ADBI Working Paper Series

The Global Financial Crisis: Countercyclical Fiscal Policy Issues and Challenges in Malaysia, Indonesia, the Philippines, and Singapore

Anita Doraisami

No. 288
June 2011

Asian Development Bank Institute

Anita Doraisami is research fellow at the Monash Asia Institute of Monash University, Melbourne, Australia. The author wishes to thank Ajay Shah, National Institute of Public Finance and Policy, New Delhi, India for his incisive comments.

The Working Paper series is a continuation of the formerly named Discussion Paper series; the numbering of the papers continued without interruption or change. ADBI's working papers reflect initial ideas on a topic and are posted online for discussion. ADBI encourages readers to post their comments on the main page for each working paper (given in the citation below). Some working papers may develop into other forms of publication.

Suggested citation:

Doraisami, A. 2011. The Global Financial Crisis: Countercyclical Fiscal Policy Issues and Challenges in Malaysia, Indonesia, the Philippines, and Singapore. ADBI Working Paper 288. Tokyo: Asian Development Bank Institute. Available: http://www.adbi.org/working-paper/2011/06/06/4581.gfc.countercyclical.fiscal.policy.issues.challenges/

Please contact the author(s) for information about this paper.

Email: anita.doraisami@monash.edu

Asian Development Bank Institute
Kasumigaseki Building 8F
3-2-5 Kasumigaseki, Chiyoda-ku
Tokyo 100-6008, Japan

Tel: +81-3-3593-5500
Fax: +81-3-3593-5571
URL: www.adbi.org
E-mail: info@adbi.org

Abstract

Several countries have employed countercyclical fiscal policy to ameliorate the impact of the global financial crisis. This study identifies some of the issues and policy implications associated with this policy response in developing countries. Included are case studies of four developing countries in the Asian region—Malaysia, Indonesia, the Philippines, and Singapore. The findings point to a rich diversity in both the size and composition of fiscal stimulus and the challenges which are confronted. This study suggests several steps that countries might take to improve the impact of expansionary fiscal policy in response to future downturns. These include (i) embedding automatic stabilizing impulses through the provision of social safety nets; (ii) increasing tax revenues collected from personal and corporate taxes, by reducing labor market informality through improvements in the business environment; (iii) safeguarding fiscal sustainability; (iv) rebalancing growth by strengthening other sectors of the economy; (v) reducing expenditures on subsidies; and (vi) ensuring smooth and efficient budget execution.

JEL Classification: E60, E61, E62, E63

Contents

1. INTRODUCTION

For more than twenty years prior to the global financial crisis, volatility in aggregate economic activity and inflation fell dramatically in most of the industrial world. The widespread and persistent nature of this phenomenon was termed "the great moderation". The most common explanations put forward for this include better monetary policy, structural changes in inventory management, and good luck (see Bernanke 2004; Blanchard and Simon 2000; Summers 2005). The role played by monetary policy led to a consensus that stabilization should be left to monetary policy, with a focus on inflation. Fiscal policy, on the other hand, should rely on automatic stabilizers, with discretionary fiscal policy best avoided.

This consensus was cast aside in the wake of the recent global financial crisis, with countries around the world adopting unprecedented fiscal stimulus packages to mitigate the impacts of the crisis. This response hinged on the premise that the monetary policy transmission mechanism would be less effective in the current climate, with considerable deleveraging taking place. In addition, further easing in some cases would be limited as policy rates are already close to the zero bound.

A critical question in this discourse is whether monetary policy has become ineffective. In some Asian countries, an activist monetary policy has not been attempted. If exchange rates are pegged—whether de facto or de jure—then interest rates cannot be lowered. In this instance, maintaining exchange rate stability precludes reducing policy rates as a policy option. While declines in policy rates were widely observed, these also reflect declines in the expected rates of inflation. In the case of Malaysia, for example, Zeilesis Shah, and Patnaik (2010) found high exchange rate inflexibility and no structural break in the exchange rate regime when faced with the crisis. It is thus likely that monetary policy was not part of the stabilization measures adopted during the crisis.

The aim of this paper is to identify some of the issues and policy implications associated with the fiscal policy response to global financial crisis in developing countries. This is done by undertaking case studies of four developing countries in the Asian region, i.e., Malaysia, Indonesia, the Philippines, and Singapore.

The first section provides an overview of the literature on countercyclical fiscal policy in developing countries, and a brief survey of the fiscal stimulus packages of countries in the Asian region. This is followed by a discussion of some of the econometric challenges associated with gauging the appropriate size of fiscal stimulus packages.

The second section documents and evaluates the fiscal policy responses undertaken by Malaysia, Indonesia, the Philippines, and Singapore. Each case study begins with a brief historical overview of fiscal performance. This is followed by an analysis of the fiscal stimulus packages (in terms of both the size and composition), fiscal space, and fiscal sustainability. The third section concludes by summarizing the fiscal policy challenges encountered by the countries and discussing the policy implications of the findings.

2. COUNTERCYCLICAL FISCAL POLICY IN RESPONSE TO CRISIS IN DEVELOPING COUNTRIES

There is considerable debate about the efficacy of discretionary fiscal policy in developing countries. While automatic stabilizers are weak and make the case for discretion, there is also the widely noted occurrence of "procyclicality". Kraay and Serven (2008) state that procyclicality applies to a wide variety of measures. These

include total expenditure, the share of total expenditure in gross domestic product (GDP), public consumption, and public investment. Recent evidence (Gavin and Perotti 1997; Kaminsky, Reinhart, and Veigh 2004) suggests that this correlation reflects a mistiming of fiscal interventions.

Explanations have also been put forward in terms of imperfections in credit markets that prevent developing countries from borrowing in bad times (Kaminsky, Reinhart, and Veigh 2004). On the other hand, political economy explanations espouse the idea that good times encourage fiscal profligacy and/or rent seeking activities (Tornell and Lane 1999). The procyclicality of fiscal policy implies that discretionary fiscal interventions tend to increase rather than reduce output volatility. Additional volatility induced by procyclical fiscal policy has been found to undermine growth in the long run (Fatas and Mihov 2003).

Further, Kraay and Severn (2008) assert that the expansionary effect of fiscal policy tends to be much smaller in developing countries than in developed ones. Thus, it is risky to extrapolate lessons from implementing countercyclical fiscal policy in the latter to make policy recommendations for the former. Overall, Kraay and Severn (2008) conclude that evidence on the short- and long-run impact of fiscal expansions on aggregate demand and output in developing countries is mixed.

Moreover, there is little consensus on what a fiscal stimulus package is expected to achieve. As Hannoun (2009) states, there are two stylized types of policy response: stabilization and stimulation. A measured stabilization policy accepts the fact that adjustment is inescapable and therefore merely aims to mitigate the pain and promote an orderly adjustment. Stimulation, on the other hand, aims to eliminate the adjustment period altogether, and therefore involves a much larger stimulus package.

Blanchard et al. (2008) contend that the optimal fiscal package should be timely, large, lasting, diversified, contingent, collective, and sustainable. It should be timely, because the need for action is immediate; large, because the current and expected decrease in private demand is exceptionally large; lasting because the downturn will last for some time; diversified because of the unusual degree of uncertainty associated with any single measure; contingent, because the need to reduce the perceived probability of another "Great Depression" requires a commitment to do more, if needed; collective, since each country that has fiscal space should contribute; and sustainable, so as not to lead to a debt explosion and adverse reactions of financial markets. It is likely that, except for a few countries, this wish list would be mutually exclusive.

There are also contradictory views on ideal the characteristics of optimal fiscal stimulus packages, such as their being timely, temporary, and targeted (Summers 2008) or permanent, pervasive, and predictable (Taylor 2008). Taylor maintains that, based on the permanent income theory or life cycle theory, temporary increases in income will not lead to significant increases in consumption. Further, he argues that an across-the-board approach is far more effective than targeting. Finally, Taylor argues that government policy has been too erratic; it should be as predictable as possible so that individuals and firms know what to expect.

Countries have announced fiscal rescue packages of varying sizes, with the People's Republic of China (PRC) announcing the biggest total package as a percentage of GDP, followed by Saudi Arabia, Malaysia, and the United States. For 2009, the economic stimulus announced by 32 countries (including all the G20) as a percentage of global GDP is 1.4%, with close to 90% of the global stimulus coming from G20 nations (see Khatiwada 2009).

Khatiwada (2009) notes that the focus of stimulus packages varies between advanced and developing economies. Infrastructure spending comprises 46.5% of stimulus

packages in developing and emerging economies, compared to 14.9% in advanced economies. Meanwhile, tax cuts comprise over 34% of fiscal stimulus in advanced economies, while these comprise only 3% in developing and emerging economies. Social transfers to low-income citizens comprise a relatively small percentage for both groups: 10.8% in advanced and 6.8% in developing and emerging countries.

Noticeably absent is the rationale for the composition of the fiscal stimulus packages. Infrastructure spending features strongly as a major item of expenditure, and comprises more than 60% of stimulus packages in Thailand, the Philippines, the Republic of Korea (hereafter Korea), and PRC (Table 1). However, it is not clear why this should be the major focus of fiscal stimulus, if the aim is to increase the level of aggregate demand in a timely, temporary, and targeted manner.

Table 1: Features of Fiscal Stimulus Package: Three Major Items of Expenditure

Country	Infrastructure	Tax Breaks	Transfers	Other
Indonesia	X	X		Waived import duties
Malaysia				Guarantee funds, equity investment
Philippines	X	X		General increase in budget
PRC	X			Health care reform
Republic of Korea	X	X	X	
Thailand		X	X	Education
India	X			home loans, export incentives

Note: PRC=People's Republic of China

Source: Author's estimates

In Asia, there appears to be wide variation in terms of the size of the stimulus (Table 2). Most Asian countries announced fiscal stimulus packages without providing a detailed justification for the magnitude of spending. PRC has rolled out the largest package, despite projections which predict a smaller decline in its GDP relative to other Asian countries. There is little doubt that PRC possesses the fiscal space to undertake this ambitious fiscal stimulus.

Table 2: Fiscal Stimulus Packages in Selected Asian Economies

Country	Forecast drop in GDP*	Stimulus/GDP, 2008 (%)	Deficit 2008/GDP (%)	Deficit 2009/GDP (%)	Debt/GDP, 2008 (%)	Current Account Balance/GDP (%) 2008
Indonesia	-3.6	1.2	-0.1	-2.1	33	0.2
Malaysia	-7.3	10	-4.8	-7.6	42.5	17.6
Philippines	-4.6	4.1	-0.9	-2.3	56	2.5
PRC	-2.5	13	-0.4	-3.2	17.6	10.1
Republic of Korea	-6.2	12.8	0.3	-6.5	33	-0.4
Thailand***	-10	1.1	-1.1	-6	33.6	-0.1
India	-3.2	4.2	8.4	10	82	-3

Notes: GDP = gross domestic product; PRC = People's Republic of China; * measures the difference in IMF's GDP forecasts between 2008 and the 2009; ** estimate as a result of implementing the stimulus as announced by country authorities; *** new package of more than 17% of GDP over three years

Source(s): Khatiwada (2009); International Financial Statistics (IMF)

Owing to their strong export orientation, Malaysia and Korea are projected to suffer a large decline in GDP, and have thus also announced large fiscal stimulus packages. With far less fiscal space, the Philippines, which has drastically reduced its debt recently, announced a stimulus amounting to 4.1% of GDP. Indonesia is still projected to grow fairly strongly, and has announced a modest stimulus of 1.2% of GDP.

The scope for countercyclical fiscal policy is usually assessed in developed countries by estimating the output gap and the role of automatic stabilizers. In the case of developing countries, however, it is difficult to measure the output gap estimate precisely. This is due to data limitations, structural breaks in time series, and exogenous factors which have large impacts on the economy, owing to a lack of diversification in the economic structure (Mueller, Yackovlev, and Weisfeld 2009). It is therefore difficult to gauge which variables fiscal policy should target.

In deciding on the size of fiscal packages, the ideal would be to estimate the output gap and multiplier effects of different types of government expenditure and perhaps the lag time involved for the impacts. An estimate of fiscal sustainability should also be obtained. As already noted, while output gaps are routinely calculated for developed countries, this is not the case for developing countries.

There is an ample literature on ways to measure potential output and output gaps. Gerlach and Yiu (2004) assert that these may be usefully thought of as either following an a theoretical approach, a structural approach, or a mixed approach. The theoretical approach is primarily a statistical exercise in which actual data on output are used to estimate potential output. The most frequently used approaches are the (HP) filter proposed by Hodrick and Prescott (1997), the band-pass (BP) filter proposed by Baxter and King (1999), and the (BN) filter proposed by Beveridge and Nelson (1981).

The structural approach has the appeal of being informed by economic theory in estimating potential output. Typically, data on employment and estimates of the capital stock are used to fit a production function. Given assumptions about "normal" levels of employment, productivity, and the utilization of the capital stock, measures of potential output can be constructed. While the guidance of theory is attractive, the data requirements are quite demanding. Furthermore, poor estimates of the output gap could arise from a misspecification of the production function.

A third approach combines a time series model with structural economic information. Kuttner (1994) uses an Unobserved Components model and data on actual output and

inflation to estimate the output gap in the US. While this approach is attractive, a critical assumption is that the relationship between the output gap and inflation is stable during the sample period. This assumption may be particularly debatable in economies that have experienced large structural changes.

In this paper, the output gap is estimated using the HP filter for generating the potential GDP figures for the period 2000–2008, using annual real GDP figures. As Cerra and Saxena (2000) observe, the HP is a simple smoothing procedure that has become increasingly popular because of its flexibility in tracking the characteristics of the fluctuations in trend output. Trend output (denoted by τ) is derived using the HP filter and is obtained by minimizing a combination of the gap between actual output (y) and trend output and the rate of change in trend output for the whole sample of observations (T):

$$\min_{t=1} \sum_{t=1}^{T} (y_t - \tau_t)^2 + \lambda \sum_{t=2}^{T-1} \left[(\tau_{t+1} - \tau_t) - (\tau_t - \tau_{t-1}) \right]^2.$$

Where λ determines the degree of smoothness of the trend.

The shortcomings of the HP filter have been well documented. A major drawback comes from the difficulty in identifying the appropriate "detrending" parameter λ, which is generally overlooked by using arbitrary values popularized by the real business cycle literature. Mechanical detrending based on the HP filter can lead to spurious cyclicality with the integrated or nearly integrated time series and an excessive smoothing of structural breaks. A second important flaw is the end-sample biases. These reflect the symmetric trending objective of the method across the whole sample and the different constraints that apply within the sample and the edges.

In a survey of the literature on multipliers, Spilimbergo, Symansky, and Schindler (2009) note that there is wide disagreement on the reliability of multipliers, due in part to methodological differences. There are four broad methodologies that have been used to calculate fiscal multipliers. These are model simulations, Vector Autoregressions (VARs), econometric studies of consumer behavior in response to fiscal shocks, and case studies. All of these methodologies have limitations. Furthermore, they note that the range of estimates for even similar methodologies is large.

This study applies a structural vector autoregression (SVAR) framework based on the methodology developed by Blanchard and Perotti (2002) to estimate multipliers. It assumes that as discretionary fiscal decisions take time to implement (because of political and legislative requirements), the short-term (i.e., within one quarter) reaction of fiscal variables to current economic developments only reflect "automatic" responses defined by existing laws and regulations. Fiscal developments adjusted for these automatic/cyclical responses are, therefore, assumed to represent discretionary *structural* fiscal policy shocks. The study uses logged quarterly seasonally adjusted data for the period 2000 to 2008 and assesses the impact of a change in total government expenditure on GDP.

Lag lengths for the SVAR framework were selected by the model with the lowest Schwartz Information Criterion (SIC) statistic if it displayed no autocorrelation using the Lagrange-multiplier (LM) test.

In summary, several shortcomings have been identified with the methodology adopted in this paper. The results from these estimations are therefore not discussed at length, as they should not be viewed as precise and reliable. Future directions for research in this area should be directed at estimates of output gaps and multipliers using different methodologies and data.

In assessing fiscal stimulus packages, financing and fiscal sustainability considerations are paramount. The increase in the debt/GDP ratio over time as a result of the fiscal stimulus package is assessed using equation 6 below (see for instance Blanchard 1990; Bohn 1998; Buiter 1985).

The budget accounting relation can be expressed algebraically in discrete time as

$$D_t = D_{t-1} + i D_{t-1} - PB_t \tag{1}$$

Where D is public debt, i is interest rate, and PB is primary balance.

Dividing equation (1) by nominal *GDP* (or Y_t)

$$\frac{D_t}{Y_t} = \left[1+i\right] \frac{D_{t-1}}{Y_t} - \frac{PB_t}{Y_t} \tag{2}$$

$$\frac{D_t}{Y_t} = \left[\frac{1+i}{1+g}\right] \frac{D_{t-1}}{Y_{t-1}} - \frac{PB_t}{Y_t} \tag{3}$$

Where g is rate of GDP growth.

Taking the change in the public debt to national income ratio

$$\frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}} = \left[\frac{1+i}{1+g}\right] \frac{D_{t-1}}{Y_{t-1}} - \frac{D_{t-1}}{Y_{t-1}} - \frac{PB_t}{Y_t} \tag{4}$$

Setting

$$\Delta\left(\frac{D}{Y}\right) = \frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}} \tag{5}$$

and simplifying

$$\Delta\left(\frac{D}{Y}\right) = \left[\frac{i-g}{1+g}\right] \frac{D_{t-1}}{Y_{t-1}} - \frac{PB_t}{Y_t} \tag{6}$$

Equation (6) shows that as public debt to GDP rises, the higher the primary deficit, the higher the interest rate (i) and the lower the rate of growth (g). Conversely, as the public debt to income ratio falls, the lower the interest rate, the higher the rate of growth, and the higher the primary surplus.

To stabilize public debt to national income,

$$\frac{PB_t}{Y_t} = \left[\frac{i-g}{1+g}\right] \frac{D_{t-1}}{Y_{t-1}} \tag{7}$$

to reduce the debt ratio in t + n, to a fixed percent (δ) of its value at time, t

the following formula can be used

$$\frac{\overline{PB}}{Y_t} = \frac{D_t}{Y_t} \bullet \frac{\left[(1+i)^n - (1+g)^n \bullet \delta\right]}{\sum_{j=1}^{n}(1+i)^{n-j}} \tag{8}$$

3. CASE STUDIES

3.1 Malaysia

3.1.1 A Brief Historical Overview of Fiscal Performance in Malaysia

During the 1970s, the Malaysian government used revenues from newly discovered petroleum reserves to support high levels of public expenditure without a dramatic rise in debt. Much of this funding was directed at expanding state owned enterprises, which were at the forefront of Malaysia's ethnic restructuring efforts as envisaged in the New Economic Policy (NEP). In fact, fiscal policy in Malaysia has been inextricably linked to the NEP since its commencement in 1970.

In the early 1980s, commodity prices declined as a result of a recession triggered by the US-led tightening of liquidity. As a result, Malaysia's terms of trade fell by 17%, and its current account deficit widened to 14% of GDP in 1982. Government counter-cyclical policy to offset the deflationary effects of the downturn resulted in soaring public expenditure and a deficit of 19% of GDP (Table 3).

Table 3: Malaysia–Debt, Deficit and Current Account Ratios to GDP

1981–1988

Year	Total Debt/GDP (%)	Deficit /GDP (%)	Current Account/GDP (%)
1981	56.0	-19.1	-09.9
1982	70.1	-17.9	-13.5
1983	78.9	-13.2	-11.6
1984	78.1	-08.9	-04.8
1985	89.0	-07.4	-02.0
1986	112.3	-10.6	-0.40
1987	110.8	-07.8	8.1
1988	103.8	-04.3	5.2

GDP = gross domestic product

Source: Bank Negara Malaysia Annual Report, various issues

After the elections in 1982, when it became apparent that the recession would last longer than expected, the government decided to cut back on spending. However, these cuts did not affect borrowing for developing heavy industries through the Heavy Industries Corporation of Malaysia (HICOM). HICOM pursued a heavy industrial program, collaborating with foreign companies in developing a range of industries. These included cement, steel, and automobile manufacturing. HICOM's activities were mainly financed by massive foreign borrowing from Japanese sources.

In 1985, Malaysia experienced its first recession as its major export earners slowed. In 1986, the economy slumped altogether. The prices of tin, petroleum, and rubber were almost half their 1984 values, and the debt-to-GDP ratio peaked soon afterwards. This time the government was not in a position to use counter-cyclical policy, and privatization and liberalization of foreign direct investment were undertaken instead. However, it was a sustained boom led by export-oriented manufacturing and the relocation of production from East Asia that eventually led to a decline in the debt-to-GDP ratio.

The debt-to-GDP ratio bottomed out in years just prior to the Asian financial crisis (Table 4), but this decline was short-lived. In fact, Malaysia has consistently incurred deficits since 1970, except for small surpluses for three years prior to the crisis when

high growth rates were achieved. What are lessons of the 1980s? Are there parallels emerging with the proposed fiscal stimulus packages?

Table 4: Malaysia–Debt/GDP Ratio 1989–1997

Malaysia : Debt/GDP 1989-97
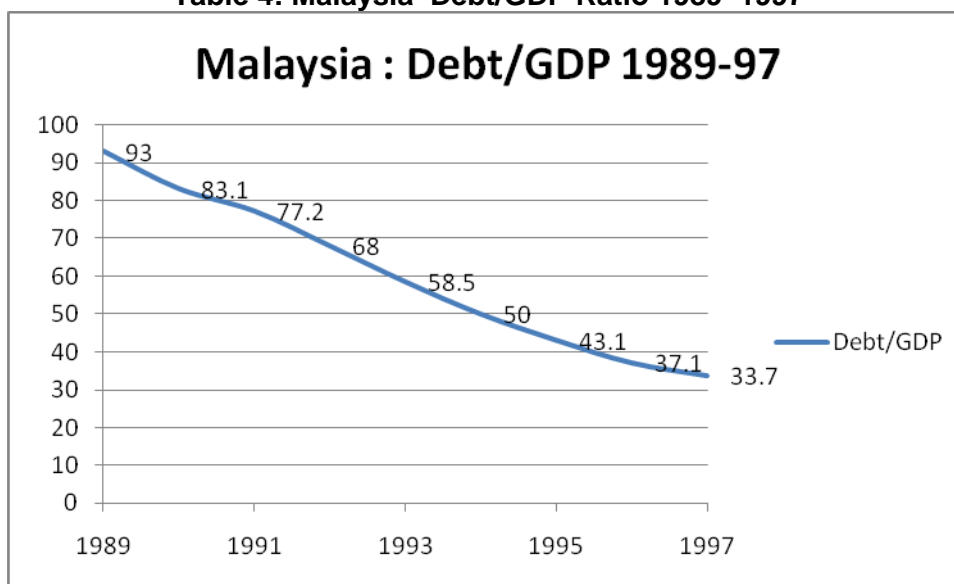
GDP = gross domestic product

Source: Bank Negara Malaysia Annual Report various issues

3.1.2 Fiscal Stimulus Packages: Size and Composition of Stimulus, Fiscal Space, and Fiscal Sustainability

Size and Composition of Stimulus

The Malaysian economy contracted by 6.2% in the first quarter of 2009, after growing by 0.1% in the fourth quarter of 2008. Gross fixed investment declined by 10.8% during the same period, after declining by 10.2% in the last quarter of 2008. Exports declined by about 30% on a year-on-year basis in May 2009, while imports fell by 27.8%. Growth contracted in the second quarter by 3.9% and in the third quarter by 1.2%.

As Table 5 indicates, Malaysia is a highly export-oriented country. Manufactured goods make up about 82% of exports, of which electronics, electrical machinery and appliances account for about 53%. The major destinations of Malaysian manufactured exports are the US, the European Union (EU) and Japan. Private investments collapsed in the aftermath of the crisis and are currently at par with public investments. Malaysia has a high savings rate and all employees contribute to the Employees Provident Fund.

Table 5: Malaysia–GDP by Expenditure Shares, 2008

(%)

Component	% Share
Consumption	58
Private	45
Public	13
Investment	20
Private	11
Public	9
Change in Stocks	-1
Exports	103
Imports	80
TOTAL	100

GDP = gross domestic product

Source(s): Bank Negara Malayisa Annual Report

The first stimulus package introduced in November 2008 amounted to 1% of GDP (see Appendix 1), when it was thought that GDP would decline by 1%. This was announced under the former Prime Minister who was due to step down in March 2009. Approximately 85% of this package was directed towards improving infrastructure.

The construction sector welcomed the package, but other sectors were unimpressed. No assistance was forthcoming for the vulnerable or those made redundant. The package was skewed towards those employed, particularly in the public sector. Currently, the ratio of public servants to the overall population in Malaysia is 4.7%— one of the highest in the region—and wages and salaries of public servants is the biggest item of expenditure by function in the budget (see Table 10).

The second fiscal stimulus package was announced in March 2009, soon after the current Prime Minister and Finance Minister assumed office (see Appendix 2). The package, intended to be spent over two years, amounts to RM60 billion or approximately 9% of GDP. It comprises a fiscal injection of RM15 billion, guarantee funds of RM25 billion, equity investments of RM10 billion, private finance initiatives of RM7 billion. and tax incentives of RM3 billion.

The package is designed to achieve four separate thrusts in different areas (Table 6).

Table 6: Measures Included in Malaysia's Second Fiscal Package

Thrust	Fiscal Measures
Thrust 1: Reduce unemployment & increase opportunities (3%)	- Create 163,000 jobs & training opportunities in public and private sectors - Provide double tax deductions to employers hiring workers retrenched from 1 July 2008
Thrust 2: Assist the private sector, especially small and medium enterprises SMEs (48%)	- Provide RM25 billion in Government Guarantee Funds, including the Working Capital Guarantee Scheme (RM5 billion), Industry Restructuring Loan Guarantee Scheme (RM5 billion), and credit enhancement of up to RM15 billion to companies looking to raise monies via the bond market - Provide RM5200 million for Auto Development Fund to assist vendor network. Provide a discount of RM5,000 ringgit to junk 10-year old cars for new, national cars
Thrust 3: Build future capacity (32%)	- Provide RM2 billion for new low-cost carrier terminal at Kuala Lumpur International Airport - Increase Khazanah's (Ministry of Finance Investment Arm) investment funds - Liberalize services by removing the 30% "bumiputera equity requirement" for 27 services sub-sectors - Support the creative arts industry - Support Private-Finance Initiatives
Thrust 4: Ease the burden on the vulnerable (17%)	- Provide RM674 million for subsidies on basic necessities such as food; RM480 for million fixed toll rates; and RM18.1 billion for fuel subsidies - Provide assistance to students, disabled and poor families, low-cost housing - Increase existing tax exemption of RM6,000 given for retrenchment benefits to RM10,000 for each completed year of service - Provide RM 10,000 in annual tax relief for interest paid on housing loans for three years - Provide incentives for banks to defer repayments of housing loans

Source(s): Ministry of Finance Malaysia (2009)

In 2009, Malaysia's GDP was expected to contract by 3.5%. The output gap as a percentage of GDP was in the region of plus or minus one percent of GDP prior to the crisis (see Appendix 4). Currently, a negative growth rate of between 3.5 and 4.5% of GDP has been forecast, leaving a large output gap of at least 7% of GDP.

Multiplier estimates based on SVAR show significant results for all four lagged coefficients of the impact of government expenditure on output. This indicates that the long-run multiplier, which is a summation of all the significant lagged coefficients, is about 0.35. Thus, a 1% rise in government expenditure would give rise to a 0.35% increase in GDP (see Appendix 4).

While the announced "headline" value of the stimulus is a total of RM70 billion (or 10% of GDP) and is expected to take the budget deficit from 4.8% of GDP to 7.6%, it is unlikely that this will be the final amount spent. The major thrust of the package is to assist the private sector, particularly small and medium enterprises (SMEs). The RM25 billion set aside for guaranteed funds includes RM5 billion for a working capital guarantee scheme for companies with equity below RM20 million; RM5 billion for an industry restructuring guarantee fund for loans to encourage green technology applications; and RM15 billion to facilitate access to capital markets for companies that intend to raise funds on the bond market.

Funds to assist SMEs are certainly warranted, as SMEs make up 99% of total registered businesses in Malaysia. These contribute 56% to total employment, and account for 32% of the GDP. In a survey of SME response to the stimulus (see New Straits Times 2009), respondents stated that a reduction in corporate tax and electricity tariffs would be more effective in helping them deal with the crisis, and that they could then use this surplus as working capital. The findings also indicated that SMEs had yet to benefit or see any impact from the various assistance programs and stimulus packages offered by the government; they maintained that the effect of these changes would more likely be felt in the long run.

The package's second thrust sets aside RM10 billion to allow Khazanah, the investment arm of the Ministry of Finance, to increase its funds and investment. The existence and operation of this fund have proven contentious. While Khazanah has major equity shares in the biggest Malaysian companies listed on the stock exchange, it is unclear how boosting its investments funds will provide an immediate stimulus to the economy.

The move to liberalize the services sector, involving the removal of the 30% "bumiputera equity requirement" for the 27 services sub-sectors, was announced at the same time as the second stimulus package. The sub-sectors cover health and social services, as well as services in the tourism, transport, business, and computer and its related sectors (Appendix 3). This liberalization is to take place with immediate effect, and in line with the ASEAN trade liberalization arrangements. It is expected to attract more investments, bring in more professionals and technology, and strengthen the competitiveness of the sector.

In the current context, services can provide a promising avenue for generating growth in the future. Baily, Farrell, and Remes (2005) suggest that given the right competitive environment, services can be a powerful source of wealth creation and growth in middle income countries.

It is highly unlikely that Malaysia will be able to rely on its export-oriented strategy to the same extent as before. Focus needs to shift to rebalancing growth and making it more domestically driven. The reliance on an undervalued exchange rate, export incentives, and cheap foreign labor to ward off competition from other, lower wage

economies is now losing its effectiveness. Unfortunately, Malaysia also lacks the skills necessary to shift to higher value, manufactured products.

The services sector contributed 55% to GDP in 2008, of which 47.6% came from non-government services (Table 7). The sector also accounted for 52.1% of the total employment in Malaysia in 2008 (Table 8). It is hoped that the services sector will increase its contribution to the GDP to 60%.

Table 7: Malaysia–Service Sector's Share of GDP by Subsector, 2008

(%)

Subsector	Share of GDP (%)
Intermediate Services	24.3
Transport and Storage	3.9
Communications	3.9
Finance and Insurance	11.2
Real Estate and Business Services	5.3
Final Services	30.6
Utilities (electricity water and gas)	2.9
Wholesale and Retail Trade	12.9
Accommodation and Restaurants	2.4
Other Services	5.7
Government Services	6.7
TOTAL	**55.1**

Source: Ministry of Finance, Malaysia 2009

Table 8: Malaysia–Service Sector's Share of Employment by Subsector, 2008

(%)

Subsector	Share of GDP (%)
Electricity, Gas and Water	0.8
Wholesale and Retail Trade, Accommodation and Restaurants	17.1
Finance, Insurance, Real Estate and Business	7.0
Transport, Storage, and Communication	5.8
Government Services	10.9
Other Services	10.4
TOTAL	**52.1**

Source: Ministry of Finance, Malaysia 2009

Although these liberalization efforts are welcome, their impact is likely to be constrained by the fact liberalization across sectors have been very uneven (Khoo 2009). The computer and related services sector, for example, has undergone considerable liberalization since the implementation of the Mutlimedia Supercorridor (MSC) project, which conferred MSC status on many companies and provided for an exemption from the bumiputera equity criteria. In contrast, health and social services liberalization has failed to include private hospitals. Even transport sub-sector liberalization is narrow, with the logistics sub-sector excluded.

One area which would have a pervasive impact is the lifting of the bumiputera equity conditions for firms which are bidding for government- and government-linked companies procurement contracts. Both of these entities combined are the single biggest consumers of services in Malaysia; given the size of government expenditure and activity, they are likely to have a large impact.

There has also been a bi-partisan call to liberalize nine sectors, i.e., property, utilities, government investment agencies, airports, publication and printing of recorded media, telecommunications, public transportation, and conventional banking and financial institutions (Lee 2009). Proponents maintain that doing so will have a large impact on productivity and production.

Additionally, there is concern that slow implementation of the stimulus package is impeding its effectiveness. As of the end of September 2009, the disbursement rate for the first package announced in November 2008 was 61%, while that for second package, intended to be disbursed throughout 2009 and 2010, was only 26% (World Bank 2009a).

Fiscal Space and Fiscal Sustainability

While there is no fiscal space index as such to indicate the capacity of countries to undertake fiscal packages, some of the macroeconomic indicators listed below can be used to make a preliminary judgment. Currently, Malaysia has a moderate level of debt-to- GDP ratio, a comfortable reserve position, a large account surplus, and low levels of short-term and foreign debt (Table 9). There appears to be the sufficient fiscal space to implement a fiscal stimulus of the magnitude proposed.

Table 9: Malaysia–Selected Indicators of Fiscal Space, 2008

Indicator	Value
Deficit/GDP	Increase from 4.8 % to 7.6%
Debt/GDP	45%
Current Account/GDP	17.5%
Reserves/GDP	50%
Reserves/Short-term debt	3.9
Reserves/Months of Imports	7.7
Funding Sources	93% domestic

Source: Calculated from the IMF International Financial Statistics, 2009

However, looking beyond these indicators and examining the revenue and expenditure side of the budget raises a number of concerns. In 2008, 44% of government revenues was linked to petroleum resources transferred from the state oil company Petronas, which is fully government-owned. These include direct taxes, petroleum royalties, export taxes, and the item designated as interest and return on investment (Table 10). In fact, dependence on oil revenues has increased sharply since 2002, when oil revenues contributed approximately 18% of the total. The projected deficit for 2009 was based on high oil prices last year.

Table 10: Malaysia–Federal Government Revenues by Source, 2008

(%)

Revenue Source	% Share
Direct Taxes	53.7
Companies	23.8
Petroleum	15.2
Individuals	9.4
Stamp Duties	2.2
Other	1.1
Indirect Taxes	
Exports Duties	1.8
Import Duties	1.7
Excise Duties	6.7
Sales Tax	5.3
Service Tax	2.1
Others	1.9
Non-Tax Revenues	29.5
Licenses and Permits	3.3
Petroleum Royalty	3.7
Interest and Return on Investment	20.3
Others	1.6
Non-Revenue Receipts	0.6
TOTAL	**100**

Source: Ministry of Finance, Malaysia (2009)

The price of Tapis crude has since fallen from US$125 per barrel to US$ 48.25 per barrel in the first quarter of 2009. The budget has yet to be revised based on the more recent oil price projections. In 2008, the non-oil primary balance was almost 12% of GDP. It is anticipated that, at the current rate of oil consumption, Malaysia could be a net oil importer as early as 2011. This has implications for Malaysia's current account and reserves positions as well as its deficit and debt.

In addition, approximately half of the oil windfalls have been spent on subsidies (Table 11), which were threatening to consume more than half of expenditures until the basis for their provision was revised. Subsidies to both businesses and consumers have increased consumption and depleted petroleum reserves.

Table 11: Malaysia–Federal Government Expenditure by Functional Classification, 2008

(%)

Expenditure Item	% Share
Emoluments	26.7
Pensions and Gratuities	6.5
Debt Service	8.3
Domestic	7.6
Foreign	0.8
Supplies and Services	16.4
Subsidies	19.5
Asset Acquisition	1.8
Grants and Transfers	20.1
Other	0.6
TOTAL	**100**

Source: Ministry of Finance, Malaysia

In terms of financing the deficit and debt, the "circular flow" can be summarized as follows: in 2008 Petronas funds contributes about 44% of revenues; in turn, the deficit is financed domestically, primarily by the Employees Provident Fund but also by other government owned funds and banks.

In the current stimulus package, Khazanah is allocated RM10 billion to boost equity in strategic sectors. These are telecommunications, technology, tourism, agriculture life sciences, and projects related to Iskandar Malaysia.[1] Channeling stimulus funds through Khazanah has left the government open to claims that this money will be injected into companies which are already majority government-owned, or closely connected to the government. In this context, tax breaks across the board may have provided a greater stimulus to the private sector and may have been regarded as more impartial.

Current attention needs to be focused on a deficit reduction strategy given the projected increase in debt-to-GDP ratio. At the end of 2008, the debt was approximately 45% of GDP. However, given the forecast growth rate of -3.5% for 2009, and the current interest rate on debt of 4.2 %, debt at the end of 2009 will increase sharply to approximately 54.5%. This sharp increase is a reflection of the large differential between growth rates and interest rates, as well as a negative primary balance.

Malaysia's debt-to-GDP ratio was 54.5% in 2009; assuming an annual GDP growth rate of 3% from 2010 to 2013, this ratio is projected to increase to 76% of GDP by 2013. With a GDP growth rate of 5%, the ratio is projected to be slightly lower at 73% of GDP (Figure 1).

Figure 1: Malaysia—Debt/GDP Projection, 2008–2013
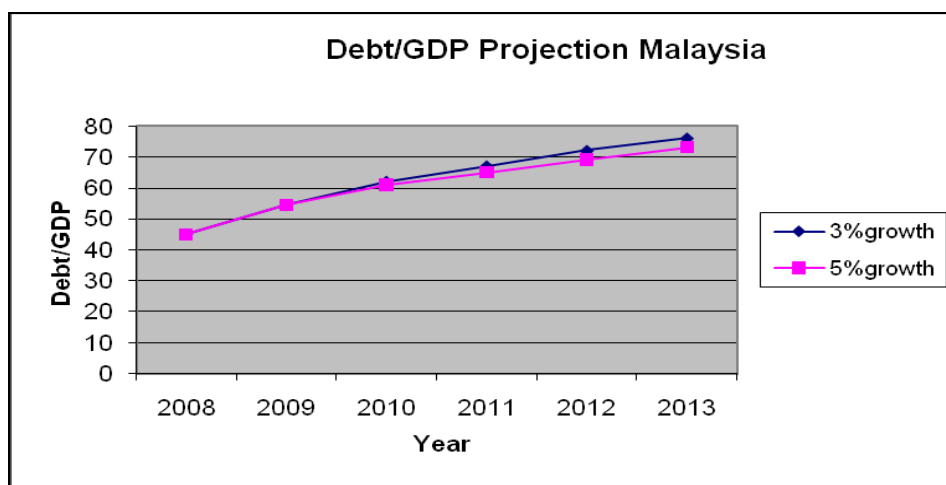
GDP= gross domestic product

Source(s): Author's Estimations

The IMF projects the budget deficit for 2009 to be around 8% of gross domestic product (GDP). The non-oil deficit is projected to reach 15% of GDP in 2010. Should the debt to GDP ratio reach 77% of GDP, Malaysia will need to run a primary balance surplus of 4% of GDP over the next ten years to reduce the debt-to-GDP ratio to the current level of 45%. Given its fiscal performance to date, this will be an enormous challenge.

---

[1] Iskandar Malaysia is modeled after the Pearl River Delta Economic Zone. It is envisaged that it will capitalize on synergies with Singapore.

Heavy reliance on Petronas for revenues is not a viable long term strategy. The establishment of a petroleum fund needs to be seriously considered. This will confer many benefits, including reduced exposure to volatile oil prices, procyclicality in spending, increased transparency, and sensitivity to intergenerational equity considerations.

The high level of subsidies also needs to be reconsidered. The introduction of a value added tax (VAT) has long been discussed, and its implementation in 2011 should proceed as scheduled. Over the medium term, consideration should be given to the redirection of subsidies, which consumed 20% of the budget in 2008 to provide a social safety net for the poor. Given the low official poverty rate of 6%, this may be a feasible strategy. It would also help to boost the very low levels of consumption.

The role of Khazanah and government-linked companies should also be reviewed, given their impact on their economy. The consolidation of accounts to include all non-financial public sector enterprises and the recording of quasi-fiscal and off-budget operations need to improved, to provide a more accurate gauge of the assets and liabilities of the public sector.

3.2 Indonesia

3.2.1 A Brief Historical Overview of Fiscal Performance in Indonesia

Up until the Asian financial crisis, Indonesia followed the balanced budget rule, whereby routine expenditures were covered by government tax and non-tax revenue. The development budget was covered partly by foreign loans, almost all of which came from official development assistance. Government debt prior to the crisis was almost entirely foreign, amounting to 22.9% of GDP in 1996.

In the aftermath of the Asian financial crisis, both foreign and domestic debt rose alarmingly, reaching over 100% of GDP in 2000 (Table 12). This was due to the massive depreciation of the rupiah. Previously non-existent domestic debt rose from the costs accruing to the budget due to the government's blanket deposit guarantee scheme and the issuance of recapitalization bonds to rescue the failing banking and corporate sectors. This amounted to about Rp740 trillion in 1998–1999 (roughly one-half of GDP in 1999), one of the costliest bank bailouts in history.

Table 12: Indonesia–Government Debt Service Payment in Government Budget, 1999–2002

Year	1997/98	1998/99	1999/00	2000	2001	2002
Total Domestic and Foreign Debt (Rp trillion)	29.5	62.9	63.1	57.7	115.3	136.2
External	29.5	54.5	40.9	26.5	49.0	72.9
Domestic	0.0	8.4	22.2	31.2	66.3	63.4
Total Debt Service as a percentage of revenues	26.3	42.8	30.9	28.1	38.4	45.2
Total Debt Service as a percentage of expenditure	26.4	37.4	27.3	26.6	32.5	39.6
Total Debt Service as a percentage of GDP	4.3	6.0	5.6	5.8	7.8	8.1
Primary Fiscal Balance	2.5	1.1	1.4	3.9	2.8	2.7
Fiscal Surplus/Deficit	0.1	-2.0	-2.3	-1.2	-3.7	-2.5
Debt/GDP (%)	23	73.7	94.8	100.3	89.8	80

Source(s): IMF, International Financial Statistics, various issues

Hill (2006) asserts that Indonesia managed to bring the fiscal deficit and debt under control in spite of a weakened central government, an ambitious decentralization program, increased pressure to set up social expenditure, and widespread discontent with the International Monetary Fund (IMF) stabilization program. What made this possible were very modest fiscal deficits, stronger economic growth, lower interest rates, an appreciation in the rupiah, a renegotiation of debt maturity and—in the aftermath of the tsunami—debt forgiveness. A Fiscal Law (Law No. 17) was introduced in 2003, capping the budget deficit at 3% of GDP and public debt at 60% of GDP (OECD 2008). The current budget deficit is around 33% of GDP—this represents a reduction in debt/GDP ratio of almost 70% since 2000.

3.2.2 Fiscal Stimulus Packages: Size and Composition of Stimulus, Fiscal Space, and Fiscal Sustainability

Size and Composition of Stimulus

Overall, Indonesia is expected to be one of the better performers in the region, with a forecast growth rate of approximately 4% for 2009. The output gap as a percentage of GDP was in the region of plus or minus two percent of GDP prior to the 2008–09 global financial crisis (Appendix 6). Estimates of the multiplier based on SVAR show significant results only for the third lagged coefficients. These, however, are negative.

Private consumption, which accounts for about 61% of GDP (Table 13), was strong particularly in the first quarter of 2009. Fuelled by high levels of spending on parliamentary elections and strong harvests, it recorded an increase of 6% in the first quarter of 2009.

Government consumption likewise recorded a 19.2% growth rate in the first quarter of 2009. However, this was mostly due to higher public service salaries announced in the 2008 budget.

Another main driver of growth in 2009 was net exports, due to a sharper decline in imports of approximately 26% compared to exports of about 19%. Overall, Indonesia recorded a year-on-year growth rate of GDP of 4.4% in the first quarter, and 4% in the second quarter.

Table 13: Indonesia–Gross National Product by Expenditure Shares, 2008

Component	% Share
Private	61.0
Public	8.4
Investment	27.7
Change in Stock	1.7
Exports	29.8
Imports	28.6
TOTAL	100

GNP = gross national product

Source: Central Statistical Office Indonesia, 2009

Given the small projected decline in GDP from 6% in 2008 to 4% in 2009, Indonesia announced a relatively small stimulus amounting to 1.4% of GDP. This is projected to increase the budget deficit to 2.1% of GDP in 2009.

The fiscal stimulus package announced in 2009 was aimed primarily at (i) sustaining purchasing power to maintain household consumption; (ii) maintaining corporate/business resilience; and (iii) creating employment and mitigating the impact of job losses through labor-intensive infrastructure construction. The total funds allocated for this fiscal stimulus program amounted to Rp71.3 trillion (Table 14).

Table 14: Indonesia's Fiscal Stimulus, 2009

(Rp trillion)

Fiscal Measures	Allocation (Rp trillion)
Tax Savings	**43.0**
Reductions in Income Tax Rates:	32.0
Lower Corporate Tax Rate	18.5
Lower Personal Income Tax Rate	13.5
Income tax-free band raised to Rp15.8 million	11.0
Tax/Import Duty Subsidies for Business/Targeted Households	**13.3**
VAT on oil/gas exploration, cooking oil	3.5
Import duties on raw materials and capital goods	2.5
Payroll tax	6.5
Geothermal tax	0.8
Pro-Business/Jobs Subsidies and Budget Expenditures	**15.0**
Reduced price for automotive diesel	2.8
Discounted electricity billing rates for industrial users	1.4
Additional infrastructure expenditures + subsidies + government equity injection	10.2
Upscaling of Community Block Grants (PNPM)	0.6
Total Stimulus	**71.3**

Note: VAT = Value Added TaxSource; Department of Finance Indonesia (2009a)

Source: Department of Finance, Indonesia (2009a)

Sustaining and/or Strengthening Public Purchasing Power

Tax cuts and the provision of subsidies (both tax and non-tax) were the main methods chosen to increase consumption expenditure, which is by far the largest component of GDP. A reduction in the tax-free threshold as well as in the tax rates was announced (Table 15).

Table 15: Indonesia–Public Purchasing Power Stimulus, 2009

(Rp Trillion)

Fiscal Measures	Allocation (Rp Billion)
Taxation	**24,500**
Reductions in Non-Oil Gas Income Tax Rates	13,500
Raising Income Tax Free Band	11,000
Subsidies	**1,410**
Tax Subsidies	1,000
VAT on Cooking Oils	800.0
VAT on Biofules	200.0
Non-Tax Subsidies	410
Cooking Oil	210
Generic Medicines	200
Total Stimulus	**25,910**

Note: VAT = Value Added Tax

Source: Department of Finance, Indonesia (2009a)

The 2009 budget also announced a 15% basic salary increase for civil servants, military personnel, police and pensioners, and the payment of a 13th month salary. Complementing this was a direct cash transfer paid out to 18.2 million target households for two months at the rate of Rp100,000 per household per month.

Corporate/Business Sector Resilience and Export Competitiveness

A reduction in taxes and the provision of various subsidies and financing was announced to support businesses and exports. Tax cuts involved reducing the single corporate tax rate, while subsidies consisted of import duty relief, VAT support, a payroll tax incentive, reduced electricity billing rates for industrial users, and lower prices for automotive diesel. The finance measures consisted of state equity injection for grassroots business credit and export guarantees (Table 16).

Table 16: Indonesia–Measures to Enhance Corporate/Business Sector Resilience

Fiscal Measures	Allocation (Rp trillion)
Taxation	**18,500**
Reductions in Non-Oil Gas CorporateTax Rates	18,500
Subsidies	**16.432,8**
Tax Subsidies	12,300
Import Duty Reductions	2,500
VAT on Oil and Natural Gas Exploration	2,500
Geothermal Tax	800.0
Payroll Tax	6.500
Non-Tax Subsidies	4,1328
Automotive Diesel Reductions	2,7799
Discounted Electricity for Industrial Users	1,3379
Interest Subsidies for Water Utilities	15
Financing	**2,000**
State Equity Injection for Asuransi Ekspor Indonesia	1,000
State Equity Injection for Askrindo and Jamkrindo	1,000
Total Stimulus	**36.9328**

Note: VAT = Value Added Tax

Source: Ministry of Finance, Indonesia (2009a)

Job Creation and Mitigation of Job Losses through Labor-Intensive Construction of Infrastructure

To create jobs and mitigate the effects of job losses, a total of Rp8,376.5 billion was allocated, consisting of Rp7,775.0 billion for infrastructure spending andRp601.5 billion for the national community block grant (PNPM) program (Appendix 6).

The funding allocations for job creation and mitigation of job losses targeted labor-intensive construction of infrastructure in various areas (Table 17).

Table 17: Funding Allocations for Job Creation and Mitigation of Job Losses

Fiscal Measures	Allocation (Rp)
Public works infrastructure development	Rp3.385 trillion
Communications infrastructure development	Rp1.325 trillion
Energy infrastructure development	Rp1.000 trillion
Housing infrastructure development	Rp 680.0 billion
Market infrastructure development	Rp315.0 billion
Construction and rehabilitation of farming community road and irrigation infrastructure	Rp650.0 billion
Improvements to vocational training	Rp300.0 billion
Rehabilitation of warehouses for storage of staple goods	Rp120.0 billion

Source: Ministry of Finance Indonesia (2009a)

The objectives of the Community Block Grant programs are (i) to provide quality, sustainable, and environmentally-friendly urban and rural infrastructure appropriate to local needs and capacity, and (ii) to construct urban and rural infrastructure on a participatory, transparent, and accountable basis.

In summary, the Indonesian fiscal stimulus consisted of tax cuts amounting to 60% of the package. Subsidies made up another 25%; infrastructure, 11%; and equity injections, 2%.

The Indonesian fiscal stimulus package faces challenges relating to the low number of individual and corporate taxpayers, the lack of targeted subsidies, and budget execution problems both in general and particularly in relation to infrastructure.

With its current population of approximately 225 million, and a workforce estimated at 97 million, 60 million people are estimated to be informally employed. The government currently derives 6.8% of revenues from income tax (Table 18).

Table 18: Indonesia–Revenues and Grants 2008 as a percentage of GDP

Taxation Revenues	13.6
Income Tax	6.8
Oil and Gas	1.2
Non-oil and Gas	5.6
VAT	4.4
Land and Building	0.6
Property Transfer Tax	0.1
Excise	1.0
Other Taxes	0.1
Taxes on International Trade	0.6
Import Duties	0.4
Export Duties	0.2
Non Tax Revenues	**6.3**
Natural Resources Receipts	4.3
Oil/Gas	4.1
Crude Oil	3.3
Natural Gas	0.8
Non-Oil Gas	0.2
General Mining	0.2
Forestry	0.1
Fisheries	0.0
SOE Dividends	0.7
Other Non-Tax Revenues	1.2
Receipts from Public Service Agencies	0.1
Grants	**0.1**
Revenues and Grants	**20.0**

Note: SOE = state-owned enterprise; VAT = Value Added Tax

Source: Department of Finance, Indonesia, 2009

Latest estimates put registered taxpayers at only 10 million. Furthermore, it is estimated that one percent of taxpayers pay about 56% of taxes. As such, lowering the personal income tax and directing more than a third of the stimulus to lifting the income tax threshold only benefit a small proportion of the total population, mainly the relatively better off. The estimated half of the Indonesian population living below the poverty line and the 40% of the population employed in the agricultural sector do not pay taxes. The distribution is not particularly pro-poor, and direct cash transfers to targeted poor households may have been more equitable.

A similar situation is encountered as far as corporate taxes are concerned. This is partly due to the fact that almost 98% of the Indonesian corporate sector is dominated by micro and small enterprises, which are legal entities and are therefore not registered for tax purposes. Ikhsan, Trialdi, and Syahrial (2005) estimate that in 2002, only 200,000 corporations were registered for tax purposes, out of about 48 million businesses in Indonesia. Virtually all tax due is paid by the highest bracket. In this context a reduction in corporate taxes is likely to benefit the largest businesses entities.

The high level of informality in employment and enterprise in Indonesia impedes the effectiveness of the fiscal stimulus and the automatic stabilizing impulses of the budget. Yadav (2009) asserts that the informal sector was originally treated as a residual emanating from the insufficient absorptive capacity of the formal economy, and that productivity growth in the formal sector acts as a "pull" factor, drawing in informal sector workers and enterprises as development occurs. However, the informal sector has increased over time, particularly in the wake of the Asian financial crisis (OECD 2008).

A more recent view (McKinsey Global Institute 2006) considers informal firms as a threat to formal firms and an obstacle to growth, for two reasons. First, informal firms tend to remain small so as to remain under the radar and avoid detection by authorities. This gives rise to a "low-productivity trap" which adversely impacts the overall productivity growth of a country. It has been estimated that informal firms operate about 50% below the average productivity level of formal firms within the same sector. Second, the cost advantage enjoyed by informal firms due to tax evasion and regulatory non-compliance gives them an edge over formal firms, thereby allowing them to impinge on the formal sector's market share. Formal firms are subjected to unfair competition which reduces their incentive to invest, expand, and improve productivity. In addition, low tax revenue as a result of the large informal sector may induce more stringent taxation of the formal sector, which may then further fuel informality.

Farrell (2004) argues that informal businesses, even large ones, choose to stay that way if there is no change in the factors that generally drive them into informality: high corporate taxes and the bureaucratic burden of operating formally. The OECD (2008) notes that, in Indonesia's case, two important contributors to informality are the tightening of employment protection legislation (EPL), especially with the enactment of the Manpower Law of 2003, and sharp increases in the real value of the minimum wage, which is currently about 65% of the median wage.

According to the OECD (2008), the EPL's provisions on dismissal procedures, severance compensation entitlements, restrictions on flexible work arrangements, and minimum-wage setting have been the least conducive to improvements in labor market outcomes. This is affirmed in the World Bank's (2009b) *Doing Business in Indonesia Survey*, where Indonesia ranks 150 out of a total of 183 countries in terms of difficulty associated with hiring labor. Indonesia also ranks poorly in terms of opening and closing a business and enforcing contracts. These concerns need to be addressed if labor market informality is to be reduced.

With regard to subsidies, these currently consume more than 10% of government expenditure in 2008 (Table 19), with the bulk directed to fuel. Most of these subsidies are poorly targeted, with fuel subsidies benefiting the richest 20% of households (Augustina et al. 2008).

Table 19: Indonesia–Government Expenditures as a Percentage of GDP, 2008

Expenditure Item	% Share
Central Government Expenditure	**14.3**
Personnel Expenditure	2.9
Material Expenditure	2.0
Interest Payments	2.4
Subsidy	2.9
Social Assistance	1.5
Others	0.5
Capital Expenditure	2.1
Transfers to Regions	**7.1**
Special Autonomy and Adjustment Fund	**0.2**
Total Central Government and Transfers	**21.6**

Note: GDP = gross domestic product

Source: Department of Finance Indonesia, 2009

As for infrastructure projects, infrastructure investment in Indonesia currently amounts to approximately 3.4% of GDP. Given the deterioration in many infrastructure indicators over the past decade, there is an urgent need to upgrade and expand existing infrastructure. However, the implementation of infrastructure projects in Indonesia has traditionally been hampered by poor budget execution.

According to the World Bank (2007), actual budget performance in Indonesia has routinely deviated from budget realization indicators. There is an overall problem with spending, and while budgets have become larger, the government has been unable to spend the money appropriated. Subsidies and transfers are substantially underestimated, while realized capital/development expenditures are often lower than initially planned. In addition, Indonesia frequently spends 50% of its capital budget in the final quarter of the year. Project implementation is disrupted by an adverse cycle, and in the case of multi-year projects, it is interrupted at the beginning of each year.

This problem has worsened since Indonesia pursued decentralization in 2001. Indonesia currently has one of the most decentralized governments in the world. Provincial and district governments now manage more than 30% of total public expenditure (Table 18) and carry out more than 50% of public investment. The World Bank (2007) notes that Indonesia's main development challenge is no longer to transfer money to poorer regions, but to ensure that poorer regions spend their money well. The largest item of spending of sub-national governments is government administration, which absorbs 32% of national expenditures. This has crowded out spending in key areas, particularly health, infrastructure, and agriculture.

Furthermore, many local governments have difficulty spending their additional resources. Sub-national governments now have an accumulated level of reserves reaching 3% of GDP in 2007. Overall, the World Bank (2007) concludes that public financial management systems are weak and risks of corruption are high. Local government performance in the areas of debt investment and external audit, and capacity and human resources have also been found to be extremely weak.

Fiscal Space and Fiscal Sustainability

Indonesia achieved a growth rate of 5.8% in 2008 and a respectable growth rate of 4% is forecast for 2009. The forecast deficit is expected to increase by just 0.9% of GDP in 2009 as a result of the stimulus. Currently, Indonesia has a moderate debt-to-GDP ratio, of which 55.8% is domestic debt (Table 20). Rupiah-denominated government securities are the major source of debt financing in Indonesia. Foreign loans are mostly from bilateral and multilateral sources.

Table 20: Indonesia–Selected Indicators of Fiscal Space, 2008

Indicator	Value
Deficit/GDP	To rise from 1.2% to 2.1%
Debt/GDP	33.2%
Current Account/GDP	0.1%
Reserves/GDP	11%
Reserves to short-term debt	1.4
Reserves to months of imports	6 months
Funding	55.8% domestic

Note: GDP = gross domestic product

Source: Computed from the IMF International Financial Statistics, various issues

Table 21: Outstanding Total Central Government Financing of Debt as a Percentage of Total Debt as of end 2008

| Year	% of Total Debt
External Loans	44.2%
Bilateral	29.6 %
Multilateral	13.2 %
Commercial	1.3 %
Suppliers	0.1 %
Government Securities	55.8%
Rupiah Denominated	48.3 %

Source: Department of Finance, Indonesia, 2009

To finance the deficit (including the stimulus), it is projected that an additional Rp91.7 trillion will be needed. Approximately Rp51.3 trillion will come from the unused 2008 budget cash funds in the government account. The remainder will be raised through the issue of negotiable and non-negotiable government securities in rupiah and foreign currencies, sold to domestic and foreign investors.

The Indonesian government has held intensive talks with both multilateral and bilateral creditors to provide backup in the form of standby loans, in the event of weak investor demand, as well as greater competition for available funds as other countries embark on expansionary fiscal policies of their own. Commitments have been secured from the Asian Development Bank, the World Bank, Australia, and Japan via the Japan Bank for International Corporation.

On the upside, an improvement in Indonesia's tax collection systems has strengthened Indonesia's finances. This is thought to be primarily due to the tax office's efforts to target taxpayers in the highly profitable commodity sectors and improve its internal personnel management (World Bank 2007). Given Indonesia's historical difficulties with budget execution, slippages as far as widening deficits and increasing debt are not likely to cause problems. In fact, by July 2009, the government had only spent 10.9% of the funds allocated to the expenditure on the budget and the fiscal stimulus package

Given the IMF's annual average GDP growth forecast of 5% in the next five years, the projected debt-to-GDP ratio is expected to decline slightly, to approximately 27% of GDP. Risks surrounding fiscal sustainability are therefore low.

Figure 2: Indonesia—Debt/GDP Projection, 2008–2013
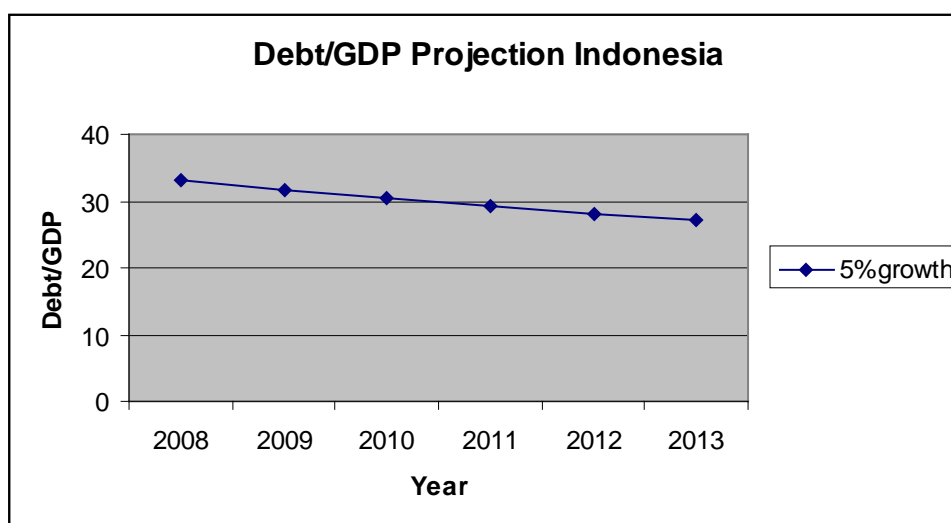
Note: GDP = gross domestic product

Source(s): Author's Estimation

3.3 The Philippines

3.3.1   A Brief Historical Overview of Fiscal Performance in the Philippines

Fiscal sustainability issues are longstanding in the Philippines. A budget deficit has been recorded every year since the 1970s, with the exception of small surpluses of less than 1% between 1994 and 1997. This was achieved through privatization receipts and efforts to consolidate spending. After the Asian financial crisis, however, the consolidated budget deficit rose from 1% of GDP in 1997 and peaked at 5.8 % of GDP in 2003, while the stock of public debt and contingent liabilities reached the equivalent of 137% of GDP. In addition, 30% of total government revenue had to be set aside for interest payments, squeezing out spending on essential government services and prompting ratings downgrades and fears about macroeconomic stability (Qin et al. 2006).

The country's high level of debt can be traced back to poor economic governance in the 1970s under the Marcos regime. According to Dohner and Intal (1989), the use of government power to gather and distribute wealth worked in three ways during the Marcos era. First, the allocation of government contracts and access to credit from public financial institutions were provided in return for some interest or "kickbacks" in operations. Second, projects and contracts were also overpriced to generate "kickbacks". The most publicized of these was the Bataan nuclear power contract, estimated to be responsible for 10% of the foreign debt. Finally, access to credit was provided to cronies at below market rates and through "behest" loans.

A debt moratorium was declared in 1983, and the Philippines emerged from martial law in 1986 with an external debt close to 100% of GDP. After the Marcos regime fell in 1986, the Aquino government nationalized the external debt inherited from the Marcos regime. This dramatically increased debt service and domestic borrowing requirements. Significant increases in public infrastructure further led to higher fiscal deficits. Although the Aquino government formulated tax reform measures, the central feature of which was the implementation of a value added tax in 1988, these changes did not lead to an appreciable rise in the tax revenue as a proportion of GDP.

After the Asian financial crisis, deficits were initially driven by the national government. While national government expenditures remained stable at around 19.4% of GDP from 1997–2003, the tax revenue effort declined steadily from 17.0% of GDP to 12.7% in 2003. This decline was caused by a chronic inability to collect sufficient revenues due to the weak institutional capacity of tax authorities, complicated and irrational taxation systems, and corruption in revenue collections causing tax evasion (Manasan 2004). From 2000–2004, however, Government Owned and Controlled Corporations (GOCCs) became the primary culprit behind the deficit, with the National Power Corporation (NAPOCOR) being a major driver of the non-financial consolidated public sector deficit and debt.

In 2004, the government adopted an aggressive and bold agenda to bring down the fiscal deficit over the medium term. The plan centered on achieving a balanced budget by 2010 through a range of measures. These included new tax measures; privatization and restructuring of GOCCs, especially the power sector; improvements in tax administration, rationalization of the bureaucracy; and improvements in public debt and expenditure management.

The centerpiece of the new tax measures were amendments to expand the coverage of the VAT (E-VAT). In 2008, the debt-to-GDP ratio was brought down to 56% of GDP, a reduction of more than 20% from its peak in 2004. Interest payments on the debt had also declined to 21% of government expenditure.

3.3.2 Fiscal Stimulus Packages: Size and Composition of Stimulus, Fiscal Space and Fiscal Sustainability

Size and Composition of Stimulus

In 2007, the Philippines recorded a growth rate of 7.8%, its highest level of growth in almost 25 years. However, growth slowed to 4.6% in 2008 and is forecast to be about one percent in 2009.

The output gap as a percentage of GDP was in the region of plus or minus one percent of GDP prior to the crisis (Appendix 7). Estimates of the multiplier based on SVAR show insignificant results for all four lagged coefficients of the impact of government (Appendix 7).

Growth was 0.4% in the first quarter of 2009. Exports declined by 18% in the first quarter of 2009, with imports decreasing by about the same proportion. Investment declined by 16%. Personal consumption expenditure grew by less than one percent while government consumption was 3.78%.

Compared to other countries in the region, the Philippines have a high level of personal consumption, driven to some extent by remittances from Overseas Filipino Workers (OFWs). Remittances have been resilient in the face of crisis and remain at about 10% of GDP (Table 22).

Table 22: Philippines–Gross National Product by Expenditure Shares, 2008

Component	% Share
Personal Consumption	69.76
Govt. Consumption	5.90
Investment	16.14
Exports	41.78
Imports	40.53
Statistical Discrepancy	-3.68
Expenditure on GDP	89.37
Net Factor Income	10.63
Expenditure on GNP	100.0

Note: GDP = gross domestic product; GNP = gross national product

Source: National Statistical Coordination Board, Philippines, 2009

In February 2009, the government announced a stimulus package called the Economic Resiliency Plan (ERP), at a cost of P330 billion (4.1% of GDP). The ERP led government to postpone its medium-term balanced budget goal to 2011.

The package consists of the following:

- P160 billion for increased national government (NG) spending on community level infrastructure projects and social protection measures;

- P100 billion to finance extra-budgetary infrastructure projects and fund large infrastructure projects. This would require GOCCs, the Social Security System (SSS), and the Government Service Insurance System (GSIS) to undertake large infrastructure projects using their investment funds in conjunction with the private sector;

- P30 billion for new and temporary additional benefits to SSS, GSIS and PhilHealth, members.

- P40 billion in income tax cuts. including P20 billion stemming from a reduction of corporate income tax from 35 to 30%, and an increase in personal tax exemptions, estimated at another P20 billion. The cuts are anticipated to increase investment and consumption by P40 billion. Other measures include a P250 million fund for OFWs known as the "payback" package, designed to assist OFWs abroad and provide those returning with reintegration and livelihood assistance.

Padilla (2009) however, maintains that out of the P160 billion increase in spending, only P50 billion can be considered new funds. This represents the sum realigned from servicing debt interest payments in the national budget for 2009. The remaining P110 billion was already a planned increase before the crisis.

Meanwhile, the second item—the P100 billion allocated for infrastructure projects, a portion of which would be bankrolled by government financial institutions and social security—could face uncertainties as a portion of the funds is supposed to come from private investors. This has also been postponed to 2010.

The P40 billion tax cuts under the ERP are not new, and are thought to represent the estimated additional savings for low and middle income earners and corporations accruing from the RVAT.

Finally, the P30 billion in additional benefits to members of social security and institutions like the SSS and the GSIS are also uncertain, since these depend on institutional investments which took a hit when stock markets fell.

Consequently, the amount that will actually be spent cannot be stated with certainty. The World Bank (2009c) notes that the ERP finely balances the need for fiscal easing. On the one hand, it calls for (i) protecting its poorest and most at risk citizens, (ii) boosting the medium-term prospects of the economy (e.g., by relieving infrastructure bottlenecks), and (iii) closing the output gap created by the private sector. On the other hand, it recognizes the limited fiscal space available. The latter is mostly the result of the country's high level of debt, which is easily affected by shocks to GDP growth and the exchange rate.

Fiscal Space and Fiscal Sustainability

Overall, the ERP is projected to increase the deficit as a percentage of GDP to 2.3% in 2009.

In 2009 debt as a percentage of GDP was about 60%, which, while still high, was far below the peak reached four years earlier, at 78% (Table 23).

Table 23: Philippines–Selected Indicators of Fiscal Sustainability, 2008

Indicator	Value
Deficit/GDP	To rise from -0.9% to -2.3%
Debt/GDP	60% as of March 2009
Current Account/GDP	2.4%
Reserves/GDP	23%
Reserves to short-term debt	4.76
Reserves to months of imports	5.9 months
Funding	57% domestic

Note: GDP = gross domestic product

Source: Computed from the IMF International Financial Statistics, various issues

However, the downside to this is that despite enhanced revenue measures, the improved fiscal outcome was derived mainly from expenditure cuts. In fact, spending on health, education, infrastructure, and primary spending have fallen since 2000, and remain extremely low (Table 24). At the same time, total interest payments have fallen from 31% of national government expenditure in 2005, remaining high at 21.4% of GDP in 2008 (Table 25).

Table 24: Philippines–National Government Expenditure by Sector (cash basis) as % of GDP, 2000–2006

Year	2000	2001	2002	2003	2004	2005	2006
Total NG Expenditures	20.3	19.5	19.1	19.1	17.8	17.4	17.3
Total Economic Services	3.8	3.2	2.6	2.7	2.5	2.2	2.7
of w/c Infrastructure	2.4	2.0	1.5	1.6	1.6	1.2	1.8
Social Services	5.0	4.5	4.4	3.9	3.4	3.1	3.6
Education	3.5	3.4	3.3	3.0	2.7	2.4	2.4
of w/c Department of Education	2.8	2.7	2.7	2.5	2.2	2.0	2.0
Health	0.4	0.4	0.4	0.3	0.3	0.3	0.3
of w/c Department of Health	0.3	0.3	0.3	0.2	0.2	0.2	0.2
National Defense	1.1	1.0	1.0	1.3	1.1	1.1	0.9
Public Administration	1.3	1.3	1.2	1.1	1.0	1.3	1.1
Peace and Order	1.4	1.4	1.4	1.4	1.3	1.2	1.1
Debt Service	4.2	4.8	4.8	5.2	5.4	5.5	5.1
Others	3.6	3.3	3.6	3.5	3.0	2.9	2.9
Total NG Expenditure net of service	16.1	14.7	14.3	13.9	12.4	11.9	12.2

Notes: NG = National Government

Source: Department of Finance, the Philippines

Consolidation of government expenditure—particularly social spending in the midst of slow growth—has jeopardized improvements in the standard of living in the Philippines. Pressure on the budget has also led to a reduction in public investment in recent years.

Table 25: Philippines–National Government Debt Position (cash basis)

as % of GDP, 2000–2008

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
Outstanding Debt (NG)	2166710	2384917	2815468	3355108	3811954	3888231	3851506	3712487	4220903
Domestic	49.3	52.3	52.3	50.8	52.5	55.7	55.9	59.3	57.2
Foreign	50.7	47.7	47.7	49.2	47.5	44.3	44.1	40.7	42.8
% of GDP/Total Debt	64.6	65.7	72.5	77.7	78.2	71.4	63.8	55.8	56.3
Domestic	31.8	34.4	37.9	39.5	41.1	39.8	35.7	33.1	32.2
Foreign	32.7	31.3	34.6	38.3	37.2	31.7	28.1	22.7	24.1
Interest Payments	140894	174834	185861	226408	260901	299807	310108	267800	272218
Domestic	93575	112592	119985	147565	169997	190352	197263	157220	170474
Foreign	47319	62242	65876	78843	90904	109455	112845	110580	101744
As a % NG Expenditure									
Domestic	14.4	15.8	15.2	17.6	19.0	19.8	18.9	13.7	13.4
Foreign	7.3	8.7	8.3	9.4	10.2	11.4	10.8	9.5	8.0
Total Interest Payments	21.7	24.5	23.6	27.0	29.2	31.1	29.7	23.3	21.4

GDP = gross domestic product; NG = national government

Source: Department of Finance, the Philippines

Thus, while the deficit and debt levels are declining and fiscal sustainability is improving, sustaining these achievements will be challenging. Currently, tax collection is weakening due to the slowing economy, falling customs revenues, and recent tax policy and administrative measures such as the effective tax cut on personal income (World Bank 2009c). On the other hand, spending has surged and the deficit stands at 4.1% of GDP as of October 2009. Given that 43% of the debt is foreign financed, downgrade by ratings agencies could increase the cost of borrowing in the future.

The debt-to-GDP projections below are based on a projected deficit of 2.3% of GDP and a debt-to-GDP level of 56.3%. Findings point to a relatively stable but still high level of debt to-GDP of 53% and 51% by 2013, assuming annual GDP growth rates of 3% and 5% respectively.

Figure 3: Philippines—Debt/GDP Projection, 2008–2013
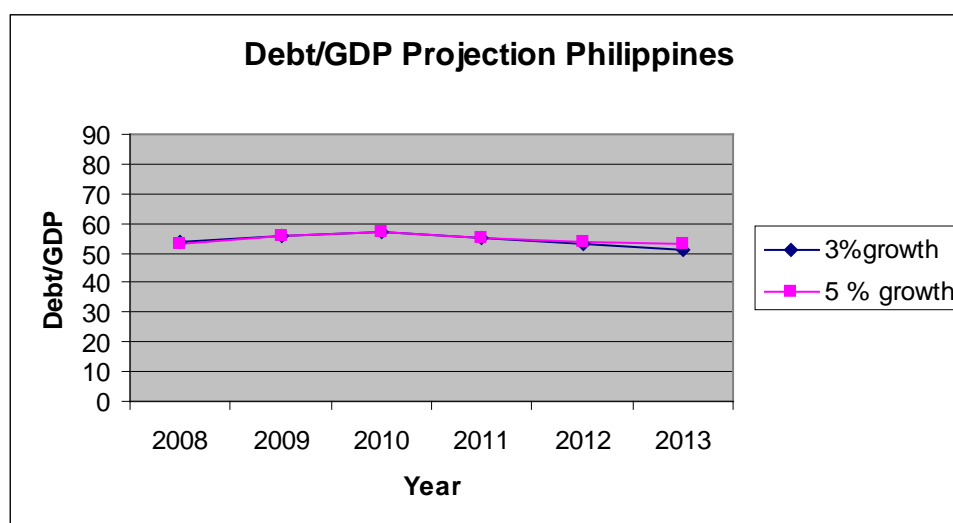
GDP=Gross Domestic Product

Source(s): Author's estimation

In summary, the Philippine economy is not expected to contract as sharply as other more export-oriented economies such as Malaysia or Singapore. GDP growth has slowed to about one percent over the first three quarters of 2009. While spending from the stimulus—which increased by 18.1% in the first half of 2009—provided some impetus to growth, the reduction in revenues by 4% and the blowout in the deficit to 4.1% limits the further role of fiscal policy in view of the persistently high level of debt and interest expenditure in the budget.

3.4 Singapore

3.4.1 A Brief Historical Overview of Fiscal Performance in Singapore

According to the Singapore Ministry of Finance (2009), fiscal policy in Singapore is directed primarily at promoting long-term economic growth, rather than cyclical adjustment or income distribution. Income and company taxes are kept low to attract foreign investment and foreign talent. Singapore's fiscal conservatism has been reflected in high structural surpluses, and the overall fiscal balance of the government has been in surplus—as defined by the IMF methodology—since 1988 (Jang and Nakabayashi 2005).

It is useful to think of the Singapore public finance system as consisting of four pillars: the budget sector itself, the Central Provident Fund (CPF), the government investment agencies, and other funds (Blondal 2006).

The CPF is a mandatory savings scheme financed by payroll contributions from both employees and employers. The combined contribution is currently 33%, with 20% paid by the employee and 14.5% paid by the employer. Withdrawal of funds to pay for housing and medical purposes is permitted. The CPF obviates the need of the budget sector to finance social services. The CPF also generates large amounts of surplus cash flows which are invested in government securities. This explains why Singapore has high levels of domestic debt, despite continuous budget surpluses and the absence of debt financing requirements.

The government has two principal investment agencies: the Government of Singapore Investment Corporation (GIC) and Temasek Holdings, both of which are answerable to the Ministry of Finance. The GIC acts as a fund manager for the government and focuses on overseas investment of the country's surpluses in equities, fixed income,

money market instruments, real estate, and special instruments. Temasek manages corporate shareholdings both in Singapore and abroad. Its corporate profile includes a wide range of sectors, and several of the companies are listed on stock markets in Singapore and overseas.

There are several other funds which are not consolidated in the budget but are governed by specific acts. These include the Government Securities Fund, where the CPF invests its surplus funds. The interest paid to the CPF is netted against investment income earned by the government agencies; thus the budget sector does not show any interest expenses paid.

The Singapore constitution contains three key fiscal rules governing fiscal responsibility and sustainability in the country. First, the government should not draw upon resources accumulated during previous terms of office. This means that deficits in any year must be balanced by surpluses accumulated in earlier years during its term in office. Second, the government may only consider as revenue for these purposes up to half of the annual net investment income from the accumulated reserves. Third, the government may engage in deficit financing and draw on past reserves if consent is given by both the Parliament and the President. This is known in Singapore as the "two-key" safety mechanism.

Unlike other countries in this study, and indeed the developing world in general, Singapore has no external debt or expenditure on subsidies and interest payments. Furthermore, unlike a lot of OECD countries, its spending on social security is minimal, despite being a high income country with a rapidly aging society. Individual savings for old age is seen as the responsibility of the individual through compulsory savings with the CPF. The family is also expected to play its part. The Maintenance of Parents Act passed in 1995 allows for parents over the age of 60 to apply to a tribunal for an order for their offspring to provide support. Support from the community, mainly through charities, is seen as a last resort.

3.4.2 Fiscal Stimulus Packages: Size and Composition of Stimulus, Fiscal Space and Fiscal Sustainability

Size and Composition of Stimulus

Singapore's economy was one of the first to contract sharply at the end of 2008, with GDP falling by 4.2% in the fourth quarter. The output gap as a percentage of GDP was in the region of plus or minus one percent of GDP prior to the crisis (Appendix 8). A negative growth rate of between 5 and 7% of GDP has been forecast for 2009, leaving a large output gap of at more than 10% of GDP. Estimates of the multiplier based on SVAR show insignificant results for all four lagged coefficients of the impact of government expenditure on output.

Singapore's GDP experienced the sharpest contraction in the first quarter of 2009, falling by 9.5%. Exports fell by 21%, and imports by 19.2%. Gross fixed capital formation also contracted sharply by 15.5%. GDP growth fell in the second quarter by 3.3%, bringing the contraction in the first half of 2009 to 6.4% (Table 26).

Table 26: Singapore–Quarterly Change in GDP by Expenditure,

Q42008 to Q32009

(%)

Component	Q42008	Q12009	Q22009	Q32009
Private Consumption	-1.2	-4.2	-3.4	-0.9
Government Consumption	2.7	-6.7	5.6	10.2
Gross Fixed Capital Formation	-9.9	-15.5	-7.6	0.3
Exports of Goods and Services	-9.6	-21.1	-15.8	-10.9
Imports of Goods and Services	-5.8	-19.2	-18.0	-11.4
Total	-4.2	-9.5	-3.3	0.6

GDP = gross domestic product

Source: Singstat, year 2009

Given Singapore's economic structure, i.e., low private consumption, high investment, and extremely high levels of exports and imports (Table 27), it is not surprising that the country has been severely affected by a collapse in exports. An Economic Resilience package was unveiled early in January 2009, with some of the spending already taking place in the last quarter of 2008.

Table 27: Singapore–Gross National Product by Expenditure Shares, 2008

Component	% Share
Private Consumption	41.00
Government Consumption	10.69
Gross Fixed Capital Formation	28.49
Changes in Inventories	2.39
Net Exports of Goods and Services	19.07
Exports of Goods and Services	234.34
Imports of Goods and Services	215.26
Statistical Discrepancy	-1.65
Total	100

Source: Singstat   2009

Table 27: Singapore GNP by Expenditure Shares, 2008

(%)

Component	% Share
Consumption	**51.68**
Private	41.00
Public	10.68
Investment	**28.49**
Private	11
Public	9
Change in Stock	2.39
Exports	**234.34**
Imports	**215.26**
Statistical Discrepancy	-1.65
Total	**100**

GNP = gross national product

Source: Singstat 2009

The Resilience Package (of SGD20.5 billion, comprising about 8.2% of GDP) has five components, as summarized in Table 28.[2]

Table 28: Salient Features of the Resilience Package

Fiscal Measures	Allocation (SGD billion)
Job Preservation -Companies will receive a 12 % cash credit against employee salaries up to a salary of SGD2,500 which is the median income -Skills Upgrading and Resilience (SPUR). The government will pay 90% of retraining fees, as well as an hourly lost productivity rebate, to keep employment while new job training takes place -Workfare Income Supplement (WIS). The wages of low income earners — the supplement will be increased by 50%. -Government will expand recruitment with 18,000 public sector jobs	**5.1**
Stimulating Bank Lending -Extend government capital for a Special Risk-Sharing Initiative, a bridging loan program, trade finance schemes and enhancements to existing credit measures	**5.8**
Enhancing Business Cash Flow and Competitiveness **-**Tax measures and grants for businesses	**2.6**
Supporting Families **-**This includes Goods and Sales Tax (GST) credits and Senior Citizens Bonus. Much of these are based on the annual value of property of residences, rebates in rent, service and conservancy, utilities, rebates available to those living in public housing, as well as personal income tax and property tax rebates. Targeted assistance for the poor include public transport vouchers, and financial assistance for education	**2.6**
Building A Home for the Future **-**This amount will go to developing infrastructure and expanded provisions for education and healthcare	**4.4**
Total Stimulus	**20.5**

Source: Ministry of Finance Singapore

---

[2] For full details see http://www.mof.gov.sg/budget_2009/speech_toc/downloads/index.html

First: Job Preservation, at SGD5.1 billion

- The key elements here are companies will receive a 12 % cash credit against employee salaries, up to a salary of SGD2,500 which is the median income

- Skills Upgrading and Resilience (SPUR). The government will pay 90% of retraining fees, as well as an hourly lost productivity rebate, to keep employment while new job training takes place

- Workfare Income Supplement (WIS). This supplements the wages of low income earners — the supplement will be increased by 50%.

- Government will expand recruitment with 18,000 public sector jobs.

Second: Stimulating Bank Lending, at SGD5.8 billion

- Extend government capital for a Special Risk-Sharing Initiative, a bridging loan program, trade finance schemes and enhancements to existing credit measures.

Third: enhancing business cash-flow and competitiveness, at SGD2.6 billion

- Tax measures and grants for businesses

Fourth: supporting families, at SGD2.6 billion to support households.

- This includes Goods and Sales Tax (GST) credits and Senior Citizens Bonus. Much of these are based on the annual value of property of residences, rebates in rent, service and conservancy, utilities, rebates available to those living in public housing, as well as personal income tax and property tax rebates. Targeted assistance for the poor include public transport vouchers, and financial assistance for education

Fifth: building a home for the future, at USD4.4 billion

- This amount will go to developing infrastructure and expanded provisions for education and healthcare.

Given the structure of the economy, the key elements of the package were designed to ensure that the leakage in terms of spending on imports would be minimized. A major feature of the package was the provision of a cash credit to employers against employee salaries. However, the major problem faced here was a decline in external demand rather than wage competitiveness. In addition, although employers were encouraged to keep workers employed by this initiative, with the stimulus for bank lending also seeking the same aim, there was no assistance forthcoming for those rendered redundant.

Much of the assistance to households was targeted to those employed in low paying work through the Workfare Income Supplement. Smaller amounts were targeted as support for families. Overall, the response was skewed in favor of businesses, at the expense of those employees made redundant. All payments and credits were disbursed in a timely manner in 2009. Increases in government consumption expenditure were the only positive items of expenditure playing a timely and significant role in preventing an even sharper contraction.

Fiscal Space and Fiscal Sustainability

With large current account surpluses and official reserves, as well as undisclosed amounts of government assets and no debt, there is little doubt that Singapore possesses vast fiscal space (Table 29). Additionally, the projected deficit as a result of

the fiscal package is estimated to be about 3.5% of GDP and will not require any borrowing.

Table 29: Singapore–Selected Indicators of Fiscal Space, 2008

Indicator	Value
Deficit/GDP	1.5 surplus to 6.5% deficit (before inclusion of net investment income and other adjustments and 3.5% after)
Debt/GDP	113.7%
Current Account/GDP	14.8%
Reserves/GDP	99%
Reserves to short-term debt	N/A
Reserves to months of imports	6.9 months
Funding	No borrowing required

GDP = gross domestic product

Source: Computed from the IMF International Financial Statistics, various issues

The Budget speech announced that although the government had sufficient savings to fund the budget deficit, the Resilience Package contained temporary extraordinary measures which were not part of a normal countercyclical budget; these would be funded from past reserves. Accordingly, the case was made to the President for the cost of these measures to be funded from the past reserves, on the grounds that the circumstances faced were exceptional. The President gave his assent. It was also felt that tapping on past reserves provided flexibility to respond to future uncertainties.

Of all the countries included in this study, Singapore is in the best position to undertake a fiscal stimulus in response to the global financial crisis. Singapore's fiscal stimulus challenges stem from the limits of fiscal policy in a highly open economy with a high savings rates. In the longer term, however, Singapore will need to rebalance its economy. This will mean an increase in consumption and less export orientation. With its small population, Singapore will always have to be export-oriented in order to survive. There is scope for a more consumption-oriented economy, but this will require a fundamental shift in the Singapore economic model, which has been one of the most successful in the world.

Singapore has a very high savings rate of about 43% of GDP, a result of household, government, and corporate savings. Although the current level of contribution to the CPF for individuals is high, it is generally considered inadequate to retire on, given that much of it is also withdrawn for other purposes prior to retirement, particularly housing and health. Individuals have to save over and above this amount as there is no universal pension, and state expenditure on health is low, particularly given a rapidly aging population. Thus, for social security to be provided by the state—something which most economies at Singapore's level of per capita GDP are already doing—space must be found within the current budget outlays and revenue must be increased, otherwise the state will have to run lower budget surpluses.

Currently, the largest item of expenditure in the Singapore budget is defense, which is a strategic priority of the government (Ghesquiere 2007). There is mandatory national service for all male citizens and permanent residents aged 18. Thus, if space is to be found in the budget for social security spending, this would be the obvious item for reconsideration (Table 30).

Table 30: Singapore–National Expenditure by Sector and Ministry, 2008

(%)

Sector/Ministry	% Share
Social Development	**42.2**
Education	21.5
Health	7.0
National Development	5.7
Community Development, Youth and Sports	3.6
Environment and Water Resources	2.07
Information, Communications and the Arts	1.9
Security and External Relations	**37.7**
Defense	28.8
Home Affairs	7.8
Foreign Affairs	1.1
Economic Development	**16.1**
Transport	7.3
Trade and Industry	6.7
Manpower	1.9
Info-communications and Media Development	0.2
Government Administration	**3.8**
Finance	1.6
Organs of the State	0.8
Law	0.8
Prime Minister's Office	0.6
TOTAL EXPENDITURE	**100.0**

Source: Ministry of Finance, Singapore 2009

Singapore's tax revenue was only 13% of GDP in 2008, compared to 31%in the median OECD country. The major source of revenue is capital receipts from the lease of land, since the government owns more than 80% of land in Singapore. Investment and interest income is also substantial, reflecting the prudent investment of a large stock of government assets, and the effectiveness of the GST (Table 31).

Table 31: Singapore–Revenue Sources as a Percentage of Total Revenue, 2008

Revenue Source	% Share
Tax Revenues	**58.5**
Personal Income Tax	15.5
Corporate Tax	11.4
Other	0.6
Statutory Board Contributions	0.6
Assets Tax	1.9
Property Tax	1.9
Customs and Excise Taes	3.8
Motor Vehicle	3.0
GST	12.4
Betting Tax	3.5
Stamp Duty	1.9
Selective Consumption Taxes	0.3
Other Taxes	4.1
Fees and Charges	**4.4**
Others	**0.2**
Investment and Interest Income	**18.3**
Dividends	7.0
Interest On Loans	2.5
Capital Receipts	**18.6**
Total Receipts	**100**

GST= Goods and Services Tax

Source(s): Ministry of Finance Singapore (2009)

In contrast to other high income countries, personal tax and corporate tax rates remain low in Singapore. The top tax rate for individuals is 20%, and no taxes are paid on income up to SGD20,000 per year. Those on the median income of SGD2500 per month pay about SGD350 per annum in taxes annually. As for corporate taxes, no tax is payable for the first SGD100,000 dollars; a tax rate of 8.5% applies to amounts up to SGD$300,000, and a 17% flat rate applies to amounts over SGD300,000. Low taxes for individuals and corporations have been useful in attracting foreign investment and talent as well as keeping the incentive to work high. However, it also renders the tax system less able to act as an automatic stabiliser.

There is scope for a gradual shift to providing a state-funded social safety net for the elderly and poor, if the goal of high cumulative surpluses is replaced with one of balancing the budget over the business cycle. However, this will require a fundamental change in ideology.

4. CONCLUSION

This study examined some of the fiscal policy issues and challenges confronted by developing countries in using countercyclical fiscal policy to ameliorate the impact of the global financial crisis. A case study approach examined the experience of four developing Asian countries and revealed a rich diversity both in terms of the size and composition of fiscal stimulus and the challenges which are confronted.

The case for discretionary fiscal policy is unequivocal, given that automatic stabilizing impulses are weak. On the expenditure side, this is mainly due to the absence of social safety nets embedded into the expenditure side of the budget. This may be less pronounced on the revenue side, as revenues decline with slower economic activity. However, this decline may not be as pronounced as in developed countries, since the proportion of revenues derived from income taxes is much lower. Thus, employing tax

cuts as a major component of a fiscal package—while quickly and easily implemented—may not be effective.

Countries such as Indonesia, which have relied on tax cuts as a major component of its fiscal package, face a number of difficulties stemming primarily from the high level of labor market informality. Microeconomic reforms in this arena can spur growth by increasing productivity and improving the effectiveness of fiscal policy, thus rendering it less regressive. In the case of others which have employed either corporate or personal tax cuts, the impact is muted because tax rates were low in the first place. Attention needs to be focused on tax reforms in this area.

Since automatic stabilizing impulses are weak, it is imperative that spending associated with the fiscal stimulus be disbursed quickly, both to reduce the severity of the crisis as well to avoid the procyclical impacts of fiscal policy. In countries such as Indonesia, which have longstanding problems with budget execution, or Malaysia, where spending has been slower than anticipated, direct cash handouts to poor households could be considered.

The lack of fiscal space and fiscal sustainability issues also present serious constraints. This has been a key issue for the Philippines and, to a lesser extent, Malaysia. In the Philippines, increased expenditure in the short-term must be weighed against long standing concerns on fiscal sustainability. Increasing tax revenues is paramount, both in terms of increasing expenditure on social services and safeguarding fiscal sustainability.

In the Malaysian case, fiscal space can be created within the budget through a reduction in subsidies and better targeting of subsidies to the poor. In the longer term, attention should be focused on reducing reliance on petroleum revenues, introducing the VAT, trimming the size of the public sector and public financial enterprises, and refraining from producing chronic budget deficits.

The impact of expansionary fiscal policy has also been muted by the structure of the economy, particularly in the case of highly open economies with low consumption, such as Singapore and Malaysia. In this case, policies to rebalance growth towards more domestic consumption should be seriously considered. In the case of Malaysia, recent initiatives to liberalize the services sector should be pursued more vigorously. Moving away from an export mindset and reviewing fiscal incentives provided for exports should also be conducted. Increased consumption would be encouraged if more social safety nets were provided. In the case of Singapore, the fiscal space to provide state funded social safety nets can realistically be accomplished if budgets were balanced over the cycle.

In summary, this study identifies several steps that countries might take to improve the impact of expansionary fiscal policy in response to future downturns. These include (i) embedding automatic stabilizing impulses through the provision of social safety nets; (ii) increasing tax revenues collected from personal and corporate taxes by reducing labor market informality through improvements in the business environment; (iii) safeguarding fiscal sustainability; (iv) rebalancing growth by strengthening other sectors of the economy; (v) reducing expenditures on subsidies; and (vi) ensuring smooth and efficient budget execution.

REFERENCES

Augustina, C., J. Granado, T. Bulman, W. Fengler, and M. Ikhsan. 2008. Black Hole or Black Gold? The Impact of Oil and Gas Prices on Indonesia's Public Finances. World Bank Policy Research Working Paper No. 4718, East Asia and Pacific Region (September). Washington, DC: World Bank.

Baily, M., D.Farrell, and J. Remes. 2005. *Domestic Services: The Hidden Key to Growth.* Massachusetts: McKinsey Global Institute, McKinsey and Company.

Bank Indonesia www.bi.go.id accessed 5 July 2009

Bank Negara Malaysia. *Annual Report*, various issues. Kuala Lumpur: Government Printers.

Baxter, M., and R. King. 1999. Measuring business cycles: Approximate band-pass filters for economic time series. *Review of Economic Statistics* 81(4):575–593.

Bernanke, B. 2004. The Great Moderation. Speech at the Eastern Economic Association, 20 February 2004, Washington, DC. wwwfederalreserve.gov/boarddocs/speeches/2004/20040220/default.html (accessed 3 July 2009).

Beveridge, S., and C. Nelson. 1981. A New Approach to Decomposition of Economic Time Series into Permanent and Transitory Components with Particular Attention to Measurement of the Business Cycle. *Journal of Monetary Economics* 7(2):151–174.

Blanchard, O., and Simon, J. 2000. The Long and Large Decline in U.S. Output Volatility. *Brookings Papers on Economic Activity* 2001(1):135–74

Blanchard, O. 1990. Suggestions for a New Set of Fiscal Indicators. OECD Department of Economics and Statistics Working Paper No. 79 (April). Paris: OECD.

Blanchard, O., C. Cottarelli, A. Spilimbargo, and S. Symansky. 2008. Fiscal Policy for the Crisis. *CEPR Discussion Paper* No. DP 7130. London: Centre of Economic Policy Research.

Blanchard, O., and R. Perotti. 2002. An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output. *Quarterly Journal of Economics* 117(4):1329–1368.

Blondal, J. 2006. Budgeting in Singapore. *OECD Journal on Budgeting* 6(1):45–85

Bohn, H. 1998. The Behavior of U.S. Public Debt and Deficits. *Quarterly Journal of Economics* 113(3):949–963.

Buiter, W. 1985. Guide to Public Sector Debt and Deficits. *Economic Policy: A European Forum.* 1 (November):949–63.

Cerra. V., and S. Saxena. 2000. Alternative Methods of Estimating Potential Output and the Output Gap: An Application to Sweden. International Monetary Fund (IMF) Working Paper 00/59. Washington, DC: IMF.

Central Statistical Office. (2009. www.bps.go.id accessed 5 July 2009

Department of Finance the Philippines. (2009. www.dof.gov.ph accessed on 2 September 2009

Dohner, R., and P. Intal. 1989. The Marcos Legacy: Economic Policy and Foreign Debt in the Philippines. In *Developing Country Debt and Economic*

Performance (Volume 3), edited by J. Sachs and S. Collins. Chicago, IL: Chicago University Press.

Farrell, D. 2004. The Hidden Dangers of the Informal Economy. *McKinsey Quarterly* 2004*(3)*:26–37

Fatas, A., and I. Mihov. 2003. The Case for Restricting Fiscal Policy Discretion. *Quarterly Journal of Economics* 118(4):1419-1447.

Gavin, M., and Perotti. 1997. Fiscal Policy in Latin America. In *National Bureau of Economics (NBER) Macroeconomics Annual.* Cambridge, MA and London: MIT Press.

Gerlach, S., and M. Yiu. 2004. Estimating Output Gaps in Asia: A Cross-Country Study. *Journal of the Japanese International Economies* 18(1):115–136.

Ghesquiere, H. 2007. *Singapore's Success: Engineering Economic Growth.* Singapore: Thomson Publishing.

Hannoun, H. 2009. Long Term Sustainability versus Short Term Stimulus: Is There a Trade-off? Paper Presented at the 44th SEACEN Governors Conference on Preserving Monetary and Financial Stability in the New Global Financial Environment, Kuala Lumpur, 7 February. http://www.bis.org/speeches/sp090213.htm (accessed 3 July 2009)*.*

Hill, H. 2006. The Indonesian Economy a Decade after the Crisis (and Some Philippine Parallels). Paper presented at the Panel Discussion on Growth, Development and Institutions. 44th Philippine Economic Society Annual Meeting, Manila, 21–22 November.

Hodrick, R., and E. Prescott. 1997. Postwar US Business Cycles: An Empirical Investigation. *Journal of Money, Credit, and Banking* 29(1):1–16.

Ikhsan, M., Trialdi, L., and Syahrial, S. 2005. Indonesia's New Tax Reform: Potential and Direction. In *Journal of Asian Economics* 16(6):1029-1046.

International Monetary Fund (IMF). 2009. *World Economic Outlook* (July). Washington DC: IMF.

International Monetary Fund (IMF) various years *International Financial Statistics* Washington, DC: IMF

Jang, B., and S. Nakabayashi. 2005. Some Issues in Medium Term Fiscal Policy in Singapore. *Selected Issues, IMF Country Report* 05/140 (April). Washington, DC: IMF.

Kaminsky, G., C. Reinhardt, and C. Végh. 2004. When It Rains, It Pours: Procyclical Capital Flows and Macroeconomic Policies. In *NBER Macroeconomics Annual.* Cambridge, MA and London: MIT Press.

Khatiwada, S. 2009. Stimulus Packages to Counter Global Economic Crisis: A Review. International Institute for Labor Studies Discussion Paper No. 196. Geneva, Switzerland: International Labour Organisation.

Khoo, K. 2009. *Liberalisation of 27 Services Sub-Sectors—Hardly Anything Impressive.*

http://khookaypeng.blogspot.com/2009/04/liberalisation-of-27-services-sub.html (accessed 3 July 2009)*.*

Kraay, A., and L. Serven. 2008. Fiscal Policy Response to the Current Financial Crisis: Issues for Developing Countries. World Bank Research Brief (December). Washington, DC: World Bank. http://go.worldbank.org/U6BCGYUQO (accessed 3 July 2009)*.*

Kuttner, K.1994. Estimating potential output as a latent variable. *Journal of Business and Economic Statistics* 12(2):361–367.

Lee, W. 2009. Bi-Partisan Call for Unrestricted Access to More Sectors.

http://my-1.themalaysianinsider.com/index.php/malaysia/24280. (accessed 6 September 2009)

Manasan, R. 2004. The Philippines Fiscal Position: Looking at the Complete Picture. Philippines Institute of Development Studies (PIDS) Discussion Paper Series No 2004–07. Manila: PIDS.

Mc Kinsey Global Institute. 2006. *Driving Growth: Breaking Down Barriers to Global Prosperity.* Cambridge, MA: Harvard Business School Press.

Ministry of Finance, Indonesia (2009) Indonesia www.depkeu.go.id accessed 1 May 2009

Ministry of Finance, Indonesia. 2009a. The 2009 Revised Budget Fiscal Stimulus Programme: Mitigating the Impact from the Global Crisis. Jakarta: Ministry of Finance, Indonesia.http://www.bi.go.id/NR/rdonlyres/AE350D5E-BCB8-4AA4-BE29-9FB44C66B04B/15743/APBNPenyesuaian_2009_ENGLISH1.pdf

Ministry of Finance. Various Years. *Economic Report* (various issues). Kuala Lumpur: Ministry of Finance, Malaysia www.treasury.gov.my (accessed 15 September 2009)

Ministry of Finance Singapore (2009) www.mof.gov.sg (accessed 13 August 2009)

Mueller, J., I. Yackovlev, and H. Weisfeld. 2009. The Global Financial Crisis: Impact on WAEMU Member Countries and Policy Options. IMF Staff Position Note (2 July 2009) Washington, DC: IMF.

National Statistical Cordination Board of the Philippines (2009) http://www.nscb.gov.ph/ (accessed 2 August 2009)

New Straits Times. 2009. Lower corporate tax, power tariffs will benefit SME's more-survey indicated (10 June 2009)

http://www.btimes.com.my/Current_News/BTIMES/articles/acccim/Article/ (accessed 6 September 2009)

OECD. 2008. Economic Surveys: Indonesia Economic Assessment, Volume 2008 (17 July). Paris: OECD.

Padilla, A. 2009. Why Gloria's P330-B Stimulus Package Will Fail: A Critique on the Economic Resiliency Plan (ERP). *Bulatlat,* April 2009.

Qin, D., M. Cagas, G. Ducanes, N. Magtibay-Ramos, and P. Quising. 2006. Empirical Assessment of Sustainability and Feasibility of Government Debt: The Philippines Case. *Journal of Asian Economics* 17(1):63–84.

Singstat (2009) Department of Statistics Singapore www.singstat.go.sg (accessed 13 August 2009)

Spilimbergo, A., S. Symansky, and M. Schindler. 2009. Fiscal Multipliers. IMF Staff Position Note (29 May 2009). Washington, DC: IMF.

Summers, P. 2005. What Caused The Great Moderation? Some Cross Country Evidence. In *Economic Review.* Federal Reserve Bank of Kansas City, 3rd Quarter pp. 5–32.

Summers, L. 2008. Fiscal Stimulus Issues. Testimony at the Joint Economic Committee, Hearing on What Should the Federal Government do to avoid a Recession. Testimony Washington, DC, 16 January.

http://belfercenter.ksg.harvard.edu/publication/17863/fiscal_stimulus_issues.html
(accessed 2 April 2009)

Taylor, J. 2008. Why Permanent Tax Cuts are the Best Stimulus: Short term Fiscal Policies Fail to Produce Long Term Growth. *The Wall Street Journal* (25 November)

Tornell, A., and L. Philip. 1999. The Voracity Effect. *American Economic Review* 89(1):22–46.

World Bank. 2007. *Indonesia Public Expenditure Review: Spending for Development Making the Most of Indonesia's New Opportunities*. Washington, DC: World Bank.

World Bank. 2009a. *East Asia and Pacific Update—Transforming the Rebound Into Recovery (*November). Washington, DC: World Bank.

World Bank. 2009b. *Doing Business Report 2009 Building Capacity Through Rethinking Development.* Indonesia World Bank and International Finance Corporation Palgrave. Washington, DC: Macmillan.

World Bank. 2009c*. Philippine Quarterly Update* (April)*.* Manila: World Bank Office

Yadav, N. 2009. The Informal Sector: Definitions and its Implications for Growth. Economics and Environment Briefing Paper 9/2009. Jaipur, India: Centre for International Trade

Zeileis, A., and A. Shah, and I. Patnaik. 2010. Testing, Monitoring and Dating Structural Changes in Exchange Rate Regimes. In *Computational Statistics and Data Analysis,* forthcoming.

APPENDIX 1: MALAYSIA'S FIRST STIMULUS PACKAGE, NOVEMBER 2008

Package of RM7 billion (1% of GDP)
1. Construction and infrastructure projects
    a) RM3.5 billion to build low cost and public housing, schools, bridges and roads; upgrade police stations and army camps; and repair public facilities
    b) RM1.5 billion investment fund to attract private investment into strategic sectors
    c) RM400 million for broadband infrastructure
    d) RM500 million for public transport
2. Boosting private sector investments
    a) RM200 million for micro credit for small and medium enterprises
    b) Allow foreigners to buy commercial properties above RM500,000 without Foreign Investment Committee approval
    c) Liberalize the services sector, including allowing 70% foreign ownership by 2015
3. Employment and training
    a) RM500 million for skills training (RM200 million for government ministries)
    b) Government Linked Companies to train up to 12,000 graduates in two years for the job market
    c) Government to accelerate the hiring of public sector employees in critical areas
4. Boosting consumer spending
    a) Allow voluntary reduction of Employment Provident Fund contribution from 11% to 8%
    b) Increase limit on civil servant car loans by RM10,000 across the board
    c) Extend government housing loan repayment period from 25–30 years

Source: Ministry of Finance Malaysia

APPENDIX 2: MALAYSIA'S SECOND STIMULUS PACKAGE, MARCH 2009

Package of RM60 billion (9% of GDP)
1. Reducing unemployment and increasing employment opportunities (RM2 billion)
    a) Training and Job Placement in Public and Private Sectors (163,000 places)
        -   Increase participants in Special Training and Re-training programs for retrenched workers
        -   Increase training programs with the cooperation of industries and related companies (10,000 trainees)
        -   Provide on the job training for unemployed graduates (1,000 graduates)
        -   Provide 2,000 training opportunities and job placements in GLCs
        -   Conduct Perbadanan Ushawan National Berhad attachment training programs for graduates and those with skills certificates (2,000 participants)
        -   Strengthen the Program Tunas Mekar—SME (500 graduates)
    b) Welfare of Retrenched Workers
        -   Double the tax deduction on the amount of remuneration paid (not exceeding RM 10,000/month and limited to 12 months remuneration per employee)
    c) Create job opportunities in the Public Sector (63,000 places)
        -   Expedite recruitment for 50,000 vacant posts
        -   Create additional 13,000 jobs for officers on a contract basis

2. Easing the burden on the people, especially vulnerable groups (RM10 billion)
    a) Provide subsidy for food products (RM674 million)
    b) Provide toll compensation (RM 480 million)
    c) Increase home ownership
        -   Rumah Mesra Rakyat Syarikat Perumahan Negara Malaysia (additional 200 million)
        -   House buyers to be given tax relief on interest paid on housing loans up to RM10,000/year, for three years
    d) Improve public infrastructure
        -   Implement 9th Malaysia Plan projects that have high local and multiplier effects, are people-centric, and can be implemented immediately (RM8.4 billion)
        -   Allocate an additional RM200 million to repair/maintain drains and roads
    e) Renovate and repair building public amenities (RM150 million)
    f) Improve school facilities especially in rural areas such as Sabah and Sarawak (RM1.9 billion)
    g) Provide basic amenities in rural areas (RM580 million) and allocate RM500 million for Penyenggaraan Infrastruktut Awam (PIA) and Projek Infrastruktur Asas (PIAS) projects in Sabah and Sarawak
    h) Provide infrastructure and increasing economic activities in Sabah and Sarawak (RM1.2 billion), particularly the Sibu and Miri airports
    i) Undertake additional microcredit programs by Agrobank (RM300 million) TEKUN (RM50 million)
    j) Assist the less fortunate (additional RM20 million)
    k) Ensure welfare of retrenched workers by increasing tax exemption of RM6,000 to RM10,000.
    l) Provide incentives for banks to defer repayments of housing loans for one year

3. Assisting the private sector in facing the crisis (RM29 billion)
    a) Establish a working capital guarantee scheme (RM5 billion, with working capital equity below RM20 million) with a guarantee ratio of 80% government and 20% financial institutions
    b) Set industry restructuring guarantee scheme (RM5 billion) for loans to encourage green technology application
    c) Facilitate access to capital markets. Establish a financial guarantee institution assisted by Bank Negara Malaysia to provide credit enhancement to companies that intend to raise funds from the bond market. Adopt additional measures to reduce time to market by Securities Commission.
    d) Attract high net worth and skilled individuals bringing in more than US$2 million for investment or savings-consideration for permanent residence status
    e) Reduce cost of doing business
        - Exempt levy payments to Human Resources Development Fund for six months for employers in the textile and Electrical and Electronics industries from February 1, 2009
        - Reduce levy payment rate from 1% to 0.5% for all employers for a period of two years effective April 1, 2009
    f) Promote the automotive sector
        - Additional allocation to the Automotive Development Fund (RM200 million)
        - Auto scrapping scheme for PROTON and PERODUA (at least 10 years old) discount of RM50,00 to purchase new car.
    g) Rebate of 50% on landing charges for all airlines that operate from Malaysia (for two years effective April 1, 2009)
    h) Allow company's current year losses to be carried back to the immediate preceding year (up to RM10,000 million per year) and applicable for year of assessment 2009 and 2010
    i) Increase the threshold for windfall profit levy from RM2,000 to Rm 2,500 for Peninsula Malaysia and RM 3,000 for Sabah and Sarawak.
    j) Enhance the tourism industry (RM200 million)
        - Upgrade infrastructure in tourist spots, diversify tourism products and organize more international conferences and exhibitions in Malaysia
        - Strengthen the *Malaysia, My Second Home* program and consider issuing work permits to skilled spouses of the program participants

4. Building capacity for the future (RM19 billion)
    a) Increase investment fund of Khazanah (RM10 billion) in strategic sectors
        - telecommunications, technology, tourism, agriculture life sciences, and projects related to Iskandar Malaysia
    b) Implement off-budget projects (RM5 billion)
        - LCCT at KLIA (RM2 billion)
        - Expand Penang airport (RM250 Million)
        - Improve telecommunications infrastructure (RM2.4 billion)
        - Construct sky bridges and covered walkways in Golden Triangle in KL (RM100 million)
    c) Provide funds for the implementation of projects through PFI (RM2 billion)
        - Infrastructure for the Tg. Agas Industrial Park
        - Biotechnology cluster at Iskandar Malaysia
        - Traffic infrastructure around KL sentral
        - GLCs to establish ten non-profit private schools under Corporate Social Responsibility commitment
    d) Liberalize services sector in line with commitments under ASEAN Framework Agreement on Services and World Trade Organisation

e) Nurture a more investment-friendly environment , including formulating new FIC guidelines
f) Develop creative arts industry (RM20 million)
g) Strengthen effective management of government financial resources
   - Adopt value for money approach in government procurement
   - Disallow implementation of design and build projects
   - Strengthen approval from Standards and Costs Committee

Source(s): Ministry of Finance Malaysia

APPENDIX 3: SERVICES SUB-SECTORS FOR LIBERALIZATION UNDER MALAYSIA'S FIRST FISCAL STIMULUS PACKAGE

1. Computer and related services
   a) Consultancy services related to installation of computer hardware
   b) Software implementation services: systems and software consulting services; systems analysis services; systems design services; programming services; and systems maintenance services
   c) Data processing services: input preparation services; data processing and tabulation services; time sharing services; and other data processing services
   d) Database services
   e) Maintenance and repair services of computers
   f) Other services: data preparation services; training services; data recovery services; and development of creative content

2. Health and social services
   a) All veterinary services
   b) Welfare services delivered through residential institutions to old persons and the handicapped
   c) Welfare services delivered through residential institutions to children
   d) Child day-care services, including day-care services for the handicapped
   e) Vocational rehabilitation services for the handicapped

3. Tourism services
   a) Theme parks
   b) Convention and exhibition centers
   c) Travel agencies and tour operators services (for inbound travel only)
   d) Hotel and restaurant services (for 4 and 5 star hotels only)
   e) Food serving services (for 4 and 5 star hotels only)
   f) Beverage serving services for consumption on the services (for 4- and 5-star hotels   only)

4. Transport services–Class C freight transportation (private carrier license–to transport own goods)

5. Sporting and other recreational services - Promotion and organization services

6. Business services
   a) Regional distribution center
   b) International procurement center
   c) Technical testing and analysis services: composition and purity testing and analysis services; testing and analysis services of physical properties; testing and analysis services of integrated mechanical and electrical systems; and technical inspection services
   d) Management consulting services: general; financial (excluding business tax); marketing; human resources production; and public relations services

7. Rental/Leasing services without operators

    a) Rental/leasing services of ships that excludes cabotage and offshore trades
    b) Rental of cargo vessels without crew (Bareboat Charter) for international shipping

8. Supporting and Auxiliary Transport Services

    a) Maritime agency services
    b) Vessel salvage and refloating services

Source(s): Ministry of Finance Malaysia

APPENDIX 4A: MALAYSIA—OUTPUT GAP AS A PERCENTAGE OF POTENTIAL GDP, 2000–2008

Output Gap as percentage of Potential GDP
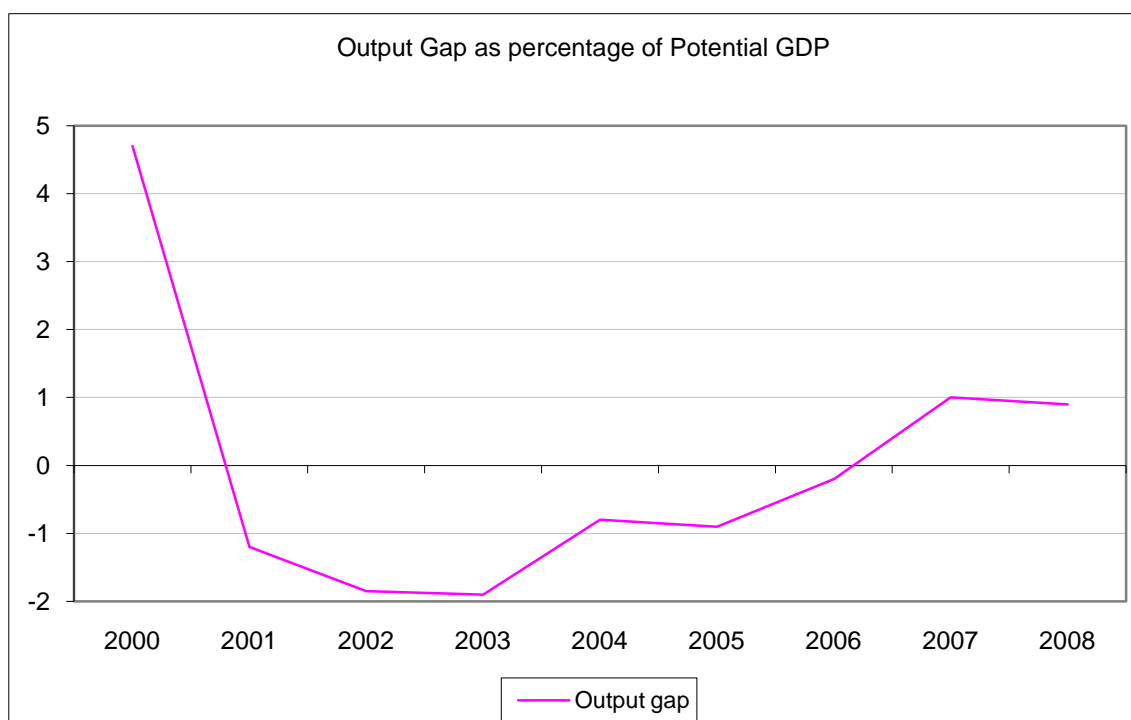
GDP = gross domestic product
Source(s): Author's estimation

APPENDIX 4B: MALAYSIA—ESTIMATES OF MULTIPLIER FROM VAR

Vector Autoregression Estimates
Sample (adjusted): 2000Q1 2008Q4
Standard errors in ( ) & t-statistics in [ ]

	LGDP	LGOV
LGDP(-1)	0.715732	1.998984
	(0.16069)	(1.27156)
	[4.45403]	[1.57207]
LGDP(-2)	0.100487	-1.512640
	(0.22016)	(1.74209)
	[0.45644]	[-0.86829]
LGDP(-3)	-0.173510	-0.551174
	(0.22291)	(1.76389)
	[-0.77838]	[-0.31248]
LGDP(-4)	-0.002940	1.755728
	(0.15481)	(1.22503)
	[-0.01899]	[1.43321]
LGOV(-1)	0.063401	-0.040860
	(0.03018)	(0.23879)
	[2.10094]	[-0.17111]
LGOV(-2)	0.105340	-0.311956
	(0.02974)	(0.23534)
	[3.54196]	[-1.32557]
LGOV(-3)	0.109921	-0.054465
	(0.03159)	(0.24996)
	[3.47981]	[-0.21790]
LGOV(-4)	0.076713	-0.041056
	(0.02409)	(0.19062)
	[3.18444]	[-0.21538]
C	0.691401	-5.221678
	(0.28127)	(2.22565)
	[2.45818]	[-2.34613]

Source(s): Author's Estimation

53

APPENDIX 5: INDONESIA'S FISCAL STIMULUS FOR LABOR-INTENSIVE INFRASTRUCTURE

**Package of Rp8,376.5 billion**
1. Infrastructure Expenditure (Rp7,775 billion)
    a) Public Works Infrastructure Development (Rp3,385 billion)
    b) Flood Control (including Bengawan Solo flooding) (Rp1,000 billion)
    c) Irrigation network rehabilitation for food resilience (Rp600 billion)
    d) Extension of water distribution networks and construction of water treatment plants (Rp385 billion)
    e) Accelerated completion of multi-year contracts (Rp1,000 billion)
    f) Inspection routes and irrigation in aquaculture pond production centers (Rp400 billion)
2. Communications Infrastructure Development (Rp1,325 billion)
    a) Construction and rehabilitation of rail links (Rp800 billion)
    b) Additional funding for construction of Kuala Namu Airport (Rp200 billion)
    c) Runway extension and airport rehabilitation (Rp145.2 billion)
    d) Construction and rehabilitation of ferry ports and wharves (Rp179.8 billion)
3. Energy Infrastructure Development (Rp1,000 billion)
    a) Power plant and transmission line construction (Rp900 billion)
    b) Energy Self-Sufficient Villages (Rp75 billion)
    c) Drilling for clean water in rural areas (Rp25 billion)
4. Housing Infrastructure Development (Rp680 billion)
    a) Low-rental apartment construction for military/police/workers/students (40 twin blocks) (Rp480 billion)
    b) Construction of special housing (fisher folk, border areas and natural resources processing locations) (Rp200 billion)
5. Construction of Market Infrastructure (Rp315.0 billion)
    a) Market construction for itinerant vendors/micro and small enterprises (Rp100 billion)
    b) Construction of Sample Markets (Rp120 billion)
    c) Construction of synergy markets and supporting markets (Rp15 billion)
    d) Construction of economic corridor markets in Yogyakarta, Sragen, Sleman,Solo, Magelang and Bantul (Rp80 billion)
6. Infrastructure spending for construction and rehabilitation of farming community road and irrigation infrastructure (Rp650 billion)
    a) Roads supporting cultivation in estate production centers (Rp60 billion)
    b) Roads and irrigation for farmers in livestock farming and horticultural centers (Rp125 billion)
    c) Roads and irrigation for farmers in food staple production centers (Rp465 billion)
7. Improvements to vocational training (Rp300 billion)
    a) Skills training by Vocational Training Centers (Rp136 billion)
    b) Improvements to Vocational Training Center facilities (Rp164 billion)
    c)
8. Rehabilitation of warehouses for storage of rice and corn (Rp120 billion)

National Community Block Grant Programme (Rp601.5 billion)

Source(s): Bank Indonesia

APPENDIX 6A: INDONESIA—OUTPUT GAP AS A PERCENTAGE OF POTENTIAL GDP, 2000–2008

Output Gap as percentage of Potential GDP
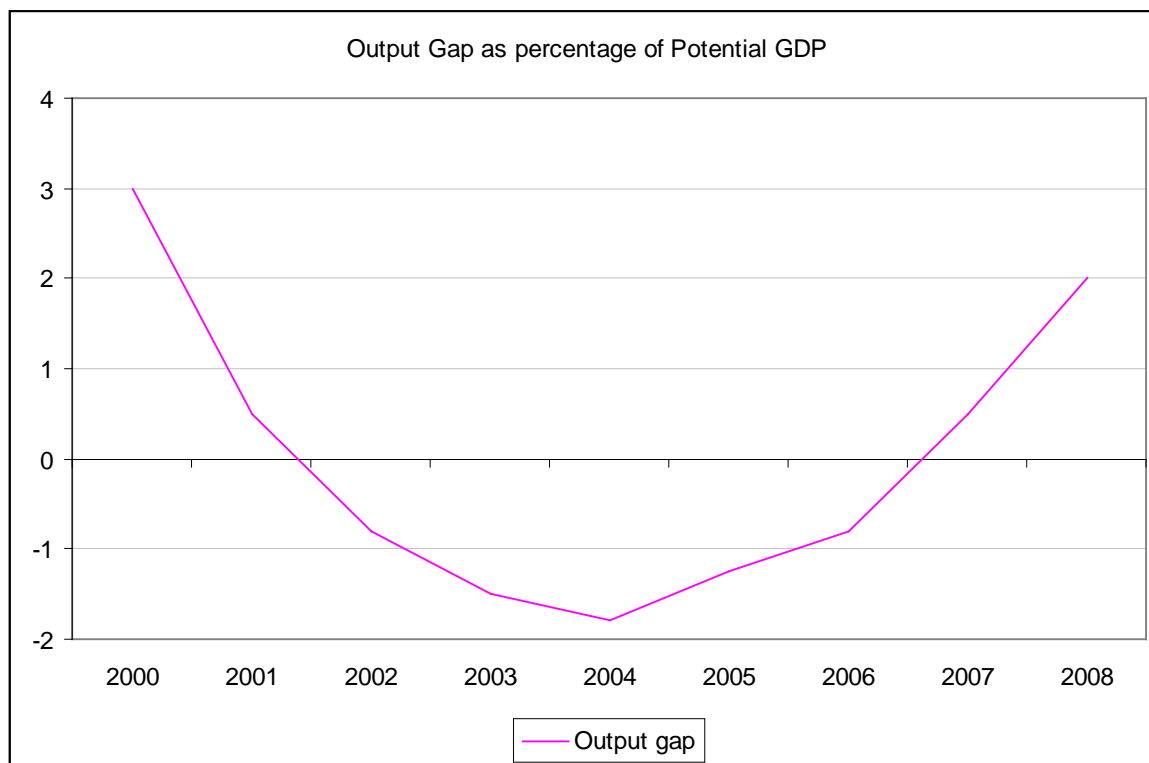
GDP = gross domestic product
Source(s): Author's estimation

APPENDIX 6B: INDONESIA—ESTIMATES OF MULTIPLIER FROM VAR

Vector Autoregression Estimates
Sample (adjusted): 2000Q1 2008Q4
Standard errors in ( ) & t-statistics in [ ]

	LGDP	LGOV
LGDP(-1)	0.957909	-1.297987
	(0.27089)	(1.38326)
	[3.53617]	[-0.93836]
LGDP(-2)	0.132514	2.205375
	(0.32724)	(1.67098)
	[0.40495]	[1.31981]
LGDP(-3)	-0.009576	0.202196
	(0.24647)	(1.25857)
	[-0.03885]	[0.16066]
LGDP(-4)	0.156852	1.650670
	(0.21776)	(1.11198)
	[0.72029]	[1.48444]
LGOV(-1)	-0.007983	-0.313742
	(0.05384)	(0.27492)
	[-0.14828]	[-1.14122]
LGOV(-2)	-0.065630	0.026827
	(0.05971)	(0.30491)
	[-1.09912]	[0.08798]
LGOV(-3)	-0.175567	-0.309066
	(0.05984)	(0.30559)
	[-2.93373]	[-1.01139]
LGOV(-4)	0.040918	-0.852476
	(0.07125)	(0.36383)
	[0.57428]	[-2.34303]
C	-0.692140	-8.104103
	(0.54091)	(2.76211)
	[-1.27957]	[-2.93403]

Source(s): Author's estimation

APPENDIX 7A: PHILIPPINES—OUTPUT GAP AS A PERCENTAGE OF POTENTIAL GDP, 2000-2008

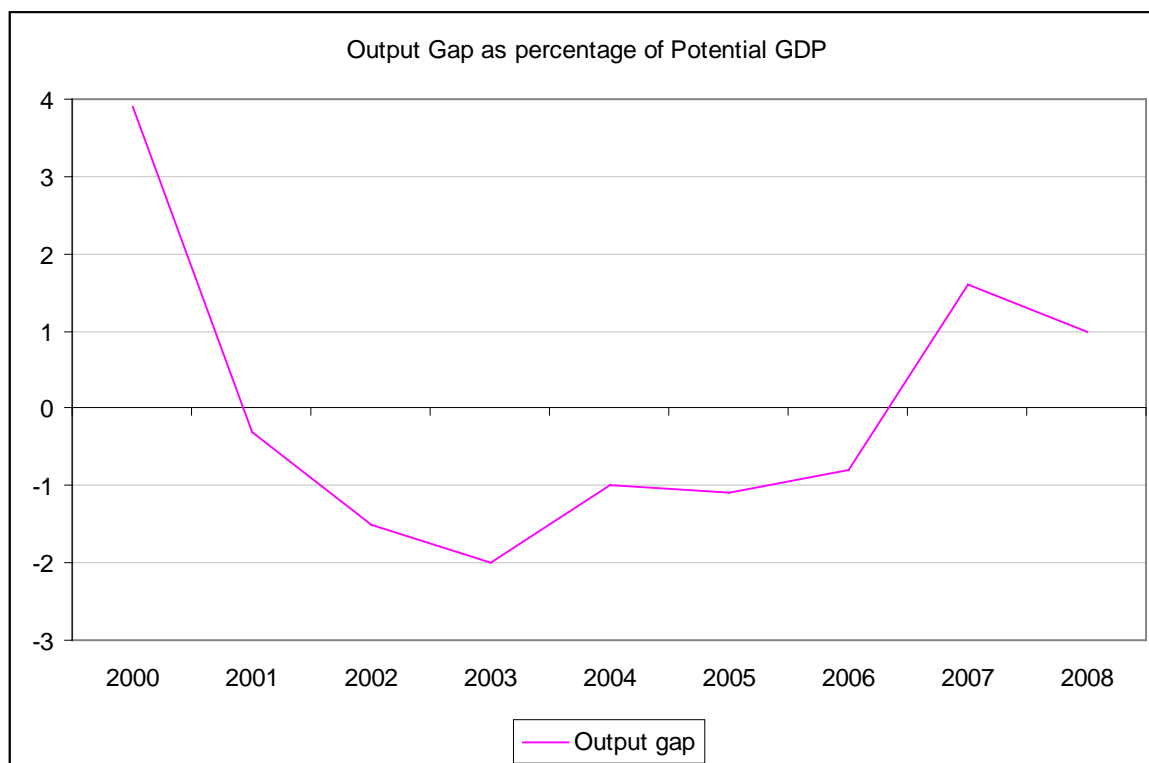GDP = gross domestic product
Source(s): Author's estimation

APPENDIX 7B: PHILIPPINES—ESTIMATES OF MULTIPLIER FROM VAR

Vector Autoregression Estimates
Sample (adjusted): 2000Q1 2008Q4
Standard errors in ( ) & t-statistics in [ ]

	LGDP	LGOV
LGDP(-1)	0.457574	0.508074
	(0.22267)	(0.58157)
	[2.05494]	[0.87363]
LGDP(-2)	0.553078	-0.085374
	(0.25254)	(0.65957)
	[2.19010]	[-0.12944]
LGDP(-3)	0.146732	0.325377
	(0.25644)	(0.66978)
	[0.57218]	[0.48580]
LGDP(-4)	-0.146442	-0.245767
	(0.26498)	(0.69207)
	[-0.55265]	[-0.35512]
LGOV(-1)	-0.031780	-0.121232
	(0.07744)	(0.20225)
	[-0.41039]	[-0.59942]
LGOV(-2)	-0.032404	-0.031948
	(0.07474)	(0.19520)
	[-0.43358]	[-0.16367]
LGOV(-3)	0.056345	0.373988
	(0.06958)	(0.18172)
	[0.80984]	[2.05808]
LGOV(-4)	0.010259	0.135162
	(0.05170)	(0.13502)
	[0.19844]	[1.00104]
C	-0.144660	0.939947
	(0.36323)	(0.94867)
	[-0.39826]	[0.99080]

Source(s): Author's estimation

APPENDIX 8A: SINGAPORE—OUTPUT GAP AS A PERCENTAGE OF POTENTIAL GDP, 2000–2008

Source(s): Author's estimation

APPENDIX 8B: SINGAPORE—ESTIMATES OF MULTIPLIER FROM VAR

Vector Autoregression Estimates
Sample (adjusted): 2000Q1 2008Q4
Standard errors in ( ) & t-statistics in [ ]

	LGDP	LGOV
LGDP(-1)	1.174837	-0.722595
	(0.29495)	(0.71534)
	[3.98311]	[-1.01014]
LGDP(-2)	0.011326	1.278873
	(0.33820)	(0.82021)
	[0.03349]	[1.55919]
LGDP(-3)	-0.385504	0.202770
	(0.26627)	(0.64578)
	[-1.44778]	[0.31399]
LGDP(-4)	0.253721	-0.613386
	(0.23189)	(0.56240)
	[1.09413]	[-1.09066]
LGOV(-1)	-0.134262	0.610325
	(0.12578)	(0.30506)
	[-1.06741]	[2.00069]
LGOV(-2)	-0.058088	-0.177242
	(0.13940)	(0.33808)
	[-0.41671]	[-0.52427]
LGOV(-3)	0.110679	0.584346
	(0.10362)	(0.25131)
	[1.06809]	[2.32517]
LGOV(-4)	-0.178732	0.169043
	(0.10770)	(0.26121)
	[-1.65947]	[0.64715]
C	1.749516	-3.221589
	(0.92178)	(2.23556)
	[1.89798]	[-1.44107]

Source(s): Author's estimation