

Effect of Decentralization Strategy on Macroeconomic Stability in Thailand

Kanokpan Lao-Araya

August 2002

ERD Working Paper No. 17

**EFFECT OF DECENTRALIZATION STRATEGY
ON MACROECONOMIC STABILITY IN THAILAND**

KANOKPAN LAO-ARAYA

August 2002

Kanokpan Lao-Araya is an economist at the Development Indicators and Policy Research Division, Economics and Research Department, Asian Development Bank. The views expressed in this paper are those of the author and do not necessarily represent those of ADB. The author wishes to thank Arvind Panagariya, Charles Adams, and Jeffrey Liang for guidance and support of this research project. This paper also benefits from inputs from the author's former colleagues at the Fiscal Policy Office and Policy Research Institute, Ministry of Finance, Thailand, particularly Sethaput Suthiwartnarueput and Jaroonsri Chyehard. The author also appreciates comments by Ernesto Pernia, J. P. Verbiest, Richard Bolt, Yun-Hwan Kim, Christopher Edmonds, V.N. Gnanathurai, and Sailesh Jha.

Asian Development Bank
P.O. Box 789
0980 Manila
Philippines

©2002 by Asian Development Bank
August 2002
ISSN 1655-5252

The views expressed in this paper
are those of the author(s) and do not
necessarily reflect the views or policies
of the Asian Development Bank.

Foreword

The ERD Working Paper Series is a forum for ongoing and recently completed research and policy studies undertaken in the Asian Development Bank or on its behalf. The Series is a quick-disseminating, informal publication meant to stimulate discussion and elicit feedback. Papers published under this Series could subsequently be revised for publication as articles in professional journals or chapters in books.

Contents

I.	INTRODUCTION AND BACKGROUND	1
	A. Introduction	1
	B. Background	2
II.	ASYMMETRICAL FISCAL DECENTRALIZATION	4
	A. Theoretical Framework	4
	B. Decentralized Local Public Finance	7
	C. International Experience and Asymmetrical Fiscal Decentralization	10
	D. Incentive Problem in the Thai Decentralization System	12
	E. Contributory Problems	14
III.	DECENTRALIZATION AND MACROECONOMIC STABILITY	16
	A. The Model	17
	B. Assumptions	18
	C. Forecasting Procedure	19
	D. Results	20
IV.	CONCLUSIONS AND POLICY RECOMMENDATIONS	22
	APPENDIX 1: GDP Growth, Inflation, and Budget Balance	25
	APPENDIX 2: Institutional Infrastructure	26
	APPENDIX 3: Local Revenue for FY 1998-2001	30
	APPENDIX 4: Local Revenue Forecast for FY 2002-2006	31

Abstract

This research study examines how the Thai central government can finance decentralization and make local governments accountable for their own finances.

The Thai government's medium-term fiscal stance is not conducive to planned fiscal decentralization, and local governments will not immediately assume responsibility for providing public services previously provided by the central government. This study proposes that the central government must improve revenue collection efficiency without hindering economic growth by gradually increasing the value added tax rate over the medium term.

Thailand has adopted an unbalanced approach to fiscal decentralization. Local governments are guaranteed revenue from transfers from the central government but need not assume increased responsibility for providing public services. This encourages local authorities to spend irresponsibly in expectation of bailouts by the central government. This study recommends that the Thai central government impose hard budget constraints on local governments.

I. INTRODUCTION AND BACKGROUND

A. Introduction

Thailand is currently decentralizing its governmental fiscal system in a manner that could lead to domestic macroeconomic instability. Unfortunately, the factors that might contribute to this negative outcome are, to some extent, inherent elements of the Thai government's adopted approach to fiscal decentralization. Therefore, the government is somewhat limited as to what measures it can adopt to prevent macroeconomic instability. This study identifies two significant shortcomings of Thailand's decentralization program and proposes two possible solutions that take into consideration the government's decentralization commitments.

The first problem has its roots in Thailand's unbalanced approach to fiscal decentralization, which gives local governments control over local expenditure but not revenue and creates an incentive for them to finance fiscal deficits by not adequately holding them responsible for overall local fiscal policy. On one hand this encourages local governments to spend revenue that they will not have independently earned. At the same time, since they still believe that the central government will bail them out of debt, local governments are likely to borrow recklessly. This will increase overall public debt in Thailand and ultimately result in macroeconomic instability. To counteract this tendency, the government will need to implement a strict policy of not bailing local governments out of debt. The first half of this paper presents a theoretical/qualitative analysis of this issue.

The other major problem with the Thai decentralization program is that, although they will enjoy a greater portion of revenue, local governments will not immediately assume responsibility for providing public services previously funded by the central government. Thus, although the central government will allocate more revenue to local governments, the expenditures of the central government over the medium term will not correspondingly decrease. Therefore, the central government will need to collect revenue with increased efficiency, but without hindering economic growth. The best way to accomplish this goal at present is by gradually increasing the value added tax rate over the medium term. The second half of this paper presents a quantitative macro-fiscal argument that supports this suggestion.

B. Background

1. Thailand's Current Macroeconomic Stance

In the early 1980s, Thailand experienced numerous macroeconomic hardships, but during the late 1980s and early 1990s, the economy grew very quickly while the inflation rate remained

manageable. Prior to 1997, Thailand experienced economic growth with many positive concomitant developments, including drastic poverty reduction. The economic crisis that struck Thailand in 1997 was primarily caused by microeconomic problems in the financial sector, rather than by the sort of macroeconomic imbalances that led to the Latin American crisis of the mid-1990s (Knowles et al. 1999). In reacting to the Asian economic crisis, the Thai government has found that it direly needs both domestic and external financing in order to restructure the nation's financial system, provide a social safety net, and rehabilitate domestic economic fundamentals. Despite the crisis, the Thai economy has not experienced high inflation (see Appendix 1).

The Thai economy has not been recovering from the crisis as quickly as many observers might originally have hoped. The medium-term outlook is not very promising since the recovery coincides with a slowdown in the world economy and since both Japan and the United States (US) are preparing for economic recessions over the medium term. There is no immediately apparent risk of macroeconomic price instability, but the ratio of public debt to gross domestic product (GDP) has increased exponentially since 1997.¹ The fact that most of this debt is domestically financed will eventually put a considerable strain on price stability, since the government will expand the money supply as domestic public debt increases. At the same time, the newly introduced fiscal decentralization program is likely to cause local authorities to expect bailouts from the central government. An increase in the ratio of public debt to GDP is likely to cause macroeconomic instability.

2. Structure of the Thai Government

Pursuant to the Thai Administration Act 1991, the Thai government consists of three levels of public administration: central, regional, and local. However, regional administration, at the provincial and district levels, is merely a territorial extension of the central government and has neither autonomy nor authority over administration. The central government in Bangkok delegates officials to work in provincial and district offices to achieve centrally determined administrative goals. Local governments, on the other hand, have some autonomy and authority over local administration.

The executive branch of the central government is composed of 15 ministries, including the Office of the Prime Minister. On the regional level, the heads of provincial and district offices are officials that have been appointed by different ministries of the central government. The Ministry of Interior appoints staff members from its Department of Local Administration to act as provincial governors and as the heads of districts in 75 regional provinces. The governor of Bangkok is the only elected governor in Thailand. The governor of Bangkok is elected to a four-year term to oversee the Bangkok Metropolitan Administration. The provincial governors and district heads appointed by the Ministry of Interior do not directly control the provincial offices of other ministries.

The 76 provinces in Thailand (75 regional provinces plus Bangkok) are subdivided into districts, subdistricts (*tambon*), and villages. Local governments of various forms are responsible

¹ Public debt to GDP ratio increased from 15.7 percent percent in 1996 to 55.7 percent percent in 2001.

for local administration within different areas of geographical coverage. Local governments in Thailand can be classified into six forms: (i) Provincial Administrative Organizations (PAOs), (ii) Municipalities (MAs), (iii) Sanitary Districts (SDs), (iv) Tambon Administrative Organization (TAOs), (v) Bangkok Metropolitan Administration (BMA), and (vi) Pattaya City. Local governments of different form not only have different political and administrative structures, but also different sizes.

The BMA is a special form of province while Pattaya City is a special form of municipality. The governor of the BMA is elected, and the BMA has greater local autonomy than other forms of local governments. Pattaya City is headed by the City Manager, an employed professional manager from the private sector. However, members of the Pattaya City assembly are elected. Both the BMA and Pattaya City are independent from the other four forms of local governments.

MAs and SDs have the same administrative authorities and both administer to urban communities, but MAs are larger than SDs. When an SD expands, it becomes an MA. TAOs are responsible for communities in rural areas. PAOs are local governments that have superstructure characteristics. That is, a PAO oversees local administration for areas not covered by MAs, SDs, and TAOs within a provincial territory (see Appendix 2 for further details on Thai government structure in Institutional infrastructure).

3. Thailand's Decentralization Plan

Thailand is a unitary country with a highly centralized fiscal system. Local governments have only limited fiscal autonomy.² The Thai government first began considering fiscal decentralization after this trend became internationally popular in the early 1990s. Before adopting specific reform measures, the government and public extensively debated the relative benefits of and appropriate methods for implementing decentralization. Initial reforms included some minor changes in local institutions and a minor increase in revenue sharing for local authorities. In spite of these fledgling reforms, the Thai government made no serious attempts to decentralize public finance until the new people-based Constitution was promulgated in 1997. (For more details about the institutional infrastructure for decentralization in Thailand, see Appendix 2.)

The 1997 Constitution (Sections 78 and 284) instituted substantial elements of a decentralized political system, explicitly requiring the central government to transfer certain powers to local governments. These clauses effectively secured the Thai government's legal commitment to fiscal decentralization by devolution rather than simply through delegation or deconcentration.³ Thus, decentralization is now a constitutionally mandated legal principle. The Thai government

² The central government collects 95 percent of general tax revenues and spends 93 percent of total general government spending (IMF 1999).

³ Devolution describes the situation in which local governments both implement the local administration and have the authority to do so. Deconcentration only reflects dispersion of responsibilities within a central government to regional branch offices. Delegation refers to a situation in which local government acts as an agent for the central government, executing certain functions on the central government's behalf (Bird and Vaillancourt 1998, 3).

is rigidly committed to implementing decentralization reforms and has specified deadlines within which certain outcomes must be realized, such as fixing the proportion of aggregate local government revenue to that of the central government.

Pursuant to the stipulations of the new Constitution, the Thai Parliament enacted the Decentralization Act (effective 18 November 1999), which, in turn, established the National Decentralization Committee (NDC) in February 2000. The NDC is responsible for drawing up an “Action Plan” that will determine how decentralization will proceed. With respect to the provision and management of public services, the Action Plan will outline which powers, authorities, and duties will be granted to the central government and which will be given to local governments.

The new Constitution significantly transforms local political conditions by giving local residents more opportunities to participate in local government administration. Local citizens now directly elect to local government organizations and local assemblies leaders that were formerly appointed by the central government (Varanyuwatana 2000, 25). However, with these new changes also come significant challenges as the Thai government endeavors to maintain fiscal discipline in the face of economic recession.

II. ASYMMETRICAL FISCAL DECENTRALIZATION

A. Theoretical Framework

1. Public Finance and Decentralization

Although public finance normally deals with both general government and state-owned enterprise finance, this study gives primary consideration to general government finance, which is subdivided into central and local government finance.⁴ Decentralization is a political process in which a central government devolves to local governments certain authorities and responsibilities.

Fiscal decentralization refers to the process through which a central government devolves upon local governments authority over and responsibility for various aspects of local government finance. The most important public-finance related political powers that are devolved by this process include control over local government revenue, expenditure, borrowing, and fiscal policy. In a fiscally centralized state, the central government completely or nearly completely controls all these aspects of local government finance. In a completely fiscally decentralized state, the central government controls only central government finance and local governments are completely responsible for all aspects of local government finance.

⁴ However, public debt is generally considered to include debt from (i) direct central government borrowing, (ii) nonfinancial state-owned enterprises (both guaranteed and nonguaranteed borrowing), and (iii) other contingent liabilities that will result in increasing fiscal cost to the government (e.g., Financial Institutions Development Fund [FIDF] fiscalization cost for Thailand).

Fiscal decentralization is intended to enable governments to deliver public services to citizens more efficiently and effectively. Generally, local governments are better informed about the needs of their constituents and can react to local developments faster than the central government. International experience has proven that adequately prepared local governments can deliver public services to local constituents better than the central government. However, when fiscal decentralization is implemented incorrectly, it can actually reduce the overall quality and quantity of public services, cause regional conflicts, and even lead to macroeconomic instability. Therefore, it is important for a government to understand how to prepare for and implement fiscal decentralization correctly in order to reap the benefits and avoid the considerable pitfalls.

2. Asymmetrical Fiscal Decentralization

Governments tend to encounter difficulties when they decentralize their fiscal systems asymmetrically. The nature of a fiscal decentralization process is determined by both political and public finance arrangements and asymmetry can manifest itself in either sphere. Fiscal decentralization is considered politically asymmetrical when the central government devolves disproportionate degrees of authority over and responsibility for local public finance. The process is considered fiscally asymmetrical when the central government devolves upon local governments certain aspects of local public finance, but not others. Therefore, fiscal decentralization is only symmetrical if the central government simultaneously devolves equal degrees of authority and responsibility for all aspects of local public finance, i.e., revenue, expenditure, borrowing, and overall fiscal policy management.

3. Thailand's Asymmetrical Approach to Fiscal Decentralization

Thailand's decentralization process is both fiscally and politically asymmetrical. It is fiscally asymmetrical because the central government is devolving responsibility and authority for expenditure but not for revenue. Simply speaking, this means that the central government is giving local governments money to spend but is not holding them responsible for earning their own keep. This is analogous to the case of rich parents giving their child money to spend. As the old cliché goes, the child does not know the value of the money that he spends. Essentially, this arrangement does not produce a strong incentive for local governments to be fiscally disciplined. The revenue distributed is in no way linked to a system that would punish local governments who squander funds or reward those who spend wisely and accomplish the goal of improving their local delivery of public services. In the end all local government players are guaranteed that they will receive a predetermined portion of general government revenue no matter how well or poorly they perform.

The Thai decentralization process is politically asymmetrical because the central government is devolving authority over but not responsibility for the sustainability of local fiscal policy. This political asymmetry is not as obvious as the fiscal expenditure-revenue imbalance because it arises not as a result of explicit government policy but rather from an implicit expectation in the minds

of local fiscal policy makers. The central government has formally pronounced that it will hold local governments responsible for maintaining local fiscal sustainability. Nevertheless, many local authorities and players in the field of local public finance still assume that the central government will take ultimate responsibility if a local government should prove unable to sustain local public finance. With this sort of expectation, local governments can confidently act to adopt the fiscal stances that they feel are appropriate, manage local debt, and set policies for local fiscal sustainability, in keeping with the central government's pronouncements. However, they will also rest assured of central bailouts if trouble arises, in spite of the central government's denial that it will intervene.

This bailout expectation can also be described using game theory.⁵ The relationship between the central and local governments is analogous to that of principal and agents in game theory. The central government, as principal, wants local governments, the agents, to behave in a certain way, i.e., to maintain fiscal discipline. However, local governments, as rational players, wish to maximize their utility by procuring as many funds as possible for their constituents. Each local government is aware that it has access to and is in competition with other local governments to maximize its share of a limited pool of resources, i.e., central government revenue. The channel of access to this pool is the system of centrally funded debt bailouts. In the long run, those local governments that continually incur deficits and consequently procure bailouts will maximize their share of central government revenue and thereby benefit their constituents as much as possible. This means that the local governments (agents) have a disincentive in behaving the way the central government (principal) desires, i.e., maintaining fiscal discipline.

By implementing a strong system of incentives, the Thai government should be able to compensate for both the political and fiscal imbalances implicit in the approach it has taken to fiscal decentralization.

In spite of all its possible benefits, decentralization cannot be expected to function properly until it is implemented fully. As long as significant channels exist between central and local accounts, down-flows are bound to occur and unfortunately these will normally benefit the local governments that perform most poorly at the expense of the general public. Once decentralization is complete, the central government can allow poorly performing local governments to go bankrupt, and at that point market forces should cause the system to work optimally. However, until it is ready and politically able to take this step, the central government will still need to exert control over local governments to ensure that the successful are encouraged and that their opposite numbers are brought back to the fold.

⁵ Game theory studies the conflicts and cooperation between rational decision makers who make choices under conditions of less than full information concerning the outcome of their decisions.

B. Decentralized Local Public Finance

1. Local Revenue

a. Changes Effected by the Decentralization Program

There are three important observations to make about the status of local government revenue under the Thailand's new decentralization program. First, the central government is not devolving to local governments any new responsibility for or authority over local revenue, i.e., the central government will neither transfer significant new government assets to local governments nor increase their power to levy taxes independently. Second, local governments have and will continue to collect independently only a tiny portion of the revenue that they use. Third, the central government is committed to significantly increasing the share of general government revenue that local governments will receive. Thus, although local governments will have much more revenue to use for their expenditures, the revenue aspect of general government public finance will continue to be highly centralized.

The Decentralization Act of 1999 states that aggregate local government revenue must not amount to less than 20 percent of total central government revenue in FY2001, with the requisite level rising to 35 percent by FY2006. For the three years before this, the ratios of aggregate local government to central government revenue were 13.10 (1998), 13.79 (1999), and 13.39 percent (2000) (see Appendix 3). Since the Decentralization Act does not give local governments any new sources of or authority/responsibility to collect revenue, the central government will need to finance this increase by transferring more funds to local governments.

b. Breakdown of Local Government Revenue Sources

Thai local governments have three main sources of revenue: locally collected revenue, centrally collected revenue, and grants or subsidies from the central government. Locally collected revenue consists of both tax and nontax revenues. Locally collected taxes include building and land tax, land development tax, signboard tax, slaughter tax, bird nest tax, tobacco and gasoline sales taxes, and hotel charges collected by Provincial Administrative Organizations (PAOs). Nontax revenues that are locally collected include license fees and fines, sale of assets, revenue from utility provision, and miscellaneous revenue. Like many of their counterparts in other developing countries, local governments in Thailand lack significant tax raising powers and are reluctant to court unpopularity by imposing new taxes.

Centrally collected revenue consists of shared taxes and fees collected for local government. Shared taxes are taxes that the central and local governments collect from the same tax base. Since it is able to do so more effectively than local governments, the central government collects such taxes and redistributes the revenue to local governments either partially or entirely. Shared taxes include value added tax (VAT), specific business tax, excise taxes, motor vehicle tax, land

registration fees, gambling tax, mineral and petroleum tax, airport fees, and underground water fees.

Intergovernmental grants or subsidies consist of unconditional and conditional grants. Unconditional grants are given to local governments with no requirements as to how the recipients may spend the funds. Conditional transfers, on the other hand, are given to local governments with conditions and can be subdivided into three types: block grants, project grants, and matching grants. Block grants are given to local governments on condition that the recipient will use the grant to achieve certain broad objectives. The recipient is free to decide how to spend the money to achieve the stated objectives. Project grants, on the contrary, require that the recipient spend the funds on certain activities or projects specified by the central government. Matching grants are used to finance the provision of a public service. The grant recipient must co-finance the provision of the stated public service within the recipient's locality by raising a certain proportion of the grant.

The sum of centrally collected revenue and grants from the central government is called total intergovernmental transfers. In its budget documents, however, the Thai central government does not include centrally collected revenue for local governments in the item central government revenue. Grants or subsidies from the central government, however, appear as intergovernmental grants and subsidies appropriated to local governments in the item central government expenditure.

As mentioned above, revenue collected by the central government is the main source of revenue for local governments in Thailand. Locally collected revenue accounts for the smallest proportion of the total local revenue. In FY2000, 50.10 percent of total local revenue was collected by the central government, 30.63 percent came from grants from the central government, and 19.27 percent was locally collected (Suwanmala 2000, 16). This demonstrates that local governments depend heavily on transfers from the central government. Improving local revenue mobilization will be a very challenging task, given the existing structure and a lack of both effectiveness and incentives for local governments to collect more revenue by themselves.

2. Local Expenditure

Under Thailand's current decentralization program, local governments have full, unconditional authority to spend local revenue on local administration and the provision of local public services. This applies to all sources of local revenue except conditional subsidies from the central government. The scope of local government expenditure responsibilities under the Decentralization Act of 1999 is also very broad. A large number of expenditures for which local governments are to be held responsible under the Act duplicate provisions that are also to be made by central government agencies. The National Decentralization Committee has ordered that the central government devolve responsibility for providing public services to local governments in two phases. During the first phase, 2001-2004, public services are to be reclassified and responsibilities for those services are to be devolved to appropriate local authorities. During the second phase, 2005-2010, all local services should be fully devolved to local authorities. However,

it is doubtful that the goals of the first phase will be achieved within the dateline, because many local authorities are too small and lack maturity and capacity while some public services are quite complex (Suwanmala 2000, 22).

3. Local Borrowing

The Decentralization Plan does not substantially alter the nature of local government borrowing. Just as before, local governments in Thailand will have very limited authority over and responsibility for borrowing to finance local fiscal deficits. Therefore, the financing aspect of local government public finance remains predominantly under the control of the central government.

Although it does not confer new revenue collection powers, the Thai Decentralization Plan does require local governments to undertake more expenditure responsibilities for a wider range of functions than they can finance on their own. Often when a country decentralizes, the central government gives local governments more authority to borrow to finance local deficits. As a result, the central government inadvertently encourages local governments to rely heavily on the central government for bailouts necessitated by the irresponsible borrowing behavior of inexperienced local authorities.

Local governments in Thailand have the legal right to borrow domestically, but rarely do so because of limited resources and experience and because the process is complex and tightly controlled. Domestic borrowing is subject to cumbersome approval requirements imposed by the Ministry of Interior. External borrowing must also be approved in the annual external borrowing plan drawn up by the National Debt Policy Committee (NDPC), in compliance with the Regulation on National Debt Policy B.E. 2528.⁶ With such strict and complex requirements, inexperienced local authorities are unlikely to resort to domestic or external borrowing.

Historically, local government borrowing has been relatively unimportant in Thailand since local governments primarily finance costly local infrastructure development projects with local government savings or by means of budgetary transfers from the central government. There have been very few externally financed local development projects.

Even though Thailand is in the process of decentralizing, the central government still supervises local government borrowing. The Decentralization Act of 1999 grants local governments the rights under certain conditions and with permission from the Cabinet, to issue bonds and to borrow domestically or externally. The recent draft of the Public Debt Management Law (PDML) also states clearly that the ceiling for total annual external borrowing includes local borrowings. The Cabinet approved this PDML draft on 7 August 2001.

⁶ The Regulation specifies clearly that the total amount of external loans, together with the external loans expected to be drawn over the next five years, must not exceed 9 percent of the income in foreign currency that is expected to be derived from the sale of goods and services over the same five-year period.

The strict control of local borrowing by the Thai central government, however, might induce local governments to expect debt bailouts from the central government. Given Thailand's political legacy of strong centralization and the government's recent bailout of the financial sector, local governments will naturally expect debt bailouts from the central government. Unless the central government establishes local bankruptcy regulations and designs mechanisms to promote *ex post* enforcement of a credible no-bailout policy, local governments will have a strong incentive to borrow irresponsibly. Even though conventional borrowing requires Cabinet's approval, local governments can still use other forms of unconventional borrowing, such as running in arrears on goods and services provided to the local government.

Since public debt management is properly a central government task, the central government should have full control over all the instruments of policy it needs to carry out this task properly. The public debt can also be managed effectively and efficiently by a centralized agency that deals with macro-level public finance. Public debt management requires up-to-date information on debt and borrowings. Local fiscal data in Thailand, however, are not updated and communicated to the central agency quickly. One main reason for this shortcoming is the existence of an excessively large number of local authorities in Thailand.

This system of informal borrowing arises in Thailand because local governments have come to expect and rely on centrally funded fiscal bailouts. Local governments are aware that the central government will help meet financial obligations on which local governments default. This expectation is so strong that local governments have a pronounced tendency to incur debts that they intend to finance with central government bailouts. Institutions that lend to local governments are also aware of this dynamic. Consequently, they are willing to lend funds for programs they might otherwise consider financially risky or unrewarding, because they know that local governments have such a reliable guarantor with considerably deep pockets. In order not to overlook such an important source of local government financing, this study will treat these informal borrowings as a component of borrowing in general.

C. International Experience and Asymmetrical Fiscal Decentralization

Two empirical studies on approaches to fiscal decentralization help to support the argument that the asymmetrical nature of Thailand's fiscal decentralization program is likely to create macroeconomic problems.

1. Administrative Federalism versus Full Legislative Federalism

Guigale and Webb's (2000) investigation of fiscal decentralization demonstrated that countries encountered macroeconomic difficulties when their decentralization arrangements were similar to that of Thailand. Their study examined fiscal arrangements under two extremes of fiscal decentralization. At one extreme they classified nearly completely decentralized countries such as Canada and the US into an arrangement they referred to as Full Legislative Federalism. At

the other extreme, they placed countries that are partially decentralized, such as Argentina and Germany, into an arrangement called Administrative Federalism. Thailand’s decentralization program most closely approximates the latter.

Guigale and Webb described Administrative Federalism as a system in which local governments have only a slight degree of revenue independence, expenditure autonomy, debt autonomy, and independence in determining personnel policies.⁷ According to their findings, when local governments were given little independence in determining other aspects of local fiscal policy, but were given a high degree of debt autonomy, countries had difficulty maintaining overall fiscal discipline. This was the case in Argentina, especially in the 1980s, where local governments had both a high level of debt autonomy and almost complete independence in determining personnel policies but were given minimal revenue independence. Table 1 below summarizes features of these decentralization models.

Table 1. Administrative Federalism versus Full Legislative Federalism

Features	Complete	Partial	Minimal
Revenue Independence	Canada, US	Brazil	Argentina, Australia, Colombia, Germany, Venezuela
Expenditure Autonomy	Brazil, Canada	US	Australia, Colombia, Germany, Venezuela
Debt Autonomy	Canada, US	Argentina	Brazil
Personnel Policy Independence	Argentina		Brazil
Regional Equalization (Federal Transfers)	Australia, Canada, Germany		Colombia, Venezuela, US

2. Revenue-oriented Decentralization

Bird and Vaillancourt’s (1998) study of the order in which local finance powers are decentralized also supports the contention that asymmetrical decentralization in Thailand will lead to macroeconomic instability. Whereas Guigale and Webb’s study examined decentralization arrangements as a snapshot in time, Bird and Vaillancourt’s investigation looked at the process of decentralizing and the order in which local public finance powers are devolved. They took their

⁷ Their categories are easily assimilated under the general terms of public finance as used in this paper: revenue independence = revenue; expenditure autonomy = expenditure; debt autonomy = financing. Personnel policy independence can be considered a subdivision of expenditure.

samples from a group of countries that have undergone fiscal decentralization. Their conclusion shows that countries tend to encounter macroeconomic problems when local revenue and expenditure authority and responsibility are not devolved simultaneously.

In their study, the authors discuss a budget decentralization process that they refer to as revenue-oriented budget decentralization. This describes the type of processes that were implemented in Argentina, Brazil, and Colombia. In this type of budget decentralization, the central government retains authority and responsibility for collecting revenue and distributing it to local governments. However, the central government does not correspondingly retain authority and responsibility for dictating what expenditures local governments must fund with the revenue that they allocate. Central governments normally implement this type of decentralization process by making legal commitments to transfer funds to local governments.

It is thought that this approach will give local governments the flexibility to determine their own spending on the principle that they should know best what they need. At the same time it gives them funds to make those expenditures, assuming that at the outset of the decentralization process they would not be sufficiently prepared to gather revenue independently. However, in countries that have decentralized in this way local revenue mobilization has diminished, overlapping expenditure provisions have arisen, and macroeconomic imbalances have appeared. Thailand's decentralization program follows this type of pattern.

In spite of its shortcomings, revenue-oriented budget decentralization has an advantage in that it provides predictable revenue inflows for local governments that are just gaining experience with independently managing local public finance. This predictability allows local governments to plan budgets for the long term, rather than simply on the year-on-year basis. For Thailand, it has the added advantage of also helping the Thai central government to transition from a year-on-year to a rolling three-year national budget plan (Bird and Vaillancourt 1998, 5-6).

D. Incentive Problem in the Thai Decentralization System

Local governments do not have strong incentives to be accountable for their own finances and administration when they (i) have soft budget constraints, (ii) face neither ex ante nor ex post borrowing regulations, or (iii) have weak administrative skills and disciplinary administrative institutions and environments. These problems in the Thai decentralization system will be examined below.

1. Hard versus Soft Budget Constraints

Soft budget constraint and hard budget constraint refer to the two incentive extremes that ultimately determine how well local fiscal discipline will be maintained. A soft budget constraint exists when local governments can expand its expenditure without itself ever having to face the full cost thereof. This occurs when local governments know and expect that the central government will bail them out if they fail to honor their financial obligations. A hard budget constraint reflects

the opposite situation, i.e., the central government follows a strict no-bailout policy and local governments are responsible for their own financial obligations. Various researchers have explored the literature concerning these issues in great detail, e.g., Bird (1993), and recently Rodden et al. (2001).

A central government can impose hard budget constraints on local governments through the three main fiscal policy dimensions, namely, revenue, expenditure, and borrowing. These three dimensions of fiscal policy must be jointly regulated to achieve a sustainable fiscal stance that does not result in widespread bankruptcy of local governments or central government bailouts. Although there is a legal mandate on increasing aggregate local revenue, the central government still can use conditional transfers of funds to control behaviors of local governments. For example, the central government can transfer more per-capita subsidy to local authorities that demonstrate higher local fiscal discipline and accountability. Concrete indicators for such local discipline and accountability need to be designed and used as tools to evaluate performance of individual local authorities. In addition, the Thai government must introduce certain laws that not only prohibit the central government from bailing local governments out of debt but that also eliminate the expectation of local fiscal bailouts by both local governments and lending institutions.

2. *Ex Ante* and *Ex Post* Borrowing Regulations

The existence of local borrowing partially determines what impact decentralization will have on macroeconomic stability. It may also raise concerns about the problem of moral hazard. To minimize problems, some countries have imposed strict limits on the borrowing ability of local governments. Although there are both pros and cons associated with *ex ante* regulations that limit local borrowing, international experience has shown that the only way to reduce the moral hazard implicit in decentralization in developing countries may be by imposing strict limits on local borrowing (Bird and Vaillancourt 1998).⁸ As an alternative or complement to limiting local borrowing *ex ante*, some developing countries prohibit explicit bailouts *ex post* by forcing creditors to accept losses that arise when a local government fails to service a debt. Dillinger and Webb (1999) also concluded that among other critical conditions that lessen the likelihood that fiscal decentralization will lead to excessive deficits and thus macroeconomic instability are both *ex ante* regulations that limit local borrowing (as in Brazil) and *ex post* enforcement of a credible no-bailout policy (as in Argentina). These two methods of preventing excessive local borrowing are not mutually exclusive and can, in fact, reinforce each other. Therefore, Thailand can impose both *ex ante* regulations and *ex post* enforcement.

⁸ A pro for setting the limit in the national level is underlined by the fact that macroeconomic stabilization is the national government task. The national government therefore should have full control over all the instruments of policy it needs to carry out this task properly. A con for not setting the limit is that it prevents market discipline from being applied, which is an analogy to public insurance saving deposits.

3. Improving Administrative Accountability

Increasing local governments' accountability can help minimize risk that fiscal decentralization will result in macroeconomic instability. Decentralization should promote political, administrative, and economic accountability. Political accountability requires politicians in all levels to be responsive and responsible to their constituents. At the same time, constituents must be fully informed about the consequences of their and their politicians' decisions. Administrative accountability requires a clear legal framework with respect to who is responsible for what. In addition, the legal framework should specify in detail the form, content, and frequency of financial reports as well as the administrative flow of reports. Economic accountability requires that local residents are responsible for paying for local services, which in turn requires that local authorities can set some tax rates (Bird and Vaillancourt 1998, 13).

It is far more difficult to improve political and economic than administrative accountability. The former two dimensions require that local residents and politicians participate in local politics and be both politically aware and morally responsible. Administrative accountability, on the other hand, can be improved simply by establishing adequate and well-designed rules, regulations, and practices, i.e., by institutional reforms. But in general, the keys to improving accountability are the accuracy and timely availability of information and the existence of channels through which the general public or authorized auditors can bring to account corrupt or incapable local authorities.

In Thailand local administrations lack administrative accountability. Most critically, there is still no official central agency that is responsible for auditing, compiling, consolidating, and reporting aggregate fiscal data. The ministry of interior collects data from all local administration organizations other than the Bangkok Metropolitan Administration (BMA) and Pattaya City. Currently, the Bank of Thailand and the Fiscal Policy Office jointly prepare the most comprehensive local fiscal data to be reported in the *Government Finance Statistics Yearbook* published by the International Monetary Fund. However, these two agencies have neither enough leverage nor human resources to accelerate the local fiscal data. As a result, the most recent preliminary aggregate local fiscal data, which is only available for internal use, has a two-year lag. And they are only published in the *Government Finance Statistics Yearbook* after a three-year lag. Although fiscal decentralization is already under way, the Thai government has yet to outline a detailed and concrete plan for improving the timeliness and administration flow of financial reports as it has for other aspects of decentralization.

E. Contributory Problems

In addition to the lack of sufficient incentives, the Thai decentralization process also faces challenges in that the process is being implemented quickly, that local government infrastructure is highly complex, and the quality and speed of fiscal information is poor.

1. Speed of Decentralization

When political and fiscal decentralization occurs quickly, relatively untested and sometimes weak institutions are suddenly charged with making important decisions and handling large amounts of money. This happened in Columbia where progressively increasing transfers to the municipalities, which were mandated by the 1991 Constitution, exacerbated the central government's existing fiscal imbalance. The requirements for transfers constrained the central government significantly without placing corresponding constraints on local governments (Dillinger and Webb 1999).

Like Columbia and some other countries, Thailand legally mandated that the central government must transfer revenue to local governments to ensure that the decentralization processes would be adequately financed. This also occurred in Argentina, Indonesia, and Tunisia. Countries that began fiscal decentralization recently, like Indonesia and Thailand, can learn valuable lessons from Columbia.

For both Thailand and Indonesia, the legal commitment considerably changed the previous trends of central-to-local transfers and, thus, increased local governments' total revenue. Thailand's 1999 Decentralization Act mandates that aggregate local revenues must amount to at least 20 and 35 percent of the central government's total revenue in fiscal years 2001 and 2006, respectively. In FY2001, the total revenue of local governments increased drastically to 20.9 percent of central government revenue from only 13.4 percent in FY2000. Indonesia's Fiscal Decentralization Law No. 25/1999 specified that the total amount of a "general allocation fund" must be at least 25 percent of the central government domestic revenues. In the national budget for FY2001, the total amounts of central transfers to regional governments—which includes revenue sharing, the "general allocation fund," and a newly-introduced central transfer "special allocation fund"—amounted to more than an 80 percent increase on a year-on-year basis.

Although the speed of Thailand's decentralization process cannot be changed now, the government can anticipate problems and work to prevent them by paying prompt and close attention to the types of incentives it can implement to force local governments to handle local finance responsibly.

2. Complexity of Local Government Infrastructure

Another major problem that the Thai government faces in devolving finances to local governments is that the latter vary immensely in terms of their respective sizes, authorities, and capacities. Suwanmala (2000) used 1999 data to present the distribution of population among different forms of local governments. The statistics showed that about 70 percent of local authorities are small communities with populations of under 5,000. In addition, those communities are contiguous or located next to each other with no clear-cut boundaries, and thus they share most

of their natural resources and infrastructures. Therefore, few local authorities can apply economies of scale in providing public services. Moreover, as expenditure responsibilities are further devolved one can only expect that local governments located near one another will encounter worse externality problems concerning the costs and benefits of providing public services (Suwanmala 2000, 9-10, 33-34; also see Appendix 2)

3. Inadequacy of Local Fiscal Data

The central government also faces a serious challenge in effectively implementing fiscal decentralization because of the inadequacy of local fiscal data. Local governments do regularly submit to the central government information on local public finance. However, there is a great disparity in terms of the quality and thoroughness of data submitted from one area to another. This in part results from the great diversity of local political arrangements, but local authorities also have differing interpretations of the fiscal data reporting system. The central government provides insufficient training to local authorities on reporting procedures and standards. When data from one locality is submitted incorrectly, the central government is forced to seek clarification from the submitting authority and this adds to the already extensive time lag in compiling local fiscal data. Consequently, the central government is unable to assess the progress of fiscal decentralization in real time. Local authorities are also aware that data is not being collected adequately and that the central government cannot realistically keep track of individual local government's performances. This only weakens the effectiveness of any incentive measure that the central government might implement to foster cooperation from the local level, because local authorities know that it would be difficult for the central government to bring them to account.

III. DECENTRALIZATION AND MACROECONOMIC STABILITY

This section examines the effect of decentralization on macroeconomic stability in Thailand over the medium term using a macro-fiscal analytical approach. It takes into consideration pertinent macroeconomic structures and policy assumptions about public finance and strategy, especially those relating to fiscal decentralization. This sort of analysis is important because macroeconomic instability may occur in Thailand if the medium-term fiscal stance is unsustainable.

This section uses the following indicators to identify fiscal sustainability: (i) medium-term downward trend of public debt to GDP ratio, (ii) convergence of revenue-to-GDP and expenditure-to-GDP ratio and (iii) medium-term downward of debt service cost to GDP. Thailand increasing public debt ratio reflects a higher demand for public borrowing, which can lead to inflation or price instability.

A. The Model

This medium-term fiscal analysis examines the three main parts of public finance, i.e. revenue, expenditure, and public debt, over the period from FY2002 to 2009. The analysis focuses only on the central government's revenue and expenditure.

The only medium-term forecast of local governments' revenue and expenditure disclosed by the Thai Ministry of Finance clearly shows no new forms of local revenue mobilization, e.g., there are no structural changes in local taxes or local revenue measures. In particular, the forecast assumes no changes in any item of locally raised revenue, except Building and Land Tax and Land and Development Tax, over a 5-year period from FY2002 to FY2006. Consequently, the legally mandated increases in the proportion of local to central government revenue will be mostly financed by transfers from the central government (see Appendix 4).

1. Central Government Revenue

The revenue forecast presented in this study is based on assumptions about revenue elasticity and government measures that affect revenue such as privatization. Revenue elasticity is generally defined as follows:

$$\text{Revenue Elasticity} = \frac{\text{percent change in revenue excluding effects from revenue measures}}{\text{percent change in GDP}}$$

Since the revenue forecast presented in this study is based on assumptions about revenue elasticity, its results will be significantly influenced by assumptions about the GDP growth rate. When the author obtained in September 2001 from the Thai Ministry of Finance the model that is used in this study, the GDP growth rate had yet to be adjusted to reflect the general downturn in the global economy. Therefore, the results presented are based on the author's own best assumptions about how the GDP growth rate should have been modified in that model.

The results are also based on two assumptions about possible revenue policies. One assumes a low revenue mobilization policy in which the VAT rate was to be kept at 7 percent throughout the period. The second assumes a high revenue mobilization policy in which the government would gradually increase the VAT rate from the current 7 percent to 8 percent in 2003, 9 percent in 2004, and 10 percent in 2005.

2. Central Government Expenditure

The expenditure side of this model is more complex than the revenue side. Total expenditure (TE) is broken down into three main components: capital expenditure (KE), current expenditure (CE), and principal repayment (PR). Current expenditure is further broken down into three components: current expenditure for personnel expenses (CEP), current expenditure for interest payment (CEI), and current expenditure for the remainder of the former two categories (CER).

$$TE = KE + CE + PR$$

$$TE = KE + CEP + CEI + CER + PR$$

The model's estimates about the medium-term CEI and PR are mainly based both on the existing payment schedule for present borrowing obligations and on assumptions about future borrowing to finance budget deficits and FIDF fiscalization cost. Fiscal decentralization will increase intergovernmental transfers in the form of capital transfers to local governments in KE and current transfers to local governments in CER. If the central government has to bail out local governments' unserviceable debt, CEI and PR will increase. If the decentralization strategy entails a concrete plan of personnel transfers from the central to local governments, then the CEP should be reduced over the medium term. If the decentralization strategy entails a concrete plan of responsibility transfers, the item "purchase of goods and services" in CER should also be reduced. However, given the progress up to the present, the CEP and CER are likely to be the same. One can expect an upward trend in the total expenditure of the central government under the current environment of fiscal decentralization in Thailand.

Note that the above computation is based on budget appropriations, which will be built upon to acquire cash-basis expenditure. For accuracy, the analysis uses a cash-basis concept for revenue and expenditure to assess the convergence of the revenue-to-GDP ratio and expenditure-to-GDP ratio. Further assumptions about the budget disbursement rate and carryovers are needed to bridge the gap between planned budget appropriations and spent budget expenditure.

3. Public Debt

The public debt concept used in the model contains three main parts: direct central government debt, nonfinancial state-owned enterprise debt (both guaranteed and nonguaranteed by the central government), and fiscalized cost of FIDF debt. The details of the current stock of debt, the committed plan of debt payments—both debt servicing and amortization—and the future policy toward incurring new debt/ borrowing in the model rely on data from the Ministry of Finance. However, the baseline analysis by the Thai MOF did not incorporate the possibility of possible higher public debt caused by the fiscal bailouts of local governments. The model, therefore, presents an alternative scenario in which local governments face soft-budget constraints in order to demonstrate the sensitivity of fiscal sustainability in a worse-case scenario.

B. Assumptions

Table 2 shows assumptions used this analysis. There are two baseline scenarios with no consideration of decentralization effect, namely (i) when VAT is pegged at 7 percent; and (ii) when VAT increases to 8, 9, and 10 percent in FY2003, 2004, 2005, respectively, and stays at 10 percent onward. The effect of decentralization does not manifest itself in the main assumptions in the items "growth rate of capital expenditure (KE)" or "growth rate of current expenditure excluding

personnel and interest expenses (CER).” However, it is factored into the model through the detailed components of total expenditure as incremental amounts calculated on the basis of the Ministry of Finance’s local revenue forecasts and the increase in the proportion of local to central government revenue as required by the Decentralization Act of 1999.

Table 2. Assumptions Used in the Medium-term Analysis

Assumptions/ Fiscal Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Nominal FY GDP (billion baht)	4,900	5,091	5,356	5,650	5,989	6,349	6,742	7,160	7,626	8,122	8,649
Nominal FY GDP growth rate (percent)	6.2	3.9	5.2	5.5	6.0	6.0	6.2	6.2	6.5	6.5	6.5
Inflation rate (CPI)	1.6	2.6	2.8	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Exchange rate (baht/USD)	39.03	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00
Elasticity of revenue (excluding privatization and irregular proceeds)	0.00	2.32	0.89	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Interest rate for financing budget deficit (percent)	5.0	5.0	5.5	5.5	6.0	6.0	6.5	6.5	6.5	6.5	6.5
Interest rate for financing FIDF2 bonds (percent)	5.5	5.5	6.0	6.0	6.5	6.5	7.0	7.0	7.0	7.0	7.0
Budget disbursement rate (percent)	89	90	90	90	90	90	90	90	90	90	90
Growth rate of capital expenditure	-7.0	0.5	5.3	7.1	6.9	7.1	6.9	6.9	6.9	6.9	6.9
Growth rate of current expenditure excluding interest and personnel expenses			9.7	5.5	6.0	6.0	6.2	6.2	6.5	6.5	6.5
Growth rate of personnel expenses		6.6	3.9	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

C. Forecasting Procedure

Given the assumptions above, the author forecasted Thai medium-term fiscal stance in four scenarios: (i) baseline case with no extra intergovernmental transfers to local governments and where VAT is pegged at 7 percent; (ii) case of intergovernmental transfers to local government and VAT is pegged at 7 percent; (iii) baseline case with no extra intergovernmental transfers to local governments and VAT is gradually increased to 10 percent; and (iv) case of intergovernmental transfers to local government and where VAT is gradually increased to 10 percent. For convenient references, the four cases will be called (1) baseline VAT 7 percent, (2) Decentralization VAT 7 percent, (3) Baseline VAT 10 percent, and (4) Decentralization VAT 10 percent. The main purpose of the analysis in this sector is to compare results from cases (2) and (4). Neither case (2) nor (4) are a policy option for the Thai government now. Decentralization has been adopted and implemented with a time frame. The answer that this exercise can provide is whether it is necessary for the Thai government to introduce the pre-announced and gradual increase of VAT over the medium term.

D. Results

Figures 1, 2, and 3 show the effect of different fiscal decentralization strategies on fiscal sustainability. These figures all demonstrate that fiscal sustainability is not a big concern for Thailand, regardless of what VAT policy is adopted. However, all three indicators clearly show that decentralization damaged medium-term fiscal sustainability. If the government commits itself to increasing the VAT to 10 percent, the fiscal stance is much more sustainable over the medium term. Appendix 4 presents detailed results of four medium-term projections: baseline with stable 7 percent VAT, baseline with gradually increasing VAT, decentralization effect with stable 7 percent VAT, and decentralization effect with a gradually increasing VAT.

Figure 1 shows the medium-term public debt to GDP trends of the four scenarios. Case (2) demonstrates that if the Thai government decides to peg VAT at 7 percent throughout the medium term, public debt to GDP will still decline. Fiscal sustainability is not threatened. However, the declining rate of public debt to GDP is very gradual. By the end of 2010, public debt to GDP is still higher than 60 percent. Case (4), on the other hand, demonstrates that if the Thai government adopts the pre-announced gradual increase in VAT, public debt to GDP will drastically drop from the peak of over 60 percent in 2006 to under 50 percent in 2010.

Figure 2 indicates that the debt-service ratio over the medium term will drop drastically if the government adopts a 10 percent VAT policy. If the government pegs the VAT rate at 7 percent, even though the debt service cost will decline over time, the cost will slightly increase in 2010.

Figure 3 demonstrates the central government's revenue-expenditure gap in the medium term. With a pegged 7 percent VAT, the gap over the medium term improved, but stayed close to 2.5 percent deficit in 2010. That means, the government will not be able to use its budgetary surplus to amortize public debt by 2010. Alternatively, if the government adopts the VAT rate increase option, the central government's budgetary deficit will be reduced drastically. In addition, by 2010 the central government's budget will be almost balanced.

Figure 1: Public Debt to GDP, 2000-2010

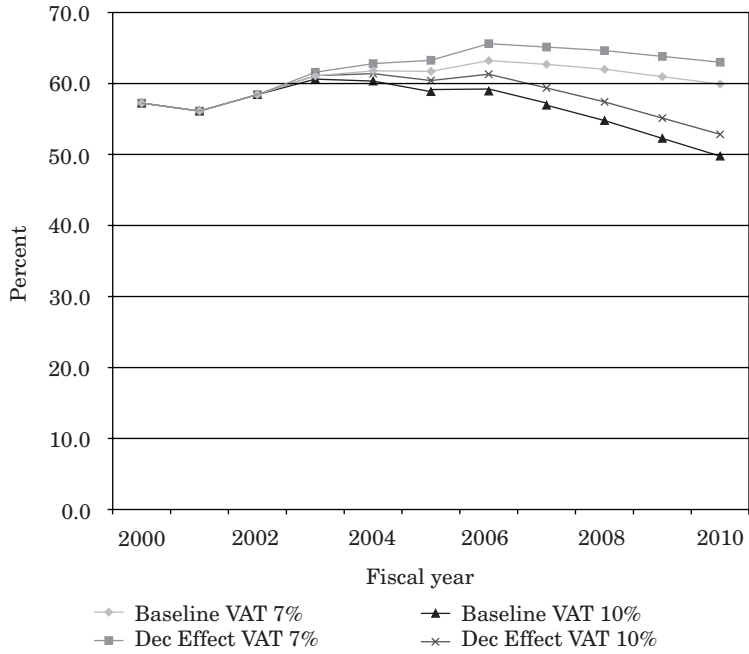


Figure 2: Debt Service Cost to GDP, 2000-2010

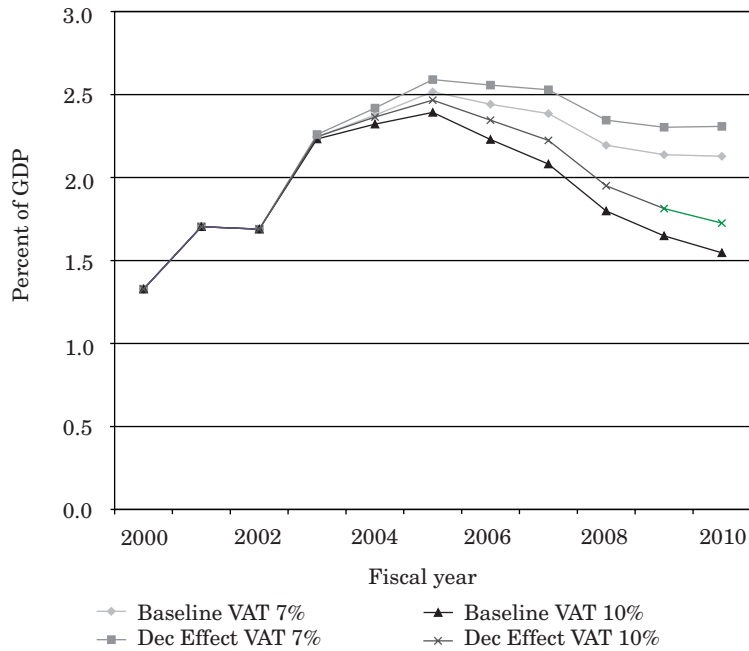
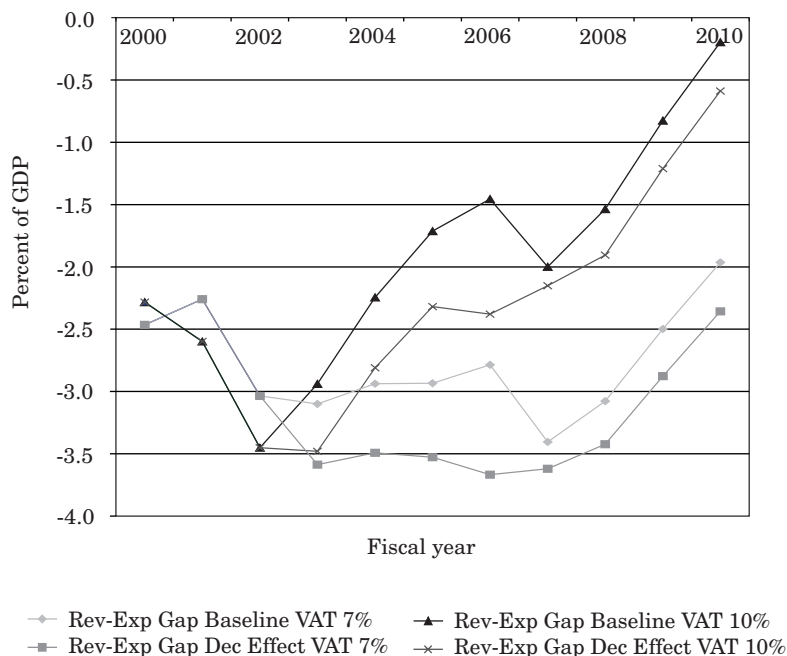


Figure 3: Revenue-Expenditure Gap, 2000-2010



IV. CONCLUSIONS AND POLICY RECOMMENDATIONS

Fiscal decentralization has been adopted in Thailand in response to a popular sentiment that was expressed through a democratic process. Yet, the decentralization strategy is based on a top-down rather than bottom-up approach. The Constitution of 1997 and the Decentralization Act of 1999 mandate a rather rigid increase in the ratio of local to central government revenue. This is true despite the fact that the majority of local revenue already comes from the central government (80 percent in FY2001). The law charges the central government with achieving this goal in the set schedule. Local governments have no incentives to improve local revenue mobilization. Nor do they have action plans for decentralization. Therefore, responsibility for increasing local revenue falls entirely on the central government. Over the medium term, one can expect increasing transfers from the central government to local governments.

This study has sought to identify which conditions might minimize the risk that fiscal decentralization will cause macroeconomic instability in Thailand. Macroeconomic instability is especially worrisome in Thailand because the nation is already in a weak fiscal stance as a result of the government's attempts to rescue the financial sector after the Asian economic crisis of 1997. Thailand's decentralization strategy gives local governments minimal revenue independence from the central government but a relatively high degree of expenditure autonomy. This sort of arrangement encourages local authorities to spend irresponsibly in expectation of federal bailouts,

which in turn can cause macroeconomic instability. To avoid the pitfalls of this sort of arrangement, Thailand must foster institutional arrangements that create hard budget constraints for local governments.

Establishing a strong incentive system to encourage accountability will ensure a sound decentralization system in the long run. The Thai government should design an institutional setting that creates hard budget constraints for local governments. The central government must send out a strong message to all potential lenders that it will not bail out insolvent local governments. The government should make the announced no-bailout policy credible while simultaneously making efforts to reduce the rate of failure on part of local governments. To do so, this study recommends the following.

First, the central government should help build local governments' administrative skills. Second, local governments should have more responsibility for their revenue by expanding their own-source revenue. New taxes and expanding tax bases for local governments can help achieve this. Third, since local governments cannot raise own-source revenue quickly during the transitional period, the central government should promote local government accountability by using conditional transfers. Local governments with superior transparent and disciplinary fiscal performance should receive more transfers. Fourth, the central government needs to introduce ex-ante and ex-post borrowing regulations, i.e., borrowing ceilings and bankruptcy regulations. Finally, there is an urgent need to improve local fiscal account reports. The government should establish a central agency that will be responsible for consolidating accurate and timely local fiscal data. Local fiscal data and information should be reported on standard forms and made available in a timely fashion to all parties that will enforce local fiscal discipline.

In addition to the above structural problems, the Thai central government must also cope with the problem of financing decentralization during the transitional period. While local governments are still weak and too immature to mobilize their own revenue, the central government must increase intergovernmental transfers to local governments. The medium-term fiscal analysis presented in the paper asks whether the central government can afford to finance local governments under existing taxation and expenditure settings. Since the central government is under pressure to follow current spending trends, its most viable policy option is to increase tax revenues. This study considers the fiscal advantages of gradually increasing the VAT rate from 7 to 10 percent, assuming that the Thai government would announce and thoroughly publicize the entire plan prior to the implementation.

The study's medium-term analysis model covers fiscal years 2002 to 2010. It illustrates that, in the absence of decentralization, Thailand would be able to sustain its fiscal stance, with public debt to GDP decreasing gradually after FY2006. However, the Thai government has already been committed to implement fiscal decentralization. Under fiscal decentralization, if the VAT rate is to be maintained at 7 percent, the medium-term ratio of public debt to GDP will only decrease very slowly and will still stay at over 60 percent through 2010. Thus, the Thai central government should improve its revenue mobilization if it is to comply with the current fiscal decentralization strategy. The following rationales support the proposed increase in the VAT rate: VAT is a very

buoyant tax, it has a vast base, its current rate of 7 percent is very low by international standards, and it is quite inelastic. If the central government were to incrementally increase the VAT rate to 10 percent over the medium term, the Thai government would have a strong chance of achieving fiscal sustainability and hence of avoiding macroeconomic instability. In addition, a scheduled increase in consumption tax would lead to an increase of consumption, which will accelerate economic growth.⁹

⁹ This phenomenon was evident in Japan before the consumption tax initiation of FY1989 and the increased consumption tax rate from 3 percent to 5 percent in FY1997. There were sharp increases in consumption in the first three months of 1989 and 1997 before the tax increases became effective on 1 April, the first day of Japanese fiscal year.

Appendix 1
GDP Growth, Inflation, and Budget Balance

Year	GDP Growth (y-o-y percent change)	Inflation (percent)	Budget Balance (percent GDP)
1980	5.9	19.7	-2.68
1981	5.9	12.8	-2.73
1982	5.4	5.2	-4.77
1983	5.6	3.8	-3.55
1984	5.8	0.9	-3.80
1985	4.7	2.5	-4.50
1986	5.5	1.8	-4.15
1987	9.5	2.5	-2.05
1988	13.3	3.8	0.63
1989	12.3	5.4	2.41
1990	11.1	5.9	4.04
1991	8.6	5.7	4.29
1992	8.1	4.1	2.56
1993	8.4	3.4	1.05
1994	8.9	5.1	1.44
1995	8.8	5.8	2.20
1996	5.5	5.9	1.51
1997	-1.8	5.6	-1.18
1998	-10.2	8.1	-2.58
1999 ^p	4.2	0.3	-2.81
2000 ^p	4.4	1.6	-2.31

Sources: Office of the National Social and Development Board, Bureau of the Budget, and Fiscal Policy Office.

Appendix 2

Institutional Infrastructure

A. Rules and Law

Prior to 1997, Thailand had already established various local authorities under several laws. The Thai government increased the power and responsibilities of such authorities gradually, until, with the ratification of the 1997 Constitution, the major change in decentralization started when the Constitution of 1997 was promulgated.

The 1997 Constitution instituted the principles of local autonomy and the election of local representatives. The Constitution required that the government draft a decentralization act and establish a decentralization committee. It specified that the act must delineate the functions of central and local governments. The committee, in turn, was charged with preparing the decentralization plan and reviewing, monitoring, and making policy recommendations to the Cabinet (Section 284 of the Constitution). The National Decentralization Act, which became effective in November 1999, serves as the core legal framework for establishing a new decentralization system and structuring intergovernmental relations. Other laws that contribute to the legal framework for decentralization are the Provincial Administrative Act, Tambon Administrative Organization Act, Municipalities Act, Upgrade Status of Sub-Municipalities to Full Municipalities, Change in the Status of the BMA, Change in the Status of Pattaya City, Master Plan and Procedures of Administrative Power, and Act for Establishing a Centralized Personnel Body of Permanent Officials of Local Administrative Organizations (World Bank 2000, 70).

The National Decentralization Act provides a framework for Thailand's decentralization plan. It consists of four parts: (i) phasing of decentralization, (ii) public service responsibility classification and devolution, (iii) financial decentralization benchmarks, and (iv) decentralization planning cycle. Parts (i) and (iii) specify rigid schedules for devolving service responsibilities to local authorities and increasing the proportion of local revenue to central government revenue. Part (ii) provides guidelines for devolving public services to local authorities, and part (iv) establishes procedures for legalizing the Decentralization Plan.

Although the Plan addresses both the revenue and expenditure sides of budget decentralization, it provides greater detail about the revenue side. Specifically, it legally binds the central government to devolving revenue on a set schedule, leaving no option for postponement. Part (i), which addresses the devolving of public services, sets a much less aggressive schedule than that for guaranteeing local revenue. It establishes two phases in which responsibility for public services will be devolved. During the first phase, 2001-2004, public services are to be reclassified and responsibilities for those services are to be devolved to appropriate local authorities. During the second phase, 2005-2010, all local services should be fully devolved to local authorities. However, it is doubtful that the goals of the first phase will be achieved within the dateline, because many local authorities are too small and lack maturity and capacity while some public services are quite complex (Suwanmala 2000, 22).

The National Decentralization Act also defines the roles and responsibilities of the National Decentralization Committee (NDC). The NDC is responsible for (i) producing a Decentralization Plan to be submitted to the Cabinet and Parliamentary Approval; (ii) proposing criteria or parameters for allocating resources, including subsidies and central budget, among different levels of government; (iii) proposing legislation, regulations, and administrative guidelines to implement the decentralization plan in a timely manner; (iv) proposing a system to achieve transparency and public participation in government functions at the local level; and (v) monitoring progress in implementing the decentralization plan.

B. National Decentralization Committee and Subcommittee

The National Decentralization Committee (NDC) is composed of 36 members, chaired by the Prime Minister. The 36 members include 12 representatives of local authorities; 12 central government officials; and 12 qualified authorities from the fields of government affairs, public law, economics, and local politics.

The NDC also contains four subcommittees: (i) Strategic Planning, (ii) Finance/ Budget/ Personnel, (iii) Law and Legislation, and (iv) Monitoring and Evaluation. The Strategic Planning Subcommittee is expected to take the lead in guiding the NDC in providing the Decentralization Action Plan, which must be finalized by November 2001. This subcommittee established a planning task force to articulate a set of criteria for service and functional allocation among levels of governments and to prepare guidelines for devolving services and responsibilities to local governments.

The Finance, Budget, and Personnel Subcommittee is mainly responsible for providing recommendations concerning intergovernmental taxes and transfers, as well as the repositioning and devolution of personnel, in accordance with the guidelines set forth in the Decentralization Action Plan. The Law and Legislation Subcommittee is responsible for providing recommendations concerning the revisions of laws and regulations to facilitate the devolution and delegation of functions, personnel, and finance to local governments. The Monitoring and Evaluation Subcommittee is responsible for monitoring and evaluating the progress and problems of decentralization. As such, it is expected to prepare reports and recommendation for the NDC, but it has neither suggested significant measures nor submitted any reports on the problems and progress of decentralization so far (Suwanmala 2000, 32).

C. NDC Secretariat Office

The NDC Secretariat Office is under the Office of the Prime Minister. The Office had five officials in FY2000, the first year of its establishment. None of these officials had any background in decentralization. The Office's main responsibility is to coordinate and arrange the meeting of the NDC and its subcommittees. During the early months of the NDC Office's existence, other central agencies like the Office of the Civil Service Commission and the Fiscal Policy Office of the Ministry of Finance helped with subcommittee affairs.

D. Structure of Thai Local Governments

Local governments in Thailand are statutory bodies of the national government. They can be classified into six forms: (i) Provincial Administrative Organizations (PAOs), (ii) Municipalities (MAs), (iii) Sanitary Districts (SDs), (iv) Tambon Administrative Organization (TAOs), (v) Bangkok Metropolitan Administration (BMA), and (vi) Pattaya City. The BMA and Pattaya City are special forms of province/ municipality. The governor of the BMA is elected, and the BMA has greater local autonomy than other forms of local governments. Other local governments not only have different political and administrative structures, but also different sizes.

PAOs are legally regarded as a "supra local authority," under which MAs, SDs, and TAOs are located. Established in 1955 by the Provincial Administration Act, PAOs act on behalf of the central government to provide public services to residents who are not within the geographical jurisdiction of the aforementioned local entities. Their main function is to promote coordination among local jurisdictions and to carry out functions that are overlapping across boundaries of many local entities within the province. Specifically, PAOs support local administration by constructing and maintaining local roads, providing water, and other limited services to residents in rural areas. There are 75 PAOs, corresponding to the number of provinces, excluding Bangkok.

Municipalities are considered to have the most well established local governments and a great degree of autonomy. Presently there are 1,129 municipalities. Established in 1933 by the Municipal Act, each MA consists of a legislative body and a municipal executive committee. Their structure allows for little interference from the central government. MAs are also the only type of local government that receives general grants (paid per head) that are annually appropriated from the national budget, and for which MAs have complete autonomy over their use. In 1998 there were 150 municipalities, which were divided into three categories: metropolitan (Nakorn), city (Muang), and town (Tambon). The classification is determined by population size, revenue capacity, and service provision ability. In principle, MAs occupy only urban areas. However, over time the geographical extent of MAs has not grown to match the expansion of actual urban areas in Thailand. Therefore, the majority of urban activities in many existing MAs occur outside municipal boundaries.

Sanitary Districts were established in 1908 by the Sanitary Act to take care of local sanitation and health in densely populated areas. SDs are administered by a board composed of both elected members and appointed officials. However, throughout their existence, SDs have been designed so that they could be converted to independent MAs, or annexed by neighboring municipalities, or merged with adjacent SDs to form new MAs. The Decentralization Act of 1999 requires that local representatives alone must administer all local affairs. As a result, all 1,050 existing SDs must be converted into MAs with elected councils.⁹

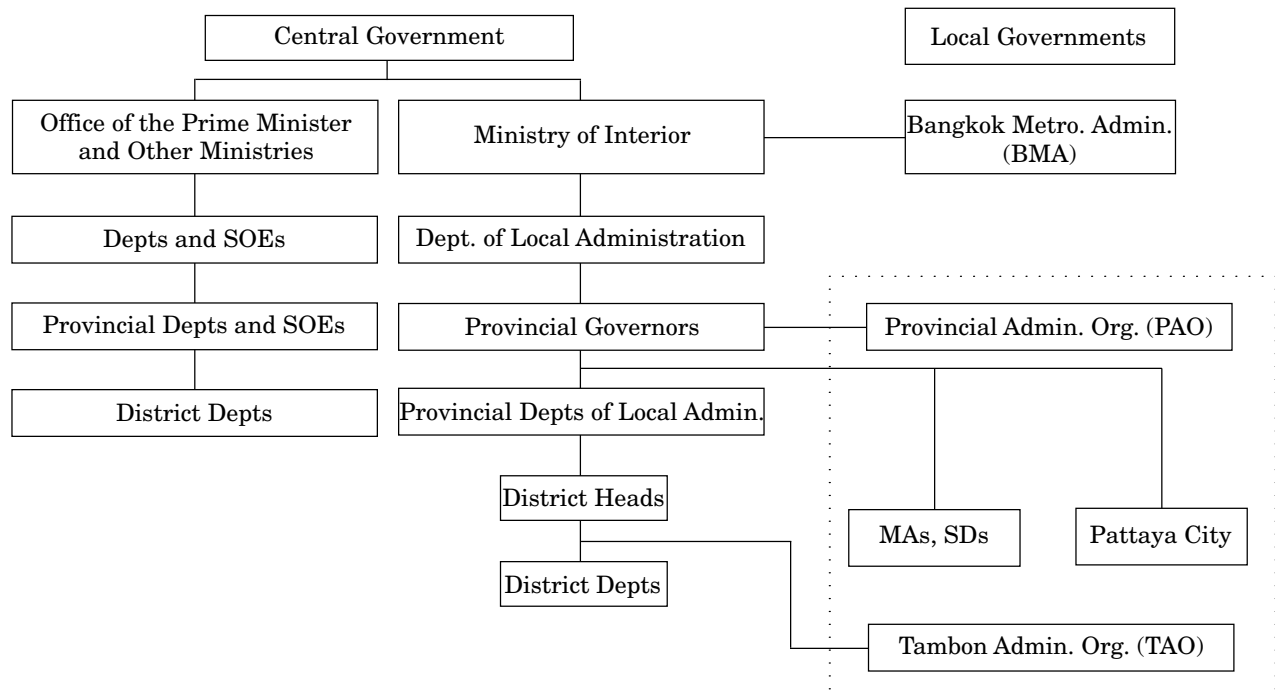
The Tambon Administrative Organizations were first established under the Tambon Authority Act of 1956 to serve areas outside of MAs and SDs. TAOs are designed to provide basic services and facilities, predominantly in rural areas. However, only the recent TAO Act of 1995 gave legal entity to all existing TAOs. The executive members must be directly elected from the local residents. TAOs are entitled to issue their own regulations and develop plans customized to their own areas. There are 6,745 TAOs as of 10 May 2001 (Ministry of Interior statistics). Most TAOs are too small and fragmented to be able to perform their responsibilities of providing public services and managing public finance. In 1999, the average population size of TAOs was 5,000 individuals, and about 72 percent of TAOs had the populations ranging from 2,001 to 8,000 people (Suwanmala 2000, 9).

The Bangkok Metropolitan Administration is a special form of local authority established in 1972 to operate as a unitary government governing the capital Bangkok. The BMA is the most autonomous among the forms of local government. The Governor of the BMA is the only elected local government official in Thailand.

Pattaya City is another special local authority, established in 1978. The city was developed from Pattaya Sanitary District, which had grown rapidly as a tourist attraction and thus needed more flexibility and powers to deal with its specific problems and its urban development. Pattaya City is similar to the BMA in terms of political structure, having an elected mayor and city council members. However, its administrative apparatus is more like those of MAs than that of the BMA.

⁹ This represents the total number of SDs before the SD legislation was passed.

E. Central, Regional, and Local Administration



Appendix 3
Local Revenue for FY 1998-2001

Tax	1998	1999	2000	2001
Locally Collected Revenue	16,759	17,517	20,125	22,644
Tax Revenue	8,901	9,346	10,681	12,132
Building and Land Tax	7,315	7,707	7,993	8,353
Land Development Tax	713	752	959	992
Signboard Tax	818	819	896	937
Slaughter Tax	56	68	182	191
Tobacco, Gasoline, and Hotel Taxes	—	—	650	1,660
Nontax Revenue	7,858	8,171	9,444	10,512
License and Fee	1,260	1,222	1,451	1,908
Received from Assets	5,202	4,493	6,303	6,784
Received from Public Utilities	241	242	263	278
Miscellaneous Income	1,154	2,213	1,427	1,543
Local Revenues Collected by the Central Government	48,667	42,732	45,528	71,784
Value Added Tax	18,700	14,086	14,989	30,375
Business Specific Tax	2,964	2,145	1,651	2,224
Excise Tax	12,716	12,359	13,113	15,432
Motor Vehicle Tax	9,628	9,966	10,410	11,138
Land Registration Fee	3,444	2,689	3,644	10,008
Gambling Tax	165	143	250	250
Mineral and Petroleum Taxes	536	562	721	1,483
Other	513	783	750	874
Subsidies/Grants from the Central Government	30,630	37,499	34,800	73,730
Total Local Revenue excluding Subsidies	65,426	60,248	65,653	94,428
Total Central Government Revenue	733,137	708,826	749,948	805,000
Local-Central Revenue Ratio (percent)	13.10	13.79	13.39	20.89
Total Local Revenue	96,056	97,748	100,453	168,157

Note: Figures in million baht.

Sources: Department of Local Administration; Ministry of Interior; BMA; and Fiscal Policy Office, Ministry of Finance.

Appendix 4
Local Revenue Forecast for FY 2002-2006

Tax	2002	2003	2004	2005	2006
Locally Collected Revenue	19,160	21,160	23,160	25,160	27,160
Tax Revenue	12,362	14,362	16,362	18,362	20,362
Building and Land and Land Development Taxes	9,017	11,017	13,017	15,017	17,017
Signboard Tax	777	777	777	777	777
Slaughter Tax	83	83	83	83	83
Bird Nest Tax	200	200	200	200	200
Tobacco, Gasoline, and Hotel Taxes	2,285	2,285	2,285	2,285	2,285
Nontax Revenue	6,798	6,798	6,798	6,798	6,798
License and Fee	1,544	1,544	1,544	1,544	1,544
Received from Assets	3,528	3,528	3,528	3,528	3,528
Received from Public Utilities	277	277	277	277	277
Miscellaneous Income	1,449	1,449	1,449	1,449	1,449
Local Revenues Collected by the Central Government	86,342	96,260	107,166	119,273	127,473
Value Added Tax	29,539	35,888	44,265	53,641	58,830
Business Specific Tax	1,433	1,547	1,693	1,852	2,027
Excise Tax	16,399	17,699	19,375	21,189	23,195
Motor Vehicle Tax	10,241	11,272	11,319	11,368	11,420
Land Registration Fee	6,550	7,674	8,334	9,043	9,821
Gambling Tax	160	160	160	160	160
Mineral and Petroleum Tax	21,390	21,390	21,390	21,390	21,390
Other	630	630	630	630	630
Subsidies/Grants from the Central Government	77,558	113,822	161,745	217,109	290,513
Total Local Revenue excluding Subsidies	105,502	117,420	130,326	144,433	154,633
Total Central Government Revenue	823,000	924,967	1,043,112	1,166,265	1,271,847
Local-Central Revenue Ratio (percent)	22	25	28	31	35
Total Local Revenue	181,060	231,242	292,071	361,542	445,146

Note: Figures in million baht.

Sources: Fiscal Policy Office, Ministry of Finance estimates; author's estimates.

REFERENCES

- Bird, R. M., 1993. "Threading the Fiscal Labyrinth: Some Issues in Fiscal Decentralization." *National Tax Journal* 46:207-27.
- Bird, R. M., and F. Vaillancourt, eds., 1998. *Fiscal Decentralization in Developing Countries*. Cambridge: Cambridge University Press.
- Borden, C. A., 2000a. "Assessment of Increased Budgetary Allocation to Local Government Organizations." Asian Development Bank, Manila.
- , 2000b. *Decentralization and Multilevel Planning for Thailand's Ninth NESDB Development Plan*. Asian Development Bank, Manila.
- de Mello, L. R., 2000. Can Fiscal Decentralization Strengthen Social Capital? IMF Working Paper 00/129, International Monetary Fund, . Washington, D. C.
- Dillinger, W., and S. B. Webb, 1999a. Fiscal Management in Federal Democracies: Argentina and Brazil. Policy Research Working Paper 2121, The World Bank, Washington, D. C.
- , 1999b. Decentralization and Fiscal Management in Colombia. Policy Research Working Paper 2122, The World Bank, . Washington, D. C.
- Gaiha, R., 2001. "Decentralisation and Poverty Alleviation in Asia." Faculty of Management Studies, University of Delhi.
- Giugale, M. M., and S. B. Webb, eds., 2000. *Achievements and Challenges of Fiscal Decentralization: Lessons from Mexico*. The World Bank, Washington, D. C.
- Huther, J., and A. Shah. 1998. Applying a Simple Measure of Good Governance to the Debate on Fiscal Decentralization. Policy Research Working Paper 1894, The World Bank, Washington, D. C.
- Knowles, J. C., E. M. Pernia, and M. Racelis, 1999. Social Consequences of the Financial Crisis in Asia. Economic Staff Paper No. 60, Asian Development Bank, Manila.
- Mokoro Ltd., 1999. *Thailand: Public Expenditure Review*. Report prepared for the Bureau of the Budget, Government of Thailand.
- Rodden, J., G. Eskeland, and J. Litvack, eds., 2001. *Fiscal Decentralization and the Challenge of Hard Budget Constraints*. Cambridge: MIT Press. Forthcoming.
- Shah, A., and Z. Qureshi, 1994. Intergovernment Fiscal Relations in Indonesia. Discussion Paper No. 239, The World Bank, Washington, D. C.
- Suwanmala, C., 2000. *An Overview of Decentralization in Thailand*. King Prajadhipok's Institute, Bangkok.
- Ter-Minassian, T., ed., 1997. *Fiscal Federalism in Theory and Practice*. International Monetary Fund, Washington, D. C.
- Varanyuwatana, S., 2000. "Retrospective and Prospective of Intergovernmental Transfers in Thailand." Thammasat University, Bangkok.
- Wallich, C., ed., 1994. *Russia and the Challenge of Fiscal Federalism*. The World Bank, Washington, D. C.

-
- Wescott, C., 2001. *Draft ADB Strategy for Supporting Good Governance in Thailand*. Asian Development Bank, Manila.
- World Bank, 1993a. *The Philippines: Fiscal Decentralization Study. Report 10716-PH*. Infrastructure Operations Division, Country Department I, East Asia and Pacific Region, Washington, D. C.
- , 1993b. *The Philippines: Fiscal Decentralization Study. Report 10716-PH*. Infrastructure Operations Division, Country Department I, East Asia and Pacific Region, Washington, D. C.
- , 1996a. *Vietnam: Fiscal Decentralization and the Delivery of Rural Services. Report 15745-VN*. Country Operations Division, Country Department I, East Asia and Pacific Region, Washington, D. C.
- , 1996b. *Argentina: Provincial Finances Study. Report 15487-AR*. Country Operations Division, Country Department I, East Asia and Pacific Region, Washington, D. C.
- , 1996c. *World Development Report 1996*. New York: Oxford University Press.
- , 2000. *Thailand: Public Finance in Transition. Report 20656-TH*. Poverty Reduction and Economic Management Unit, East Asia and Pacific Region, Washington, D.C.

PUBLICATIONS FROM THE ECONOMICS AND RESEARCH DEPARTMENT

ERD WORKING PAPER SERIES (WPS)

(Published in-house; Available through ADB Office of External Relations; Free of Charge)

- | | | | |
|-------|---|--------|--|
| No. 1 | Capitalizing on Globalization
— <i>Barry Eichengreen, January 2002</i> | No. 10 | Poverty Reduction and the Role of Institutions in Developing Asia
— <i>Anil B. Deolalikar, Alex B. Brillantes, Jr., Raghav Gaiha, Ernesto M. Pernia, Mary Racelis with the assistance of Marita Concepcion Castro-Guevara, Liza L. Lim, Pilipinas F. Quising May 2002</i> |
| No. 2 | Policy-based Lending and Poverty Reduction: An Overview of Processes, Assessment and Options
— <i>Richard Bolt and Manabu Fujimura January 2002</i> | No. 11 | The European Social Model: Lessons for Developing Countries
— <i>Assar Lindbeck May 2002</i> |
| No. 3 | The Automotive Supply Chain: Global Trends and Asian Perspectives
— <i>Francisco Veloso and Rajiv Kumar January 2002</i> | No. 12 | Costs and Benefits of a Common Currency for ASEAN
— <i>Srinivasa Madhur May 2002</i> |
| No. 4 | International Competitiveness of Asian Firms: An Analytical Framework
— <i>Rajiv Kumar and Doren Chadee February 2002</i> | No. 13 | Monetary Cooperation in East Asia: A Survey
— <i>Raul Fabella May 2002</i> |
| No. 5 | The International Competitiveness of Asian Economies in the Apparel Commodity Chain
— <i>Gary Gereffi February 2002</i> | No. 14 | Toward A Political Economy Approach to Policy-based Lending
— <i>George Abonyi May 2002</i> |
| No. 6 | Monetary and Financial Cooperation in East Asia—The Chiang Mai Initiative and Beyond
— <i>Pradumna B. Rana February 2002</i> | No. 15 | A Framework for Establishing Priorities in a Country Poverty Reduction Strategy
— <i>Ron Duncan and Steve Pollard June 2002</i> |
| No. 7 | Probing Beneath Cross-national Averages: Poverty, Inequality, and Growth in the Philippines
— <i>Arsenio M. Balisacan and Ernesto M. Pernia March 2002</i> | No. 16 | The Role of Infrastructure in Land-use Dynamics and Rice Production in Viet Nam's Mekong River Delta
— <i>Christopher Edmonds July 2002</i> |
| No. 8 | Poverty, Growth, and Inequality in Thailand
— <i>Anil B. Deolalikar April 2002</i> | No. 17 | Effect of Decentralization Strategy on Macroeconomic Stability in Thailand
— <i>Kanokpan Lao-Araya August 2002</i> |
| No. 9 | Microfinance in Northeast Thailand: Who Benefits and How Much?
— <i>Brett E. Coleman April 2002</i> | | |

ERD TECHNICAL NOTE SERIES (TNS)

(Published in-house; Available through ADB Office of External Relations; Free of Charge)

- | | | | |
|-------|--|-------|---|
| No. 1 | Contingency Calculations for Environmental Impacts with Unknown Monetary Values
— <i>David Dole February 2002</i> | No. 3 | Measuring Willingness to Pay for Electricity
— <i>Peter Choynowski July 2002</i> |
| No. 2 | Integrating Risk into ADB's Economic Analysis of Projects
— <i>Nigel Rayner, Anneli Lagman-Martin, and Keith Ward June 2002</i> | No. 4 | Economic Issues in the Design and Analysis of a Wastewater Treatment Project
— <i>David Dole July 2002</i> |

ERD POLICY BRIEF SERIES (PBS)

(Published in-house; Available through ADB Office of External Relations; Free of charge)

- | | | | |
|-------|--|-------|--|
| No. 1 | Is Growth Good Enough for the Poor?
— <i>Ernesto M. Pernia, October 2001</i> | No. 6 | Achieving the Twin Objectives of Efficiency and Equity: Contracting Health Services in Cambodia
— <i>Indu Bhushan, Sheryl Keller, and Brad Schwartz, March 2002</i> |
| No. 2 | India's Economic Reforms
What Has Been Accomplished?
What Remains to Be Done?
— <i>Arvind Panagariya, November 2001</i> | No. 7 | Causes of the 1997 Asian Financial Crisis: What Can an Early Warning System Model Tell Us?
— <i>Juzhong Zhuang and Malcolm Dowling, June 2002</i> |
| No. 3 | Unequal Benefits of Growth in Viet Nam
— <i>Indu Bhushan, Erik Bloom, and Nguyen Minh Thang, January 2002</i> | No. 8 | The Role of Preferential Trading Arrangements in Asia
— <i>Christopher Edmonds and Jean-Pierre Verbiest, July 2002</i> |
| No. 4 | Is Volatility Built into Today's World Economy?
— <i>J. Malcolm Dowling and J.P. Verbiest, February 2002</i> | No. 9 | The Doha Round: A Development Perspective
— <i>Jean-Pierre Verbiest, Jeffrey Liang, and Lea Sumulong, July 2002</i> |
| No. 5 | What Else Besides Growth Matters to Poverty Reduction? Philippines
— <i>Arsenio M. Balisacan and Ernesto M. Pernia, February 2002</i> | | |

MONOGRAPH SERIES

(Published in-house; Available through ADB Office of External Relations; Free of charge)

EDRC REPORT SERIES (ER)

- | | | | |
|--------|---|--------|---|
| No. 1 | ASEAN and the Asian Development Bank
— <i>Seiji Naya, April 1982</i> | | Pacific Trade and Development Conference
— <i>Seiji Naya, March 1983</i> |
| No. 2 | Development Issues for the Developing East and Southeast Asian Countries and International Cooperation
— <i>Seiji Naya and Graham Abbott, April 1982</i> | No. 15 | A Survey of Empirical Studies on Demand for Electricity with Special Emphasis on Price Elasticity of Demand
— <i>Wisarn Pupphavesa, June 1983</i> |
| No. 3 | Aid, Savings, and Growth in the Asian Region
— <i>J. Malcolm Dowling and Ulrich Hiemenz, April 1982</i> | No. 16 | Determinants of Paddy Production in Indonesia: 1972-1981—A Simultaneous Equation Model Approach
— <i>T.K. Jayaraman, June 1983</i> |
| No. 4 | Development-oriented Foreign Investment and the Role of ADB
— <i>Kiyoshi Kojima, April 1982</i> | No. 17 | The Philippine Economy: Economic Forecasts for 1983 and 1984
— <i>J.M. Dowling, E. Go, and C.N. Castillo, June 1983</i> |
| No. 5 | The Multilateral Development Banks and the International Economy's Missing Public Sector
— <i>John Lewis, June 1982</i> | No. 18 | Economic Forecast for Indonesia
— <i>J.M. Dowling, H.Y. Kim, Y.K. Wang, and C.N. Castillo, June 1983</i> |
| No. 6 | Notes on External Debt of DMCs
— <i>Evelyn Go, July 1982</i> | No. 19 | Relative External Debt Situation of Asian Developing Countries: An Application of Ranking Method
— <i>Jungsoo Lee, June 1983</i> |
| No. 7 | Grant Element in Bank Loans
— <i>Dal Hyun Kim, July 1982</i> | No. 20 | New Evidence on Yields, Fertilizer Application, and Prices in Asian Rice Production
— <i>William James and Teresita Ramirez, July 1983</i> |
| No. 8 | Shadow Exchange Rates and Standard Conversion Factors in Project Evaluation
— <i>Peter Warr, September 1982</i> | No. 21 | Inflationary Effects of Exchange Rate Changes in Nine Asian LDCs
— <i>Pradumna B. Rana and J. Malcolm Dowling, Jr., December 1983</i> |
| No. 9 | Small and Medium-Scale Manufacturing Establishments in ASEAN Countries: Perspectives and Policy Issues
— <i>Mathias Bruch and Ulrich Hiemenz, January 1983</i> | No. 22 | Effects of External Shocks on the Balance of Payments, Policy Responses, and Debt Problems of Asian Developing Countries
— <i>Seiji Naya, December 1983</i> |
| No. 10 | A Note on the Third Ministerial Meeting of GATT
— <i>Jungsoo Lee, January 1983</i> | No. 23 | Changing Trade Patterns and Policy Issues: The Prospects for East and Southeast Asian Developing Countries
— <i>Seiji Naya and Ulrich Hiemenz, February 1984</i> |
| No. 11 | Macroeconomic Forecasts for the Republic of China, Hong Kong, and Republic of Korea
— <i>J.M. Dowling, January 1983</i> | No. 24 | Small-Scale Industries in Asian Economic Development: Problems and Prospects
— <i>Seiji Naya, February 1984</i> |
| No. 12 | ASEAN: Economic Situation and Prospects
— <i>Seiji Naya, March 1983</i> | No. 25 | A Study on the External Debt Indicators |
| No. 13 | The Future Prospects for the Developing Countries of Asia
— <i>Seiji Naya, March 1983</i> | | |
| No. 14 | Energy and Structural Change in the Asia-Pacific Region, Summary of the Thirteenth | | |

- Applying Logit Analysis
—*Jungsoo Lee and Clarita Barretto, February 1984*
- No. 26 Alternatives to Institutional Credit Programs in the Agricultural Sector of Low-Income Countries
—*Jennifer Sour, March 1984*
- No. 27 Economic Scene in Asia and Its Special Features
—*Kedar N. Kohli, November 1984*
- No. 28 The Effect of Terms of Trade Changes on the Balance of Payments and Real National Income of Asian Developing Countries
—*Jungsoo Lee and Lutgarda Labios, January 1985*
- No. 29 Cause and Effect in the World Sugar Market: Some Empirical Findings 1951-1982
—*Yoshihiro Iwasaki, February 1985*
- No. 30 Sources of Balance of Payments Problem in the 1970s: The Asian Experience
—*Pradumna Rana, February 1985*
- No. 31 India's Manufactured Exports: An Analysis of Supply Sectors
—*Ifzal Ali, February 1985*
- No. 32 Meeting Basic Human Needs in Asian Developing Countries
—*Jungsoo Lee and Emma Banaria, March 1985*
- No. 33 The Impact of Foreign Capital Inflow on Investment and Economic Growth in Developing Asia
—*Evelyn Go, May 1985*
- No. 34 The Climate for Energy Development in the Pacific and Asian Region: Priorities and Perspectives
—*V.V. Desai, April 1986*
- No. 35 Impact of Appreciation of the Yen on Developing Member Countries of the Bank
—*Jungsoo Lee, Pradumna Rana, and Ifzal Ali, May 1986*
- No. 36 Smuggling and Domestic Economic Policies in Developing Countries
—*A.H.M.N. Chowdhury, October 1986*
- No. 37 Public Investment Criteria: Economic Internal Rate of Return and Equalizing Discount Rate
—*Ifzal Ali, November 1986*
- No. 38 Review of the Theory of Neoclassical Political Economy: An Application to Trade Policies
—*M.G. Quibria, December 1986*
- No. 39 Factors Influencing the Choice of Location: Local and Foreign Firms in the Philippines
—*E.M. Pernia and A.N. Herrin, February 1987*
- No. 40 A Demographic Perspective on Developing Asia and Its Relevance to the Bank
—*E.M. Pernia, May 1987*
- No. 41 Emerging Issues in Asia and Social Cost Benefit Analysis
—*I. Ali, September 1988*
- No. 42 Shifting Revealed Comparative Advantage: Experiences of Asian and Pacific Developing Countries
—*P.B. Rana, November 1988*
- No. 43 Agricultural Price Policy in Asia: Issues and Areas of Reforms
—*I. Ali, November 1988*
- No. 44 Service Trade and Asian Developing Economies
—*M.G. Quibria, October 1989*
- No. 45 A Review of the Economic Analysis of Power Projects in Asia and Identification of Areas of Improvement
—*I. Ali, November 1989*
- No. 46 Growth Perspective and Challenges for Asia: Areas for Policy Review and Research
—*I. Ali, November 1989*
- No. 47 An Approach to Estimating the Poverty Alleviation Impact of an Agricultural Project
—*I. Ali, January 1990*
- No. 48 Economic Growth Performance of Indonesia, the Philippines, and Thailand: The Human Resource Dimension
—*E.M. Pernia, January 1990*
- No. 49 Foreign Exchange and Fiscal Impact of a Project: A Methodological Framework for Estimation
—*I. Ali, February 1990*
- No. 50 Public Investment Criteria: Financial and Economic Internal Rates of Return
—*I. Ali, April 1990*
- No. 51 Evaluation of Water Supply Projects: An Economic Framework
—*Arlene M. Tadler, June 1990*
- No. 52 Interrelationship Between Shadow Prices, Project Investment, and Policy Reforms: An Analytical Framework
—*I. Ali, November 1990*
- No. 53 Issues in Assessing the Impact of Project and Sector Adjustment Lending
—*I. Ali, December 1990*
- No. 54 Some Aspects of Urbanization and the Environment in Southeast Asia
—*Ernesto M. Pernia, January 1991*
- No. 55 Financial Sector and Economic Development: A Survey
—*Jungsoo Lee, September 1991*
- No. 56 A Framework for Justifying Bank-Assisted Education Projects in Asia: A Review of the Socioeconomic Analysis and Identification of Areas of Improvement
—*Etienne Van De Walle, February 1992*
- No. 57 Medium-term Growth-Stabilization Relationship in Asian Developing Countries and Some Policy Considerations
—*Yun-Hwan Kim, February 1993*
- No. 58 Urbanization, Population Distribution, and Economic Development in Asia
—*Ernesto M. Pernia, February 1993*
- No. 59 The Need for Fiscal Consolidation in Nepal: The Results of a Simulation
—*Filippo di Mauro and Ronald Antonio Butiong, July 1993*
- No. 60 A Computable General Equilibrium Model of Nepal
—*Timothy Buehrer and Filippo di Mauro, October 1993*
- No. 61 The Role of Government in Export Expansion in the Republic of Korea: A Revisit
—*Yun-Hwan Kim, February 1994*
- No. 62 Rural Reforms, Structural Change, and Agricultural Growth in the People's Republic of China
—*Bo Lin, August 1994*
- No. 63 Incentives and Regulation for Pollution Abatement with an Application to Waste Water Treatment
—*Sudipto Mundle, U. Shankar, and Shekhar Mehta, October 1995*
- No. 64 Saving Transitions in Southeast Asia
—*Frank Harrigan, February 1996*
- No. 65 Total Factor Productivity Growth in East Asia: A Critical Survey
—*Jesus Felipe, September 1997*
- No. 66 Foreign Direct Investment in Pakistan: Policy Issues and Operational Implications
—*Ashfaq H. Khan and Yun-Hwan Kim, July 1999*
- No. 67 Fiscal Policy, Income Distribution and Growth
—*Sailesh K. Jha, November 1999*

ECONOMIC STAFF PAPERS (ES)

- | | | |
|--------|---|--|
| No. 1 | International Reserves:
Factors Determining Needs and Adequacy
— <i>Evelyn Go, May 1981</i> | in Monsoon Asia
— <i>Harry T. Oshima, October 1983</i> |
| No. 2 | Domestic Savings in Selected Developing Asian Countries
— <i>Basil Moore, assisted by A.H.M. Nuruddin Chowdhury, September 1981</i> | No. 21 The Significance of Off-Farm Employment and Incomes in Post-War East Asian Growth
— <i>Harry T. Oshima, January 1984</i> |
| No. 3 | Changes in Consumption, Imports and Exports of Oil Since 1973: A Preliminary Survey of the Developing Member Countries of the Asian Development Bank
— <i>Dal Hyun Kim and Graham Abbott, September 1981</i> | No. 22 Income Distribution and Poverty in Selected Asian Countries
— <i>John Malcolm Dowling, Jr., November 1984</i> |
| No. 4 | By-Passed Areas, Regional Inequalities, and Development Policies in Selected Southeast Asian Countries
— <i>William James, October 1981</i> | No. 23 ASEAN Economies and ASEAN Economic Cooperation
— <i>Narongchai Akrasanee, November 1984</i> |
| No. 5 | Asian Agriculture and Economic Development
— <i>William James, March 1982</i> | No. 24 Economic Analysis of Power Projects
— <i>Nitin Desai, January 1985</i> |
| No. 6 | Inflation in Developing Member Countries: An Analysis of Recent Trends
— <i>A.H.M. Nuruddin Chowdhury and J. Malcolm Dowling, March 1982</i> | No. 25 Exports and Economic Growth in the Asian Region
— <i>Pradumna Rana, February 1985</i> |
| No. 7 | Industrial Growth and Employment in Developing Asian Countries: Issues and Perspectives for the Coming Decade
— <i>Ulrich Hiemenz, March 1982</i> | No. 26 Patterns of External Financing of DMCs
— <i>E. Go, May 1985</i> |
| No. 8 | Petrodollar Recycling 1973-1980. Part 1: Regional Adjustments and the World Economy
— <i>Burnham Campbell, April 1982</i> | No. 27 Industrial Technology Development the Republic of Korea
— <i>S.Y. Lo, July 1985</i> |
| No. 9 | Developing Asia: The Importance of Domestic Policies
— <i>Economics Office Staff under the direction of Seiji Naya, May 1982</i> | No. 28 Risk Analysis and Project Selection: A Review of Practical Issues
— <i>J.K. Johnson, August 1985</i> |
| No. 10 | Financial Development and Household Savings: Issues in Domestic Resource Mobilization in Asian Developing Countries
— <i>Wan-Soon Kim, July 1982</i> | No. 29 Rice in Indonesia: Price Policy and Comparative Advantage
— <i>I. Ali, January 1986</i> |
| No. 11 | Industrial Development: Role of Specialized Financial Institutions
— <i>Kedar N. Kohli, August 1982</i> | No. 30 Effects of Foreign Capital Inflows on Developing Countries of Asia
— <i>Jungsoo Lee, Pradumna B. Rana, and Yoshihiro Iwasaki, April 1986</i> |
| No. 12 | Petrodollar Recycling 1973-1980. Part II: Debt Problems and an Evaluation of Suggested Remedies
— <i>Burnham Campbell, September 1982</i> | No. 31 Economic Analysis of the Environmental Impacts of Development Projects
— <i>John A. Dixon et al., EAPI, East-West Center, August 1986</i> |
| No. 13 | Credit Rationing, Rural Savings, and Financial Policy in Developing Countries
— <i>William James, September 1982</i> | No. 32 Science and Technology for Development: Role of the Bank
— <i>Kedar N. Kohli and Ifzal Ali, November 1986</i> |
| No. 14 | Small and Medium-Scale Manufacturing Establishments in ASEAN Countries: Perspectives and Policy Issues
— <i>Mathias Bruch and Ulrich Hiemenz, March 1983</i> | No. 33 Satellite Remote Sensing in the Asian and Pacific Region
— <i>Mohan Sundara Rajan, December 1986</i> |
| No. 15 | Income Distribution and Economic Growth in Developing Asian Countries
— <i>J. Malcolm Dowling and David Soo, March 1983</i> | No. 34 Changes in the Export Patterns of Asian and Pacific Developing Countries: An Empirical Overview
— <i>Pradumna B. Rana, January 1987</i> |
| No. 16 | Long-Run Debt-Servicing Capacity of Asian Developing Countries: An Application of Critical Interest Rate Approach
— <i>Jungsoo Lee, June 1983</i> | No. 35 Agricultural Price Policy in Nepal
— <i>Gerald C. Nelson, March 1987</i> |
| No. 17 | External Shocks, Energy Policy, and Macroeconomic Performance of Asian Developing Countries: A Policy Analysis
— <i>William James, July 1983</i> | No. 36 Implications of Falling Primary Commodity Prices for Agricultural Strategy in the Philippines
— <i>Ifzal Ali, September 1987</i> |
| No. 18 | The Impact of the Current Exchange Rate System on Trade and Inflation of Selected Developing Member Countries
— <i>Pradumna Rana, September 1983</i> | No. 37 Determining Irrigation Charges: A Framework
— <i>Prabhakar B. Ghate, October 1987</i> |
| No. 19 | Asian Agriculture in Transition: Key Policy Issues
— <i>William James, September 1983</i> | No. 38 The Role of Fertilizer Subsidies in Agricultural Production: A Review of Select Issues
— <i>M.G. Quibria, October 1987</i> |
| No. 20 | The Transition to an Industrial Economy | No. 39 Domestic Adjustment to External Shocks in Developing Asia
— <i>Jungsoo Lee, October 1987</i> |
| | | No. 40 Improving Domestic Resource Mobilization through Financial Development: Indonesia
— <i>Philip Erquiaga, November 1987</i> |
| | | No. 41 Recent Trends and Issues on Foreign Direct Investment in Asian and Pacific Developing Countries
— <i>P.B. Rana, March 1988</i> |
| | | No. 42 Manufactured Exports from the Philippines: A Sector Profile and an Agenda for Reform
— <i>I. Ali, September 1988</i> |
| | | No. 43 A Framework for Evaluating the Economic Benefits of Power Projects
— <i>I. Ali, August 1989</i> |
| | | No. 44 Promotion of Manufactured Exports in Pakistan |

- Jungsoo Lee and Yoshihiro Iwasaki, September 1989*
- No. 45 Education and Labor Markets in Indonesia: A Sector Survey
—*Ernesto M. Pernia and David N. Wilson, September 1989*
- No. 46 Industrial Technology Capabilities and Policies in Selected ADCs
—*Hiroshi Kakazu, June 1990*
- No. 47 Designing Strategies and Policies for Managing Structural Change in Asia
—*Ifzal Ali, June 1990*
- No. 48 The Completion of the Single European Community Market in 1992: A Tentative Assessment of its Impact on Asian Developing Countries
—*J.P. Verbiest and Min Tang, June 1991*
- No. 49 Economic Analysis of Investment in Power Systems
—*Ifzal Ali, June 1991*
- No. 50 External Finance and the Role of Multilateral Financial Institutions in South Asia: Changing Patterns, Prospects, and Challenges
—*Jungsoo Lee, November 1991*
- No. 51 The Gender and Poverty Nexus: Issues and Policies
—*M.G. Quibria, November 1993*
- No. 52 The Role of the State in Economic Development: Theory, the East Asian Experience, and the Malaysian Case
—*Jason Brown, December 1993*
- No. 53 The Economic Benefits of Potable Water Supply Projects to Households in Developing Countries
—*Dale Whittington and Venkateswarlu Swarna, January 1994*
- No. 54 Growth Triangles: Conceptual Issues and Operational Problems
—*Min Tang and Myo Thant, February 1994*
- No. 55 The Emerging Global Trading Environment and Developing Asia
—*Arvind Panagariya, M.G. Quibria, and Narhari Rao, July 1996*
- No. 56 Aspects of Urban Water and Sanitation in the Context of Rapid Urbanization in Developing Asia
—*Ernesto M. Pernia and Stella LF. Alabastro, September 1997*
- No. 57 Challenges for Asia's Trade and Environment
—*Douglas H. Brooks, January 1998*
- No. 58 Economic Analysis of Health Sector Projects—A Review of Issues, Methods, and Approaches
—*Ramesh Adhikari, Paul Gertler, and Anneli Lagman, March 1999*
- No. 59 The Asian Crisis: An Alternate View
—*Rajiv Kumar and Bibek Debroy, July 1999*
- No. 60 Social Consequences of the Financial Crisis in Asia
—*James C. Knowles, Ernesto M. Pernia, and Mary Racelis, November 1999*

OCCASIONAL PAPERS (OP)

- No. 1 Poverty in the People's Republic of China: Recent Developments and Scope for Bank Assistance
—*K.H. Moinuddin, November 1992*
- No. 2 The Eastern Islands of Indonesia: An Overview of Development Needs and Potential
—*Brien K. Parkinson, January 1993*
- No. 3 Rural Institutional Finance in Bangladesh and Nepal: Review and Agenda for Reforms
—*A.H.M.N. Chowdhury and Marcella C. Garcia, November 1993*
- No. 4 Fiscal Deficits and Current Account Imbalances of the South Pacific Countries: A Case Study of Vanuatu
—*T.K. Jayaraman, December 1993*
- No. 5 Reforms in the Transitional Economies of Asia
—*Pradumna B. Rana, December 1993*
- No. 6 Environmental Challenges in the People's Republic of China and Scope for Bank Assistance
—*Elisabetta Capannelli and Omkar L. Shrestha, December 1993*
- No. 7 Sustainable Development Environment and Poverty Nexus
—*K.F. Jalal, December 1993*
- No. 8 Intermediate Services and Economic Development: The Malaysian Example
—*Sutanu Behuria and Rahul Khullar, May 1994*
- No. 9 Interest Rate Deregulation: A Brief Survey of the Policy Issues and the Asian Experience
—*Carlos J. Glower, July 1994*
- No. 10 Some Aspects of Land Administration in Indonesia: Implications for Bank Operations
—*Sutanu Behuria, July 1994*
- No. 11 Demographic and Socioeconomic Determinants of Contraceptive Use among Urban Women in the Melanesian Countries in the South Pacific: A Case Study of Port Vila Town in Vanuatu
—*T.K. Jayaraman, February 1995*
- No. 12 Managing Development through Institution Building
—*Hilton L. Root, October 1995*
- No. 13 Growth, Structural Change, and Optimal Poverty Interventions
—*Shiladitya Chatterjee, November 1995*
- No. 14 Private Investment and Macroeconomic Environment in the South Pacific Island Countries: A Cross-Country Analysis
—*T.K. Jayaraman, October 1996*
- No. 15 The Rural-Urban Transition in Viet Nam: Some Selected Issues
—*Sudipto Mundle and Brian Van Arkadie, October 1997*
- No. 16 A New Approach to Setting the Future Transport Agenda
—*Roger Allport, Geoff Key, and Charles Melhuish, June 1998*
- No. 17 Adjustment and Distribution: The Indian Experience
—*Sudipto Mundle and V.B. Tulasidhar, June 1998*
- No. 18 Tax Reforms in Viet Nam: A Selective Analysis
—*Sudipto Mundle, December 1998*
- No. 19 Surges and Volatility of Private Capital Flows to Asian Developing Countries: Implications for Multilateral Development Banks
—*Pradumna B. Rana, December 1998*
- No. 20 The Millennium Round and the Asian Economies: An Introduction
—*Dilip K. Das, October 1999*
- No. 21 Occupational Segregation and the Gender Earnings Gap
—*Joseph E. Zveglic, Jr. and Yana van der Meulen Rodgers, December 1999*
- No. 22 Information Technology: Next Locomotive of Growth?
—*Dilip K. Das, June 2000*

STATISTICAL REPORT SERIES (SR)

- | | |
|--|---|
| <p>No. 1 Estimates of the Total External Debt of the Developing Member Countries of ADB: 1981-1983
—<i>I.P. David, September 1984</i></p> <p>No. 2 Multivariate Statistical and Graphical Classification Techniques Applied to the Problem of Grouping Countries
—<i>I.P. David and D.S. Maligalig, March 1985</i></p> <p>No. 3 Gross National Product (GNP) Measurement Issues in South Pacific Developing Member Countries of ADB
—<i>S.G. Tiwari, September 1985</i></p> <p>No. 4 Estimates of Comparable Savings in Selected DMCs
—<i>Hananto Sigit, December 1985</i></p> <p>No. 5 Keeping Sample Survey Design and Analysis Simple
—<i>I.P. David, December 1985</i></p> <p>No. 6 External Debt Situation in Asian Developing Countries
—<i>I.P. David and Jungsoo Lee, March 1986</i></p> <p>No. 7 Study of GNP Measurement Issues in the South Pacific Developing Member Countries. Part I: Existing National Accounts of SPDMCs—Analysis of Methodology and Application of SNA Concepts
—<i>P. Hodgkinson, October 1986</i></p> <p>No. 8 Study of GNP Measurement Issues in the South Pacific Developing Member Countries. Part II: Factors Affecting Inter-country Comparability of Per Capita GNP
—<i>P. Hodgkinson, October 1986</i></p> | <p>No. 9 Survey of the External Debt Situation in Asian Developing Countries, 1985
—<i>Jungsoo Lee and I.P. David, April 1987</i></p> <p>No. 10 A Survey of the External Debt Situation in Asian Developing Countries, 1986
—<i>Jungsoo Lee and I.P. David, April 1988</i></p> <p>No. 11 Changing Pattern of Financial Flows to Asian and Pacific Developing Countries
—<i>Jungsoo Lee and I.P. David, March 1989</i></p> <p>No. 12 The State of Agricultural Statistics in Southeast Asia
—<i>I.P. David, March 1989</i></p> <p>No. 13 A Survey of the External Debt Situation in Asian and Pacific Developing Countries: 1987-1988
—<i>Jungsoo Lee and I.P. David, July 1989</i></p> <p>No. 14 A Survey of the External Debt Situation in Asian and Pacific Developing Countries: 1988-1989
—<i>Jungsoo Lee, May 1990</i></p> <p>No. 15 A Survey of the External Debt Situation in Asian and Pacific Developing Countries: 1989-1992
—<i>Min Tang, June 1991</i></p> <p>No. 16 Recent Trends and Prospects of External Debt Situation and Financial Flows to Asian and Pacific Developing Countries
—<i>Min Tang and Aludia Pardo, June 1992</i></p> <p>No. 17 Purchasing Power Parity in Asian Developing Countries: A Co-Integration Test
—<i>Min Tang and Ronald Q. Butiong, April 1994</i></p> <p>No. 18 Capital Flows to Asian and Pacific Developing Countries: Recent Trends and Future Prospects
—<i>Min Tang and James Villafuerte, October 1995</i></p> |
|--|---|

SPECIAL STUDIES, COMPLIMENTARY (SSC)

(Published in-house; Available through ADB Office of External Relations; Free of Charge)

- | | |
|--|--|
| <p>1. Improving Domestic Resource Mobilization Through Financial Development: Overview <i>September 1985</i></p> <p>2. Improving Domestic Resource Mobilization Through Financial Development: Bangladesh <i>July 1986</i></p> <p>3. Improving Domestic Resource Mobilization Through Financial Development: Sri Lanka <i>April 1987</i></p> <p>4. Improving Domestic Resource Mobilization Through Financial Development: India <i>December 1987</i></p> <p>5. Financing Public Sector Development Expenditure in Selected Countries: Overview <i>January 1988</i></p> <p>6. Study of Selected Industries: A Brief Report <i>April 1988</i></p> <p>7. Financing Public Sector Development Expenditure in Selected Countries: Bangladesh <i>June 1988</i></p> <p>8. Financing Public Sector Development Expenditure in Selected Countries: India <i>June 1988</i></p> <p>9. Financing Public Sector Development Expenditure in Selected Countries: Indonesia <i>June 1988</i></p> <p>10. Financing Public Sector Development Expenditure in Selected Countries: Nepal <i>June 1988</i></p> <p>11. Financing Public Sector Development Expenditure in Selected Countries: Pakistan <i>June 1988</i></p> <p>12. Financing Public Sector Development Expenditure in Selected Countries: Philippines <i>June 1988</i></p> <p>13. Financing Public Sector Development Expenditure in Selected Countries: Thailand <i>June 1988</i></p> <p>14. Towards Regional Cooperation in South Asia: ADB/EWC Symposium on Regional Cooperation in South Asia <i>February 1988</i></p> <p>15. Evaluating Rice Market Intervention Policies: Some Asian Examples <i>April 1988</i></p> <p>16. Improving Domestic Resource Mobilization Through Financial Development: Nepal <i>November 1988</i></p> <p>17. Foreign Trade Barriers and Export Growth</p> | <p><i>September 1988</i></p> <p>18. The Role of Small and Medium-Scale Industries in the Industrial Development of the Philippines
<i>April 1989</i></p> <p>19. The Role of Small and Medium-Scale Manufacturing Industries in Industrial Development: The Experience of Selected Asian Countries
<i>January 1990</i></p> <p>20. National Accounts of Vanuatu, 1983-1987
<i>January 1990</i></p> <p>21. National Accounts of Western Samoa, 1984-1986
<i>February 1990</i></p> <p>22. Human Resource Policy and Economic Development: Selected Country Studies
<i>July 1990</i></p> <p>23. Export Finance: Some Asian Examples
<i>September 1990</i></p> <p>24. National Accounts of the Cook Islands, 1982-1986
<i>September 1990</i></p> <p>25. Framework for the Economic and Financial Appraisal of Urban Development Sector Projects <i>January 1994</i></p> <p>26. Framework and Criteria for the Appraisal and Socioeconomic Justification of Education Projects <i>January 1994</i></p> <p>27. Guidelines for the Economic Analysis of Projects
<i>February 1997</i></p> <p>28. Investing in Asia
<i>1997</i></p> <p>29. Guidelines for the Economic Analysis of Telecommunication Projects
<i>1998</i></p> <p>30. Guidelines for the Economic Analysis of Water Supply Projects
<i>1999</i></p> |
|--|--|

SPECIAL STUDIES, ADB (SS, ADB)

(Published in-house; Available commercially through ADB Office of External Relations)

1. Rural Poverty in Developing Asia
Edited by M.G. Quibria
Vol. 1: Bangladesh, India, and Sri Lanka, 1994
\$35.00 (paperback)
Vol. 2: Indonesia, Republic of Korea, Philippines, and Thailand, 1996
\$35.00 (paperback)
2. External Shocks and Policy Adjustments: Lessons from the Gulf Crisis
Edited by Naved Hamid and Shahid N. Zahid, 1995
\$15.00 (paperback)
3. Gender Indicators of Developing Asian and Pacific Countries
Asian Development Bank, 1993
\$25.00 (paperback)
4. Urban Poverty in Asia: A Survey of Critical Issues
Edited by Ernesto Pernia, 1994
\$20.00 (paperback)
5. Indonesia-Malaysia-Thailand Growth Triangle: Theory to Practice
Edited by Myo Thant and Min Tang, 1996
\$15.00 (paperback)
6. Emerging Asia: Changes and Challenges
Asian Development Bank, 1997
\$30.00 (paperback)
7. Asian Exports
Edited by Dilip Das, 1999
\$35.00 (paperback)
\$55.00 (hardbound)
8. Mortgage-Backed Securities Markets in Asia
Edited by S.Ghon Rhee & Yutaka Shimomoto, 1999
\$35.00 (paperback)
9. Corporate Governance and Finance in East Asia: A Study of Indonesia, Republic of Korea, Malaysia, Philippines and Thailand
J. Zhuang, David Edwards, D. Webb, & Ma. Virginita Capulong
Vol. 1, 2000 \$10.00 (paperback)
Vol. 2, 2001 \$15.00 (paperback)
10. Financial Management and Governance Issues
Asian Development Bank, 2000
Cambodia \$10.00 (paperback)
People's Republic of China \$10.00 (paperback)
Mongolia \$10.00 (paperback)
Pakistan \$10.00 (paperback)
Papua New Guinea \$10.00 (paperback)
Uzbekistan \$10.00 (paperback)
Viet Nam \$10.00 (paperback)
11. Selected Developing Member Countries \$10.00 (paperback)
11. Guidelines for the Economic Analysis of Projects
Asian Development Bank, 1997
\$10.00 (paperback)
12. Handbook for the Economic Analysis of Water Supply Projects
Asian Development Bank, 1999
\$15.00 (hardbound)
13. Handbook for the Economic Analysis of Health Sector Projects
Asian Development Bank, 2000
\$10.00 (paperback)

SPECIAL STUDIES, OUP (SS,OUP)

(Co-published with Oxford University Press; Available commercially through Oxford University Press Offices, Associated Companies, and Agents)

1. Informal Finance: Some Findings from Asia
Prabhu Ghatte et. al., 1992
\$15.00 (paperback)
2. Mongolia: A Centrally Planned Economy in Transition
Asian Development Bank, 1992
\$15.00 (paperback)
3. Rural Poverty in Asia, Priority Issues and Policy Options
Edited by M.G. Quibria, 1994
\$25.00 (paperback)
4. Growth Triangles in Asia: A New Approach to Regional Economic Cooperation
Edited by Myo Thant, Min Tang, and Hiroshi Kakazu
1st ed., 1994 \$36.00 (hardbound)
Revised ed., 1998 \$55.00 (hardbound)
5. Urban Poverty in Asia: A Survey of Critical Issues
Edited by Ernesto Pernia, 1994
\$18.00 (paperback)
6. Critical Issues in Asian Development: Theories, Experiences, and Policies
Edited by M.G. Quibria, 1995
\$15.00 (paperback)
\$36.00 (hardbound)
7. From Centrally Planned to Market Economies: The Asian Approach
Edited by Pradumna B. Rana and Naved Hamid, 1995
Vol. 1: Overview
\$36.00 (hardbound)
Vol. 2: People's Republic of China and Mongolia
\$50.00 (hardbound)
- Vol. 3: Lao PDR, Myanmar, and Viet Nam
\$50.00 (hardbound)
8. Financial Sector Development in Asia
Edited by Shahid N. Zahid, 1995
\$50.00 (hardbound)
9. Financial Sector Development in Asia: Country Studies
Edited by Shahid N. Zahid, 1995
\$55.00 (hardbound)
10. Fiscal Management and Economic Reform in the People's Republic of China
Christine P.W. Wong, Christopher Heady, and Wing T. Woo, 1995
\$15.00 (paperback)
11. Current Issues in Economic Development: An Asian Perspective
Edited by M.G. Quibria and J. Malcolm Dowling, 1996
\$50.00 (hardbound)
12. The Bangladesh Economy in Transition
Edited by M.G. Quibria, 1997
\$20.00 (hardbound)
13. The Global Trading System and Developing Asia
Edited by Arvind Panagariya, M.G. Quibria, and Narhari Rao, 1997
\$55.00 (hardbound)
14. Rising to the Challenge in Asia: A Study of Financial Markets
Asian Development Bank, 1999
Vol. 1 \$20.00 (paperback)
Vol. 2 \$15.00 (paperback)
Vol. 3 \$25.00 (paperback)
Vols. 4-12 \$20.00 (paperback)

SERIALS

(Co-published with Oxford University Press; Available commercially through Oxford University Press Offices, Associated Companies, and Agents)

1. Asian Development Outlook (ADO; annual)
\$36.00 (paperback)
2. Key Indicators of Developing Asian and Pacific Countries (KI; annual)
\$35.00 (paperback)

JOURNAL

(Published in-house; Available commercially through ADB Office of External Relations)

1. Asian Development Review (ADR; semiannual)
\$5.00 per issue; \$8.00 per year (2 issues)