Volume Title: Fiscal Institutions and Fiscal Performance

Volume Author/Editor: James M. Poterba and , editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-67623-4

Volume URL: http://www.nber.org/books/pote99-1

Publication Date: January 1999

Chapter Title: Budgetary Institutions and the Levels of Expenditure Outcomes in Australia and New Zealand

Chapter Author: Campos, Sanjay Pradhan

Chapter URL: http://www.nber.org/chapters/c8030

Chapter pages in book: (p. 233 - 264)

10 Budgetary Institutions and the Levels of Expenditure Outcomes in Australia and New Zealand

J. Edgardo Campos and Sanjay Pradhan

10.1 Introduction

In recent years, there has been heightened concern about poor fiscal outcomes in both developed and developing countries. Governments have had to reduce aggregate public spending and deficits due to serious macroeconomic imbalances. At the same time, governments have had to focus attention on the composition of spending in deciding where to cut expenditures, that is, increase allocative efficiency. Moreover, many have recognized the need to address often serious problems with technical inefficiency in the use of budgeted resources (World Bank 1993). But while policymakers and researchers have recognized these three basic problems, for the most part they have not addressed them in an integrated manner. In particular, the interrelationships among these problems have not been systematically examined. Macroeconomists have focused on the control of aggregate spending and the deficit. Experts in public administration have worked predominantly on improving technical efficiency. And fiscal economists have concentrated on issues of allocative efficiency.[1]

Further, much of the work on these issues has not dealt with the underlying institutional arrangements that affect the outcomes. Indeed recently, there has been a flurry of work on the role of institutions in influencing aggregate fiscal discipline (Alesina et al. 1996; von Hagen 1992). But this work has not addressed the implications of these and other institutional arrangements on allocative and technical efficiency.

J. Edgardo Campos is senior economist at the Economic Development Institute of the World Bank. Sanjay Pradhan is sector leader of the Public Sector and Institutional Reform unit of the Eastern Europe and Central Asia Region of the World Bank.

1. The World Bank, for instance, has devoted enormous resources to carrying out public expenditure reviews to evaluate public expenditure allocations.

The relative lack of attention to coherence and institutional underpinnings stems in part from the absence of an analytical framework within which to evaluate a public expenditure management system. In this paper, we present such a framework. Specifically, we examine how institutional arrangements (i.e., the rules, norms, procedures) governing the budget process affect *incentives* governing the allocation and use of resources. Using theories from the new institutional economics to guide us, we identify key theoretical problems that underpin any public expenditure management system. We then construct a set of generic institutional arrangements each of which can potentially address one or more of the problems and link with each arrangement relevant accountability- and/or transparency-enhancing mechanisms. We categorize these arrangements and mechanisms according to their relative impact on three levels or categories of expenditure outcomes—the aggregate level of spending and the deficit, the composition of expenditures, and the technical efficiency in the use of budgeted resources. On the basis of this categorization, we are able to develop a parsimonious measure of the potential effectiveness of a system with respect to each of the three expenditure categories. We are then able to systematically examine key features of reform efforts, particularly the interlinkages, and are able to correlate the "quality" of public expenditure systems with expenditure outcomes.

Through our methodology, we are able to capture the principal changes that the radical reforms in New Zealand and Australia introduced. We are able to show that the New Zealand reforms have been geared to achieving aggregate fiscal discipline and enhancing technical efficiency, and that formal mechanisms for transparency and accountability have been central to these reforms. The data reveal that our measures, the slack coefficients, are correlated with expenditure outcomes (e.g., reduction in fiscal discipline and unit costs of service delivery). Our slack coefficients for Australia confirm that the thrust of the reforms was to focus attention on strategic priorities and achieve a significant shift away from central to line agencies as the source of savings in order to achieve aggregate fiscal targets. The result has been a dramatic reduction in the level of spending and deficits, and more significantly, large churnings in the composition of spending of a highly activity-specific nature.

This paper is divided into five sections. In the following section, we present the analytical framework and identify the key institutional arrangements that define the parameters of a public expenditure management system. We also construct indices to represent each of the key institutional arrangements, and we show how the indices can be used to derive three measures of the potential effectiveness of a system with respect to the three categories of expenditure outcomes. In section 10.3, we describe the pre- and postreform systems of New Zealand and Australia, apply the methodology developed in section 10.2 to derive the measures of potential effectiveness for each system, and correlate changes in these measures with changes in expenditure outcomes. We then compare the two postreform systems and derive some implications for the study of budgeting systems. In section 10.4 we discuss recent developments in the reforms in each country. We conclude the paper with a brief discussion of directions for future research in this relatively nascent area.

10.2 The Analytical Framework

Understanding the intricacies of a country's public expenditure management system is a complicated and demanding task. In this paper, we attempt to unravel the complications that arise in constructing an effective public expenditure management system, to present a methodology for characterizing the system parsimoniously without losing its essential features, and to undertake some correlations of system characterizations and expenditure outcomes. To organize our approach, we categorize expenditure outcomes according to three basic objectives that any system needs to achieve: (i) to instill *aggregate fiscal discipline,* (ii) to facilitate *strategic prioritization of expenditures across programs and projects,* and (iii) to encourage *technical efficiency in the use of budgeted resources,* that is, achieve outputs at the lowest possible cost.

Three distinct but interrelated theoretical problems impinge on the task of achieving the above objectives. The first has to do with what is known as the tragedy of the commons. Disparate claimants on government spending view the budget as a common resource pool into which they can dip with little or no cost. The second pertains to information revelation and "vote cycling" problems that primarily impede the strategic prioritization of expenditures across sectors and programs. The third involves information asymmetry and incentive incompatibilities within the government hierarchy (e.g., the principal-agent relationship between the central and line ministries), which can impede the efficient allocation and use of budgeted resources. Each of these problems can affect expenditure outcomes adversely. Each is inherently difficult to resolve. Together they present a formidable task.

To guide us in our analysis, we use theories from the new institutional economics to help us identify key institutional arrangements that can help address these problems. We describe each of these arrangements, explain briefly how they work, and indicate why they can help resolve one or more of these problems. From this, we are then able to piece together a set of institutional arrangements that can potentially make for an effective public expenditure management system.

Institutional arrangements, however, need not necessarily have any effect. For them to be binding, mechanisms that make adherence or nonadherence to these rules transparent and that hold the government and its ministries accountable for bad performance are necessary. *Transparency and accountability* mechanisms impose implicit costs on politicians and bureaucrats for violating rules and thus can make their commitment to the rules credible.

10.2.1 Aggregate Fiscal Discipline and the Tragedy of the Commons

Aggregate fiscal discipline is impeded by the so-called tragedy of the commons. There are many claimants to the budget, for example, interest groups, legislators, line ministries. Each has different preferences for the manner in which the budget is to be allocated, that is, the composition of spending, and each exerts pressure on the government to bias spending in the direction of their preferences. Given that taxes are collected from the general public, the tax burden of a claimant's spending priorities, which is spread across many groups and individuals, is likely to be considerably lower than the total social cost of the implied programs. On the other hand, the benefits accrue mostly to the claimant. Consequently, a claimant will always demand a level of spending on its desired programs that exceeds the level that is socially optimal.[2] For these reasons, constraints on the aggregate level of spending and deficits over the medium term become important. Absent any constraint, meeting the demands of disparate claimants is likely to result in large, unsustainable deficits that translate into an unstable macroeconomic environment—high inflation, high interest rates, burgeoning current account deficits—which can ultimately retard growth.[3]

Key institutional arrangements that can help mitigate the tragedy of the commons, together with associated transparency and accountability mechanisms are summarized in part 1 of table 10.1. The tragedy of the commons problem can be mitigated by introducing a medium-term macroeconomic framework into discussions of the budget, granting the central ministries a dominant position on decisions concerning aggregate spending, and by establishing formal constraints on spending and borrowing. A macroeconomic framework provides a basis for evaluating the implications of the public expenditure program for macroeconomic variables and gives the government a means to have claimants incorporate the real cost of inflation as well as implied changes in other macro variables into their decision calculus. It would be important, however, for all public expenditures, including extrabudgetary funds, to be included in the macroeconomic framework; in Ukraine in 1991 for instance, extrabudgetary funds accounted for about 12 percent of GDP and were not incorporated in the macro framework. To be effective, the macroeconomic framework needs to be supported by underlying institutional arrangements that ensure coordination among the key central agencies. For example in Thailand, the four central agencies—the Central Bank, the Budget Bureau, the Ministry of Finance, and the Planning Ministry—work closely to develop and monitor an internally consistent set of macro aggregates.

2. See Weingast, Shepsle, and Johnsen 1981 for a more detailed discussion of this issue.
3. This is consistent with the observation that macroeconomic crisis generally induces governments to confront and scale down the deficit (Haggard and Kaufman 1992).

Table 10.1 Key Institutional Arrangements and Expenditure Outcomes

Institutional Arrangements	Accountability	Transparency
1. Aggregate fiscal discipline		
A. Macro framework and coordination mechanisms	Ex post reconciliation	Published
B. Dominance of central ministries	Sanctions	Made public
C. Formal constraints	Openness of financial markets	Freedom of the press
D. Hard budget constraints		
E. Comprehensiveness of budget		
2. Prioritization		
A. Forward estimates	Reporting on outcomes	Published
B. Comprehensiveness of the budget	Ex post evaluations	Freedom of the press
C. Flexibility of line agencies	Hard budget constraint	Made public
D. Breadth of consultations	Technical capacity of parliament	Comprehensible
E. Use of objective criteria		
3. Technical efficiency		
A. Civil service pay and merit-based recruitment/promotion	Clarity of purpose/ task	Published
B. Managerial autonomy of line agencies	Chief executive tenure	Made public
C. Predictability of resource flow	Financial accounts, audits	Freedom of the press
	Client surveys	
	Contestability in service delivery	

Line ministries and other claimants have relatively parochial views on the budget. By virtue of their mandates and jurisdictions, the central ministries are better able to evaluate the big picture of which aggregate spending and macroeconomic trends are major components. Hence, the tragedy of the commons can also be mitigated by granting the central ministries dominance over aggregate spending. In Thailand, for instance, the four central agencies have had considerable autonomy and authority in setting aggregate fiscal targets; there have been only two years in the last few decades where the cabinet or the parliament has overridden their targets.

Given the nature of politics in many countries, however, this may not be enough. There will be constant pressure from claimants to expand the budget envelope. Establishing explicit rules that put specific limits on spending and borrowing and that impose penalties on overspending by line ministries can give the central ministries more leverage over claimants, that is, increase their bargaining power. In practical terms this means central ministries can refer to objective, predetermined rules to defend their decisions. Similarly, Indonesia's constitutional balanced-budget law prohibits the government from incurring any domestic borrowing.

In theory, then, aggregate fiscal discipline will depend upon (i) the existence of a medium-term expenditure framework based upon a consistent macroeconomic program; (ii) the relative dominance of the central ministries; and (iii) the existence of formal constraints on spending and deficits. But while such rules may exist on paper, they may not be binding. The following mechanisms can help improve accountability and/or transparency and thus impose political costs on politicians and bureaucrats for violating the rules: (i) reconciliation between ex ante and ex post aggregate spending and deficits; (ii) sanctions against overspending; (iii) publication and dissemination of the results to the public; and (iv) integration of all expenditures within the budget, including extra-budgetary funds. New Zealand offers the most dramatic example of accountability and transparency mechanisms that bind the government to aggregate fiscal discipline. The contract of the governor of the central bank is explicitly linked to inflation, and the contract of the minister of finance is linked to aggregate fiscal performance. Further, the government is legally required to commit itself to aggregate fiscal targets, and is legally bound to full and frequent disclosure. Open financial markets have exerted a disciplining force with the publication of this data. Similarly, Indonesia's balanced-budget law does not by itself exert a binding influence because while it prohibits domestic borrowing, it allows external borrowing; external discipline is in fact exerted by open capital accounts in Indonesia.

Indeed, *the openness of financial markets* represents a subtle mechanism that imposes accountability on the government for maintaining aggregate fiscal discipline. Open financial markets can potentially act as a disciplining device on the government even in the absence of other mechanisms. If the government decides to run a large deficit, institutional investors and fund managers may perceive this to imply macroeconomic problems down the road, such as inflation, devaluation, and so on, and thus may decide to pull their funds out and move them to other countries. Should this happen then the government is likely to confront a macroeconomic crisis, which would likely have serious political repercussions. In short, open financial markets make it politically costly for the government to run a large deficit.[4]

10.2.2 Strategic Prioritization, Transactions Costs, and Consensus Building

Given aggregate fiscal discipline, the second key challenge is how to prioritize competing claims on scarce resources. Once again, the underlying problem is the tragedy of the commons, which creates a tension among competing

4. Indeed, our preliminary explorations (Campos, Davoodi, and Pradhan 1995) into this issue suggests that more open financial markets tend to reduce the relative size of budget deficits (deficit-to-GDP ratio).

claims from individuals and groups. But there are two additional problems that make prioritization difficult: high transactions costs in getting feedback to and from civil society about how to map expenditures onto preferences, and information asymmetries within the government hierarchy characterized by the fact that line agencies possess better information about how best to allocate expenditures within their mandates.

Prioritization is fundamentally a political process. Politicians will set priorities based upon their understanding of the preferences of their constituencies: the key here is whether there are institutional arrangements that improve the quality of information needed to do this effectively. Key institutional arrangements and their associated transparency and accountability mechanisms, which can facilitate prioritization, are summarized in part 2 of table 10.1.

Invariably the tragedy of the commons will create demands in excess of the constraints. This raises the transactions costs of collective decision making within the political process because it creates a situation in which individuals and groups will strive to restructure coalitions in order to enlarge their share of a fixed pie.[5] This implies the need for institutional arrangements that help build consensus among the competing groups on the relative expenditure allocations.[6]

Consensus building requires information on what trade-offs are being made, including what everyone is having to give up and gain, together with a vision of future benefits that will derive from current sacrifices. Thus for prioritization, the most important arrangement is likely to be a process that articulates and seeks consensus over strategic outcomes that expenditures seek to achieve in the medium term and that links expenditure allocations with these strategic outcomes. This could include, for instance, a decision-making mechanism in the cabinet to decide upon strategic priorities informed by a system for comparing the medium-term costs of competing policies within a given hard budget constraint.

Line ministries have better information on how best to allocate resources within their sectors to achieve given objectives. Consequently, a complementary arrangement that would economize on transactions costs would be to give them the flexibility to determine what new programs to introduce and what existing programs to cut; that is, by allocating resources within their ceilings, information costs are reduced. For as long as line ministries can be held accountable for their performance (through reconciliations and ex post evaluations) and their performance is made transparent, they will tend to use the information they possess (but which central ministries and politicians do not) to allocate their ceilings to achieve their given objectives.

Australia offers the best example of such a priority-setting process. The process engenders strong focus on strategic outcomes that expenditure programs

5. Theoretically this refers to the problem of "vote" cycling (see McKelvey 1976).
6. On the U.S. Congress, see Weingast 1979; Krehbiel 1991; Shepsle 1979.

are seeking to achieve, and incorporates a medium-term expenditure framework that link allocations to the achievement of these outcomes. At the cabinet level, the process focuses on evaluating and setting strategic priorities based upon medium-cost estimates of spending and savings options identified by line agencies as well as by the cabinet. Line ministries are given a hard budget constraint consistent with these intersectoral priorities, but then given flexibility to reallocate resources within their portfolios. These medium-term costs of policies, called forward estimates, are rolled over into future budgets provided policies do not change. This lowers transaction costs and helps focus attention on changes in strategic priorities. Accountability is achieved through the hard constraint, reporting on results or outcomes, and a strong emphasis on ex post reconciliations and evaluations. Australia, for instance, publishes a reconciliation table with its budget showing the deviations between last year's forward estimates and this year's proposed allocations. This is accompanied by an explanation of the observed deviations. Australia also undertakes systematic ex post evaluations of its programs. Among developing countries, Colombia is launching the most ambitious program of ex post evaluations, and Malawi is attempting to institute a priority-setting process along the lines of Australia's.

A credible priority-setting process also requires that all expenditures be incorporated into the budget. In other words, the budget needs to be comprehensive. The existence of extrabudgetary funds and/or the exclusion of certain expenditure categories, for example, subsidies to public enterprises, is likely to weaken the ability of decision makers to allocate expenditures to achieve strategic outcomes. For instance, considerable earmarking of resources for particular expenditures in several Latin American countries (e.g., Colombia) effectively removes large chunks of expenditures from the prioritization process. Comprehensiveness or unity of the budget is perhaps the second most important arrangement for prioritization.

There is also a need to establish impersonal rules for evaluating the relative importance of programs and projects to complement the prioritization process. Since impersonal rules apply equally to every program and project, the government cannot be as easily accused of favoritism and thus is better able to defend itself against criticism. The use of economic cost-benefit analysis and incidence analysis are examples of such rules. The first can provide information on the net social gain, while the second can potentially make transparent who gains and who loses. These rules can thereby help claimants evaluate tradeoffs more objectively and thus arrive at agreements more quickly.

To build a consensus, the decision-making process also needs to extract information about the preferences of different claimants, that is, determine the demand curve. Decisions have to be made about broad strategic priorities, for this determines ministerial objectives, ceilings, and allocations over the medium term. But again asymmetries in information between the government and claimants make this difficult. Consequently, there is a need for institutional arrangements that lower the costs of transmitting the information about social preferences to government and thus in determining broad strategic priorities.[7]

Broad consultations that involve representatives of claimants and that incorporate feedback and provide oversight at relatively low transactions cost can help arrive at strategic priorities. The most extensive, tractable form of such consultations is likely to involve parliamentary discussions of the budget. Parliamentarians represent some segment of the population as well as certain interest groups. Moreover, parliamentary committees and subcommittees generally evaluate specific components of the overall public expenditure program. So by exposing proposed public expenditure allocations to parliamentary scrutiny, feedback can be obtained on the appropriateness of the priorities and adjustments made accordingly.

In some countries, corporatist arrangements tend to complement if not dominate parliamentary procedures.[8] In such cases, representatives from various sectors in society become an important sounding board of the government. It is helpful if not necessary to create a forum through which these representatives can comment on and criticize budget proposals.[9] In any case, opinion surveys can help identify broad priorities that discussions with parliament and/or representatives of corporatist groups can refine.

Critical to the success of the demand-revealing (and thus consensus-building) mechanisms is a set of rules or criteria that introduces incentives for "shared sacrifice"; that is, claimants agree to smaller allocations within a constrained budget envelope. This suggests the need for commitment devices that insure claimants that their current sacrifices will result in future benefits and that each one will bear some part of the burden.[10] Hence, mechanisms that hold government accountable for allocating resources accordingly and making those allocations transparent become important. Unless claimants can be sure that the government will indeed allocate resources accordingly, they will be much less willing to support any proposed allocation, reducing the likelihood that a consensus can be reached.

Consensus building is really about creating institutional arrangements for claimants and the government to exploit potential gains from trade, that is, logrolling. Hence, for a consensus to emerge, arrangements that address logrolling problems are needed. There is by now a considerable literature on this in the context of the United States (see Shepsle and Weingast 1994 for a literature survey). However, much of this discussion is premised on the fact that

7. In practice what this has usually meant is for the cabinet to propose ministerial ceilings and intraministerial allocations and for broad consultations to inform the cabinet of changes that need to be made to conform more closely to preferences of claimants from civil society.

8. See Staniland 1985 for a definition and discussion of corporatism.

9. In Malaysia, for example, the Budget Dialogue Group, which consists of representatives from all major sectors including NGOs and industry groups, meets annually to discuss budget priorities for the coming year and to comment on the previous year's allocations.

10. See Campos and Esafahani 1996 and Campos and Root 1996 for a discussion of this issue.

individuals and groups are willing to behave according to the rules of the game. In much of the developing world, this cannot be presumed. The rules are not very transparent, and public officials are not held sufficiently accountable for their actions. Hence, politicians and public officials have very little incentive to behave according to the rules. This of course makes trades among different parties difficult since it creates an environment in which individuals may renege on agreements without fear of being penalized.

Increasing transparency and improving accountability make it more costly for politicians and public officials to violate rules and thus renege on agreements. Publishing the expenditure allocations and the agreed-upon (i.e., strategic) outcomes embodied in the expenditure plan and publicizing these (i.e., making the budget transparent) make it more difficult for both politicians and officials to alter things midstream without sufficient cause since they will have to defend any such action before the general public. Institutionalizing a process of reconciling actual expenditures of ministries with their annual budgeted allocations as well as reconciling their forward estimates with subsequent budget requests and publicizing all such reconciliations will induce the government to stick to the expenditure priorities (except when there are large exogenous shocks, and even then the government will have to provide a good explanation). Moreover, undertaking regular ex post evaluations of major ministerial programs and publicizing the results makes line ministries more responsive to producing the outputs that they have promised to produce over the medium-term period.

Closely linked to the above transparency and accountability mechanisms is the need to provide parliament with sufficient resources to hire and maintain a staff with the technical capacity to evaluate government programs and proposals. If parliament can adequately scrutinize government performance, then the government will be under more pressure to deliver on what it has promised in the expenditure plan.

In summary, institutional arrangements that can facilitate prioritization include (i) an expenditure planning process linked to the achievement of affordable outcomes, including a process to identify and discuss the medium-term costs of competing priorities at the cabinet level; (ii) flexibility for line agencies to make intrasectoral allocations; (iii) comprehensiveness of the budget; (iv) a process that allows feedback from claimants that inform priority setting; and (v) the use of objective criteria. Accountability and transparency mechanisms that can help bind the politicians and bureaucrats to the achievement of these strategic outcomes include (i) reconciliation of ex ante and ex post allocations; (ii) reconciliation of budgetary allocations with forward estimates; (iii) reconciliation of ex ante and ex post outcomes, including ex post evaluations; (iv) public dissemination of the results; (v) hard budget constraint to create incentives to prioritize expenditures; (vi) integration of all expenditures (e.g., extrabudgetary funds) into budgetary deliberations; and (vii) building the technical capacity of parliament.

10.2.3 Technical Efficiency and Incentive Incompatibilities

Assuming that an aggregate level and a prioritization of expenditures emerges from the above arrangements, there still remains the principal agent problem within the government hierarchy. Information asymmetries and incentive incompatibilities can impede the efficient delivery of public services by line agencies and their civil servants. Because of their closeness to the clients and their involvement in day-to-day operations in a specific sector or subsector, line ministries and their agencies possess superior information about how best to implement programs to achieve the intended results. It thus becomes imperative for the government to grant the line ministries a sufficient degree of managerial autonomy over the specific allocations and the responsibility to implement their respective budgets.

The capacity of line agencies for efficient delivery of services depends also on the predictability of the flow of budgetary resources. Unless a line agency can be certain of how much it is going to get over the fiscal year, it will not be able to make definite plans and therefore cannot make efficient allocations. For instance, in several African countries, the budget is remade during the year, and line agencies face considerable uncertainty in making their expenditure plans for the fiscal year. At the opposite extreme, the expenditure process in Australia with its requirement of automatically folding forward estimates (absent major policy changes) of line agencies into their annual budgets introduces a high degree of predictability.

Managerial autonomy and predictability will not produce desirable results unless the civil service in line agencies attracts competent individuals. A necessary requisite to do this is adequate compensation. In this regard, among the more critical arrangements is a compensation scheme that closely aligns public-sector with private-sector compensation. However this arrangement needs to be complemented by a merit-based recruitment and promotion system. Without such a system, competency will not be rewarded appropriately, which will affect the morale and thus the incentives of civil servants. The worst-case scenario is one in which promotions and recruitment are based solely on political connections and influence. In such cases, high salaries will tend to go to those who are most well connected, and civil servants will tend to concentrate on establishing such connections rather than on accomplishing their tasks efficiently.

Autonomy and competence of line agencies are necessary but not sufficient for technical efficiency. Indeed, there is no guarantee that the line ministries, despite their superior information, will implement their budgeted programs in ways that will achieve the intended results at the lowest possible cost. They could just as well use their budget inappropriately, for example, for personal or parochial gain. Hence, they have to be made accountable for the allocational decisions that they make, and for the efficient delivery of services. An appropriate balance between autonomy and accountability of the line agencies has to be struck. Accountability will depend upon (i) publication of financial accounts and with what lags; (ii) publication of financial audits and with what lags; (iii) the extent of oversight of financial accounts and audits by groups in civil society (e.g., parliamentary subcommittees); (iv) clarity of outputs of organizational units; (v) contestability in the delivery of outputs; (vi) tenure of agency heads; (vii) implicit or explicit performance contracts for agency heads and their employees; (viii) extent of performance audits and their publication; and (ix) the use of client surveys. The publication and general dissemination of their results, that is, making them transparent, will contribute further to the effectiveness of these arrangements.

To sum up, then, technical efficiency in the use of budgeted resources will depend upon the relative autonomy of line agencies and the extent to which they can be held accountable for performance, the predictability of resource flows into ministerial budgets, the competence of line agency bureaucrats, and the extent to which recruitment and promotion is based on merit. In part 3 of table 10.1, we present a capsule summary of the arrangements and accountability/transparency mechanisms that can help make government delivery of public services more technically efficient.

10.2.4 Interactions and Trade-offs among the Three Levels of Expenditure Outcomes

Above, we have summarized the institutional arrangements, transparency, and accountability mechanisms that can help achieve each the three basic objectives discussed above. Table 10.1 summarizes this matrix. This represents a diagnostic framework that can be used to analyze the impact of budgetary institutions on expenditure outcomes in particular countries.

In this regard, it is critical to underscore two central points: (i) there are interactions among the three levels of expenditure outcomes and their institutional arrangements; and (ii) budgeting systems face trade-offs among the levels of expenditure outcomes that they are geared toward. As the analyses below illustrate, how countries control aggregate spending affects the way they deal with budgetary allocations and the efficiency with which line agencies use their budgets, and conversely as well. These considerations induce trade-offs in terms of which category of expenditure outcomes to focus on. It is this emphasis on interactions and trade-offs that distinguishes our approach from other recent studies that have focused exclusively on institutional arrangements that contribute to aggregate fiscal discipline (e.g., Alesina et al. 1996; von Hagen 1992).

10.2.5 Constructing a Measurable Representation of a Public Expenditure Management System

To characterize a public expenditure management system, we need to develop a parsimonious representation of the system that captures its principal features and that indicates how these features relate to each other. To do this,

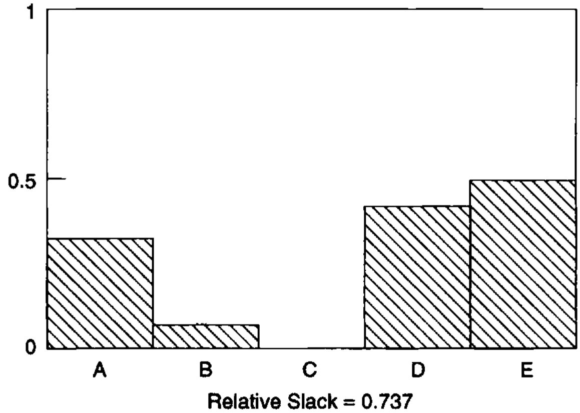

Fig. 10.1 New Zealand—prereform aggregate fiscal discipline

we construct an index for each of the institutional arrangements and, where applicable, for corresponding transparency and accountability mechanisms. The arrangements, mechanisms, and associated indices are presented in detail in Campos and Pradhan 1996.

For a country-specific public expenditure management system, we assign index values to each of the institutional arrangements and transparency/accountability mechanisms in the table. The values are based on responses of an expert on the country's budgeting process to a diagnostic questionnaire that we have prepared as well as an in-depth analysis provided by the expert. For two mechanisms, the openness of financial markets and the freedom of the press, we used objective indices developed elsewhere. Because it is accountability and transparency that bind the governments to institutional arrangements, we give a weight of ⅙ to the arrangement, ⅓ to the transparency mechanism, and ½ to the accountability mechanisms and derive a weighted index for the arrangement cum mechanisms. Where there are no transparency and/or accountability mechanisms, we normalize weights so that the sum of the weights for all applicable factors is 1. For example, if there are no mechanisms associated with an arrangement, then the arrangement gets a full weight of 1, and its weighted index will be equal to its index value. Based on this, we are able to construct a parsimonious representation of each of the three categories of the system in the form of a chart and a corresponding slack coefficient roughly analogous to the Gini coefficient measure of income inequality. For example, figure 10.1 illustrates the relative slack of New Zealand's prereform (circa 1983) system with respect to aggregate fiscal discipline. There are five institutional arrangements under this expenditure category (see table 10.1), represented as A, B, C, D, and E in the horizontal axis. We give equal weights to each of these arrangements and assign a maximum height of 1 to each. The actual country-specific height corresponding to each arrangement is given by the weighted index associated with it, for instance, for A this is 0.325. The unshaded portion represents the slack of the system with respect to aggregate fiscal discipline. Its area (4.18) as a proportion of the total area of the chart (5) gives the corresponding slack coefficient −0.837.

Some arrangements are themselves characterized by subarrangements nested in them. In such cases, we take the average of the actual index values assigned to each of the subarrangements and use that as the index value for the arrangement.

There are also accountability and transparency mechanisms that apply to a whole category. These are the openness of financial markets, which is an accountability mechanism, and the relative freedom of the press, which is a transparency mechanism. Both mechanisms are essentially exogenous to the public expenditure system. For the case of openness of financial markets, we adjust each accountability mechanism under aggregate fiscal discipline by taking the average of the mechanism's index value and the index value for openness. For the case of freedom of the press, we multiply each relevant transparency mechanism by the index value for freedom of the press.

In the case of the prioritization and technical efficiency categories, we assign different weights to each of the arrangements cum accountability/transparency mechanisms based on implications of the preceding analysis. For instance, under technical efficiency, we give line agency accountability twice the weight of competency and autonomy. Without accountability, competency and autonomy can translate into abuse and misuse of resources. With accountability, the government and in particular the line agencies will have strong incentives to improve the overall level of competency and to try to use their autonomy to meet their objectives at least cost. Specifically, under technical efficiency, we assign weights of .5, .5, and 1 respectively to arrangements A, B, and C and, under prioritization, weights of 1, .8, .6, .4, .2 respectively to arrangements A through E (see table 10.1), given their decreasing order of importance as suggested by our analytical framework. In the country-specific analyses, we undertake some sensitivity analysis by comparing our results with the weights with results based on equal weights for each arrangement (Campos and Pradhan 1996).

10.3 New Zealand and Australia

10.3.1 New Zealand

Faced with a severe economic crisis and a heavily interventionist state not dissimilar from former Eastern European centrally planned economies, the government of New Zealand undertook a sequence of radical institutional reforms that sought to completely redefine the role and revamp the functioning of government. The reforms proceeded in four general stages as embodied in the State-Owned Enterprise Act (1986), the State Sector Act (1988), the Public

Finance Act (1989), and the Fiscal Responsibility Act (1993). The State-Owned Enterprise Act took the state out of production activities that the private sector could just as well provide competitively. The act formed the basis of the strategic focus of the reforms that followed. The State Sector Act abolished the permanent tenure of civil servants by putting agency heads on five-year (renewable) performance contracts and granting them the authority to hire and fire employees within their jurisdiction. It also introduced the notion of splitting an agency into two or more focused business units, for example, one as the funder/purchaser and another as the provider. The Public Finance Act introduced two innovations: first, it enhanced the transparency of public financial statements by requiring that all such statements be put on an accrual accounting basis and be published and made available to the general public; and second, it improved accountability by mandating that any given appropriation must be linked to one of seven categories, the main one being outputs. The first innovation made individual agency statements comprehensible to other agencies as well as to the business community. The second created incentives for each agency to clearly specify the outputs that it planned to provide during the fiscal year, for which it could then be held accountable. The Fiscal Responsibility Act enhanced the transparency and accountability of the government for aggregate fiscal discipline through full and frequent disclosure of aggregate fiscal information and benchmarking actual performance vis-à-vis published aggregate fiscal objectives.

In terms of the summary features in table 10.1, the big changes occurred in the second and third columns. Prior to the reforms, most public financial statements and budgetary documents were not available to the general public for scrutiny, and, even if they were made available, they could not be easily understood even by accountants and financial experts in the private sector. Consequently, government performance was largely nontransparent. The Public Finance Act changed this dramatically.

Accountability of line ministries was very weak as well. There were little or no reconciliations of ex ante provisions with ex post outcomes. Line ministries did not face a hard budget constraint. Control of their spending was done mostly through control of their inputs by the central ministries. And because of these, it was not possible to impose sanctions against line ministries. In other words, line ministries had very little autonomy. Consequently, it was difficult to hold them accountable for their performance. The State Sector Act granted considerable autonomy to line ministries but made them accountable for outputs. It introduced sanctions against nonperformance: the chief executive of a line ministry could be dismissed after his or her five-year contract expired and the executive's compensation was based on the delivery of key outputs; employees of the line ministry could be fired by the chief executive. And, in conjunction with the Public Finance Act, it made reconciliations de facto mandatory.

Discussions of accountability and transparency rarely focus on the central ministries. This was certainly the case in New Zealand up to the mid-1980s. In fact, there was a period in which the prime minister held the finance portfolio as well, a situation that could have easily led to fiscal mismanagement (which it did). But accountability and transparency of the central ministries have become a crowning point of the reforms. The Fiscal Responsibility Act has bound the minister of finance to meeting clear-cut fiscal objectives, for example, cutting the deficit to 1 percent. These objectives constitute the outputs that (s)he is responsible for and provide the basis upon which her or his performance is judged and thus upon which her or his compensation and tenure depend.[11]

Accompanying the public-sector reforms were measures that liberalized financial markets. As mentioned earlier, New Zealand was very much like a centrally planned economy prior to the reforms. Concomitantly, the financial sector was highly controlled. Beginning in the mid-1980s, various measures were introduced to ease up the controls. By the early 1990s, financial markets were very much open to international flows. This is indicated by one measure of financial openness that shows the extent to which domestic real interest rates exceed world real interest rates. The index ranges from 0 to 1 in steps of tenths, for example, .1, .2, and so on, with higher numbers reflecting relatively greater openness of financial markets. For New Zealand, the average of the index from 1980 to 1984 was around .3; the average from 1990 to 1994 was .7.

With regard to the institutional arrangements (the first column of table 10.1), the major changes occurred in the third (technical efficiency) and first (aggregate fiscal discipline) categories. As already mentioned, the permanent tenure of agency heads was abolished, and, in its place, a five-year performance contract based on clearly defined key outputs for agency heads (now referred to as chief executives) was introduced. In turn, agency heads were given the authority to hire and fire employees: the typical civil service personnel arrangement was turned on its head. With this also came a great deal of autonomy over agency matters. Under the first category (aggregate fiscal discipline), the reforms introduced formal constraints on aggregate spending and the deficit via the Fiscal Responsibility Act. Comprehensiveness also improved since the output-based system forced line agencies to include all possible expenditures in their proposed budgets: budgets are structured in terms of seven classes of outputs; every expenditure had to fall into one of these classes.

The New Zealand reforms have not been focused on the second category—strategic prioritization *within* the residual, core public sector. Up till recently, there has been no conscious effort to link agency outputs and thus expenditure allocations to strategic outcomes. Only beginning in 1994 was there some attempt to identify broad strategic priorities and to link annual budgetary considerations to these (medium- to long-term) priorities.

In table 10.2, we summarize the changes that the reforms introduced in

11. We note also that the contract of the head of the central bank is tied to the inflation rate.

Table 10.2 The New Zealand Reforms

Institutional Arrangements	Accountability	Transparency
1. Aggregate fiscal discipline		
A. Macro framework and coordination mechanisms	Ex post reconciliation	Published
B. Dominance of central ministries	Sanctions	Made public
C. Formal constraints	Openness of financial markets	Freedom of the press
D. Hard budget constraints		
E. Comprehensiveness of the budget		
2. Prioritization		
A. Forward estimates	Reporting on outcomes	Published
B. Comprehensiveness of the budget	Ex post evaluations	Freedom of the press
C. Flexibility to line agencies	Hard budget constraint	Made public
D. Breadth of consultations	Technical capacity of parliament	Comprehensible
E. Use of objective criteria		
3. Technical efficiency		
A. Civil service pay and merit-based recruitment/promotion	Clarity of purpose/ task	Published
B. Relative autonomy of line agencies	Chief executive tenure	Made public
C. Predictability of resource flow	Financial accounts, audits	Freedom of the press
	Client surveys	
	Contestability in service delivery	

terms of the categories and subcategories listed in table 10.1. Items that are shaded indicate the areas where the reforms introduced significant changes. Those that are not shaded represent arrangements or mechanisms that have not been the focus of the New Zealand reforms.

Characterizing Pre- and Postreform Systems

Using the methodology discussed earlier, we are able to capture the essential institutional changes that the above reforms introduced. We derive slack coefficients to both the prereform (circa 1983) and the postreform (circa 1994) systems of New Zealand. The left side of figure 10.2 indicates the weighted indices for each arrangement (i.e., the height) and illustrates the relative slack of the prereform system with respect to the three categories. The corresponding slack coefficients are indicated in the upper right corner. The right side of the figure does the same for the postreform system.

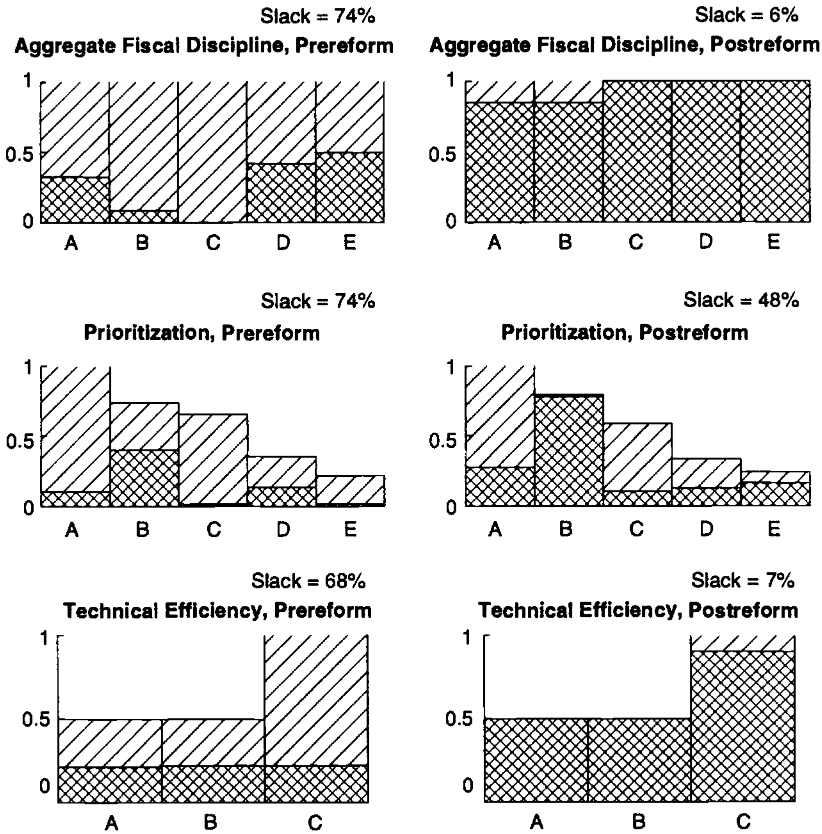

Fig. 10.2 Institutional changes in New Zealand

Correlating Systems with Outcomes

From figure 10.2, we discern that the relative slack of the New Zealand system with respect to aggregate fiscal discipline is substantially smaller today than it was in the prereform era—a slack coefficient of .06 versus .74. Corresponding to this has been a significant fall in the deficit-to-GDP ratio over the period 1984 to 1994, as indicated in figure 10.3. The ratio was about −9 percent in 1983 but gradually fell over the decade so that by 1994 it turned into a small surplus.

Interestingly, the expenditure-to-GDP ratio fell less drastically from about 38 percent in 1983 to around 35 percent in 1994. This is depicted in figure 10.4. However as figure 10.5 illustrates, the composition of spending changed markedly, with the share going to the development of industry falling from about 13 percent in 1983 to approximately 3 percent in 1994 and the share of social services rising roughly from 30 percent to 37 percent and the share of

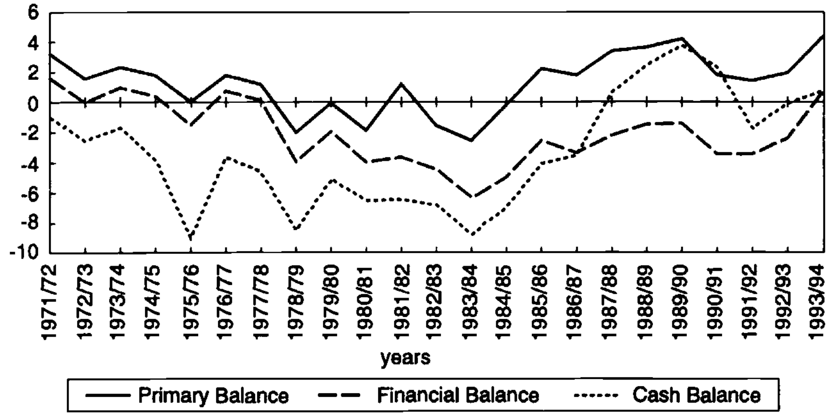

Fig. 10.3 Deficits as percentage of GDP

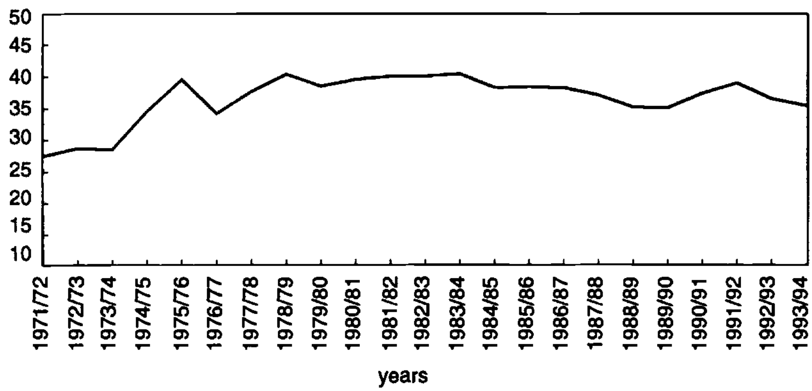

Fig. 10.4 Expenditure as percentage of GDP

health from 7 percent to around 12 percent. Other expenditure ratios remained relatively constant. The slack coefficient of the system (and thus the relative slack) with respect to prioritization is correlated with this change. Circa 1983, the slack was .74; in 1995 it was .48. A look at the left side of figure 10.2 indicates the possible weak points of the prereform system with respect to prioritization. The system scores low on arrangements A, C, and E, which are arrangements that respectively deal with the articulation of strategic priorities, deal with the flexibility of line agencies, and pertain to the use of economic analysis in evaluating expenditures. The right side of figure 10.2 shows that substantial changes were introduced to address C and E. Changes were also introduced to improve on B (the relative integration of the budget). The change in A, which refers to the articulation of strategic outcomes, is consistent with

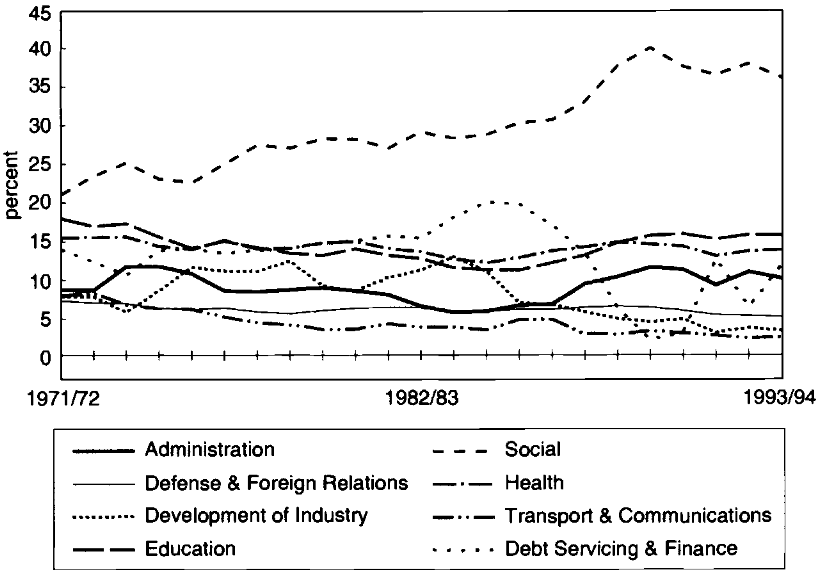

Fig. 10.5 Shares of net government expenditure

observed changes in the role of the state, which essentially involved a radical redirection of the role of government from one that supported state-owned enterprises and intervened heavily in industry through massive regulation to one that aggressively encouraged the provision of contestable goods and services by private industry. The articulation of strategic outcomes within the core public sector, however, remains weak.

In terms of the capacity to achieve technical efficiency, the postreform system improved significantly on the prereform system; the former has a slack coefficient of .07 and the latter .67. Unit cost data is not generally available except for a very limited sample of activities and only for a limited time period. The New Zealand Treasury has conducted a pilot study of productivity improvements in a small, select set of activities. The study estimates average unit costs for select activities within four ministries. But as Scott and Ball (1996) comment, there were no adjustments made to inflation and there were a lot of qualifications. That is, the data must be interpreted with caution.

Due to the request of the Treasury that the results be kept confidential (for the moment), we will label the concerned activities anonymously and indicate the changes in unit costs over time estimated for each of them.[12] We emphasize that these results are very preliminary and may change as the Treasury com-

12. The Treasury released the study in late 1995; we will identify the activities and present data on changes in unit costs in subsequent research.

Table 10.3 **Percentage Change in Unit Costs in New Zealand, Selected Activities**

Activities	Period of Study	Percentage Change in Average Unit Costs
A	1989–94	Fall of 10 to 20%
B	1989–92	Rise of 25%
	1992–95	Fall of 25 to 30%
C	1990–94	Fall of 10 to 40%
D	1987–94	0%[a]

[a]Unit cost levels dropped down to approximately 1989 levels.

pletes its study. The results, which are indicated in table 10.3, suggest that unit costs are likely to have fallen between 1984 and 1994. This is consistent with the change in the slack.[13]

10.3.2 Australia

Australia has instituted a medium-term expenditure framework, which focuses the budget process on changes in strategic priorities within aggregate fiscal parameters. It has introduced measures that grant considerable flexibility to line agencies and provide them with incentives to identify savings options themselves. At the same time, the reforms have sought to focus attention on outcomes and introduce some form of accountability, although these are not formalized.

These reforms consist of six main, interrelated elements. First, a cornerstone of the Australian reforms has been a system of forward estimates, or three-year forecasts of the minimum cost of existing policies and programs, which are automatically rolled into budgetary allocations if there is no change in policy. This has removed from ministerial consideration the bulk of outlays in any budget that do not involve any changes in policies. Ministers now allocate the limited time for budget consideration to policy development rather than zero-basing an entire set of appropriations; indeed, this has freed up cabinet time as evidenced by the decline in cabinet meetings from 370 in 1981 to 180 in 1988–89 to 121 in 1989–90. The lock-in feature has also provided line agencies with more certainty about present and future resources, thereby potentially enhancing technical efficiency. Finally, the requirement to publish a reconciliation table that shows and explains the deviation between the forward estimates for the year and actual allocations in the annual budget, including their outyear implications, has served as a transparent and accountable mechanism for show-

13. We have also attempted a characterization of the pre- and postreform systems with equal weights on all arrangements (cum accountability/transparency mechanisms) in each of the three expenditure categories. The results indicate that, within reasonable weighting parameters, our characterization has relatively robust ordinal properties, i.e., big changes remain big and small changes remain small (Campos and Pradhan 1996).

ing areas of policy change as well as the future demands on resources of these policies.

Second, mechanisms for macroeconomic planning reconcile the forward estimates with the target deficit to identify the scope for new spending and savings. Aggregate fiscal discipline in the determination of target deficits has in turn been induced by public commitments to aggregate targets (e.g., the Hawke government's trilogy of commitments not to increase spending and taxes, and to reduce the deficit) and implicitly enforced through open financial markets and media. Third, decision-making mechanisms were instituted at a political level through the "Trilaterals" and the Expenditure Review Committee (ERC) of the cabinet to decide upon competing priorities for spending and savings to achieve the net fiscal targets. Individual portfolios are required to submit spending and savings proposals to stay within their targets, but it is up to the ERC to decide whether to choose only the savings or spending options, or both. Fourth, a system of portfolio budgeting was introduced. This devolves priority setting to individual portfolios by encouraging and requiring line agencies to themselves identify savings and spending options within their portfolio to meet their net savings targets. This capitalizes on the superior information of line agencies by inducing them to identify their least cost-effective program in order to fund new programs. Fifth, the development of the running-costs system further devolved authority within departments or portfolios. All administrative and salary expenses, which previously consisted of 20 or more items, were consolidated into a single running-cost item, and department managers were given the authority to allocate this expenditure item to various inputs—including staff numbers and salaries—as they saw fit. Additional flexibility was provided by allowing agencies to bring forward or carry over running costs between years, up to a limit of 10 percent. A partial quid pro quo for this freedom is the annual efficiency dividend of 1 percent that agencies are expected to achieve in their running costs every year.

Finally, while portfolio budgeting and the running-cost system devolved authority to line agencies, program management and budgeting was introduced to focus attention on outcomes. This entailed classification of portfolio activities into programs, and introduction of accountability mechanisms by requiring departments to report on the performance of programs within their portfolios. At the same time, ex post evaluation was introduced to assess whether programs were achieving their intended results. Various reviews, however, have concluded that program budgeting and evaluation has had limited impact on budgetary allocations, but has helped create a performance-oriented culture.

Using the methodology above, we are able to characterize the principal features of these reforms, and assign slack coefficients to both prereform and postreform systems. As shown in figure 10.6, the coefficients corroborate our qualitative findings that the greatest emphasis in the Australian reforms has been on improving strategic prioritization (i.e., slack coefficient declined from 80 percent to 12 percent) and aggregate fiscal discipline (i.e., reduction in coef-

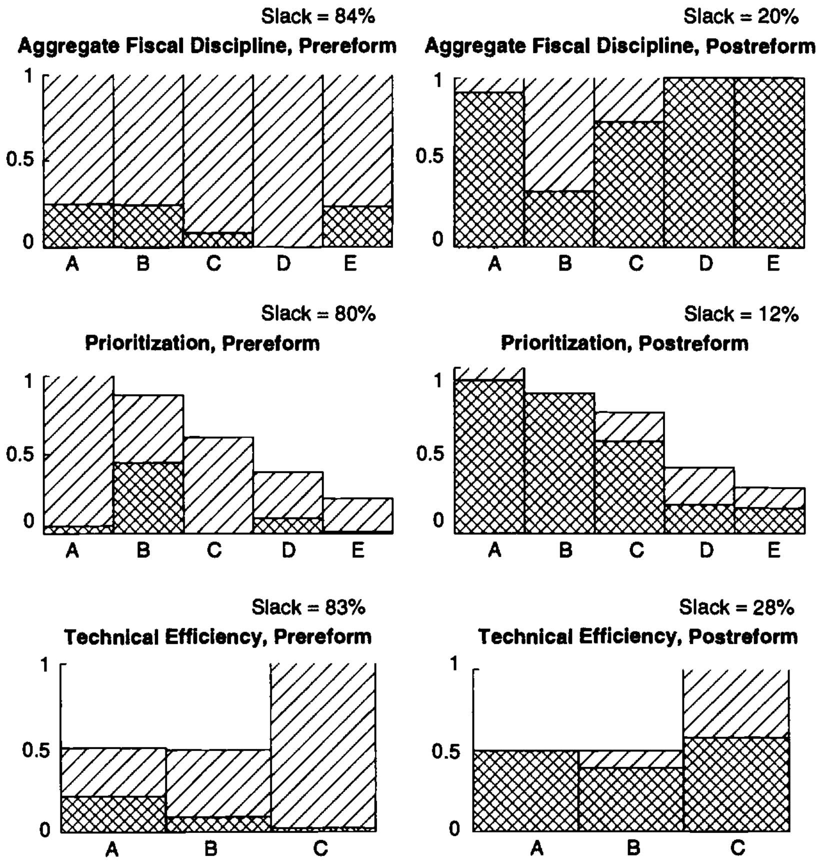

Fig. 10.6 Institutional changes in Australia

ficient from 84 percent to 20 percent). At the same time, there has been less emphasis on introducing measures for accountability to enhance technical efficiency.

The reforms have had a dramatic impact on the level and composition of spending. Aggregate budgetary outlays declined from 29.8 percent of GDP in 1984–85 to 23.7 percent in 1989–90. This involved three consecutive years of negative real growth in outlays (1987–88 to 1989–90) and four years of resulting budget surplus (1986–87 to 1990–91). The budget deficit moved from 4.1 percent of GDP in 1983–84 to a surplus of 2 percent of GDP in 1989–90!

The reduction in forward estimates of outlays from 1987 was even more dramatic than the reduction in actual expenditures. Figure 10.7 shows that there was a strong tendency in the early 1980s for forward estimates of outlays on existing outlays to rise steeply. This meant that the reduction in annual growth of spending involved a double task: reversal of growth in forward esti-

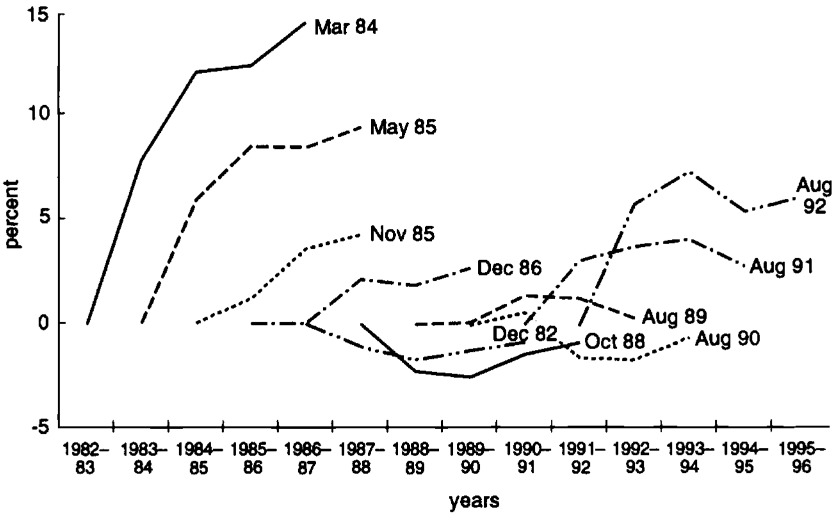

Fig. 10.7 Budget and forward estimates, cumulative real growth, Australia
Source: Dixon 1996, 229.
Note: Excludes asset sales.

mates to bring spending down to the preceding year, and further reductions in spending to achieve net declines. From 1987, however, the forward estimates of outlays begin to show declines in the outyears, under the influence of budget decisions that reduced outlays over a period of time.

What is striking about the Australian experience is that these dramatic cuts were achieved by significant changes in the composition of intrasectoral expenditures on account of savings identified by line agencies themselves (fig. 10.8). The distribution of real savings measures undertaken by line agencies shows that the spending cuts involved some major policy shifts, particularly in the social security function, where a much higher degree of outlays targeting was achieved. However, the bulk of the changes in expenditure composition came from measures of a highly activity-specific nature, involving program redesign and elimination of particular, less cost-effective aspects of program spending. These achievements contrast sharply with an attempt to reduce spending by an earlier administration in the early 1980s, which unsuccessfully tried to eliminate redundant functions in a centralized manner and merely ended up making modest reductions through across-the-board cuts.

10.3.3 New Zealand versus Australia: A Comparison

New Zealand and Australia are often mentioned together as being at the cutting edge of institutional reform. Our analysis above reveals that while they share some important principles in their reform efforts, they have by and large taken dramatically different paths, which provide quite separate paradigms for other countries.

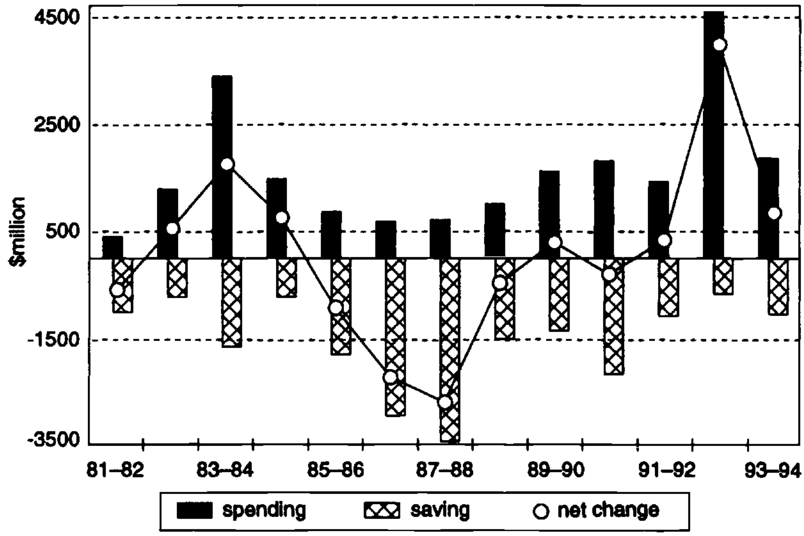

Fig. 10.8 Real new policy, total all functions, Australia (budget year effect, 1981–82 to 1993–94)

Perhaps the most important shared characteristic of the two reforms is that they each have sought to alter underlying *incentives* that govern the allocation and use of resources. Within this, a common feature is *transparency,* which binds key players to particular fiscal outcomes and makes it costly for them to misbehave. Transparency pervades all key aspects of the New Zealand reforms—for example, explicit delineation of outputs, the contracts of chief executives, budgetary appropriations explicitly based upon outputs purchased, publication of balance sheets showing net worth of government, and legislatively mandated full and frequent disclosure. In Australia, transparency is best exemplified in the requirement to publish a reconciliation table for the forward estimates, explicitly indicating how much particular outlays were changed in the annual budget vis-à-vis the forward estimates, the reasons behind these changes, and their outyear implications.

Another shared feature is *considerable devolution to line agencies* to perform their tasks. In both countries, this has created incentives that make it worthwhile for line agencies to identify savings, and move them toward a greater interest in both allocative and technical efficiency. In New Zealand, chief executives have complete autonomy over the allocation of inputs to produce the outputs, including the right to hire and fire. In Australia, all administrative expenses of line agencies have been consolidated into a single running-cost item, and managers have complete flexibility in the allocation of these costs across inputs, including staff numbers and salaries. Further, portfolio budgeting in Australia devolves priority setting to individual departments, encouraging them to identify the specific spending and savings measures to meet

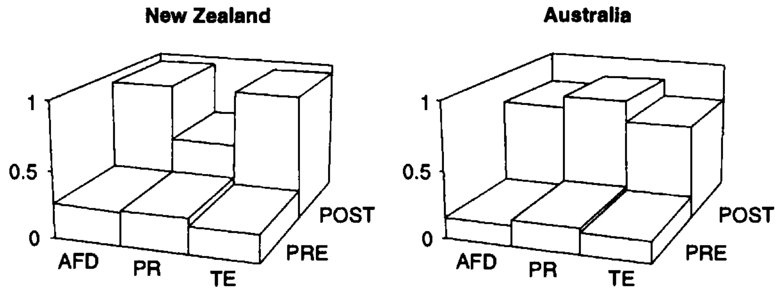

Fig. 10.9 Emphasis of reforms in New Zealand and Australia
Note: AFD = aggregate fiscal discipline. PR = priority setting. TE = technical efficiency.

their net fiscal targets. Another shared feature is *contestability* in service delivery. In both countries, there is a strong emphasis on unbundling the provision of public services, and introducing competition in service delivery—including from the private sector—in order to achieve technically efficient outcomes. While New Zealand has gone much farther down this route, Australia too has instituted explicit measures for contestability—even for policy advice.

A final common characteristic has been a *binding commitment to aggregate fiscal discipline.* Each country has publicly committed itself to targets for fiscal prudence and has instituted mechanisms that facilitate the achievement of fiscal targets. At the same time, the openness of financial markets and the media have provided an external disciplining mechanism to ensure adherence to prudent fiscal targets.

Past this, however, Australia and New Zealand have adopted dramatically different reforms to achieve aggregate fiscal discipline. A principal distinguishing feature has been the relative emphasis placed on *technical efficiency* in New Zealand as opposed to *strategic priority setting* in Australia. This is clearly revealed in their relative slack measures corresponding to the two outcomes as shown in figure 10.9. This in turn reflects relative emphasis on technical efficiency in the delivery of *outputs* (i.e., goods and services produced) in New Zealand, as opposed to the cost-effective achievement of *outcomes* (i.e., the impact of outputs on beneficiaries) in Australia. The different reforms in the two countries have been path-dependent, reflecting the particular background and historical conditions driving each reform.

On the eve of reforms, New Zealand inherited an overexpanded public sector not dissimilar to the command economies of the former socialist countries. Consequently, a principal emphasis was on restructuring the role of the state by privatizing large chunks of the public sector. This extended itself into the paradigm of instituting private-sector incentive mechanisms within the remaining core public sector in order to achieve technical efficiency in the delivery of outputs. There is a strong emphasis on formal contracts for accountability in the efficient delivery of outputs. Management contracts between ministers and chief executives, as well as budgetary appropriations, have been based upon outputs.

By contrast, the Australian reforms were launched when a preceding administration had been unsuccessful in reducing public spending by identifying redundant functions. A centralized, top-down Commonwealth Review of Functions failed to identify egregious anomalies in the role of the state in Australia. Consequently, the Australian reforms sought to rely on a more nuanced and finely surgical process of identifying savings. They did so by focusing the budget process on changes in strategic priorities, and relying heavily on line agencies to themselves identify savings options. The system seeks to achieve results by creating an environment in which strategic priorities are articulated at the political level, and managers are given considerable flexibility—through portfolio budgeting and the running-cost system—to achieve the intended outcomes. The system seeks to achieve accountability through reporting on performance and ex post evaluations, but there are no formal outcome- or output-based contracts.

Consequently, in Australia, tightly specified accountability mechanisms based on outputs, as in New Zealand, have been sacrificed in favor of a greater collective as well as individual focus on outcomes. This reflects a fundamentally different philosophical emphasis driving the two reform efforts, with Australia placing a greater faith on trust and consensual relationships and New Zealand instituting formal accountability mechanisms to resolve incentive incompatibility stemming from a principal-agent paradigm.

The weakness of the New Zealand system is that with everyone focused on outputs and technical efficiency, the link with outcomes has been overlooked until recently. The broad priorities (so-called SRAs and KRAs—see sec. 10.4) have only recently been implemented to forge a closer link with outcomes. The weakness of the Australian system rests in much looser systems of accountability. However, this is necessitated to some extent by a federal structure wherein a large percentage of services are delivered by state governments.

It is worth asking whether a country could not merely adopt the best of the two countries' systems—that is, a focus on strategic priorities as well as technical efficiency. In a world without transactions costs, one could well envisage a system where there is a focus on outcomes, which is then translated into corresponding outputs through formalized contracts. However, our comparative analysis of the Australian and New Zealand reforms indicates that this is easier said than done. Australia adopted a strategy that began with an emphasis primarily on improving strategic prioritization. Given the much greater importance of policymaking at the central government level induced by its federal structure, the benefits relative to the transactions costs of improving strategic prioritization were likely to be higher than the net benefits from improving technical efficiency. In New Zealand, initial reforms were indeed geared toward strategic prioritization, given the vastly overextended public sector: wholescale privatization of state enterprises and departments producing commercial outputs generated substantial early dividends. Having done this to the extent politically feasible, reforms then turned to improving the technical efficiency of remaining public agencies.

10.4 Recent Developments

Recent developments in both New Zealand and Australia suggest that the two reforms are converging toward some common paradigm. In particular, each is placing greater emphasis on the level of expenditure outcome that has hitherto not been sufficiently addressed.

Recently in New Zealand, there have been concerns that formal contracting has led to a massive volume of specification and reporting requirements and thus detracted from attention to strategic policymaking (Schick 1996). In response to this, New Zealand has initiated reforms to improve strategic planning and budgeting (Boston and Pallot 1997). In particular, a focused set of broad strategic outcomes—so-called strategic result areas (SRAs) and key result areas (KRAs)—were identified. Budgetary priorities as well as contracts of chief executives now more explicitly focus on SRAs and KRAs. As noted by Schick (1996, 86), "through the SRAs and KRAs, the medium (and longer) term perspective mandated by the Fiscal Responsibility Act, and increased planning, the strategic capacity of Government departments has been upgraded. What is most pleasing about this development is that it has been accomplished in ways that comport with the logic and practice of the New Zealand model. The SRAs and KRAs emphasize the ex ante specification of objectives, as do other elements of the New Zealand system, and the Fiscal Responsibility Act upholds the value of transparency in public policy." Inevitably, further work will need to be undertaken in refining outcome measures and instituting ex post evaluation systems.

In Australia, the thrust of the reform process was changed significantly in 1996 with the election of a Liberal government that believed in a more minimalist public sector than its predecessor. The new government required agencies to step up the search for activities that might be effectively performed within a purchaser-provider framework, while also according greater freedom to set their own terms and conditions of employment.

This more rapid transition to provision of public services by arm's-length contractors has created a difficult hurdle for a public sector hitherto driven by outcome (rather than output) reporting by its agencies. While the emphasis on program objectives and outcomes over the previous decade had focused agencies on how far their programs were furthering the government's objectives, it did little to assist the preparation of contracts with arm's-length service providers that clearly defined the "deliverables" expected by the government (such as cost, quantity, quality, and timeliness) in return for the funding provided to the contractor. The increased pace of contracting out has therefore triggered a new focus within the Department of Finance on supplementing outcome information with clearly defined measures of program outputs for which service providers can be held contractually responsible. This new focus on outputs is intended to augment rather than displace the long-standing focus on outcomes, and may be incorporated in the accrual budgeting framework (ensuring the proper costing of outputs) by 1999–2000. It remains to be seen whether the rediscovery of an output focus in a public sector that had long focused on outcome measures for its programs will result in a distinctively Australian style of purchaser-provider relationship that blends strengths from both perspectives.

10.5 Concluding Remarks

In this paper, we have developed a methodology for evaluating the quality of a public expenditure management system. Using theories developed within the field of the new institutional economics and the reform experiences of Australia and New Zealand with public expenditure management, we have been able to identify key institutional arrangements that affect aggregate fiscal discipline, strategic prioritization, and technical efficiency in the use of budgeted resources. We have argued that these arrangements can be effective only if there are mechanisms that bind public officials to these arrangements. By this we mean that public officials will incur a sufficiently high cost if they violate the arrangements. Within the limitations of our data, we have been able to show that certain mechanisms that enhance transparency and accountability can indeed introduce such costs and thus lead to better expenditure outcomes.

Our comparative analysis of the Australian and New Zealand reforms highlighted the importance of interactions and potential trade-offs among the three levels of expenditure outcomes. Our findings and framework have enabled us to analyze the impact of donor assistance on the three interrelated levels in aid-dependent countries.

While we have managed to capture the essence of the Australian and New Zealand reforms with our approach, we have still not reached the point at which we can recommend with confidence which elements of the reforms will work and which will not in a different context, for example, developing-country institutional environments. Indeed there have been some attempts in a developing-country context to push a New Zealand type of reform program without adequate attention to the replicability or adaptability of these reforms. As Levy and Spiller (1996) have shown within the context of the design of regulatory systems, the replicability problem is very complex and requires in-depth comparative analysis across countries of more fundamental underpinnings, and their mapping onto specific institutional arrangements. In the context of budgetary systems, the more fundamental underpinnings that will influence replicability include, for instance, administrative capacity, enforceability of the rule of law, and the relationship between the executive and the legislature.

Though this chapter attempts to develop a coherent framework for understanding a public expenditure management system, the set of issues involved are admittedly very complex. Our proposed methodology offers a first cut. Further research can fine-tune this methodology and in particular attempt to explore in further detail the transactions costs inherent in the trade-offs among the three levels of expenditure outcomes.

References

Alesina, Alberto, Ricardo Hausmann, Rudolf Hommes, and Ernesto Stein. 1996. Budget institutions and fiscal performance in Latin America. NBER Working Paper no. 5586. Cambridge, Mass.: National Bureau of Economic Research.

Boston, Jonathan, and June Pallot. 1997. Linking strategy and performance: Developments in the New Zealand public sector. *Journal of Policy Analysis and Management* 16:382–404.

Campos, Jose Edgardo, Hamid Davoodi, and Sanjay Pradhan. 1995. Aggregate fiscal discipline and the role of financial markets: Some preliminary evidence from developing countries. World Bank. Photocopy.

Campos, Jose Edgardo, and Hadi Esfahani. 1996. To initiate public enterprise reform or not: What drives the decision? *World Bank Economic Review,* September, 451–85.

Campos, Jose Edgardo, and Sanjay Pradhan. 1996. Budgetary institutions and public expenditure outcomes. Working Paper no. 1646. Policy Research Department, World Bank.

Campos, Jose Edgardo, and Hilton L. Root. 1996. *The key to the East Asian miracle: Making shared growth credible.* Washington, D.C.: Brookings Institution.

Dixon, Geoffrey. 1996. Budgetary institutions and expenditure outcomes in Australia. Background paper, Policy Research Department, World Bank.

Haggard, Stephan, and Robert Kaufman, eds. 1992. *The politics of economic adjustment.* Princeton: Princeton University Press.

Krehbiel, Keith. 1991. *Information and legislative organization.* Ann Arbor: University of Michigan Press.

Levy, Brian, and Pablo Spiller. 1996. Regulation, institutions, and commitment in telecommunications: A comparative analysis of five country studies. In *Regulations, institutions, and commitment: Comparative studies of telecommunications,* ed. Brian Levy and Pablo Spiller. Cambridge: Cambridge University Press.

McKelvey, Richard. 1976. Intransitivities in multidimensional voting models and some implications for agenda control. *Journal of Economic Theory* 12:472–82.

Schick, Allen. 1996. *The spirit of reform: Managing the New Zealand state sector in a time of change.* Report for the State Services Commission and the Treasury, New Zealand.

Scott, Graham, and Ian Ball. 1996. The influence of fiscal institutions on aggregate fiscal outcomes: Expenditure composition and the effectiveness of resource use in New Zealand. Background paper, Policy Research Department, World Bank.

Shepsle, Kenneth. 1979. Institutional arrangement and equilibrium in multidimensional voting models. *American Journal of Political Science* 23:27–60.

Shepsle, Kenneth, and Barry Weingast. 1994. Positive theories of congressional institutions. *Legislative Studies Quarterly* 19(2): 149–79.

Staniland, Martin. 1985. *What is political economy?* New Haven: Yale University Press.

United Nations. 1992. The control and management of government expenditure. Development Papers no. 13. Bangkok: U.N. Publications.

von Hagen, Jürgen. 1992. Budgeting procedures and fiscal performance in the European Communities. Economic Paper no. 96. Commission of the European Communities.

Weingast, Barry. 1979. A rational choice theory of congressional norms. *American Journal of Political Science* 23: 245–62.

Weingast, Barry, Kenneth Shepsle, and Christopher Johnsen. 1981. The political economy of benefits and costs: A rational choice approach to distributive politics. *Journal of Political Economy* 89:642–64.

World Bank. 1993. *The East Asian miracle: Economic growth and public policy.* New York: Oxford University Press.

This Page Intentionally Left Blank