analysis can and probably should be placed in the same office.* Program evaluation—the assessment of how existing programs have performed in the past—provides basic information for program analysis. Past performance can be projected into the future as part of the task of assessing alternatives. Similar skills are likely to be needed for the two functions. It may be economical to combine the two in an "Office of Program Evaluation and Analysis." But care should be taken to avoid the pressures to evaluate a program favorably because it resulted from a previous analysis conducted by the same office.

Institutional Issues

A Special Note: Use Agency Staff in the Analysis

Staff members of operating agencies concerned with the issue being analyzed are likely to be experts in their fields. Analysts who are not already familiar with the field should draw on their expertise. The agency experts should be members of an analysis "team," in cases where a team is used. Participation of experienced staff members from operating agencies and their contact with analysts will not only yield more complete, reliable, and relevant information, but will also increase the likelihood that the agency will cooperate in implementing the recommendations that result from the study.

Staff Skills and Training

To perform most analyses, an individual does not need extensive training in a major professional speciality. What an analyst needs is intelligence and an inquiring, systematic, analytical approach to solving problems. Many governments already employ staff members who successfully undertake program and policy analyses. Other staff members could qualify with training and experience.

Quantitative training in such fields as economics, engineering, or operations research gives some advantage to potential analysts because several of the premises (for example, the widespread scarcity of resources), approaches (such as routinely considering alternatives), and techniques (for instance, use of quantitative data) associated with program analysis are familiar to persons with these disciplines. But high-quality analytical work can be performed by staff members without these specialized backgrounds.

Use of Outside Resources

Analytical projects sometimes require special skills and personnel resources that are not available within a government. This is likely to occur where the analysis staff is small or when the analysis requires an "exotic" skill or speciality. Services of consulting firms, universities, and research organizations can be hired to augment existing skills.

Accessible, and sometimes inexpensive, technical resources for state and local governments often exist in nearby colleges and universities. Users should be alert, however, that some academics prefer to work on federal-level problems, may be inclined toward ivory tower solutions, or may emphasize work

that is publishable from a disciplinary perspective rather than being useful for the government.

Federal government agencies, business firms, and even private civic groups such as the local League of Women Voters and chamber of commerce are sometimes potential sources of help. Both profit-making and nonprofit firms may be willing to participate in an analysis as a public service, for the sake of the learning experience, to test out or share some of their own technology, or simply to make contacts for possible future business.

Here are some examples of cooperation from outside organizations:

- As part of a cooperative effort with the city of East Lansing, Michigan, the National Bureau of Standards (NBS) loaned two technical staffers to work on an analysis of the location of new fire stations. The analysts used a component of an existing computer model which had been developed by NBS. The Bureau experts participated in a productive user-technician dialogue with city officials. Based on the success of the computer model, the city planned to use it in the analysis of several other city problems to which it appears applicable.¹

- New York City undertook a study of the effectiveness of emergency ambulance services. Shortly after the study began, a large computer firm undertook development of a computer simulation of ambulance services. The model was used in the analysis to calculate "response times" for three alternative modes of deploying ambulances. The firm did not charge the city for the use of the model. The analyst who developed it later joined the analysis staff of the city.²

- The Leagues of Women Voters of both Arlington County, Virginia and Randolph Township, New Jersey have provided volunteer interviewers to their local governments for surveys of citizen experience with local government services. Similarly, the Birmingham, Alabama Health and Welfare (community services) Council assisted the city with a survey of citizen views of recreation needs and performance.

In addition to obtaining assistance with part of an analysis, a government may use an outside group, such as a consulting firm, to conduct an entire

1. Marvin R. Burt, Donald M. Fisk, and Harry P. Hatry, "Factors Affecting the Impact of Urban Policy Analysis: Ten Case Histories," Working Paper 201-3 (Washington, D.C.: The Urban Institute, July 1972), pp. 20-21.

2. *Ibid.*, pp. 56-63.

program analysis. This may be required when internal staff resources are already committed, when the analysis is beyond their capability, or when a firm might bring greater "credibility" or "impartiality" to a controversial study. In these instances, governments ought to keep in mind four caveats:

1. Study costs are likely to be higher than those of an analysis conducted internally.
2. An outside group may not have or be able to acquire in the available time an adequate perspective of a complex policy problem.
3. An outside firm may be perceived as a greater threat than an internal group and perhaps find less cooperation, though in some instances the reverse may be true.
4. Implementing outside findings may not be as palatable to those inside who have to live with the consequences of recommendations which were "invented" elsewhere. Thus, although outside studies may be of higher technical quality, they may present problems when the time comes to implement their recommendations.

To improve the quality and usefulness of analyses conducted from outside, the following may be helpful:

1. *The government should be as clear as possible about what problem or problems it is asking an outside group to study.* While most problems are clarified and sometimes transformed in the very course of analysis, many studies miss their mark—and disappoint their clients—because the government really had no idea what it wanted in the first place.

2. *Before much effort has been expended, the government should review and discuss the plan to be followed with the contractor.* This includes defining and reaching an understanding of the issues or problems to be addressed, listing the major alternatives to be examined, identifying the principal criteria of effectiveness to be employed, specifying the target populations to be considered, and defining the general scope and methodology to be employed.

3. *Periodic and intensive meetings should be held during the study, especially in the early stages, to ensure communication on the subject and progress of the analysis.* A government project monitor should be assigned to each study contract.

4. *The government should specify the type and amount of staff assistance and data it will provide.* It should ensure that the contractor has reasonable

and effective access to the agencies and personnel from which information is to be obtained.

5. *The government should offer a clear understanding of the products it wants, including interim and final reports, and the schedule on which the products are to be delivered.* Findings which are too late for use in decisions are often useless. Regular written progress reports are valuable to both parties. Final reports should be in writing and accompanied by oral briefings and interpretations. The major assumptions and procedures of the study as well as the findings should be explicitly stated and documented. The data used in the study should be provided to the government in an understandable form.

Presentation of Results

If the specific findings and implications of an analysis cannot be readily understood they are not likely to be used. Even the best analysis will be ignored or rejected if it appears to be esoteric, sloppy, rambling, or incoherent. Analysts have to communicate their findings clearly to decision makers interested in very specific matters. Some decision makers prefer oral presentations; others prefer written reports. Either way, most public officials lack the time or specialized training to pore over lengthy technical arguments, long tables, computer printouts, or formulas to discover what an analysis has found. The analysts' job is to present their findings in a comprehensible way—in clear English and in a compact and orderly fashion.

Some guidelines that can make an analysis more comprehensible and meaningful are:

1. *Before distributing an analysis, have it critically reviewed.* A review of the draft by program people and one or two good technicians not involved in the analysis may turn up important ambiguities, omissions, errors, misinterpretations of data, faulty methods, bad logic, or unsubstantiated conclusions. The review can also reveal important points of debate or controversy. It is often reasonable to discuss major objections and responses to the report's recommendations in the report itself.

2. *Present findings in writing.* This will reduce the possibility of misunderstanding and permit an analysis to be reviewed. Even though decision makers may not want to read the report or have time to do so, the document should be available for staff review.

3. *Present a compact, clear summary.* The technical details of a study may thrill an analyst but bore a busy official. These details should be included

in the body of a report or in appendices, but no reader should have to wade through minutiae to reach the findings.

4. *Acknowledge the limitations and assumptions of a study.* State them explicitly. Do not force a decision maker to sniff them out. For objective analysis, the presentation should include all sides of the story: the good, the bad, and the unknown. For example, in the case of the Fort Worth car plan analysis (see appendix A-2), the city attorney indicated that he felt that the plan violated the state constitution. This was reported in the analysis but it was also pointed out that at least two other cities in the state had already started to use a similar plan.

5. *Use simple graphics where possible to communicate major findings and conclusions.* A "picture"—if it is a good one—is still worth a thousand words. Exhibit 25 in chapter 8 provides an example of the use of a bar chart to summarize the findings of one particular analysis. Other, more quantitative, examples can be seen in the tables included in appendix A that summarize the quantitative findings.

6. *Get rid of jargon.* Have one or two laymen read the body of the study to see if it is understandable.¹

7. *Tailor the presentation to the decision maker who will use it.* Some may prefer tables, others graphs. Some will demand one-page executive summaries. Others will want to have all the details. Some will want special oral briefings, others will not.

Cost of Program Analysis

Program analysis is not free. Costs of individual studies vary widely, depending on such factors as the length of the study, the complexity of the issue, the size of the analytical team employed, the cost of data collection, and charges for outside help. Major program analyses, such as those at the federal level, have cost several hundred thousand dollars. Analyses for state and local governments, of the type discussed in this report, are likely to average three to twelve person-months of analytical effort. Extended studies may require two to three person-years.

1. Useful books to help technical writers write clearly are Rudolf Fleisch, *The Art of Readable Writing* (New York: Harper and Row, 1949); Robert Gunning, *The Technique of Clear Writing* (New York: McGraw-Hill, 1968).

One way to put the costs of program analyses into perspective is to relate them to the costs associated with the programs under study. The federal government has earmarked anywhere from 0.5 to 2.0 percent of total program costs for analysis and evaluation. This is well above the amount currently being spent by most state and local governments.

Here are a few illustrations of the variations of costs or analysts' time spent in conducting several program analyses.⁴

- A study of the size and deployment of the fireboat fleet of a large eastern city took an analyst three weeks plus an undetermined amount of time for data collection by the fire department. The potential costs associated with the policy issue under study ranged from \$500,000 to \$1.5 million.
- An analysis of the need for and location of two new fire stations cost approximately \$20,000 including direct city costs, outside technical assistance, and computer costs. The issue under study was whether to spend \$500,000 in new capital and \$130,000 in new annual operating costs to build two new fire stations.
- A senior analyst spent four months analyzing alternative ways of improving onsite trash incineration to meet minimum legal air pollution standards. The alternatives under study entailed a combined cost to the city and landlords ranging from \$36 million to \$404 million.
- An assessment of alternatives for reducing response times of emergency ambulance services in a large city took about one person-year and cost the city more than \$100,000. The additional cost of developing and running a computer model was absorbed by an information systems firm.
- The analysis of Dade County library staffing described in chapter 8 required approximately four staff-years of analyst time over about ten months of time (the product included detailed staffing and scheduling recommendations for each of Dade County's twenty-five libraries).
- The analysis of options involving greater use of the private sector by seven State of Delaware and Maryland operating agencies (discussed in chapter 3) required from three to twelve staff-months to complete.

4. Marvin R. Burt, Donald M. Fisk, and Harry P. Harty, "Factors Affecting the Impact of Urban Policy Analysis. Ten Case Histories," Working Paper 201-3 (Washington, D.C.: The Urban Institute, July 1972); and International City Management Association, "Applying Systems Analysis in Local Government: Three Case Studies" (Washington, D.C., 1972).

Whether a study is worth it is a relative consideration; there are no absolute rules. Program analyses can result not only in cost savings but also improvements in program effectiveness and public services. The latter may far outweigh in importance the direct budgetary costs of a study.

Factors Affecting the Impact of Analysis

Why do some program analyses appear to have substantial impact on the decisions of public officials, while others have very little or are ignored? A number of factors beyond a study's technical sophistication affect its impact. There is no systematic evidence to pinpoint all of them, but a review by The Urban Institute of ten case studies tells us about some of the apparent hallmarks of study success, failure, and impact on policy.⁵ The studies examined are listed in exhibit 6. Ten factors were examined as to their influence on the impact of each analysis. These factors are listed in exhibit 7.

Three of the five "technical" factors examined appeared to have the strongest relationships to impact. The analyses that influenced decisions were those that:

1. Were well-timed, so that study findings were available at key decision points.
2. Included an explicit consideration of political and administrative issues that might affect the implementation of study findings.
3. Focused on well-defined problems rather than on broad or open-ended ones.

The size of the study and the adequacy of its methods seemed to be less clearly related to the study's impact.

Two of the "bureaucratic" variables examined appeared to have strong relationships to impact. The analyses which affected policy dealt with issues which could not be deferred by policy makers and focused on issues in which decision makers had shown clear interest. Whether an analysis proposed changes in a program's funding level and whether agency members who would have to implement study recommendations actually participated in the study

5. The material in the remainder of this section is based on Burt et al., "Factors Affecting the Impact of Urban Policy Analysis."

Exhibit 6. TEN CASE HISTORIES

1. *Fireboat A* examined the existing fireboats and various alternatives as to their type, number, and location for controlling fires near or on the waterfront.
2. *Fireboat B* examined the desirable number and location of fireboats for controlling fires on or near the waterfront.
3. *Fire Station Location* examined the question of how many fire stations there should be and where they should be located to provide fire protection.
4. *Emergency Ambulance Service* examined the number and location of ambulances needed to provide the fastest response to emergency calls.
5. *Mechanical Street Sweeping* examined the best way to allocate existing mechanical sweeping resources to maximize their effectiveness—with limited augmentation of resources as a possible option.
6. *Onsite Incineration* examined various ways of meeting new minimum air pollution standards regarding incinerators in both public and private apartment buildings, including enforcement of penalties to require upgrading of incinerators and the consequences to hauling requirements where incinerators were shut down.
7. *Solid Waste Collection and Disposal* examined a wide spectrum of collection and disposal options, including curbside versus backyard collection, various alternatives for solid waste containers, and a sanitary landfill versus incineration for solid waste disposal.
8. *Swimming Opportunities* examined various alternatives for providing swimming opportunities for the residents of a Model Cities neighborhood, including various numbers and sizes of pools and busing to a nearby ocean-front beach.
9. *Subemployment* examined how unemployment and underemployment might be reduced in the city's Model Cities neighborhood. The emphasis was on determining the effectiveness of existing manpower training programs and placement agencies.
10. *Veneral Disease Control* examined the problem of reducing the prevalence of gonorrhea and syphilis, with emphasis on gonorrhea.

Source: Burt et al., "Factors Affecting the Impact of Urban Policy Analysis."

Exhibit 7. FACTORS EXAMINED FOR THEIR INFLUENCE ON THE IMPACT OF ANALYSIS

Technical Variables

1. Study size
2. Study timing
3. Methodological adequacy
4. Consideration of implementation
5. Nature of problem studied

Bureaucratic and Political Variables

6. Decision maker interest
7. Implementer's participation
8. Single-agency issue
9. Proposed changes in funding
10. Immediate decision needed.

Source: Burt et al., "Factors Affecting the Impact of Urban Policy Analysis."

did not seem to be related significantly to the impact of analysis in these cases.

Some of the findings of this study tend to support intuitive feelings. For example, it is common sense that a study will have more impact if it is well timed, holds a decision maker's interest, and takes into account the administrative and political feasibility of implementing recommendations.

Effects of Limited Time and Resources: "Quickie" Analysis

There will be many times in state and local governments when a program analysis is needed but time and staffing to undertake it are limited. Unfortunately, the "quickie" or "crash" analysis may be the most common method for most governments. Under these circumstances, it will probably be necessary to limit the number of alternatives considered, to use data that are currently, or at least quickly, available, and to do a less comprehensive and thorough analysis.

Of course, any such shortcuts will weaken the analysis, and this should be specifically noted in the analysis report. But even "quickie" studies should apply the basic analytical principles and tools discussed in chapters 3 through 7. Limited time and resources are no excuse for neglecting the basics.

After the Analysis: Implementation and Follow-up

Analysis helps bring policy makers to decisions. But what should be done *after* a decision is made to implement a new program or modify an old one? Executives and analysts should consider the following approaches:

1. The executive might assign responsibility for following the implementation process to staff members (perhaps even the program analysis staff). This staff should develop a schedule for implementation, monitor the progress, and report if the process breaks down. Should problems arise or delays occur, early detection helps ensure that accountability for implementing changes is established.

2. An evaluation of an implemented program might be conducted after it has been in operation for a reasonable amount of time—both to gather information to help with future decisions and to gain feedback about the accuracy of projections analysts made. This can help analysts make improvements in their analyses. It is also a way to hold program analysts accountable for their work and to assess the program analysis process itself.

Limitations and Dangers of Analysis

Analysis can provide a decision maker with information to use in making a difficult decision, but it rarely points to a single best alternative. The decision maker will have to weigh the trade-offs, costs, and differing effects on various client groups that the analysis identifies for each alternative. Analysis does not inherently complicate decision making; it identifies complications that

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already exist and attempts to provide information to help the decision maker handle them.

Both decision makers and analysts should guard against the following tendencies:

1. Concentrating on aspects of a problem that are easy to analyze while downplaying other aspects that are more difficult to analyze but are just as vital.

2. Becoming so fascinated with sophisticated mathematical techniques that time and money are drained from other considerations. Sometimes simple, commonplace techniques are perfectly adequate for gathering the necessary information. In such cases, resources given to constructing an elaborate computer-based model, for example, are wasted.

3. Delaying decisions to perform more analysis for its own sake. It may sometimes be desirable from a technical viewpoint to wait for a more definitive analysis, but this must be balanced against the urgency to make a decision.

Why Program Analysis Is Not Used More Frequently⁶

An examination by researchers at The Urban Institute in the early 1980s of thirteen local governments, encompassing over twenty different operating agencies, found few examples of in-house, systematic program analysis being used to help select infrastructure repair, rehabilitation, or maintenance projects. These operating agencies, particularly the larger ones, often have a number of professionals, including many who have considerable technical background and could potentially undertake such analyses. The reasons why agencies do not systematically examine options appear to be as follows:

- Operating agency staff are heavily involved with emergency and operational responsibilities, and usually do not have time to undertake such examinations. Contractors usually conduct the intense examinations that are done.

- Similarly, funds for such activities are very limited in local governments. And because of the technical limitations to be noted later, resources for analysis are not believed to be a high priority.

⁶ The material in this section is adapted from Harry P. Hatry and Bruce G. Steinthal *Guide to Selecting Maintenance Strategies for Capital Facilities* (Washington, D.C.: The Urban Institute, 1984), especially pages 72 and 73.

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- The data needed to make comprehensive analyses—for example, information on each facility's physical characteristics and condition—are unavailable in most operating agencies.
- The analytical tools for using such data to undertake analyses of options have substantial weaknesses, in part because the agencies have had little experience with such tools and thus have not adapted them to their needs.
- Those parts of the analysis that require projections of the future have innate weaknesses, as do any attempts to forecast the future (including stock-market projections or projections of the economy for even several months, let alone one or more years into the future).
- Operating agency personnel, particularly at the top level, are unaccustomed to such analysis and do not perceive its use and utility.
- Higher-level officials, both chief executive officers and other elected officials, have not insisted on the information for which the analyses are needed and are inexperienced in how the information obtained might be used, for example, to gain public support for proposals.
- Even when such analyses are undertaken and are subsequently transmitted for central review, the information may not be presented clearly and concisely so that central review officials can understand the material and its implications.

Some of these problems are inherent obstacles. Many, however, can be reduced, even if only gradually. For example, data on facility condition can be obtained, the various analytical tools such as those discussed in this report can be tried and refined, and improvements can be made in the communications between operating agencies, central review personnel, and elected officials.

The remaining chapters seek to help public personnel reduce these obstacles.

Chapter 3

Improving on Crystal Ball Gazing: The Basic Elements of Program Analysis

Thus far we have emphasized the roles and responsibilities of decision makers in carrying out successful program analyses. Even with the support of decision makers, program analysis is still fraught with difficulties. The remaining chapters are devoted to aiding the analyst in conducting the basic steps of program analysis. Exhibit 2 listed typical steps. While the elements are presented as a series of steps, actual analysis usually involves an interplay among the steps, such as backtracking to refine or redefine the problem, to specify additional client groups, or to pose additional evaluation criteria.

This chapter discusses the first five steps: defining the problem, identifying objectives, selecting evaluation criteria, specifying client groups, and identifying alternatives. In considering the suggestions in chapters 3 through 7, it may be helpful to refer to the three examples of analyses summarized in appendix A, and the checklist of technical criteria for assessing program analyses in appendix C.¹

¹ For more details on various technical procedures for program analysis see such works as Hugh J. Miser and Edward S. Quade, editors, *Handbook of Systems Analysis* (New York: North-Holland, 1985); Giandomenico Majone and Edward S. Quade, editors, *Pitfalls of Analysis* (New York: John Wiley & Sons, 1980); Theodore H. Poister, *Public Program Analysis: Applied Research Methods* (Baltimore, Maryland: University Park Press, 1978); Edith Stokey and Richard Zeckhauser, *A Primer for Policy Analysis* (New York: W. W. Norton and Company, 1978); Mathew B. Miles and A. Michael Huberman, *Qualitative Data Analysis* (Beverly Hills, California: Sage Publications, 1984); John J. Clark, Thomas J. Hindelang, and Robert E. Pritchard, *Capital Budgeting* (Englewood Cliffs, New Jersey: Prentice-Hall, 1979); and Shlomo Reutlinger, *Techniques for Project Appraisal under Uncertainty* (Baltimore, Maryland: published for The World Bank by the Johns Hopkins University Press, 1970).

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decades of the twentieth century the state promoted Buddhism extensively in Korea, for the purpose of pacifying the conquered territory, while at the same time it intensified state Shinto teaching at home, in support of nationalist aims. During the prewar military take-over and the subsequent events leading to World War II it is difficult to find significant examples of systematic political criticism from Buddhist leaders.

However, in philosophy the fusion of Western categories with the Buddhist world view produced some remarkably creative syntheses, as exemplified in the works of such men as Nishida Kitarō and Tanabe Hajime. Equally significant has been the influence in the West of D. T. Suzuki's interpretations of Zen teachings, particularly in correlation with certain dimensions of existentialist philosophy and psychology. Japan in the postwar situation is an extremely complex matrix of cultural ferment, within which Buddhism appears in many new forms. It ranges from the radical sectarianism of Soka Gakkai, which blends intense devotionism with militant political goals, to the subtle historical reflection and self-criticism of intellectuals like Ienaga Saburō. Ienaga sees in the history of Japanese Buddhism—particularly in Shōtoku and Shinran—evidence of its transcendent universalism and capacity to cut through traditional forms with innovating power; but this is paradoxically mixed with an easy accommodation to the givenness of the world and a loss of critical tension, with worldly institutions regarded as inherently illusory and unreal. Ienaga's powerful critique of Buddhist tradition is itself a manifestation of the pristine ideals of prophetic negation, self-reflection, and reconstruction which the earliest teaching conveyed. For Buddhism throughout the world, it suggests the presence of the power of spiritual renewal and transcendence which continues to speak therapeutically to the human situation even as it seeks to re-create itself to meet the pressing challenges confronting all the major religions.

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BUDGETING

- I. GOVERNMENT BUDGETING Arthur Smithies
 II. BUDGETING AS A POLITICAL PROCESS Aaron B. Wildavsky

I
GOVERNMENT BUDGETING

Budgeting may be described as the art of living within an economic constraint. Virtually every organization or individual has economic limits imposed on what it wants to do: exceptions are the professional ascetic or the sailor shipwrecked on an abundant island. Budgeting, however, may be passive or active. A traditional subsistence farmer will undertake the same production program year after year and always wants to consume more than he has of everything he produces. On the other hand, a modern commercial farmer has a number of alternative ways of employing his resources and actively chooses among them. In an organization, the process of budgeting is almost necessarily active and explicit, since the very nature of an organization is that its decisions result from the interaction of a number of individuals or groups. This article is concerned with government budgeting, but it

is useful to recall that, in their budgetary processes, governments are reflecting the pervasive need to allocate scarce economic resources. [For consumer budgeting, see CONSUMERS, article on CONSUMPTION LEVELS AND STANDARDS.]

A government's budget is usually, and almost necessarily, its only comprehensive program of action for the period to which it relates. This is so because a program cannot be crystallized until the question of cost is taken into account, and virtually everything a government does costs money. The character of the administration of justice, for instance, depends critically on the amount of money spent on judges, prosecutions, and policemen. In

the United States, varying political attitudes toward the antitrust laws find concrete expression in the appropriations made to the Department of Justice. The importance of the budget is clearly recognized in countries with the parliamentary system of government. The invariable British tradition is that the government (executive) resigns if its budget is defeated in Parliament.

The process of decision making that results in a budget, whatever its complexities, contains three necessary ingredients: (1) determination of the variety of policy objectives the government intends to pursue, such as defense, education, or law enforcement; (2) estimation of the cost of pursuing each of these objectives in varying degrees; and (3) an assessment of the willingness and ability of the public to pay for the government's program as a whole [see PUBLIC EXPENDITURES; TAXATION].

No government can exist without a policy, even though that policy may be largely passive. In the world contemplated by the English classical economists, government should restrict itself to "essential functions" in order to give maximum scope to private enterprise. Its budgetary problem would then be to determine the minimum cost of performing those necessary functions and to raise the taxes necessary to pay for them, while interfering to the minimum extent with private capital accumulation.

The task of modern governments is far less simple. Although classical considerations impose restraints on their action, governments are concerned with the active pursuit of goals that require expenditures for their attainment. Governments of today are preoccupied, in different degrees, with defense, development, and improving the economic welfare of their citizens. The way in which these objectives become formulated varies widely among countries, depending on their form of government. An authoritarian government can select its objectives and assess their relative importance with minimum reliance on the consent of the public. In

a democratic society, the process is far more complicated. Consent to government policies is given or withheld in free elections and the goals established by government result largely from ideas and opinions that emerge from the whole society and are impressed on government by the groups actively interested. But, one way or another, a government does acquire a set of objectives and some idea of the relative weight to be given to each.

The extent to which an objective should be pursued, or whether one should be preferred to another, will depend on their costs. In a "classical" world, where governments were supposed to perform minimum functions, the question of costs could be approached by fairly crude methods. Finance ministers and officials won their reputations by frustrating the operation of Parkinson's Law. Treasuries acquired their reputation for saying "no." In a world of nuclear weapons, space flight, and economic development, the question of cost estimation becomes vastly more important and difficult.

Finally, governments must assess the willingness of the public to pay for government programs—to provide money, in the form of taxes or loans, that could have been used for something else. To win acceptance for its budget the government must persuade the legislature or the electorate that what it proposes is worth the cost.

The essential ingredients of the process of budgeting under "ideal" conditions can then be summarized:

(1) If the relative importance of spending money in pursuit, to varying degrees, of the different objectives can be ascertained, the government can prepare a series of "optimal budgets." For any level of total expenditures it can determine the best mix of its various programs. The mix, say between defense and social welfare, will normally vary with the size of the hypothetical budget. It will also vary materially among countries.

(2) The government can determine the method of paying for budgets of any given size that is least burdensome from economic and political points of view. It can thus estimate the cost of any of its hypothetical budgets in terms of private goods.

(3) The information provided under (1) and (2) provides the government with a basis for weighing the benefits to be derived from expenditures against the costs of expenditures, and hence for selecting a particular budget.

Traditional approach. In practice, governments have attempted to organize themselves for budgetary purposes by attempting to make a basic disjunction between "policy making" and "finance."

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Policy makers decide what ought to be done. Financial agencies assert their views on how much the government can afford. There remains the task of achieving a compromise between the two views and producing a budget. In most governments, this third function is also considered to be within the province of finance. The budget is usually the immediate responsibility of the chancellor of the exchequer, the minister of finance, or the treasurer, as the case may be.

In countries with the parliamentary system of government, particularly in countries whose institutions are of British origin, policies are decided on by the cabinet in the general political context that obtains and are endorsed by parliament in legislation. Budget requests are submitted by the departments to the treasury, which produces a budget that allocates the total among the various activities. That total is arrived at in the light of the difficulties of financing it. The budget, prepared by the treasury, is then discussed to varying extents by the policy makers in the cabinet, which may accept or revise the treasury's budget as an adequate expression of the government's policy. The outcome depends on the relative strengths of the treasurer and other members of the cabinet in a collective bargaining process. It is fair to say, however, that the cards are stacked in favor of the treasury. Not only is the treasurer the authority on revenues, but he is more completely informed on the entire expenditure program of the government than is any other member of the cabinet. When the budget has been approved by the cabinet, it is submitted to the parliament, which must virtually accept the budget or dismiss the government.

In the United States Congress, the three steps in the process are explicitly recognized in the parallel committee structure of the House and Senate. Authorizing committees recommend legislation that both declares policy and authorizes expenditure. Moreover, committee hearings and reports constitute "legislative history" that establishes policy in more informal ways.

The Committee on Ways and Means of the House and the Senate Finance Committee are the bodies concerned with recommending tax measures. The traditional rule in the United States is that the entire budget be covered by taxation.

The task of budget making is assigned to the appropriations committees, which review estimates received from the executive branch in the light of the objectives declared by Congress and the availability of revenues. In practice, however, revenue considerations are implicit rather than explicit in the work of the committees.

Before 1921, the Congress was the main budget-making body in the United States. The executive departments submitted their estimates to Congress with very little coordination by the executive branch. In that year, however, legislation required a single executive budget to be submitted by the president and set up a Bureau of the Budget to prepare it. In line with tradition, the Bureau of the Budget was to be located in the Treasury. In 1939, however, this ambiguity was removed, and the Bureau of the Budget was transferred to the executive office of the president. His personal responsibility for the executive budget was thus unequivocally established.

The Bureau of the Budget has no independent authority; it is a staff agency of the president. Under this system, the Treasury is concerned with the revenue side of the budget. The president, in making his budget, weighs the claims of the departments against the reluctance of the Treasury. However, both the claimant departments and the Treasury are supposed to reflect the policy of the president. He is thus policy maker and budget maker. In principle at least, the distinction between policy making and finance has been blurred. Practice has been steadily catching up with principle. The Bureau of the Budget is slowly becoming increasingly concerned with policy as well as finance.

The distinction drawn between policy making and finance is unfortunate. It conveys the impression, reflected in practice, that a financial agency is concerned not with policy but merely with costs and revenues. In fact, the statement has frequently been made in the United States that the Congress determines what ought to be done, and the budgetary problem is to translate that policy into financial terms. In this view, the budget should be a document that merely expresses the minimum cost of doing the government's business and gives explicit directions to the executive agencies with respect to the personnel they can employ, the automobiles and typewriters they can purchase, and the buildings they can construct. Its preoccupation is with the means to be employed rather than the ends to be accomplished.

That view of the problem might be adequate in a simple society in which each agency of government performed well-defined functions to some specified extent. For instance, it might be firmly established policy that the post office make two mail deliveries per day or that there be a prescribed number of policemen on the beat. In the defense area, planning was long dominated by the concept of absolute requirements. Military men by military methods were supposed to be able, by applying

planning factors, to determine the number of men, weapons, and ships and the amount of food and clothing needed for the "defense of the country." If all this were possible, policy throughout the government could be definitely determined. Budget makers would then review cost estimates submitted by the departments, cut out those costs that they deemed unnecessary, and then raise the revenues needed to finance the resulting budget. The process thus becomes a highly simplified special case of the more general theory of budgeting set out above.

Problems. This simplified view of the matter has never been more than a rough approximation, although it still underlies much budgetary practice. Treasuries have never accepted a military view of absolute requirements. Sometimes to the benefit and sometimes to the detriment of the country, they have cut military strength below the level deemed necessary. They have also cut the number of mail deliveries or the number of policemen in order to relieve the burdensomeness of taxation. In these activities they have, in the guise of a financial operation, assessed the relative merits of defense, postal service, and law enforcement, and at the same time compared the absolute merits of these programs with the burdensomeness of taxation.

Nevertheless, much of the distinction between policy making and finance could be preserved if the policy makers could give adequate instructions to treasuries with respect to the policy decisions the latter have to make. This could be done if it were possible to measure government programs like defense or welfare in precise quantitative terms. If, in addition, the policy makers could follow the economics textbook and draw up social utility curves of their programs, they could give precise instructions to the financial officials. If the latter could determine the costs of carrying out the different programs to varying extents, they could draw up the array of optimal budgets referred to above as a reflection of policy already determined. There would remain, however, the policy question of which optimal budget to select. That would require a policy decision.

The task of physical measurement of major programs, to say nothing of measuring social importance, is out of the question in any precise sense. Consider education as an example. At first sight it might appear that the numbers of students taught might serve as useful indicators of the quantities of school and college education provided. But although the numbers of students are an important dimension of the problem, it has other dimensions, such as the number and quality of teachers, buildings, and equipment. Even if all

measurable information were assembled, the educational value of it all would have to depend on an exercise of human judgment. Nevertheless, some unit of measurement is needed, and for major programs or program subdivisions, there seems to be no unit of measurement as satisfactory as money cost. In considering education, for instance, the question to be asked is not, How can a given amount of education be achieved at minimum cost? It is, rather, How can a given sum be spent on education in order to give the best educational results, under conditions in which education itself is not precisely defined? Although all available quantitative and qualitative information should be brought to bear on the decision, uncertainties concerning educational values render an element of human judgment necessary. The process of decision making should be organized so as to make this judgment as informed as possible.

What policy makers should do is conduct intellectual and practical experiments to determine the benefits of spending money in alternative ways. Can expenditures be shifted beneficially from social welfare to defense or vice versa, or can they be shifted usefully to alternative uses within the areas of defense and social welfare. Difficult though such comparisons may be, they would be intellectually impossible without using the common denominator, money. Thus, policy making penetrates far into the area traditionally assigned to finance.

Proposed solutions. The world survived for a long time with traditional views of the distinction between budgeting and policy making. But modern governments, preoccupied as they are with defense, development, and welfare, are coming to recognize that budgeting and policy making are part of the same process.

In the United States, in particular, efforts are being made to adapt budgetary methods to modern requirements. In consequence, conventional methods, particularly in the defense area, are being replaced or supplemented by "program budgeting."

In view of the world-wide interest and concern with economic development, investment budgeting, too, calls for special attention. In one respect investment is different from other government programs: the ends to be accomplished as well as the means employed can be expressed in economic terms. The problem of investment criteria has evoked extensive discussion. All that can be done here is to indicate the main principles involved and the relation of a government's investment program to other components of its budget.

A further important contemporary problem is the assessment of the economic impact of the

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budget. When budgets were small in relation to national revenue, the problem of financing them could be regarded as largely the political one of overcoming the reluctance of the public to pay taxes and ensuring reasonable standards of equity. In the United States in the latter part of the nineteenth century the problem was even easier than that. Customs revenues were so plentiful that the problem of the federal government was to avoid a surplus, which, if allowed to occur, might have led to a reduction of the tariff. At the present time budgets are so large that the methods of financing can have marked effects on levels of employment, income distribution, or economic growth. Consequently, simple rules of finance are gradually being replaced by analysis of the economic impact of the budget.

Program budgeting. For the budget to serve its purpose as a policy-making instrument, it must be prepared and considered in terms that relate directly to the policy objectives to be furthered. This means a reversal of traditional practice whereby budgets are designed to allocate money to responsible administrative agencies. In some cases there need be no conflict between program and administrative objectives. For instance, the money appropriated to the post office is, or should be, the same thing as the cost to the government of the postal program. (Even this statement, to be true, requires that the post office pay what may be other government agencies, such as airlines or railways, for carrying mail. This is not universal practice.) In other cases there is a clear conflict. Tradition and administrative effectiveness require that the army, the navy, and the air force be maintained as separate services; yet important defense programs require the cooperation of the three services. Budgets for the separate services clearly fail to indicate the capacity of the services to perform a combined operation.

At first sight, it might appear that program budgets could be extracted from administrative budgets. But this practice would fail to do justice to the central problem of obtaining maximum program advantage from a given cost. Administrative budgets are necessary, but they should be derived from program budgets. Governments are only slowly coming to realize this point.

Progress toward a program budget has been most noticeable in connection with the defense budget of the United States in the early 1960s. The conventional defense budget has been submitted for each of the services and for the Defense Department as a whole, in the following categories: military personnel, operation and maintenance,

procurement, research and development, military construction, and civil defense. These categories are designed essentially from the point of view of effective administration of the Department of Defense, and they tell very little about the relation of the defense program to the various missions it is supposed to accomplish. Military personnel of the air force, for instance, includes airmen on missile sites in Colorado and airmen in Laos, and the same holds for the other categories. The information contained in the conventional budget does not permit the reader, including members of Congress who have to review it, to form any adequate idea of the program for the defense of the United States itself. Reviewers therefore have to take the word of officials concerning the strategic adequacy of the budget and confine their specific review to small details that are likely to be irrelevant to the major issues. Yet their decisions have a vital bearing on strategy.

The Department of Defense has met these difficulties by preparing an alternative budget in terms of major "budget programs." These include strategic retaliatory forces, continental air and missile defense forces, general purpose forces (the army, the bulk of the navy, and the tactical air force), sealift and airlift forces, reserves and guard forces, research and development, general support, and civil defense. These programs, in turn, are built up from "program elements," which consist of complete weapons systems that contribute to the program objective.

The reforms, however, have not been able to accomplish a complete program budget at this time. The objectives of general purpose forces cannot be indicated with the same clarity as those of retaliatory forces. Transport and reserve and guard forces represent administrative rather than program categories. With respect to research and development, especially research, budgeting in terms of particular programs would presumably cause needless duplication.

The program budget permits the Congress and the president to address themselves to the important questions of strategy when they review the budget. Moreover, knowledge of the costs of these programs and program elements is an important aid in the original process of strategic planning. Defense in the modern world has multiple objectives: to prevent general war, to prevent or win limited war, and to prevent or eliminate internal subversions—so-called sublimited wars. Because resources are limited, substitutions among programs and program elements must be considered by the strategic planners. It is exceedingly difficult

to think in terms of shifting a "unit" of general purpose forces to strategic retaliatory forces, or vice versa. It is easier, although still difficult, to consider the "cost effectiveness" of shifting a billion dollars of expenditure from one program to another. As Assistant Secretary of Defense C. J. Hitch observed (in a statement before the Military Operations Subcommittee of the House Committee on Government Operations, July 25, 1962): "The job of economizing . . . cannot be distinguished from the whole task of making military decisions."

The practical need to measure programs in terms of their cost has led to the new concept "cost effectiveness." Studies of cost effectiveness attempt to answer the question whether the purposes of a program will be better served if a given sum is spent in one way rather than another. To study cost effectiveness in simple situations may mean nothing more than to determine the cheapest way of performing some specific and well-defined operation. The more interesting cases, however, are those in which expenditures in different directions contribute in different ways to general and imprecisely defined program objectives. Here a study of cost effectiveness organizes the information on the basis of which the decision maker must make a judgment. Examples, arranged in order of the increasing importance of the judgment factor, are: Will expenditure of an additional sum on sea-based or land-based missiles more effectively contribute to the retaliatory forces? Will expenditure on the retaliatory forces or on air defense more effectively protect the United States from attack? Will expenditure on strategic forces or on general purpose forces more effectively contribute to the whole defense program? Will expenditure on defense or on social welfare more effectively serve the interests of the country? In the area of research, the problem becomes vastly more difficult, if not insoluble. Expenditures undertaken *now* yield unpredictable results in an unpredictable future. Estimates of their cost effectiveness may have to rely almost entirely on experienced judgment.

Defense budgeting in the United States has been selected for discussion because in that country and that area of government activity, the intellectual problems have been most extensively examined and faced. But the problems are pervasive, for budgeting is essentially concerned with the task of achieving a rational allocation of resources under conditions in which the objectives are imperfectly defined.

Program budgeting calls not only for new concepts and methods but for the application of human skills infrequently found in traditional

ministries of finance or departmental budget offices. Budgetary staffs, wherever they are located, should include men of the highest professional competence with respect both to the ends of policy and the economic analysis of costs.

Investment budgeting Budgeting for economic development projects falls in a separate category because the objectives of the projects can be defined in economic terms. The problem also engages particular attention, not only because of the worldwide interest in development, but because it seems to be soluble by objective economic calculation.

From the point of view of the whole economy, the benefits of a development project consist of the contributions to the national income of the country that the project will make during the course of its life, which may be very long. In this respect, a public project is no different from a private project if the latter is considered from the social point of view: if the indirect benefits and costs to the economy are taken into account in addition to the direct returns from it. On the other hand, if as is sometimes appropriate, the public project is considered purely in terms of the direct monetary returns from it, the problem is similar in principle to that faced by the private investor. In either case, forecasting the distant economic future is notoriously difficult. Although there is no escape from making the attempt, the great uncertainty surrounding any estimates should be explicitly recognized. The evaluation of a project can be attempted by estimating what may be termed its economic "efficiency." Following Keynes, the efficiency of a project may be defined as the rate of discount which, when applied to future returns and future costs, will equate the present value of returns with that of costs [*see* INVESTMENT].

If the government assumes control over the entire investment program of the economy, both public and private projects can be ordered in terms of their efficiency and priority granted to projects in that order. (This statement assumes that the efficiencies of various projects are independent of one another. This assumption may be a fair approximation in a developed economy with free access to foreign supplies. It may be far from adequate in an underdeveloped economy in which the efficiency of an automobile factory depends on the existence of a steel mill.)

If the total supply of saving is known, the total investment program should be such as to absorb that supply; and the "rate of interest" will correspond to the efficiency of the lowest priority project undertaken.

This account of the matter, however, ignores the

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critical factor of uncertainty of the estimates of future yields and costs. Allowance for uncertainty must be made either as a deduction from the measure of efficiency or as an increase in the rate of interest to be compared with the efficiency of particular projects. The latter is the more common approach, and it is sometimes argued that differences in the structure of rates that appear in the market are an adequate assessment of the risks and uncertainties that surround the investment projects of particular classes of borrowers. This point of view is not generally shared by private business. The rates of return that are used for internal planning purposes are normally much higher than the rates at which firms can borrow in the market. In government, however, there is a persistent tendency to regard the rate at which the government can borrow as that which should be applied in assessing particular investment projects. That rate is thoroughly inappropriate for the purpose: it is normally lower than other rates, mainly because the entire creditworthiness of the government is behind its loans, but also partly because governments are able to adjust the loan market in their favor. It is safe to say that the rate with which the efficiency of a public investment project should be compared is normally higher than the rate at which the government can borrow.

If it were true that the flow of saving available for investment in public and private projects were fixed, budgeting for public investment could be separated from the rest of the budget and dealt with as a matter of allocating investment among public and private projects in the manner suggested above. In fact, this assumption is the basis of the common practice of regarding public loans as the normal source of finance for public investment and taxation as the normal way to finance current expenditures.

That assumption, however, is unwarranted. The flow of saving is affected by the government's policies with respect to current expenditure and taxation. The flow of saving is increased or decreased if taxation exceeds or falls short of expenditures. Furthermore, a balanced increase of current expenditures and taxation will reduce saving, for taxation inevitably reduces private saving. An increase or decrease in total saving will lower or raise the structure of interest rates, including internal planning rates, which affects the rate of investment, public or private, or both. Hence, investment budgeting cannot be regarded as a separate operation. Current government expenditures compete with public investment expenditures, and both compete with private consumption and investment expendi-

tures. The government must make a political choice between its desire for future development and its desire for benefits of defense, welfare, and law and order.

As a further complication, the government's contribution to economic development cannot be identified with public investment. As governments are coming to realize, expenditures on current items such as education or public health are equally relevant. Defense programs can yield important by-products in the form of technological knowledge that can be applied throughout the economy. They can also withdraw technical skills from employment elsewhere.

Economic impact of the budget. Governments, traditionally, have applied some simple rule of thumb to decide whether the budget as a whole is worth its cost. In the United States the rule has been that total expenditures should be covered by taxation. Other governments use the rule that current expenditure should be so covered, while capital expenditures should be financed by borrowing from the public. These rules are honored by their breach as well as their observance. They are inevitably broken in times of depression or war, when governments borrow for current purposes, but the rules persist as guides for normal prudent governmental conduct and, indeed, may serve some useful purpose in a complex political organism. Nevertheless, governments are gradually recognizing the need for a more comprehensive and rational approach to the question of economic impact. Reflections of modern economic theory are gradually appearing in budget documents, and many governments issue statements of the national accounts together with their budgets. These statements imply that the government sector of the economy should be considered in its relation to the entire national economy. This, indeed, is inevitable if large development expenditures are involved.

In financing a budget of given size, the government should decide on the method of withdrawing resources from the rest of the economy that will least impede the attainment of other economic objectives; or it may seek to further other objectives, such as distribution of income, through its method of financing. In deciding on the size of the budget, it must seek a satisfactory compromise between the ends to be attained by the budget itself and those other objectives.

The government can finance the budget by taxation or borrowing. Whether taxation or borrowing is used should depend not on the character of government expenditures—whether they can be classified as consumption or investment—but on the

effects the government desires to produce, broadly speaking, on private consumption and investment.

In a fully employed economy, the government withdraws resources from private use when it applies them to public use. Whether it withdraws them from private investment or private consumption depends on how it compares the present with the future. Borrowing mainly affects private investment, and finance by borrowing means that the budget is being provided for at the expense of the growth of the private economy. Finance by taxation, on the other hand, normally means that both private consumption and investment are curtailed, although the relative degrees by which they are curtailed will depend on the nature of the taxation imposed. The appropriate combination of borrowing and various kinds of taxation can be determined only by explicit recognition of the objectives of government policy with respect to the private economy. The government may go further and, in the guise of financing the budget, may actively promote other objectives. For instance, it may levy taxes in excess of total expenditures and thus increase savings that may be made available for the private economy. Such action, in conjunction with an appropriate monetary policy, can increase the rate of growth of the private economy.

In a situation where resources are generally unemployed and likely to remain so, the immediate task of the government is not to withdraw resources from private use to make way for the budget, but to use the budget to increase both public and private expenditures. This it can do by borrowing and spending funds that would otherwise remain unused. So long as resources remain generally idle, budgeting ceases to be a matter of allocating scarce resources. Indeed, under such conditions budgeting and economic life as well lose their rationality. The objective of government through its budget or other measures should always be to ensure that a condition of scarcity prevails. Economic activity should always be increased to the point where it is limited by some scarce factors. Such factors may be labor, particular kinds of labor, capacity in critical industries, or foreign exchange. In a condition of scarcity, rational conduct is possible and the allocative principles of budgeting apply.

Technical summary. The foregoing argument represents an attempt to apply the principles of economic theory to the problem of budgeting, with minimum use of the language of economics. It may be useful to summarize the central argument in economic terms. If government activities can be expressed in quantitative terms, the government can draw up a preference map showing rates of

substitution among its various activities. If it knows the relative costs of these activities, it can then draw up its series of hypothetical budgets. If it can produce from this information index numbers of public goods, and also of private goods, it can draw up another preference map, consisting of a family of indifference curves relating public to private goods. With its cost information it knows the rate at which private goods can be transformed into public goods. It can thus find its optimum budget. Under these circumstances there could be a clear division of labor between policy makers who determine the indifference curves and budget makers who determine the cost curves and make the computations.

In practice, the construction of index numbers for various programs would involve enormous difficulties. Initial weights of the various components would have to be determined, and the problem of the changing mix of optimal programs would have to be wrestled with. The relation of any index number to what it was supposed to indicate would be subject to change. The significance of the defense index would be affected by the capabilities of the enemy, and of the health index by the prevalence of disease. At all these points the construction of an index would depend heavily on judgment. But the construction of an index might give the impression that objective methods were possible and that the exercise of judgment was not necessary.

The same difficulties occur, in magnified form, if an index of all public goods is attempted. On the other side of the question, no index of private goods foregone would convey an adequate impression of the economic impact of budgets of varying size.

Because a large element of judgment must be exercised in any case and because the construction of aggregate indexes for programs would not facilitate that process, it seems clearly preferable to work with the more familiar notion of money optimally spent in various directions, with particular stress on the need for optimizing. (The standard index approach, however, may be feasible in many cases in solving problems at the "program elements" level, just as it is in many other economic problems.)

Consequently, the indifference curves should be established in terms of given amounts of money optimally spent on various programs, on the total government program, and on private goods. The transformation curves then simply become 45° lines. The processes of budgeting and policy making are thoroughly intermingled.

These conclusions concerning government budg-

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eting suggest that the standard theory of consumer behavior might be usefully modified along similar lines. Although a consumer, planning his breakfast, may be able to establish preferences between bacon and eggs, the purchase of a house may be a different matter. A consumer with a limited budget may employ an architect to draw up a number of plans within his budget constraint. The purchaser then selects the plan he likes most, he may not know what kind of house he wants until he has inspected the alternatives available to him. Economics should be concerned not only with the allocation of scarce resources among alternative uses but also with the discovery of the alternative uses to which scarce resources can be put.

ARTHUR SMITHIES

[See also ECONOMICS OF DEFENSE.]

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II

BUDGETING AS A POLITICAL PROCESS

Budgets are predictions. They attempt to specify connections between words and numbers on the budget documents and future human behavior. Whether or not the behavior intended by the authors of the budget actually takes place is a question of empirical observation rather than one of definition. The budget of the Brazilian government, for example, has long been known as "a

great lie" (Alionar Baleeiro reported by Frank Sherwood) with little if any connection between what is spent for various purposes and what is contained in the formal document. Nor is there any necessary connection between the budgets of Soviet (Berliner 1957) and American (Argyris 1952, Sord & Welsch 1958) industrial firms and the expenditures they make or the actions they take.

Budgeting is concerned with the translation of financial resources into human purposes. Since funds are limited, a budget may become a mechanism for allocating resources. If emphasis is placed on receiving the largest returns for a given sum of money, or on obtaining the desired objectives at the lowest cost, a budget may become an instrument for pursuing efficiency (Smithies 1955). A proposed budget may represent an organization's expectations, it may contain the amounts which the organization expects to spend. A budget may also reflect organizational aspirations, it may contain figures the organization hopes to receive under favorable conditions. Since the amounts requested often have an effect on the amounts received, budget proposals are often strategies. The total sum of money and its distribution among various activities may be designed to have a favorable impact in support of an organization's goals. As each participant acts on the budget he receives information on the preferences of others and communicates his own desires through the choices he makes. Here a budget emerges as a network of communications in which information is being continuously generated and fed back to the participants. Once enacted a budget becomes a precedent, the fact that something has been done before vastly increases the chances that it will be done again (Wildavsky 1964).

For our purposes we shall conceive of budgets as attempts to allocate financial resources through political processes. If politics is regarded as conflict over whose preferences are to prevail in the determination of policy, then the budget records the outcomes of this struggle. If one asks who gets what the (public or private) organization has to give, then the answers for a moment in time are recorded in the budget. If organizations are viewed as political coalitions (Cyert & March 1963), budgets are mechanisms through which subunits bargain over conflicting goals, make side-payments, and try to motivate one another to accomplish their objectives.

Viewed in this light, the study of budgeting offers a useful perspective from which to analyze the making of policy. The opportunities for com-

parison are ample, the outcomes are specific and quantifiable, and the troublesome problem of a unit of analysis with which to test hypotheses—there is no real agreement on what a decision consists of—is solved by the very nature of the transactions in budgeting. Although a major effort has been made to collect budgetary material from many different countries, levels of government, and private firms, the results have only been fragmentary at best. Very little is available in any language on how budgeting is actually carried on. From Stourm's classic work on the budget (1889) to the present day, virtually the entire literature on budgeting has been normative in tone and content (Smithies 1955, Burkhead 1956, Buck 1929, 1934, Willoughby 1918, 1927). Yet the glimpses we do get of budgetary behavior in different systems suggest that there may be profound uniformities underlying the seeming diversities of form and structure.

Budgetary calculations

Decisions depend upon calculation of which alternatives to consider and to choose. Calculation involves determination of how problems are identified, get broken down into manageable dimensions, and are related to one another, and how choices are made as to what is relevant and who shall be taken into account. A major clue toward understanding budgeting is the extraordinary complexity of the calculations involved. In any large organization there are a huge number of items to be considered, many of which are of considerable technical difficulty. Yet there is little or no theory in most areas of policy which would enable practitioners to predict the consequences of alternative moves and the probability of their occurring (Braybrooke & Lindblom 1963). Man's ability to calculate is severely limited; time is always in short supply; and the number of matters which can be encompassed in one mind at the same time is quite small (Simon 1947-1956). Nor has anyone solved the imposing problem of the interpersonal comparison of utilities. Outside of the political process, there is no agreed upon way of comparing and evaluating the merits of different programs for different people whose preferences vary in kind and in intensity.

Simplification. Participants in budgeting deal with their overwhelming burdens by adopting aids to calculation. They simplify in order to get by. They make small moves, let experience accumulate, and use the feedback from their decisions to gauge the consequences. They use actions on simpler matters they understand as indices to complex concerns. They attempt to judge the capacity of

the men in charge of programs even if they cannot appraise the policies directly. They may institute across-the-board ("meat axe") cuts to reduce expenditures—drawing on outcries from affected agencies and interest groups to let them know if they have gone too far (Wildavsky 1964, pp. 1-13). Hospital boards in Great Britain, unable to determine what costs should be in an absolute sense, rely on comparisons with comparable institutions. County councils keep close track of expenditures in only a few major areas to cut down on the bulk of overspending. The timing of new starts on projects is used as a simplifying device for regulating total expenditures. Another way local authorities keep spending within limits is through the practice of "rate rationing," or allowing committees so many pence or shillings of each pound of income (Royal Institute . . . 1959). Industrial firms use the percentage of total industry sales or some percentage of earnings on assets employed before taxes in setting budgetary goals. Many organizations use the number of personnel as strategic control points in limiting expenditures (Sord & Welsch 1958). Constraints are actively sought as in the common practice of isolating "prunable" items when looking for places to cut the budget (Royal Institute . . . 1959, pp. 115-116).

Incremental method. By far the most important aid to calculation is the incremental method. Budgets are almost never actively reviewed as a whole in the sense of considering at once the value of all existing programs as compared with all possible alternatives. Instead, this year's budget is based on last year's budget, with special attention given to a narrow range of increases or decreases. The greatest part of any budget is a product of previous decisions. Long-range commitments have been made. There are mandatory programs whose expenses must be met. Powerful political support makes the inclusion of other activities inevitable. Consequently, officials concerned with budgeting restrict their attention to items and programs they can do something about—a few new programs and possible cuts in old ones.

When a British Treasury official warns in 1911 against "the habit of regarding each year's estimate as the starting-point for the next . . .," (Higgs 1914, pp. 135-136) one can be sure that the practice has become well established. Both the practice and the complaints continue unabated in Great Britain (Mitchell 1935; Royal Institute . . . 1959). Incremental budgetary calculations can be found in such different places as Canadian provinces (McLeod 1953) and Michigan cities (where a sample budgetary guideline to department heads

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reads, "Budgets should be for the same level of service as the current year unless a variation is previously approved . . ." (Kressbach 1962, p. 41!).

Expectations of participants. Incremental calculations proceed from an existing base. By "base" we refer to commonly held expectations among participants in budgeting—that programs will be carried out at close to the going level of expenditures. The base of a budget, therefore, refers to accepted parts of programs that will not normally be subjected to intensive scrutiny. Since many organizational units compete for funds, there is a tendency for the central authority to include all of them in the benefits or deprivations to be distributed. Participants in budgeting often refer to expectations regarding their fair share of increases and decreases (Wildavsky 1964, pp. 16–18). Argyris (1952, p. 16) quotes a supervisor as observing that employees had a well-developed notion of a fair output. In talking about the Philadelphia capital budget, Brown and Gilbert (1961) observe that every department got a share because projects were considered partly as contributions toward keeping the departments going. The widespread sharing of deeply held expectations concerning the organization's base and its fair share of funds provides a powerful (though informal) means of coordination and stability in budgetary systems which appear to lack comprehensive calculations proceeding from a hierarchical center.

Coordination and supervision

The most powerful coordinating mechanisms in budgeting undoubtedly stem from the role orientations adopted by the major participants. Roles (the expectations of behavior attached to institutional positions) are parts of the division of labor. They are calculating mechanisms. In American national government, the administrative agencies act as advocates of increased expenditure, the Bureau of the Budget acts as presidential servant with a cutting bias, the House Appropriations Committee functions as a guardian of the Treasury, and the Senate Appropriations Committee serves as an appeals court to which agencies carry their disagreement with House action. The roles fit in with one another and set up a stable pattern of mutual expectations, which markedly reduces the burden of calculation for the participants. The agencies need not consider in great detail how their requests will affect the president's over-all program; they know that such criteria will be introduced by the Budget Bureau. Since the agencies can be depended upon to advance all the programs for which there is prospect of support, the Budget Bureau

and the appropriations committees can concentrate respectively on fitting them into the president's program or paring them down. If the agencies suddenly reversed roles and sold themselves short, the entire pattern of mutual expectations would be upset, leaving the participants without a firm anchor in a sea of complexity. For if agencies refuse to be advocates, congressmen would not only have to choose among the margins of the best programs placed before them, they would also have to discover what these good programs might be. Indeed, the Senate Appropriations Committee depends upon agency advocacy to cut its burden of calculation, if the agencies refused to carry appeals from House cuts, the senators would have to do much more work than their busy schedules permit (Wildavsky 1964).

A writer on Canadian budgeting (Ward 1962, p. 165) refers to the tendency for an administrator to become "an enthusiastic advocate" of increased funds for his policies. When disagreements over departmental budgets arise, as they frequently do in private firms, the controller and the departmental representatives come to a meeting armed to the teeth to defend their respective positions (Argyris 1952, p. 9). The same interministerial battles go on in Great Britain (Brittain 1959, pp. 216–217), the Netherlands (Drees 1955, pp. 61–71), and the Soviet Union, where "serious clashes" arise when ministries and republics ask for greater funds to fulfill their plans (Davies 1958, p. 184).

In a discussion which deserves to be better known, W. Drees (1955, pp. 61–71) points out that agency heads can defend the interests of their sectors because it is so difficult for them to relate their modest part in total expenditures to the over-all budgetary situation. Anything they could save through a spirit of forbearance would be too small a portion of the total to make the sacrifice worthwhile. From their point of view, total expenditures are irrelevant.

The role of guardian or defender of the treasury apparently did not come naturally. In the early days of public finance in France, "Financiers appropriated to themselves without restraint the spoils of the nation, and used for their own profit the funds intended for the Treasury; the only restraint lay in the fact that when their plundering exceeded the measure of tolerance they were hangcd. It was a summary procedure of control *a posteriori* . . ." (Stourm [1889] 1917, p. 536). It took centuries to develop a finance minister like Louis Thiers, whose definition of his role included that "ferocity . . . needed to defend the Treasury"

(Stourm [1889] 1917, p. 69). The members of the U.S. House Appropriations Committee consider themselves guardians of the Treasury who take pride in the high degree of frequency with which they reduce estimates (Fenno 1962). They reconcile this role with the defense of constituency interests by cutting estimates to satisfy one role and generally increasing amounts over the previous year to satisfy the other.

Among the legislatures of the world, however, guardianship appears to be quite rare. Drees (1955) reports that in the Netherlands the legislative specialists concerned with finance, by advocating higher appropriations, defend the interests of the policy areas over which they have jurisdiction to a degree overriding party lines. Much the same thing happened in France during the Fourth Republic (Williams 1954). It may be that guardianship depends, first, on appropriations committees that have continuing power to affect outcomes—a rare occurrence in the modern world—and, second, on the development of cultural values and legislative mores that support an insistent financial check on the bureaucracy. Legislative committees in nations like Mexico, where virtually complete budgetary power is in the hands of the president, who heads the single great party (Scott 1955), or Great Britain, where party responsibility overwhelms parliamentary initiative (Brittain 1959), are hardly in a position to develop a role of guardianship.

Budgetary goals

Possessing the greatest expertise and the largest numbers, working in the closest proximity to their policy problems and clientele groups, desirous of expanding their horizons, administrative agencies generate action through advocacy. But how much shall they ask for? Life would be simple if they could just estimate the costs of their ever-expanding needs and submit the total as their request. But if they ask for amounts much larger than the appropriating bodies believe are reasonable, the credibility of the agencies will suffer a drastic decline. In such circumstances, the reviewing organs are likely to apply a "measure of unrealism" (Royal Institute . . . 1959, p. 245), with the result that the agency gets much less than it might have with a more moderate request. So the first decision rule is: Do not come in too high. Yet the agencies must also not come in too low, for the assumption is that if agency advocates do not ask for funds, they do not need them. Since the budgetary situation is always tight, terribly tight, or impossibly tight, reviewing bodies are likely to accept a low

request with thanks and not inquire too closely into the rationale. Given the distribution of roles, cuts must be expected and allowances made.

The agency decision rule might therefore read: Come in a little high (padding), but not too high (loss of confidence). But how high is too high? What agency heads do is to evaluate signals from the environment—last year's experience, legislative votes, executive policy statements, actions of clientele groups, reports from the field—and come up with an asking price somewhat higher than they expect to get (Wildavsky 1964, pp. 21-32). In Michigan cities, for example, city managers sound out councilmen to determine what will go or get by in their budgets (Kressbach 1962, p. 5). Departments and local authorities in Great Britain commonly make assessments "of how much spending is likely to be acceptable to the governing body" (Royal Institute . . . 1959, p. 57). After first determining what the mayor, finance director, councilmen, and other key participants will "die for," together with other projects which "cannot be moved," the men in charge of Philadelphia's capital budget let other projects by if they seem sound and if the request is not too far out of line (Brown & Gilbert 1961, pp. 71-88).

The Bureau of the Budget in the United States takes on the assigned role of helping the president realize his goals when it can discover what they are supposed to be. This role is performed with a cutting bias, however, simply because the agencies normally push so hard in asking for funds. The bureau helps the president by making his preferences more widely known throughout the executive branch so that those who would like to go along have a chance to find out what is required of them. Since Congress usually cuts the president's budget, Bureau figures tend to be the most the agencies can get, especially when the items are not of such paramount importance as to justify intensive scrutiny by Congress. Yet the power of the purse remains actively with Congress. If the Budget Bureau continually recommended figures which were blatantly disregarded by Congress, the agencies would soon learn to pay less and less attention to the president's budget. As a result, the Bureau follows consistent congressional action (Wildavsky 1964, pp. 4-42); it can be shown empirically that Bureau recommendations tend to follow congressional actions over a large number of cases.

In deciding how much money to recommend for specific purposes, the House Appropriations Committee breaks down into largely autonomous subcommittees in which the norm of reciprocity is carefully followed (Fenno 1962). Specialization

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is carried further as subcommittee members develop limited areas of competence and jurisdiction. Budgeting is both incremental and fragmented as the committees deal with adjustments to the historical base of each agency. Sequential decision making is the rule as problems are first attacked in the jurisdiction in which they appear and then followed step-by-step as they manifest themselves elsewhere (Wildavsky 1964, pp. 56-64). The subcommittee members treat budgeting as a process of making marginal monetary adjustments to existing programs, rather than as a mechanism for reconsidering basic policy choices every year (Fenno 1962). Fragmentation and specialization are further increased through the appeals functions of the Senate Appropriations Committee, which deals with what has become (through House action) a fragment of a fragment. When the actions of subcommittees conflict, coordination may be achieved by repeated attacks on the problem or through reference to the House and Senate as a whole when the appropriations committees go beyond the informal zone of indifference set up by the more intense preferences of the membership. When one thinks of all the participants who are continually engaged in taking others into account, it is clear that a great many adjustments are made in the light of what others are likely to do.

Budgetary strategies

Having decided how much to ask for, agencies engage in strategic planning to secure their budgetary goals. Strategies are the links between the goals of the agencies and their perceptions of the kinds of actions which their political environment will make efficacious. Budget officers in the U.S. national government uniformly believe that being a good politician—cultivating an active clientele, developing the confidence of other officials (particularly of the appropriations subcommittees), and using skill in following strategies that exploit opportunities—is more important in obtaining funds than demonstration of efficiency. Agencies seek to cultivate a clientele that will help them to expand and that will express satisfaction to other public officials. Top agency officials soon come to learn that the appropriations committees are very powerful: their recommendations are accepted approximately 90 per cent of the time (Fenno 1962). Since budgetary calculations are so complex, the legislators must take a good deal on faith. Hence their demand that agency budget officers demonstrate a high degree of integrity. If the appropriations committees believe that they have been misled, they can do grave damage to the

career of the offending budgeting officer and to the prospects of the agency he represents. While doing a decent job may be a necessary condition for success, the importance of clientele and confidence are so great that all agencies employ these strategies (Wildavsky 1964, pp. 65-98).

In addition to these ubiquitous strategies there are contingent strategies which depend upon time, circumstance, and place. In defending the base, for example, cuts may be made in the most popular programs so that a public outcry results in restoration of the funds. The base may be increased within existing programs by shifting funds between categories (Kressbach 1962, p. 51; Stourm [1889] 1917, p. 348). Substantial additions to the base may come about through proposing new programs to meet crises and through campaigns involving large doses of advertising and salesmanship (Wildavsky 1964, pp. 101-123). The dependence of these strategies on the incremental, increase-decrease type of budgetary calculation is evident. By helping determine the ways in which programs are perceived and evaluated, the forms of budgetary presentation may assume considerable importance.

One major strategy deserves separate attention—the division of expenditures into capital and expense budgets. In practice, as Mosher says, "The Capital budget is a catalogue of prospective budgets for which money may be borrowed . . ." (1956, p. 69). The attempted distinction between capital assets with future returns and ordinary expenditures soon breaks down under the pressure of avoiding tax increases or the appearance of deficits by borrowing for items designated in the capital budget (Burkhead 1956, pp. 182ff.; Mosher 1956, p. 70; Sundelson 1938, pp. 146-198). The ideological emphasis on the size and growth of the deficit in the United States makes it likely that the introduction of a capital budget would permit substantially greater expenditures as apparent deficits become converted into formal surpluses.

Organizations wish to maintain themselves in their environment. For governmental agencies this can be taken to mean maintenance of political support from clientele groups and other governmental participants. We expect that policies are chosen not only because of any intrinsic merit but also because they add to, or at least do not seriously detract from, the necessary political support. The heads of agencies can expect to lose internal control, to be fired, to see their policies overturned or even to find their organization dismembered if their recommendations are continually disappointed. They therefore seek to maintain a reason-

able record of success (to guard their professional reputation, as Richard Neustadt puts it) in order to maintain the confidence of the key people in and out of their agency. Thus, they are compelled to consider the probable actions of others differently situated who have a say in determining their income. These notions may be tested by observing how agency requests vary with the treatment they receive from the Budget Bureau and Congress.

Suppose that we wish to explain the level of appropriations which agencies request of Congress through the Bureau of the Budget and the amounts which Congress provides through appropriations laws. The goals of the participants may be conceived of as constraints which are represented by the role orientations adopted by members of the appropriations committees and by top agency officials. Moreover, we know that budgetary calculations are incremental. Thus, it becomes possible to create in symbolic form, as linear, stochastic differences equations, a series of simple decision rules embodying the relationships we expect to find. Given the availability of appropriations laws and of Budget Bureau requests for individual agencies, the decision rules can be tested for their fit in accommodating the times series comprising fifteen or twenty years' figures.

In the simplest form, for example, a decision rule might be that the funds requested by an agency in a particular year are a direct function of its appropriation in the previous year up to a normally distributed random error. A second decision rule might make allowance for the difference between what the agency asked for and actually received from Congress in the previous year. Should an agency decide to pad its request to make up for a cut, should it decide to insist on the worth of its programs despite congressional action—strategies such as these can be represented as separate decision rules. Davis, Dempster, and Wildavsky (1966) are now able to show that basic parts of the federal budgetary process can be precisely described by a small number of relatively simple decision rules.

Budgets of firms

Treatment of budgets as political instruments is justified not only in governmental activities but also in industrial enterprises. A more political phenomenon than budgeting in Soviet industrial firms has not been invented. Rewards to managers depend on meeting production quotas assigned in economic plans. But the supplies, skilled labor, and financial resources are often lacking. The first consequence is that the quota is not set from above

but becomes the subject of bargaining as the managers seek to convince the ministries that quotas should be as low as possible. The managers find it prudent not to exceed their quota hugely, for in that case next year's quota will be raised beyond attainment. The second consequence is that production is not rationalized to yield the greatest output at the lowest cost but is geared instead to meeting specific incentives. Heavy nails, for example, are overproduced because quotas are figured by weight. Maintenance may be slighted in favor of huge effort for a short period in order to meet the quota. Funds are hidden in order to provide slack that can be used to pay "pushers" to expedite the arrival of supplies. The list of essentially deceitful practices to give the appearance of fulfilling the quota is seemingly endless: producing the wrong assortment of products, transferring current costs to capital accounts, shuffling accounts to pay for one item with funds designated for another, declaring unfinished goods finished, lowering the quality of goods, and so on (Berliner 1957). The point is that the budgetary system arranges incentives so that managers cannot succeed with lawful practices. Communist China reveals the same pattern (Hsia 1953; Li 1959). When similar incentives are set up in American industrial firms similar practices result, from running machines into the ground, to "bleeding the line," to meeting a monthly quota by doctoring the accounts (Jasinsky 1956, p. 107).

As in the Soviet Union, American firms often use budgets not to reflect or project reality but to drive managers and workers toward increased production. Indeed, some firms base their budgets on historical experience plus an added factor for increased performance (Axelson 1963). Budgets are conceived of as forms of pressure on inherently lazy people so that (to paraphrase Mao Tse-tung) the more the pressure, the better the budget. Inevitably, managers and workers begin to perceive budgets as "perpetual needlers." In some cases this type of budget leads to discouragement because it is apparent that whatever the effort, the budget quota will be increased. Since accounting takes place by subunits in the firm, it is not surprising that fierce negotiations occur to assign costs among them. As a result, top officials find it necessary to engage in campaigns to sell budgets to the units. Otherwise, sabotage is likely (Sord & Welsch 1958, pp. 140-150). While some attention has been given to human relations in budgeting (Eebing 1961, p. 16), only Stedry (1960) has attempted to explore the essential motivational problems of budgeting within a political, institu-

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tional framework. Yet without an understanding of the impact of different goals and incentive systems on human activity, reliable statements about the likely consequences of budget documents can hardly be made.

Intensive study of budgetary behavior has just begun. Despite the relative paucity of comparative data, patterns of behavior appear to be remarkably consistent across private and public organizations (Wildavsky 1965) and national and state boundaries. After the appearance of monographs on different budgetary systems in various environments, it should be possible to create a small number of budgetary models specifying the elements of the organization coalition, the distribution of roles among the principal actors, the most prevalent aids to calculation, the strategies which appear as responses to types of incentives, and the outcomes to be expected in terms of amounts requested and received. Computer simulation may be used to test the effect of shocks to the budgetary systems. The study of budgeting as a political phenomenon in an organizational context may then become a major aid in the comparative analysis of governmental policy.

AARON B. WILDAVSKY

[See also DECISION MAKING; ORGANIZATIONS; POLITICAL PROCESS.]

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BÜHLER, KARL

Karl Ludwig Bühler (1879-1963), German psychologist, was born in Meckesheim, near Heidelberg; his father was a railway clerk and small peasant, and his mother came of Catholic peasant stock. Bühler grew up a Catholic and obtained a scholarship to the Tauberbischofsheim Catholic Gymnasium. In 1899 he matriculated at the University of Freiburg im Breisgau and in 1903 earned his M.D. with a dissertation on the physiological theories of color vision under Johannes von Kries. He also studied philosophy at Freiburg and continued his philosophical studies at the University of Strassburg. There he earned his PH.D. under Clemens Bäumker in 1904 with a dissertation on the psychology of Henry Home (Lord Kames), the eighteenth-century Scottish philosopher.

After returning to Heidelberg to serve as assistant to von Kries, Bühler went to Berlin to study under Erdmann and Carl Stumpf; in 1906 he went to Würzburg as an assistant to Oswald Külpe, obtaining his habilitation as docent in philosophy upon submitting experimental studies on the psychology of thought processes. Bühler followed Külpe when the latter moved to Bonn in 1909 and to Munich in 1913; there Bühler was appointed associate professor without tenure. During World War I he was for a time a captain in the medical corps, developing psychological aptitude tests for drivers and pilots and also treating brain injuries.

In 1916 Bühler married Charlotte Malachowski, who in the same year earned her PH.D. at the University of Munich. At the end of the war, in 1918, Bühler was appointed a full professor at the Dresden Institute of Technology, where his wife received the habilitation as a docent in 1920. Two years later, when Bühler was appointed professor in Vienna, Charlotte Bühler also transferred her docentship to Vienna and became his assistant. Between 1922 and 1938, Bühler, with his wife's support, established and ran a psychological institute in Vienna, as well as his own school of psy-

chology, which soon achieved world-wide recognition. Concurrently he was visiting professor at the Pedagogical Institute of the City of Vienna.

In 1926-1927 and again in 1929 he taught in the United States as an exchange professor at Stanford, Johns Hopkins, Harvard, and Chicago universities. In 1938 he was briefly arrested by the Hitler regime in Vienna but released upon the intervention of Norwegian friends. Then he emigrated, first to Oslo and, in 1939, to the United States, where he became professor of psychology, first at the College of St. Scholastica in Duluth, Minnesota, and later, from 1940 to 1945 (with a brief interlude at Clark University in Worcester, Massachusetts), at the College of St. Thomas in St. Paul, Minnesota. At the end of World War II he moved to Los Angeles, serving as assistant clinical professor of psychiatry at the medical school of the University of Southern California until 1955 and as consulting psychologist at the Cedars of Lebanon Hospital. He died in Los Angeles in 1963.

In 1960 Bühler was elected honorary president of the Sixteenth International Psychological Congress in Bonn, where he was awarded the Wilhelm Wundt medal of the German Psychological Association. During his years in Vienna, Bühler had a number of European students who later made names for themselves, such as René Spitz, Alexander Willwoll, Hildegard Hetzer, Paul F. Lazarsfeld, Egon Brunswik, Else Frenkel-Brunswik, Konrad Lorenz, Albert Wellek, and Peter Hofstätter, and from the United States, Edward Tolman, David Klein, and Neal Miller.

When Bühler's Würzburg habilitation thesis on the psychology of thought was published in the *Archiv für die gesamte Psychologie* in 1907-1908, it gave rise to a celebrated controversy with Wilhelm Wundt, the old master of experimental psychology, concerning the methodological legitimacy of nonexact experiments and retrospective introspection. Next to Külpe, Bühler was the leading figure in the new psychology of thought that broadened and redefined experimental procedures. This psychology of thought was subsequently developed (beginning in 1919) into a psychology of speech.

During Bühler's years in Bonn, however, he was primarily interested in the work of the Graz school, particularly that of von Ehrenfels on visual gestalten. As early as 1912—simultaneously with the first similar statements of the Berlin psychologists who founded gestalt theory—Bühler read a paper at the Fifth German Psychological Congress on the comparison of spatial gestalten with respect to their proportions. His first major opus, *Die Gestalt-*

* Chapter 2

**The Public and Private Spheres
in Historical Perspective**

Thomas K. McCraw

Throughout American history, the proper relationship between the public and private spheres has been a theme of prickly debate. In our own time it underlies much research and commentary on such topics as regulation, industrial policy, and corporate governance. Proposals for deregulating industries, for "getting the government off the backs of the people," and for the "reprivatization of public functions" all reflect the characteristic belief of our time that the public-private relationship is somehow out of whack and must be restored to proper balance.

As soon as one begins to think systematically about this question, it becomes apparent that the ground is very slippery. Definitional problems abound. Does "public" mean simply governmental and "private" nongovernmental? If so, then in what sector should such entities as defense contractors be placed? When the Reagan administration increased the defense budget, did the public sector grow? Or did private companies such as General Dynamics merely record higher sales? And what is the impact on the public-private split when such "in-and-outers" as John J. McCloy, Cyrus Vance, Caspar Weinberger, and George Shultz change jobs? Is there any effect at all? Are these persons men of the public sector, or of the private?

Ambiguities of this sort are not new in our history. They have persisted from the beginning of the American republic, though in different forms at different times. For approximately the last century, Americans have been especially concerned about having a clear de-

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marcation between public and private activities. During this same period, we as a people have developed certain abiding criteria for legitimacy that apply to both public and private behavior. These same criteria attach as well to that growing list of activities and organizations that cannot easily be classified as either public or private but which loom large in the mixed economies characteristic of modern democratic capitalism.

This chapter addresses these issues by orienting the American experience comparatively: first across countries, then within the United States itself across time. The premise is that we cannot see our present situation clearly without the light shed by the experience of other democratic market economies as well as by our own past. In the latter part of the chapter, I will explore the indexes of legitimacy within mixed public-private institutions in America, set forth some of the pillars of success in such undertakings, and comment on the performance of public functions by private corporations.

THE UNITED STATES IN COMPARATIVE PERSPECTIVE

One relevant index of American attitudes toward the public and private spheres is the extent of public ownership of industry. The United States at the present time is at one extreme among market economies, as shown in Figure 2-1.

The facts depicted in this chart speak mostly for themselves. The United States is the only country besides South Korea with a completely private airline industry. We are the only country with an all-private telecommunications network, and one of a handful with no public enterprises in oil, gas, and steel. Furthermore, the trend over the last decade in most countries other than the United States has been toward more state ownership.¹

One perhaps unexpected characteristic of this chart is the absence of a clear correlation between extent of state-owned enterprise on the one hand and national economic performance on the other. Some economies that grew rapidly over the last twenty years (Germany, Brazil) had substantial public ownership, while others (Japan) relatively little. Some slow performers (Canada, the United States) had few state enterprises, others (Britain) a great many.²

Of course, public ownership in these industries, which include utilities as well as manufacturing, is only one measure of public involvement in a nation's economy. Another type of index is the degree and growth rate of government spending. Table 2-1 shows these numbers, which include all public spending on all levels.

Table 2-1. Government Spending as a Percentage of Gross Domestic Product.

Country	Government Spending as a Percentage of GDP, 1979	Increase in Government Spending as a Percentage of GDP, 1960-1963		Increase in Government Spending as a Percentage of GDP, 1970-1973	
		Average to 1970	Average to 1973	Average to 1977	Average to 1979
Sweden	59.7	13.1		11.1	
Netherlands	57.7	11.9		10.2	
Norway	51.3	11.3		8.0	
Denmark	51.1	13.8		8.1	
Belgium	49.2	7.8		10.5	
Ireland	49.0	9.0		9.4	
Austria	49.0	5.5		8.7	
Germany	46.4	5.1		7.2	
France	45.0	2.2		6.5	
Italy	41.8	6.9		6.5	
Britain	43.8	5.8		4.1	
Canada	40.3	6.8		3.9	
Switzerland	40.1	5.9		9.7	
Finland	39.1	5.0		6.8	
Greece	31.6	5.6		5.1	
United States	31.1	3.5		1.2	
Australia	31.7	3.1		5.1	
Japan	30.5	2.5		9.5	
Spain	28.5	5.1		5.5	

Source: Cameron (1982: 49), derived from OECD publications

Here again the story is the same: the United States has a low percentage of government spending among the industrialized market economies. And by a very wide margin it has the smallest recent growth rate in public spending. Recent rhetoric about the rampant growth of government spending in the United States would seem to have little foundation when viewed beside statistics for comparable countries. Only if the United States is abstracted from the world economy and considered in isolation can the proposition of rapid growth in public spending be defended.

Government expenditures as a percentage of a national economy can be calculated in different ways, of course. One careful study using several methods was done in 1980 for the National Bureau of Economic Research. Each method pointed to the same conclusion: with the important exception of transfer payments, there has been no substantial growth of government spending in the United States as a percentage of gross national product since 1952. Government purchases of goods and services, as distinct from Social Security and other transfers, have followed a pattern characterized not by growth

Figure 2-1. Extent of State Ownership.

	Posts	Tele-communications	Electricity	Gas	Oil production	Coal	Railways	Airlines	Motor industry	Steel	Ship-building
Australia											NA
Austria											NA
Belgium					NA						
Brazil											
Britain											
Canada											
France					NA						
West Germany											
Holland					NA	NA					
India											

Italy					NA	NA					
Japan					NA						
Mexico											
South Korea					NA						
Spain					NA						
Sweden					NA	NA					
Switzerland					NA	NA					NA
United States											

Privately owned all or nearly all
 Publicly owned all or nearly all
 75%
 50%
 25%

NA - not applicable or negligible production
*Including Conrail

Adapted from a chart in *The Economist* (London),
December 30, 1978 and reprinted with special permission

but by a decided shift away from federal and toward state and local government spending. Recent proposals to shift public functions to these lower levels, therefore, express a desire for something that in large measure has already occurred.

The apparent inconsistency between Table 2-1 (which shows total government spending in the United States at 33.4 percent) and Table 2-2 (which shows it at nearer 20 percent), derives from the exclusion from the second table of transfer payments. The dramatic rise in transfer payments over the last two decades can be seen in the shifting disposition of the federal budget dollar (Table 2-3).

Several points are clear from the foregoing chart and tables. First, speaking comparatively, the United States has an extremely small

Table 2-2. Government Purchases of Goods and Services as a Percentage of Gross National Product (Current Dollars).

Year	Federal (percent)	State and Local (percent)	All Government (percent)
1952	15.1	6.7	21.8
1955	11.1	7.6	18.8
1960	10.6	9.2	19.8
1965	9.8	10.3	20.1
1970	9.7	12.5	22.3
1975	8.0	14.1	22.1
1976	7.6	13.5	21.1
1978	7.3	13.3	20.6
1980	7.5	13.0	20.0
1981	7.8	12.5	20.3

Source: Break (1980: 622), *Stat. Abstract* (1982: 419).

Table 2-3. The Federal Budget Dollar, 1960-1979.

Year	Defense (percent)	Nondefense (percent)	Transfers (Included in Nondefense) (percent)
1960	49.0	51.0	24.8
1965	40.1	59.9	25.7
1970	40.0	60.0	30.4
1975	26.2	73.8	43.7
1976	24.4	75.6	45.7
1977	24.2	75.8	45.3
1978	23.3	76.7	43.3
1979	23.2	76.8	43.2
1980	23.6	76.4	43.1
1981	24.3	75.7	44.3

Source: Break (1980: 637); *Stat. Abstract* (1982: 250).

amount of state ownership of enterprise. Similarly, the size and recent growth rate of its government expenditure are quite small measured against those of other democratic market economies. As a percentage of gross national product, public expenditures in America have remained almost constant over the last two decades. But in two respects dramatic changes have occurred. One is in the rapid rise of transfer payments, as the United States—like other Western nations but unlike most Asian market economies—has determined that the welfare function will be a public responsibility with an extremely heavy call on public funds. The second change is a rapid shift from expenditures by the federal government to those by the states and local communities, largely through the mechanism of revenue sharing.

To be sure, a government's influence on a national economy cannot be measured solely by such percentages. Regulatory measures of many types cause private-sector expenditures that otherwise would not have occurred and that do not show up in calculations such as those outlined. Enormous investments in pollution abatement, reports to agencies, tax returns, and a host of other expensive requirements mandated by government constitute a hidden dimension of the public sector's impact on expenditures. In addition, tax laws often have decisive effects on private-sector investment decisions.

Here again, however, in cross-national perspective it is almost surely valid to say that the American private economy receives less direction from government than do the economies of most other countries. For example, to ignore government planning, promotion, and overall economic influence in such countries as Germany, Japan, and Brazil during their periods of "miracle growth" would be to leave out what most scholars regard as the most important elements. I can think of no serious scholar who would argue that the level of general government influence on the national economy is greater in the United States than it is in these other countries.

Many would argue, of course, that the kinds of influence and the goals of public policy differ dramatically across countries. The common perception that other governments tend to promote and encourage the development of business enterprise while we in the United States tend to regulate and restrain it is, by and large, an accurate position. Despite numerous exceptions, there is little question that in cross-national comparison the United States does not promote business enterprise to the degree that its international competitors do or that the United States itself did earlier in its history (Vogel 1981; Johnson 1982).³

A comparative framework for these questions is essential not only for the sake of intellectual perspective, but for immediate practical

reasons as well. The economy of the United States has become so interdependent with others that we cannot isolate ourselves from economic tendencies elsewhere. Nor can others insulate themselves from events here. This is true whether the subject be interest rates in the United States, oil prices in the Persian Gulf, or export subsidies paid by other nations in order to make their products more competitive in international markets. Just as in the business world one company's actions tend to stimulate reactions by its competitors, one country's policies often compel responses by other countries. One country's promotion and subsidy of its exports, either through state-owned enterprise or by other means, can provoke competitive responses from foreign governments, because such promotion tends to steal market share. Export and domestic sales by the nonsubsidizing countries decline, and unemployment rises. The affected industries in those countries then exert political pressures on their governments to protect them from unfair competition abroad. When tens of thousands of jobs are at stake, the pressures can become irresistible. Thus a phenomenon such as the rise of state-owned enterprise turns out to be contagious. The quest for international market share in steel, automobiles, textiles, and many other industries tends powerfully to promote the rise of government influence within national economies, even those that stop short of substantial state ownership (Walters and Monsen 1981).

HISTORICAL BACKGROUND OF THE PUBLIC-PRIVATE SPLIT IN AMERICA

For the United States, these pressures pose extremely difficult problems. The need for decisive government action seems to point us in one direction, but our dominant ideology points in another. We almost desperately want to resist the further growth of government power, whether it be to combat unfair trade practices abroad or to improve our citizens' health and welfare at home.

In the context of this chapter, our national dilemma may be posed as a pair of questions. First, why does the public-private issue seem so much more important to Americans than to the people of other countries? Second, why is the American business-government relationship so much more adversarial? Some tentative answers to these questions might suggest ways in which our treasured but sometimes inconvenient ideology can be squared with the needs that are upon us at the present time.

At its birth, one of the traits that distinguished the United States from older Western nations was the conspicuous absence of estab-

lished institutions. Here, unlike in Europe, there existed no established church, no standing army, no hereditary aristocracy, no clear locus of sovereignty. The trappings of feudal society, with its ordered strata and sense of organic unity, never took hold in America. Instead, ours was to be an open, mobile society, protected from absolutism by the division of powers so carefully written into the Constitution: the federal system of divided state and national spheres, the checks and balances of different branches of government. As if to underline their abhorrence of absolutism and privilege, the authors of the Constitution (Article I, section 8) expressly forbade the establishment of an aristocracy: "No Title of Nobility shall be granted by the United States." Compared with existing European models of the state, the American government, if not precisely weak, had sharply circumscribed powers (Hartz 1955).

One result of this decision by the Founding Fathers was that a large portion of political and economic power was left up for grabs. Because the society was so open and the continent so undeveloped, the scramble for wealth and shares of power did not unduly disrupt American life; instead it became the very essence of American life. The development of the country was so manifestly a positive-sum game that the growth of one person's wealth and power did not necessarily mean the shrinkage of another's. (It often did, of course, and in this respect as for so many others in American history, the issue of slavery was an enormously important exception.) But the openness of society and the manifold opportunities for the rise of new fortunes contrasted vividly with the situation in Europe, as a host of foreign observers remarked at the time.⁴

In such an atmosphere in America, the distinction between public and private affairs did not have the compelling quality it acquired later on. In a democratic republic, every citizen was private yet was also a member of the body politic, coequal with every other member. Most important, each citizen was free, and among his freedoms was his liberty to mix public and private functions without a sense of conflict. Several of the Founding Fathers, for example, made large sums of money speculating in western public lands. By later standards, their actions would have been scandalous. At the time, few objected.

It was not until the Progressive Era (1901-1914) that Americans at large began to take close and critical looks at such behavior. These years brought the high tide of journalistic muckraking, our first sustained period of obsessive preoccupation with thievery and betrayals of the public trust. The first glimmerings of insistence on the separation of public and private activity had begun late in the nineteenth

century, for reasons discussed in greater detail below. But what happened in the Progressive Era brought into focus the issues at stake in the separation, as well as the assumptions underlying the conviction that the two must be kept separate.

A landmark in this new way of thinking was the historian Charles A. Beard's book *An Economic Interpretation of the Constitution* (1913). This influential work retrospectively muckraked the motives of the Constitution's authors. Beard argued that some of the delegates to the Constitutional Convention stood to profit personally from the adoption of such a document, and his book stimulated a host of similar studies of all periods of American history. Within a few years, this "Beardian" or "progressive" school of scholarship, as it came to be called, dominated the teaching and learning of history, political science, and other disciplines in the United States.

Progressive history told an exciting story. It recast the American experience as a continuous contest between public and private interests—that is to say, between right and wrong. Instead of the tale of uninterrupted glory narrated by Parson Weems and the McGuffey Reader, American history now became an ongoing struggle between good and evil. Most of the evil was found to reside in the business community. The banker Nicholas Biddle, it now developed, had provided a retainer to Senator Daniel Webster, who looked after the bank's interests in return. The young J. Pierpont Morgan, it was now discovered, had earned his first fortune by selling defective rifles to the Union Army.

These peccadilloes, progressive scholars wrote, were mere preludes to what happened in the last third of the nineteenth century. In that sordid era, such Robber Barons as John D. Rockefeller, Jay Gould, and James B. Duke rode roughshod over the public interest in pursuit of their private fortunes. Mark Twain had given this period its sobriquet, "The Gilded Age," in a spirit not entirely pejorative. Later on, one of the most eminent of progressive scholars, Vernon Louis Parrington, called it "the Great Barbecue." The cook at the Great Barbecue was big business, the carcass the American public (Josephson 1934).

In the 1920s, attacks on big business quieted down. But the Crash of 1929 and the ensuing Great Depression seemed to confirm the view that private business, which by common consent had caused the depression, was indeed rotten. Accordingly, it must be disciplined by an aroused people acting through a much enhanced public sector; as Franklin D. Roosevelt called it, "a New Deal for the American people." Along with banishing fear, FDR's first inaugural called for driving the "money changers" from the American temple. And by

the middle of the twentieth century, the functional separateness of the public and private sectors had become a mainstay of the American liberal creed. Within the academy, the climax of progressive scholarship came with Arthur M. Schlesinger, Jr.'s great books on Jacksonian Democracy and on the New Deal. In the stirring prose emblematic of progressive writing, Schlesinger cast both these movements in terms of their resolute opposition to the business community. As he put it in a famous statement that by now was so self-evident in liberal circles that he hardly needed to make it at all, "Liberalism in America has been ordinarily the movement on the part of the other sections of society to restrain the power of the business community" (Schlesinger 19-15: 505).

Self-evident in the middle of the twentieth century, such a generalization would have been incomprehensible in the middle of the nineteenth. The great leaders of that period—Clay, Webster, Calhoun, Jackson, Lincoln, Douglas—did not habitually posit a dichotomy between the interests of business and those of the American people. Instead, these were seen to go hand in hand. Granted there were plenty of quarrels between warring economic interests: southern planters versus northern textile magnates, industrialists versus labor unionists, merchants versus sharecroppers, shippers versus railroads. But there was no basic division between business on the one hand and the people on the other. In fact, the nineteenth-century political economy was characterized by widespread public assistance to business enterprise through the promotion of canals, railroads, and other "internal improvements" (Goodrich 1960; Heath 1954; Hartz 1948; Handlin and Handlin 1947; Scheiber 1969; Lively 1955).

What changed it all, what brought about the seismic shift in the American viewpoint toward the public-private issue, was probably the sudden rise of big business. This profound movement began with the railroads in the 1850s and matured with the revolution in manufacturing and distribution between about 1880 and 1910. Prior to this period, no single enterprise, indeed no entire industry, was sufficiently large to threaten a substantial number of people. Even major factories usually employed no more than a few hundred workers. Before the 1870s, even the largest manufacturing companies were usually capitalized at less than \$1 million (Chandler 1977, pt. 1).

Within a single generation, all this changed. By 1890 each of several railroads employed more than 100,000 workers. By 1900 John D. Rockefeller's Standard Oil Company had grown into a huge multinational corporation capitalized at \$122 million. James B. Duke's American Tobacco Company completed a series of mergers and internal expansions that took it from a capitalization of \$25 million in

1890 to one of \$500 million in 1904. And in 1901 the creation of the United States Steel Corporation climaxed a \$1.4 billion transaction. This sum, far beyond the imagination of most contemporary citizens, became a symbol of the new giantism in the American economy (Chandler 1977, pts. 2-4; Moody 1904).

With the rise of big business, the term "private enterprise" acquired a different meaning. Where once it had meant liberty and freedom, it now meant danger as well. It menaced America. It brought, without any question, that very centralized power against which the Founding Fathers had fought their revolution. Small wonder that in its train came a new way of interpreting American history and a new insistence on separating the public sphere from the private.

As big business emerged, the size of the public sector was changing as well, though not nearly so rapidly. In 1871, on the eve of the creation of the first great business trusts, only 51,020 civilians worked for the federal government. Of these, 36,696 were postal employees. The remaining 14,324 governed a nation whose population exceeded 40 million. The subsequent trend in federal employment, further broken down with respect to those working in the national capital, was as shown in Table 2-4.

In the thirty years from 1871 to 1901, rapid growth is evident, but from a tiny base figure. Even by 1901, the year of the U.S. Steel merger, the ratio of federal employees to the national population was only 1 to 751, compared with 1 to 102 in 1980. As the table suggests, the largest absolute growth in federal employment occurred just where one would expect to find it: in the years of the New Deal, World War II, and the Great Society.

What do these numbers have to do with the relationship between the public and private spheres? Simply this: *In the United States, alone of all major market economies, the rise of big business preceded the rise of big government.* In Britain, France, Germany, and Japan, a substantial civil bureaucracy was embedded in the culture long before the appearance of big business. In addition, each of these other nations had a feudal heritage stretching back for several centuries, together with a well-defined locus of national sovereignty. In the United States, however, big business came first. And when it did come, no countervailing force existed to soften its impact: no aristocracy, no mandarin class, no guild tradition, no labor movement, no established church. This is one reason why the business revolution proceeded so much more rapidly here than elsewhere, why extremely large enterprises came so much earlier, and why the political reaction was so much stronger (Keller 1979; McCraw 1981: 1-19).

Table 2-4. Population, Federal Employment (Nonpostal), in Washington, D. C., and Ratios.

Year	U.S. Population (thousands)	Nonpostal Federal Employees	Located in Washington, D. C.	Population per Federal Employee	Population per Employee in Washington, D. C.
1871	40,936	14,324	6,222	2,558	6,580
1901	77,584	108,264	25,044	751	2,767
1925	115,829	265,495	67,563	431	1,714
1940	132,122	725,939	139,770	154	945
1950	151,664	1,476,019	223,322	103	679
1970	204,579	2,240,316	327,369	91	626
1980	227,700	2,215,552	356,000	102	654

Source: Bureau of the Census, U.S. Department of Commerce, 1975, p. 1102-1103; Stat. Abstract (1982, 6, 264, 266-7).

The United States was the only nation to enact regulatory legislation directed specifically against big business at very early dates. Congress passed the Interstate Commerce Act in 1887, the Sherman Antitrust Act in 1890, and the Federal Trade Commission and Clayton Acts in 1914. We were the only country to attempt such a thoroughgoing regulation of railroads as was contemplated under the Hepburn Act (1906). Elsewhere, such laws were regarded as unnecessary. In the case of railroads, either the government itself owned the enterprise or the size of the company was not so great as in the United States, with its vast distances and correspondingly large railroad corporations. And the antitrust laws were simply inappropriate for Europe. Although practices varied from one country to the next, in general the European polities encouraged guilds and cartels, both of which tended to protect small business and to aid those countries' efforts to promote their exports (Keller 1979; McCraw 1981: 1-19; Cornish 1979; Hannah 1979; Chandler 1980).⁵

In the United States, by contrast, small enterprises were often threatened, displaced, or even absorbed by the integrative measures typical of American big business, either through horizontal integration (absorption by merger and acquisition) or through vertical integration (displacement of small wholesalers and retailers by forward-integrating giant firms). The injuries suffered by small businesses in these often brutal procedures thrust the question of big business immediately into national politics. Bewildered owners of small businesses joined with angry farmers in demanding that the government do something about the new menace.

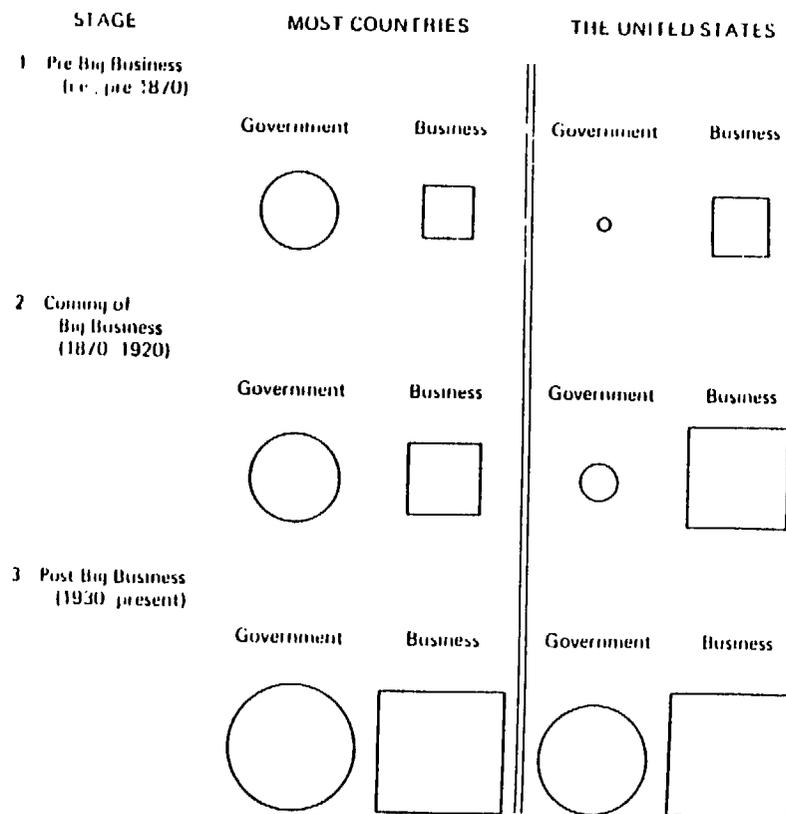
In this manner, a new political agenda emerged, and the adversarial business-government relationship in America was born. It is important to note that this adversarial character is strictly between American government and big business. Throughout the last century, small businesses have attempted to exploit the relationship as a means of protecting themselves. Their success has varied according to many different conditions: the ebb and flow of national prosperity, the involvement of the country in wars, and their own attitudes toward government (McCraw 1981: 25-55).

Of course, generalizations of the sort just set forth are very problematical. They require careful specification and are subject to many exceptions and qualifications. But the main point is simple and straightforward: The nature of the relationship between government and big business in the United States is difficult to specify in any absolute sense, but measured comparatively against the same relationship in other democratic capitalist countries, it is clearly more adversarial. Further, the character of this relationship derived in part

from a reverse sequence of institutional growth. Whereas in most nations big government (or, more precisely, a powerful and well-developed state apparatus) preceded the coming of big business, in the United States alone, with its antistatist traditions, big business came first. The pattern resembled a three-stage evolution (see Figure 2-2).

Obviously, this chart is only a rough depiction of the differential growth rates of the public sector on the one hand and big business on the other. The size of the figures only crudely expresses their relative strength. And the chart leaves out other institutions such as the church, the aristocracy, and the military, all of which served in Europe and Japan as additional counterweights to undue influence by business. In the United States, where no such counterweights

Figure 2-2. Growth Rates of Government and Big Business.



existed, nothing appeared to stand between big business and the kind of centralized power Americans had so long abhorred. (A refinement of the chart might also show broad overlaps of the figures for the other countries. Business-government cooperation sometimes became so close that portions of the public and private sectors could enter relationships of symbiosis or even merger.)

In the United States alone, big business was seen as the initial threat to liberty, since it occupied the field uncontested and since many of the early railroads and "trusts" did indeed abuse their great power. They unilaterally decided questions that affected whole communities and often made little secret of their "Public be damned" attitude. The fact that they also brought technological innovations, economic growth, and low prices to consumers could not entirely offset the bad reputation they were making for themselves.

From the business perspective, on the other hand, when government finally did begin to grow, it was seen as the threat—as a new challenger and pretender to the power that business had grown accustomed to enjoying alone. Eventually, in a development full of irony, the rise of big government in stage 3 was perceived by both big and small business as an illegitimate incursion by Washington into the autonomy rightfully exercised by private enterprise. In the rise of big government, business saw, quite accurately, a reduction in its own freedom of decision.

Without the comparative perspective, it is difficult and perhaps impossible to understand this process. But in the differential growth rates between government and big business, the American experience has been more exceptional than we often think. In other countries, business executives seldom experienced the autonomy characteristic of their American counterparts. Few European or Japanese business managers took it for granted that they could make important investment decisions without consulting the state. American executives, by contrast, thought it outrageous when the U.S. government first did claim such a role during the New Deal. And within another generation, their feelings had hardened into a virtual ideology. As one student of this question has recently commented, "The most characteristic, distinctive and persistent belief of American corporate executives is an underlying suspicion and mistrust of government. It distinguishes the American business community not only from every other bourgeoisie, but also from every other legitimate organization of political interests in American society" (Vogel 1978).

To this day foreign business executives envy American managers their high social status, as well as the degree of autonomy they still

possess in making decisions. Europeans would like very much to have the freedom their American counterparts enjoy from attacks by powerful Marxist groups and to some extent from claims by trade unions for a major voice in business decisions. Even the domestic cultures of Europe and the United States reflect the difference. Seldom in American history did business managers suffer the vaguely unseemly station characteristic of their counterparts in Europe, lower in the social pecking order than church officials, the landed aristocracy, or the military. Being "in trade" did not disqualify Americans from making a good marriage. Indeed, such American aristocracy as did develop grew primarily not from a landed gentry but from a business gentry.

European and Japanese managers emphatically do not, however, envy American executives their relationship with government. Instead, they often express wonder and bafflement at the adversarial character of that relationship. They have difficulty understanding the mutual hostility between two sets of players whom foreign executives tend to regard as natural allies.⁶

LEGITIMACY AND PERFORMANCE IN THE MIXED ECONOMY

In Europe and Japan, both government and big business today enjoy a presumptive legitimacy that is simply lacking in the United States. Historically speaking, America's absence of a feudal heritage and its early conditions of openness and mobility meant that almost nothing except individualism and personal freedom did have legitimacy. In such a setting business enterprise, nearly all of which was small scale, appeared most often as a manifestation of individual autonomy, as well as the commonest means of upward mobility. It therefore shared in the legitimacy of individualism. But the rise of big business in the late nineteenth century partly undermined the presumptive legitimacy of private enterprise and separated business into two camps: small business, which retained legitimacy, and big business, which never quite acquired it. Whenever big business did seem to have gained legitimacy, some new scandal or other event undermined it once more.

The culmination came in the 1930s, when the Great Depression destroyed the legitimacy that big business had managed to gain through its remarkable record in promoting economic growth. At the same time, the initial failure of Herbert Hoover's government to deal with the economic crisis began to call into question the legitimacy of government itself. The issue of government legitimacy was compli-

cated still further, though in a very different way, by the presidency of Franklin D. Roosevelt. FDR's New Deal appealed deeply to most Americans, but it angered corporate executives and wealthy shareholders more than any other event since the beginnings of big business itself. With the onset of the New Deal, the rise of big government began in earnest, and the whole question of the proper relationship between the public and private spheres took on new meaning.

The emergency of World War II temporarily mooted some of these issues, but the pattern had been set. Out of the combined upheavals of the Great Depression and the war emerged the modern mixed economy, in which the business-government relationship in America was far more complex than it had ever been before. The new situation did not offer a relevant setting for the old conceptual separation of the public and private spheres. The proliferation of huge government contracts—with defense industries, with private companies doing work unrelated to defense, and with universities both public and private—blurred the issue as never before. In the mixed economy nothing seemed purely public, nothing purely private. And within such a context, no status—public, private, or mixed—was in and of itself a route to legitimacy.

Instead, a series of new criteria arose that transcended the public-private question. Later in this chapter, these criteria or pillars of legitimacy are discussed in detail. First, however, the relevancy to the present discussion of both these criteria and the concept of legitimacy itself should be made more explicit.

The reason why the legitimacy question is so important is that it underlies whatever changes different groups may wish to make in the business-government relationship. These include, among other things, proposals for deregulation, for "getting the government off the backs of the people," and for the "reprivatization of public functions." In order to clarify such issues and estimate the likely degree of their fulfillment, it is appropriate not only to place the American experience in cross-national and historical perspective, as this chapter has done up to now. It is also necessary to examine the boundaries of legitimacy in some of the institutions that have been developed under the recent regime of the mixed economy.

A premise of this approach is that a question such as "Which types of activity belong in the public sector and which in the private?" is slightly off the mark. A better way to get at the important issues is to ask "What are the conditions of legitimacy in modern America for different types of public, private, and mixed undertakings?"

Often, new medical principles are discovered by researchers who look at uncommon pathologies or mutations. By much the same

route, we can get a clearer idea of modern institutional legitimacy by examining the performance of organizations that combine public and private roles in some unusual way in the mixed American economy. It is likely that the American polity holds public, private, and mixed organizations alike accountable for the fulfillment of the conditions of legitimacy and that in some respects it makes little difference which of these institutions carries on a given activity.

For each, the conditions of legitimacy seem to be a complex amalgam of efficiency, fairness, and shared power. Often we tend to associate the first with the private sector and the next two with the public. But long-term legitimacy in America for any institution, whether public, private, or mixed, requires satisfactory performance on all three counts. To illustrate let us examine briefly the experiences of two mixed institutions that grew out of the New Deal. The examples are, first, the Tennessee Valley Authority, a public corporation with a variety of functions; and second, the public-private corporate regulatory system constructed under the aegis of the Securities and Exchange Commission.

THE TENNESSEE VALLEY AUTHORITY

The TVA was created in 1933 as a multiple-purpose river project intended to raise the standard of living in a depressed area of about 40,000 square miles and about 2.5 million population. The new agency was to construct dams, develop an inland waterway, control the river's chronic flooding, develop new forms of fertilizer, and bring electricity to farms, only 3 percent of which had it at the time in this region. The TVA was a controversial undertaking, primarily because of the provisions about electricity. Privately owned power companies were already serving the area, and they would have to be coopted or displaced. President Herbert Hoover had vetoed earlier legislation to do these tasks. His veto message expressed the characteristic American concern about keeping public and private affairs separate. For the government to enter into a competitive situation with private companies, said Hoover, "is not liberalism. It is degeneration" (U.S. President 1931).

President Franklin D. Roosevelt, on the other hand, regarded public ownership of utilities as a legitimate function of government, given certain circumstances. In the case of the Tennessee Valley, he showed no hesitation. Just before FDR signed the TVA Act, Senator George Norris of Nebraska, who had sponsored both this legislation and the bill Hoover had vetoed, put a question to him: "What are you going to say when they ask you the political philosophy behind

TVA?" Roosevelt answered with typical blandness, good humor, and unconcern about mixed enterprise: "I'll tell them it's neither fish nor fowl, but, whatever it is, it will taste awfully good to the people of the Tennessee Valley" (Goldman 1952: 339).

The TVA has remained controversial to this day. But in the years since 1933 it has also achieved an extraordinarily high reputation, both in the United States and even more so abroad, for the efficient performance of its multiple functions. Eventually it became the largest electric utility in the United States. It pioneered such innovations as the declining-block utility rate structure, the coordinated management of water reservoirs, and creative methods of personnel management. And it succeeded brilliantly in its overall strategy of a unified development of the Tennessee River system into a waterway whose flow can be controlled almost like a kitchen tap. That in the process of doing all these things the TVA forced a major privately owned utility out of business did not appreciably detract from the agency's overall reputation for success (McCraw 1971: ch. 8).

It was not until the 1960s and 1970s that the TVA ran into real trouble. In those decades, the agency's halo not only began to tarnish, but ultimately fell to the ground. The new problems had to do, first, with the pollution caused by its gigantic thermal power plants, which fouled the air and used huge quantities of strip-mined coal. Environmentalists protested against the spectacle of a government agency's doing no better on environmental issues than the privately owned utility industry was doing.

A second wave of problems struck in the 1970s, as the perceived dangers of nuclear power and the skyrocketing cost of both fuel and capital all hit simultaneously. When these blows fell, TVA's public-sector status afforded it no immunity. The agency was very adversely affected, just as were its counterparts in the investor-owned part of the industry. (The public sector accounts for about 20 percent of the electric power industry in America [McCraw 1976: 1372-1380]).

The significance of the TVA story to the present discussion falls into three parts. First, the multiple-purpose job accomplished by this public agency could not have been done by a private company or even a consortium of companies. Public ownership was *sine qua non*. Only a part of the enterprise was even potentially profitable, and this part initially was regarded as incidental to the harnessing of the river and the general uplift of living standards. There simply would have been no way to "privatize" all of TVA's multiple functions.

Despite its acknowledged success, the TVA experiment has never been duplicated in the United States. When Senator Norris introduced a bill in 1937 for "seven little TVA's" to be built in other parts of

the country, the proposal did not even receive Roosevelt's support and did not come close to passage. In the American system, one TVA was enough, even in the depression atmosphere of the 1930s. The nation did not need additional yardsticks to measure the efficiency of the private utilities. Indeed, it is clear that without the crisis of the Great Depression, there would not have been even one.

Finally, when the TVA encountered intractable problems beginning in the 1960s, public-sector status not only failed to shield it from attack but actually compounded its problems. The pressures it received from environmentalists and from its own customers who were outraged at the rapid rise in its rates for electricity were all the stronger because TVA was perceived as part of the government.

In all these ways, the TVA's experience is a useful litmus test for the elements of institutional legitimacy in modern America. Its odyssey suggests that in some fundamental ways, it makes little difference whether an organization is wholly public, wholly private, or mixed in nature. If the organization is to maintain its legitimacy, it must be perceived as performing its tasks efficiently, fairly, and without too many unpleasant side effects. There is no immunity from these requirements.

CORPORATE CONTROL AND THE SECURITIES AND EXCHANGE COMMISSION

A second revealing story of a mixed system began with the passage of the Securities Act of 1933 and the Securities Exchange Act of 1934. In the years since this legislation, the Securities and Exchange Commission, which administers both laws, has developed a reputation as the most effective regulatory agency in the federal government (Heffron 1971: 188; U.S. Senate 1977: 1, 270; SEC Presidential Transition Team 1980: 1, 9).⁷ It might even be argued that without the SEC, business corporations in America would not now enjoy the legitimacy they do. The agency promotes the disclosure of information in an unusually thoroughgoing yet noncoercive way. Nearly all business executives have a well-founded respect for it. But it is the strategy behind the SEC's achievement in a mixed public-private system, in addition to the success itself, that is of interest here (McCraw 1982).

Confronted in the 1930s with a national economic depression and a discredited, moribund securities market, the SEC could easily have construed its mission as a punitive attack on unpopular giant corporations. Instead of wreaking vengeance, however, the agency set out to restore legitimacy to Wall Street's essential function of channeling

investment capital into enterprise. In order to do this, the architects of the SEC's laws and policies emphasized disclosure and publicity of corporate affairs much more than the hunting down and punishing of miscreants. The strategy looked forward rather than back and focused on new reports rather than on past sins. The SEC did not, for example, dwell on corporate America's role in bringing on the Depression. The legislation, very carefully drawn (which was atypical for regulatory laws), required corporations to report annually to the SEC on a host of intimate details of their business.

In a crucial decision, the SEC opted for enforcement of these provisions not by a huge Washington bureaucracy but by a mixed public-private regulatory system. The agency worked hand-in-hand with the American accounting profession in order to promote accurate and useful reports. In effect, private-sector accountants were made the linchpin of the scheme of regulation. The accountants themselves cooperated enthusiastically once their panic over personal liability was assuaged. The size of their profession multiplied rapidly in order to meet the SEC-mandated requirements for accounting services. What is significant is that the SEC deliberately used private agents to serve public functions.

A similar strategy underlay the SEC's management of its relationship with the organized exchanges, especially the one in New York. Rather than take over the New York Stock Exchange, as it might well have done given the disgraceful record of Wall Street in policing itself, the SEC pursued a policy of encouraging reform-minded insurgents within the exchange organization. This approach achieved complete success within a few years, despite several contrary forces: opposition to cooperation from militant SEC staff members, stonewalling by the ruling oligarchs of the stock exchange, and frequent carping from the *New Republic* and other liberal organs, which argued that the SEC was contaminating itself by association with wrongdoers. Implicitly, the *New Republic* was insisting that the public and private spheres must be kept separate, that mixed systems of this nature were illegitimate.

The final brick in the SEC's edifice of public-private regulatory structures came in 1938, when the agency helped to organize a privately run regulatory body for the so-called over-the-counter portion of the securities industry. This new institution, the National Association of Securities Dealers, Inc., looked like an ordinary trade association. In fact it became an effective regulatory force for the industry. The association did not hesitate to discipline erring members through fines, suspensions, and expulsions. Expulsion from the association meant removal from the industry. And the beauty of the system was

that as a private institution the association was not constrained by the procedural red tape that delayed implementation of sanctions by public regulatory agencies.

The SEC achieved its remarkable success primarily by encouraging and involving third-party groups from the private sector. These players, in turn, supported both the process and the SEC itself. The litigation, delay, and adversarial posturing so characteristic of other regulatory proceedings were thereby finessed.

Both the TVA and SEC stories are a good deal more complicated than suggested in these synopses, and the precise nature of bureaucratic "success" remains subjective and obscure. Such success as each of the two agencies did achieve was not gained without internal bickering within the organization, serious attacks from without, and perennial problems with Congress. In each agency, moreover, success could not have come without first-rate talent. Such men as Arthur E. Morgan and David E. Lilienthal of the TVA, James M. Landis and William O. Douglas of the SEC, were not just good public servants. They were topflight strategists who would have made their marks in many other lines of work in either the public or private sector.

To understand the likely fate of proposals for public-private partnerships or for the reprivatization of public functions, it is necessary to comprehend both the pillars of and barriers to success in mixed undertakings.

PILLARS OF SUCCESS

1. **A Sense of Crisis.** The most creative experiments in mixed undertakings have come during economic crisis, wartime, or intense international competition. The TVA and SEC during the Great Depression, the Manhattan Project and mobilization of the private sector during World War II, NASA and the moon shot during the post-Sputnik competition with the Soviet Union, all come to mind as instances of successful public-private collaboration in mixed institutions for the purpose of meeting some crisis. The perception of crisis is not a sufficient condition for success, and it may not even be essential. But it is certainly helpful. For example, a form of Medicare was introduced as early as the Truman administration, but not until the Great Society was the public perception of a crisis in health care sufficiently powerful to push through the required legislation.

2. **The Opportunity of a Positive-Sum Game.** In the examples just cited, almost every player ended up better off. There were few clear losers. Even in the TVA story, the principal loser on the private

side, Mr. Wendell Willkie of Commonwealth and Southern Corporation, parlayed his loss into the Republican nomination for the presidency in 1940. In the SEC case, Wall Street regained a measure of legitimacy, the accounting profession acquired new functions and hordes of new members, and the over-the-counter brokers and dealers gained power over the fly-by-night operators who were giving their industry a bad name. The Manhattan Project offered physicists and other scientists an enormous budget and relatively attractive working conditions. War mobilization presented the opportunity for the making of great private fortunes without profiteering. NASA was profligate with public funds during its heyday in the 1960s. And Medicare, with all its faults, finally passed Congress once the medical profession perceived it as an economic boon as well as an alternative to something more drastic.

3. **A Coherent Strategy Implemented by First-Rate Talent.** Most of these successful experiments were carried out by unusually able architects of the original strategies and by capable administrators who believed in the justice of the cause. The TVA and SEC leadership has already been described. In addition, there were Robert Oppenheimer and Leslie Groves of the Manhattan Project, James Webb of NASA, Robert Moses of the New York Port Authority, Lucius Clay of the interstate highway system, and Hyman Rickover of the Navy's nuclear power program. Each one of these leaders understood the necessity for a coherent strategy and for getting the right subordinates to carry it through.

4. **High-Percentage Initial Steps.** The first thing TVA did was build a great dam. Working round the clock, it employed four six-hour shifts of workers in order to alleviate unemployment in the depressed region. Given the engineering talent the agency was able to attract (in large part because private construction was languishing at the time), there was hardly any way its first project could fail. The initial success led to others and infused the whole organization with a spirit that became its trademark. Much the same thing happened with the SEC. And NASA took extraordinary pains to make its initial manned rocket launchings not only successful in the technical sense, but the occasions for national media spectacles.

5. **An Identifiable Measure of Success other than Profit.** On a cost-benefit calculus, nearly all of the achievements listed so far become less clearly successful. Yet each project tended to be either self-justifying through its fulfillment of noneconomic criteria (making

the atomic bomb; reaching the moon), or was financially self-sustaining (the TVA power program through customers' revenues, the SEC through requirements that private accountants be paid by their corporate clients).

In the absence of severe crisis, this pillar is perhaps the most difficult of all to put in place. If no clear proof of success is available, the issue returns to the bottom line of the income statement. And if that is to be the criterion, then the very nature of capitalism's allocation of resources is not going to be helpful on a broad scale to any undertaking except the investments of first choice as defined by capital markets.

6. **Some Means of Controlling the Agenda and Limiting the Number of Players.** Almost any mixed-function enterprise or public-private collaboration depends, if it is to succeed, on the orderly implementation of a coherent strategy. If the agenda of a given undertaking is up for grabs and the number of participants is unlimited, then the likelihood of success is small.

Because of the upheavals in American society over the last twenty years, one can argue that insuperable barriers to the control of important public agendas now exist. The number of interest groups that now scramble for attention to their own narrow goals—whether economic, political, racial, social, sexual, or whatever—makes it clear that cozy bilateral business-government relationships, even on an ad hoc basis for admirable purposes, may often be doomed. The revolution in judicial standing, which makes it possible for all sorts of players to delay almost any new undertaking through exploitation of the court system, has already killed numerous projects that in an earlier time would have sailed through. One cannot avoid wondering whether some of the successes listed could have survived had they been born in the media-dominated, litigious atmosphere characteristic of American public life today. Several commentators have expressed doubt, for example, that the interstate highway system could have been built had it been proposed in the 1970s rather than the 1950s. Yet it is equally clear that without the revolution in judicial standing and the opening up of access to power, the civil rights movement and other social achievements of the last generation could not have occurred. The old dilemmas remain, and as usual there are no easy solutions.

Despite such problems (and the list could be much longer), one salient trend of the 1980s suggests that the barriers to successful public-private collaboration might be breached. This is the trend toward viewing countries as competitors, or toward viewing compe-

tion from abroad as a threat to domestic jobs. Today, as more and more of the American people begin to understand their economic vulnerability to the superior industrial efficiency of foreign producers, they might well begin to see that business-government hostility within the United States compounds the problem and delays the adjustment. As in the past, so too in the present: A sense of crisis can redefine legitimacy in any society. In the face of crisis, customs that seem entrenched or even sacred today might tomorrow become very flexible indeed. This is just the kind of thing that happened during World War II, when the issue of national survival made adversarial relationships within the American polity suddenly inappropriate, even irrelevant.

The history of the corporation itself illustrates the same point. That history began not in an adversarial but a cooperative context. It would probably surprise many American business managers today to discover that the roots of corporate development lie deep within the political state. The pattern in the early nineteenth century was to allow the incorporation of only those enterprises regarded as helpful to the public good. Bridges, turnpikes, and banks were the favored fields. The numerous special charters that characterized early nineteenth-century business history reflected a conception of the corporation as agent of the state. The chartered companies would perform functions that were necessary but that the miniscule state did not wish to perform for itself. In this sense proposals in our own time for private companies to assume public functions resonate with the origins of the business corporation in America (Handlin and Handlin 1945).

During the last part of the nineteenth century, however, state governments adopted laws permitting free incorporation without special legislative action. This ushered in the familiar modern era in which almost anyone could start a company for almost any business purpose. Yet neither here nor in the earlier period did a coherent theory of corporate legitimacy develop, aside from the original notion of incorporation as a privilege bestowed in exchange for the discharge of some public purpose. In the twentieth century, corporate legitimacy has rested almost entirely on the demonstrated ability of the device as a means of mobilizing capital for a growing economy. For good or ill, therefore, the legitimacy of the business firm has been entirely utilitarian. When it has performed poorly, as during the Great Depression, it has tended to lose legitimacy (Hurst 1970).

Seen against this complex historical background, the "reprivatization" movement raises perplexing issues. Suppose, for example, it is suggested that inner cities be revitalized through the employment of

ghetto youth by profit-making corporations whose payrolls are to be subsidized by government. Such experiments have succeeded on a small scale, as we know. But consider the odds against widespread replication of these happy outcomes. Suppose that the arrangement became so successful in the financial sense that the corporation began to make a large profit. How long would the experiment be perceived as legitimate? For the public image of the undertaking, would it not be disadvantageous if the sponsoring company were a big business? But would not such a powerful company be the only kind able to afford the experiment in the first place? Assuming a large profit by a big business, how long would it be before an enterprising journalist wrote a convincing story that the company was enriching itself at the expense of taxpayers by taking advantage of loose public pursestrings? How long before "60 Minutes" brought the scandal to the attention of a national television audience?

Or consider the opposite financial performance. Suppose the undertaking lost money year after year. How long before complaining shareholders put a stop to it? Is it not illegitimate for companies deliberately to lose money, however worthy the cause? Given this damned if you do, damned if you don't situation, thoughts on the theme of "reprivatization" evoke a bit of hope, but some pessimism as well.

NOTES TO CHAPTER 2

1. Renato Mazzolini, *Government Controlled Enterprises* (New York: Wiley, 1979). The pie chart depicted in the present essay in some respects understates the extent of state-owned enterprise. Canada, for example, established a state-owned oil company in 1975 and has continued to nationalize elements of that industry, even though the chart shows no public ownership of oil in Canada. On the U.S. situation, see Annmarie Hauck Walsh, *The Public's Business* (Cambridge, Mass.: MIT Press, 1978).

2. The growth rates of national economies can be traced in the pages of the *Economic Report of the President* (Washington, D.C.: U.S. Government Printing Office), various years. For the 1982 *Report*, see Table B-109 on p. 355.

3. I do not wish to be misleading on this point. There is in America a long history of government-business interpenetration, occasionally even symbiosis. The relationship between the Defense Department and its thousands of contractors, the American system of price supports and research assistance to agriculture, and numerous other examples attest to the dangers of any easy generalization about American business-government relations. The many works of the historians James Willard Hurst and Ellis W. Hawley are especially helpful on this point. See also Harry N. Scheiber, "Law and Political Institutions," Gerald D. Nash, "State and Local Governments," Thomas K. McCraw, "Regulatory Agen-

cies," and Byrd L. Jones, "Government Management of the Economy," all in volume 2 of *Encyclopedia of American Economic History*, edited by Glenn Porter (New York: Scribner's, 1980). A useful and comprehensive text is H. H. Liebhaftsky, *American Government and Business* (New York: Wiley, 1971).

4. I have in mind here Alexis de Tocqueville, M. G. Jean de Crevecoeur, Mrs. Trollope, and other articulate foreign observers of the American scene. For a sample covering a wide spectrum of time, see *America in Perspective: The United States through Foreign Eyes*, edited by Henry Steele Commager (New York: c. 1947, New American Library Edition, 1961).

5. The argument I am making in this section about the differential growth rates of big business and government in the United States, including some of the numbers about federal employment, was first articulated by Alfred D. Chandler, Jr., in an essay called "Government versus Business: An American Phenomenon," in *Business and Public Policy*, edited by John T. Dunlop (Boston: Harvard Graduate School of Business Administration, 1980), pp. 1-11.

6. These comments are based on my own conversations on this subject with European and Japanese business executives.

7. These favorable judgments of the SEC are typical, but such judgments are of course not unanimous. It is within the context of other regulatory agencies, not against some ideal standard, that I am positing the SEC's success.

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* PART II

PATTERNS OF PUBLIC-PRIVATE
RELATIONS

Homework

Based on the work-sheets used in the group-exercises, please prepare the sector analysis for your own municipality.