

Global Financial Crisis and ASEAN: Fiscal Policy Response in the Case of Thailand and Indonesia

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Sound macroeconomic and financial fundamentals, plus quick and forceful fiscal policy responses contributed to Thailand's and Indonesia's economic recovery in the aftermath of the global financial crisis. This paper reviews the impacts of the recent global financial crisis on the Thai and Indonesian economies, and identifies the characteristics of the fiscal stimulus package in each economy and their implications to counter the negative impact of the global financial crisis.

Key words: ASEAN, fiscal policy, fiscal sustainability, global financial crisis, Indonesia, Thailand

JEL codes: E62, H20, H30

1. Global Financial Crisis (GFC) and Its Impacts on Association of Southeast Asian Nations (ASEAN)

In Asia, the debate about global imbalances between Asia and the USA was going on for years before the financial crisis actually happened. The central issue of the debates was whether the USA spent too much, or Asia saved too much, which, in turn, implied an undervalued currency policy in Asia. Some experts and policy makers in Asia consistently raised serious concerns over the massive imbalances in the real and financial sectors over the years. Therefore, it seems Asia was prepared for the GFC before September 15, 2008, when Lehman Brothers went into bankruptcy.

In the case of the Association of Southeast Asian Nations (ASEAN), the major preparation to prevent a financial crisis was prudential policy in overseeing financial institutions. In relation to the size of its capital, the ASEAN financial system invested only a very small amount in subprime derivatives. Although the GFC did not shake ASEAN's financial foundations, its impact, however, hit ASEAN at the main growth engine – the export sector, which generates income in all member countries. The impact varied from country to country, but all ASEAN 10 countries,¹ except Myanmar perhaps, experienced negative growth or were shaken by the economic slowdown. Thailand led the pack of negative growth countries, followed by Brunei, Malaysia, and Singapore (see Table 1). Cambodia experienced almost a no-growth situation in 2009, while Indonesia, Vietnam, and Laos PDR were still able to maintain high rates of growth.

For all ASEAN members, the policy responses showed a similar pattern – pursuing fiscal stimulus and immediately lowering interest rates. The data from Asian

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Table 1 GDP growth and fiscal balance in the ASEAN countries (2008–2010)

	GDP growth (%)			Central government deficit (%GDP)		
	2008	2009	2010	2008	2009	2010
ASEAN-10						
Thailand	2.5	−2.3	7.8	−0.3	−4.7	−2.0
Brunei	−1.9	−1.8	2.6	27.9	6.2	n.a.
Malaysia	4.6	−1.7	7.2	−4.8	−7.0	−5.6
Singapore	1.1	−0.8	14.5	0.1	−0.3	−0.1
Cambodia	6.7	0.1	5.8	−0.1	−6.3	−4.8
Philippines	3.8	1.1	7.6	−0.9	−3.7	−3.5
Indonesia	6.0	4.5	6.1	−0.1	−1.6	−0.7
Vietnam	6.2	5.3	6.8	−3.1	−10.6	−8.0
Laos PDR	7.8	7.6	7.9	−2.3	−3.4	−2.3
Myanmar	10.3	10.6	10.4	n.a.	n.a.	n.a.

Note: For the central government deficit, the data are for the fiscal year of October to September.
Source: Asian Development Bank.

Development Bank (ADB), depicted in Table 1, indicate the amount which each ASEAN country moved to support growth by fiscal deficit policies. On the one hand, the economic slowdown triggered falls in government revenue, that is, the auto-stabilizer, and, on the other hand, the government increased spending to push domestic demand against the shortfall of exports of goods and services. Vietnam generated rather large fiscal deficits that measured 10.6% and 8.0% of gross domestic product (GDP) in 2009 and 2010, respectively. Perhaps, the large fiscal deficits have helped prevent the Vietnamese economy from experiencing an economic contraction. Similar to Vietnam, other ASEAN countries (except Myanmar) would have faced a deeper cut in GDP growth without the fiscal stimulus packages.

It should be noted that the North East Asian countries introduced fiscal stimulus policies with a more aggressive magnitude than ASEAN. The People's Republic of China introduced a fiscal stimulus with a size of 13% of GDP, Korea 2.8%, and Japan 2.4% (see Table 2). As Asian countries are increasingly connected in terms of trade and investment, the concerted fiscal stimulus at this high level would have a second round effect to reinforce the import demands of each other. In the case of Thailand, the consolidated fiscal stimulus of Asia generated an extra 0.9% and 0.3% of GDP growth in 2009 and 2010, respectively. The same impact would apply to other Asian countries depending on the degree of intra-trade within the Asian region of each Asian country.

2. Impacts of the 2008 GFC on the Thai and Indonesian Economies²

The global financial crisis in 2008 led to a decrease in the demand for Asian exports, including Indonesia's and Thailand's exports. In comparison, however, the GFC had a

Table 2 Fiscal stimulus for selected Asian countries in 2008–2009

Country	Amount (USD billion)	%GDP
China†	585.7	13
Indonesia†	6.6	1.5
Japan†	120	2.4
Korea†	26	2.8
Malaysia	2.0 (first), 16.4 (second)	1.0 (first), 8.5 (second)
Philippines	7	4
Singapore	13.8	7.3
Thailand	3.3 (first), 41.9 (second)	1.3 (first), 15.9 (second)
Vietnam	1.0 (first), 17.7 (second)	1.1 (first), 18.2 (second)

†Refers to the first fiscal stimulus only as other stimulus packages are not included.

Source: Global Financial Crisis: Analyst and Policy Implications, Congressional Research Service, World Bank, Reuters and Fiscal Policy Research Institute's calculation.

more limited impact on the Indonesian economy due to its relatively small share of exports in GDP compared to that of Thailand. The share of Indonesia's total exports in GDP amounted to 29% in 2008 compared with 76% for Thailand (45% in Korea, and 234% in Singapore)³. In addition, Indonesia was also helped by its export structure which is concentrated in natural resources and related products, whereas Thailand's exports are more concentrated in manufactured goods, and, thus, more severely affected by the GFC.

For a small open economy like Thailand, global economic turmoil always has major impacts on growth and destabilizes its development path. When the global capital markets were dominated by private players, the risk in the financial market expanded in size and in complexity. This led to a sequence of financial crises throughout the 1990s. The turmoil from British Pound speculation in 1992–1993 was followed by the Mexican peso crisis in 1994–1995 which occurred before the severe financial crisis in Thailand in 1997. Since then, Thailand has been better equipped with a more prudent banking policy and become much more careful regarding capital flows.

Among other things, the industrial sector's response to lower demand was “to run on stock” (see Figure 1). Many industries suddenly reduced production hours and the number of working hours of labor, or ceased producing altogether. As a result, the unemployment rate of Thailand, which was previously as low as 1.0–1.5%, increased to 1.75–2.0% in the first two quarters of 2009. At the same time, manufacturers tended to serve a market of slimmer size with products in inventories which generally have been around 10–20% of their total production. This crisis, if anything different, was viewed by producers as if it would have a rather long lasting consequence of slow demand. This might be because the crisis happened to the G3 (USA, the European Union [EU], and Japan) which were the major global growth engines since World War II. In the case of Thailand,

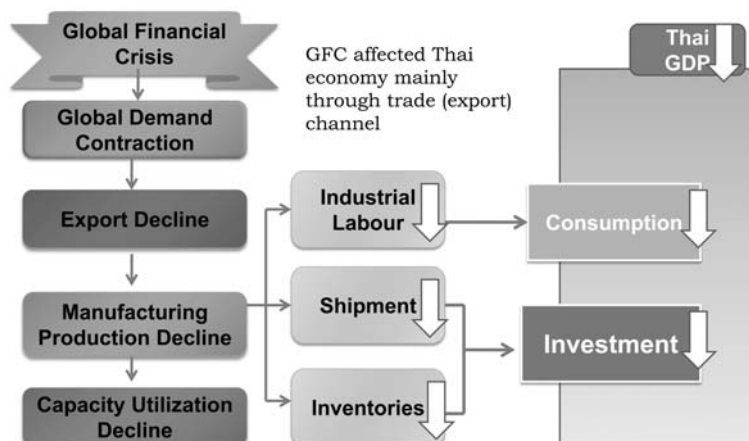


Figure 1 Transmission of GFC impact to the Thai economy.

Source: Sangsubhan and Wangcharoenrung (2012).

Table 3 Estimated impact of the GFC on demand and unemployment in Thailand (2008–2009)

% change (y-o-y)	2008					2009 E				
	Q1	Q2	Q3	Q4 E	Year	Q1	Q2	Q3	Q4	Year
GDP	6.0	5.3	3.9	−4.2	2.7	−7.1	−6.4	−4.8	2.8	−3.9
Private consumption	2.8	2.5	2.8	2.3	2.6	−2.5	−1.2	−0.2	1.1	−0.7
Private investment	1.9	−5.2	−5.5	−10.2	−4.8	−7.1	−6.6	0.0	6.7	−1.8
Exports (in \$US)	23.8	28.8	26.8	−9.2	17.6	−17.9	−24.2	−29.8	−9.3	−20.3
Import (in \$US)	34.9	29.3	38.1	5.3	26.9	−42.9	−40.5	−42.4	−30.7	−39.1
Unemployment rate (%)	1.6	1.3	1.2	1.5	1.4	5.6	5.6	6.0	3.1	5.1

Source: Estimation made by Fiscal Policy Research Institute in February 2009.

the slowdown in exports and the shock from the run on stock in the industrial sector would reduce the income levels of corporations and households, in general, which in turn depressed private consumption and investment during the same period. As a result, according to estimates in February 2009, without any stimulus policy, Thai GDP would have contracted by 3.9% (see Table 3).

As for Indonesia, the decline of exports was especially driven by prices rather than volumes. In fact, the demand for primary commodity exports, especially agriculture and mining, was relatively stable in quantity terms, thanks to relatively strong growth in both China and India during the GFC. This was seen from the relative stability of the export volumes of agriculture and mining commodities, such as crude palm oil, coal, and copper (Basri & Rahardja, 2010). With natural resources accounting for more than half of

Indonesia's exports, the natural resources' exports provided some life support for the Indonesian economy, whereas Thailand was the reverse as most of Thailand's exports are manufactured products (86% of total exports in 2008).

Despite the slowdown in the external sectors, Indonesia's domestic demand has been quite resilient. Private consumption expanded by 4.8% in 2009 and contributed 2.8% out of the 4.5% growth in real GDP in 2009. The relatively strong domestic demand, especially private consumption, did play a supporting role to the Indonesian economy during the time of GFC, partly due to the fiscal stimulus adopted by the Indonesian government.

To be more specific, Indonesia entered the GFC with better fiscal conditions than many Asian countries, or even the USA and Europe. The budget deficit/GDP ratio continuously declined, and there had been a surplus in the primary balance since 2000. The government's success in maintaining the budget deficit below 3% since 2000 helped the debt/GDP ratio to consistently decline. The government's success in maintaining a low budget deficit made Indonesia's fiscal position relatively good and even better than the European Maastricht model that Indonesia adopted, calling for a budget deficit not to exceed 3% and public debt of less than 60% of GDP.

There are several reasons why Indonesia was able to maintain its relatively low budget deficit. First, the International Monetary Fund's (IMF) reform in 1998. Although critics insist that the IMF's recommendation to Indonesia to apply a tight fiscal policy in the Asian Financial Crisis (AFC) was the wrong course to take, in the long term this requirement has led Indonesia to adopt a more cautious fiscal policy. The payoff of this policy can be seen several years after the AFC. This allowed Indonesia to enter the GFC in a stronger fiscal position. Second, this cautious stance led to the Fiscal Policy Law which limits the Indonesian budget deficit to 3% of GDP, and the government debt/GDP ratio to less than 60%. Third, this cautious fiscal policy combined with modest sales of nationalized distressed assets has significantly reduced public debt over the period from 2000 to 2010 (Basri & Hill, 2011). Fourth, it is of interest to note that central government expenditure has always fallen far below government targets. This was due to administrative hurdles including the introduction of a new budget authorization process as well as tighter anticorruption measures aimed at making the tendering process more transparent but which resulted in delayed spending (Basri & Patunru, 2006; Manning & Roesad, 2006). Decentralization also hindered disbursements from the government budget.

Thailand's fiscal position prior to the GFC was also strong. The fiscal deficit at the end of September 2008 was 0.9% of GDP. The government debt/GDP ratio had reached the lowest level at around 37% since 2007 after Thailand paid off its IMF debt in 2003. In 2001, the Thai Ministry of Finance set up a framework for fiscal sustainability that consisted of budget and public debt management rules prior to the GFC as follows. First, a public debt/GDP ratio of less than 50%, which had been maintained since 2003 when Thailand accumulated current account surpluses after the AFC and the government decided to pay off Thailand's IMF debt earlier than scheduled. Second, the proportion of the budget going to debt servicing not exceeding 15%, which was achieved in 2008. Third, public investment expenditure would be at least 25% of the budget. This was

nearly reached in 2008 when the ratio stood at 24.2%. Fourth, a balanced budget was temporarily achieved in the 2005 and 2006 fiscal years, prior to a budget deficit amounting to 1.9% of GDP in 2007. Therefore, Thailand's fiscal situation was converging toward a sustainable path prior to the impact from GFC beginning to materialize in September 2008.

3. Fiscal Responses to the GFC Impacts

As mentioned earlier, as a percentage of GDP, Thailand's and Indonesia's fiscal policy responses to the GFC are relatively similar in size. The composition of their stimulus measures varies, however, and depends on the ability of each government to arrange and implement the packages given their fiscal and economic conditions. The low government budget deficit-to-GDP ratios in 2008 for both countries (−0.1% for Indonesia and −0.3% for Thailand) allowed the governments to implement fiscal stimulus of more than 1% of GDP over the 2008–2009 period. Additional funds for extra spending were also sought through external assistance in the case of Indonesia, and through an emergency decree in the case of Thailand. The Indonesian stimulus package consisted mainly of income tax cuts and subsidies to stimulate private domestic spending, while government expenditure was limited. Thailand, whose production sector was more vulnerable to the impacts of GFC, on the other hand, implemented two broad-based packages that consisted of large government expenditure increases relative to the tax reductions, in addition to extra credit expansion in order to stimulate private and public investment and expenditure.

3.1 Indonesia's fiscal stimulus measures

To mitigate the impact of the GFC, the Indonesian Ministry of Finance (MoF) unveiled a stimulus package for 2009, valued at Rupiah (Rp) 73.3 trillion (US\$ 6.4 billion) (Table 4), to boost the economy amid the threat of an economic downturn. The package addressed three major areas: income tax cuts, tax and import duty waivers, and subsidies and government expenditure. It is worth noting that almost 60% of the Indonesian fiscal stimulus was allocated to income tax cuts. Aiming to stimulate more household and corporate spending, the government cut the highest bracket of personal income tax rate from 35% to 30% and corporate income tax rate from 30% to 28%.

It is worth noting that the size of the budget expansion was criticized as being negligible. The forecast deficit of 2.6% of GDP was partly driven by the decline in revenues (especially tax and nontax revenues due to the slowdown of the economic growth and declining commodity prices). Only about 1.2% of GDP can be considered as being the real expansion policy, and the rest was just incremental government deficit.

Despite having a healthy fiscal position (relatively low debt/GDP ratio), the size of the fiscal stimulus in Indonesia was modest compared to other economies including Australia, Malaysia, and Thailand. Thus, an important question is why did Indonesia introduce a relatively modest fiscal stimulus compared to other countries, even though its debt/GDP ratio was relatively low.

Table 4 Major fiscal stimulus measures, Indonesia

Major stimulus measures	Allocation (Rupiah billion)	% total
Public purchasing power stimulus	25,850.0	35.3
Lower personal income tax rate (from 35% to 30%)	13,500.0	18.4
Broader income tax-free band	11,000.0	15.0
Impose tax subsidies (cooking oil and bio fuels)	1,000.0	1.4
Nontax subsidies (generic medicines)	350.0	0.5
Business resilience and export competitiveness stimulus	35,478.8	48.4
Lower corporate tax rate (from 30% to 28%)	18,500.0	25.3
Impose tax subsidies (import duties for industries, VAT on oil and gas)	12,300.0	16.8
Impose nontax subsidies (reduced diesel price, discounted electricity bill rate, etc.)	4,172.8	5.7
Increase state equity participation for improving grassroots business credit gurantees	500.0	0.7
Job creation and mitigation of job losses	11,936.5	16.3
Public works infrastructure	6,601.2	9.0
Transport infrastructure	2,198.8	3.0
Energy infrastructure	500.0	0.7
Housing infrastructure	500.0	0.7
Construction and rehabilitation of roads and irrigation facilities	650.0	0.9
Construction of public markets	315.0	0.4
Improvement of vocational training and its facilities	300.0	0.4
Health infrastructure	150.0	0.2
Rehabilitation of storage facilities	120.0	0.2
National community empowerment program	601.5	0.8
Total	73,265.3	100.0

Adapted from Hur *et al.* (2010).

There are two constraints which limited the fiscal space of the Indonesian government to opt for a larger fiscal stimulus. First, the Financial Law and Regulation no. 23/2003. It is very interesting to note that the Maastricht criteria to limit budget deficits have been put into a law by the Indonesian government. This law prescribes that the consolidated national and local government budget deficits be limited to 3% of GDP in any given year, and that the total central and local government debt not exceed 60% of GDP. This law which was passed during the Megawati administration is very instrumental in ensuring fiscal sustainability and helping Indonesia in reducing the debt to GDP ratio. Although there is no official explanation for why Indonesia adopted this Maastricht criteria, we believe that this law was triggered by traumatic Indonesia's macroeconomic history. First, Indonesia had a very serious episode of hyperinflation in the 1960s; thus, there is a bias toward prudent budgetary policy. The second reason is the cost of

financing the deficit. The GFC affected emerging markets through a general loss of market confidence and an associated re-pricing of risk that contributed to a shortage of liquidity in international money markets. As a consequence, emerging markets faced increasing difficulties in accessing external financing, which is reflected in increasing yields on international bond issuances due to loss of investors' appetite for the financial products of emerging markets in general.

To handle this financing issue, Indonesia approached the World Bank, and requested a Deferred Draw-down Option scheme. This enabled Indonesia to obtain financing assistance for its budget deficit if a market disruption occurred, in which the "normal" cost of financing through markets became prohibitively expensive. So there exists a threshold agreed to by Indonesia and the World Bank. This mechanism goes into effect if the market rate which must be paid by the Indonesian government exceeds this threshold (meaning that the government must pay higher rates to finance its debt), making the Indonesian government eligible for loans from the World Bank at a concession rate that is much lower than the market rate. With this scheme and the support of the World Bank, Indonesia was successful in securing loans from multilateral institutions (such as the Asian Development Bank and the World Bank), and its major trading partners (such as Japan) at a concession rate amounting to more than US\$ 5 billion.

Parallel to this, Indonesia also submitted this proposal to the G-20. This proposal was adopted at the G-20 meeting in London in which the G-20 agreed to allocate US\$100 billion through the multilateral development banks (including the World Bank and Asian Development Bank) which could be used to support budget financing for fiscal stimuli. Another factor which influenced the government's limited fiscal stimulus was the assumption that the GFC would have a relatively small impact on Indonesia. With the estimated small impact from the GFC, the MoF decided to adopt a relatively modest fiscal stimulus.

Since the Asian crisis, there have been several important changes in the government budget process in Indonesia. Full democratization has brought about a significant role for the Parliament in the budgetary process. The active role of the Parliament makes the budgetary process quite lengthy and sometimes contributes to delays in government spending.

The pattern of disbursement in capital spending and purchases of goods and services are marked with significant back-loading. Figure 2 illustrates the trend that capital spending and purchases of goods and services tend to be small in the beginning of the fiscal year and suddenly accelerate toward the end of the fiscal year.

It is worth noting that that disbursement in total spending by central government has been pro-cyclical even during the global financial crisis (see Figure 3). Figure 2 also suggests that subsidies, especially energy subsidies (fuel and electricity), have been a significant item of central government spending in Indonesia. Energy subsidies have become a major issue for Indonesia. In 2012, these subsidies accounted for 20% of the government budget or 3.7% of GDP, making Indonesia's fiscal space relatively limited. The most challenging issue and the most binding constraint for Indonesia nowadays is the lack and poor quality of infrastructure. Unfortunately, even today, the infrastructure

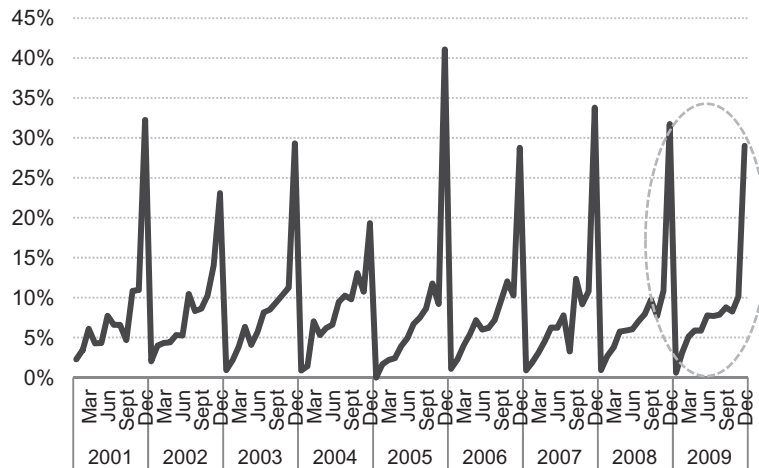


Figure 2 Capital spending and purchase of goods and services (materials) of the central government.

Source: Ministry of Finance, Indonesia.

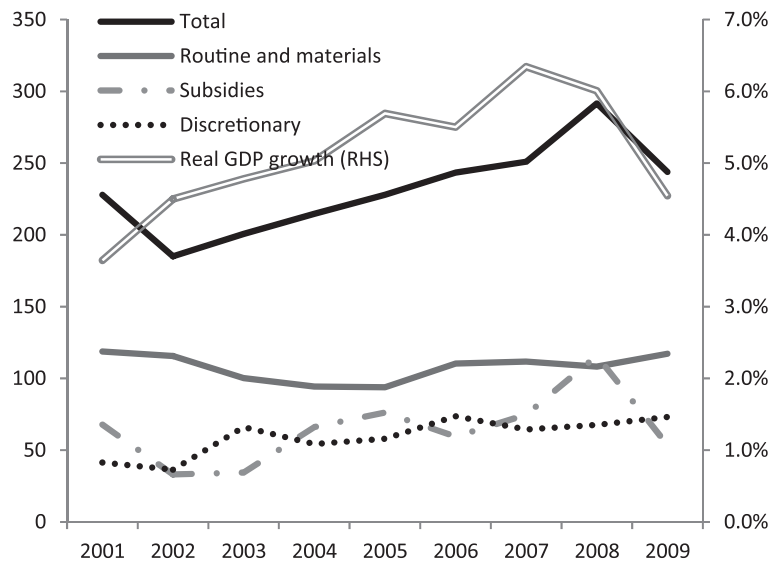


Figure 3 Actual real government expenditures and real GDP growth.

Source: CEIC, and processed from Ministry of Finance, Indonesia.

Notes: 1. Expenditures are measured in trillion Rp on the left hand axis, and the real GDP growth rates are measured in % on the right hand axis.

2. Routine spending refers to personnel payments, interest payments, and purchases of materials (purchase of goods and services), while discretionary spending refers to capital expenditure, grants, and social expenditure.

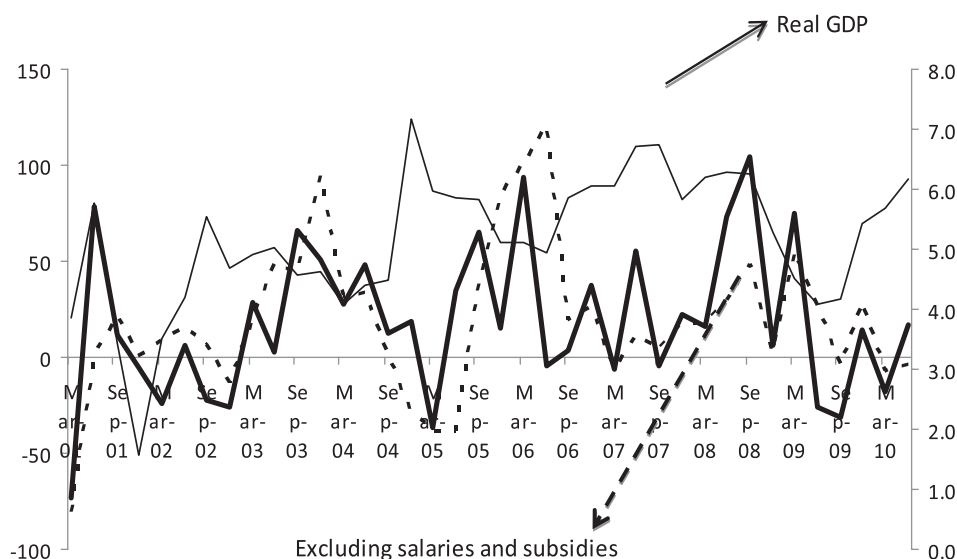


Figure 4 Growth (yoy) of disbursements of central government spending and the real GDP (right axis).

Adapted from Basri and Rahardja (2012).

budget is relatively small, due to limited fiscal space. Ironically, this limited fiscal space is spent on fuel subsidies. This leaves almost no room to allocate spending on infrastructure and poverty programs. As a result, the poor are hit the hardest. We argue that the Indonesian government needs to relocate the energy subsidies into programs for the poor and infrastructure.

Casual observation also suggests that the only spending component that has been countercyclical is discretionary expenditures. Nevertheless, the size of discretionary spending has been much smaller than subsidies that are tied to government pre-commitments. As a result, the ability of Indonesian government to use countercyclical fiscal policy seems to be quite limited.

Figures 4 and 5 indicate the year on year growth of quarterly disbursements in central government spending and tax revenue. Figure 4 suggests that if we exclude salaries and subsidies, growth in disbursements in government spending have been relatively stronger in episodes of economic downturn. In sum, we find that government disbursements tend to be pro-cyclical due to the significant amount of subsidies in the government budget. In addition, the size of the discretionary spending has been smaller and associated with significant back-loading. These characteristics of the budget lead us into the question of what was the role of fiscal policy in minimizing the impact of the GFC.

The initial debate within Indonesia was how the fiscal stimulus program should be designed and would be effective, given the inability of the central government to spend money. In these particular circumstances, we argue that it would be more effective for the fiscal stimulus to focus on income tax cuts and tax waivers. Eventually, Indonesia

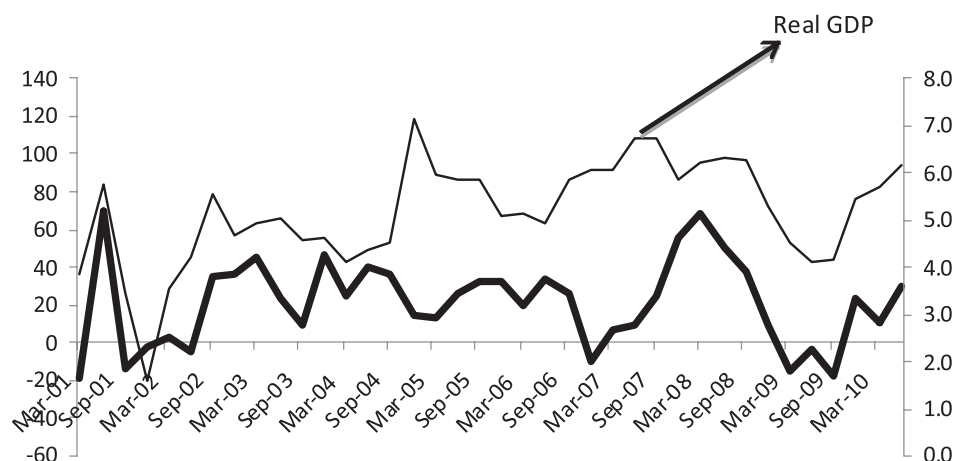


Figure 5 Growth (yoy) of central government tax revenue and the real GDP (right axis). Adapted from Basri and Rahardja (2012).

decided to combine expenditure expansion and tax cuts with the largest proportion allocated to tax cuts (60% of the fiscal stimulus). Another factor was at play in this, as, at the same time, the government was also drafting bills on new tax laws, one of which was to reduce the tax rates on corporate and household incomes. Thus, the tax cut policy did not wholly result from the fiscal stimulus design, but actually was already being prepared and advocated in Parliament in the drafting of the new tax code. The government then included this project in the fiscal stimulus package.

The next question is the effectiveness of the tax cut policy. We argue, however, that the fiscal stimulus through tax cuts can be relatively more effective in Indonesia for three reasons: First, unlike in the USA or other developed countries, Indonesian households hold less savings and have only limited access to formal bank credit. Hence, spending behavior is likely to be influenced more by *current* income rather than *permanent* income (Modigliani & Brumberg, 1955). Second, given Indonesia's stage of development, it is more likely that the marginal propensity to consume in Indonesia is higher than in the USA. Third, as pointed out by Modigliani and Brumberg (1955), consumption behavior may vary by the stage of life. Based on this theory, consumption may be relatively high in societies dominated by younger populations like Indonesia.

While it was true that the tax cut might have boosted consumption, this argument has to be juxtaposed against the fact that the impact of the fiscal stimulus on the economy may not be as large as we thought because some of the tax cuts targeted individuals paying income tax in the highest tax brackets, as well as corporate income tax. While it is true that the impact of the tax cut on individual income tax might be relatively limited, the reduction of both individual and corporate income taxes gave some cushions to the companies to maintain jobs. This somehow contributed to the strong consumption. While it is true that raising the nontaxable income threshold could have induced consumption by low-income earners, the number of Indonesians holding tax

file numbers is still relatively small. In addition, looking at the size of the fiscal stimulus and given the size of government expenditure, about 10% of Indonesian GDP in 2008, one cannot claim that the relatively high Indonesian GDP growth (compared to other countries in the region) was due to the fiscal stimulus. Basri and Rahardja (2011) argue that besides the fiscal stimulus, one of the reasons of why private consumption remained strong in Indonesia during the GFC was the important role of the export commodity boom several years before the crisis. The economy outside Java improved as a result of the commodity boom, and during the crisis period, residents outside Java were able to make use of their accumulated savings to fund consumption during the global financial crisis. In addition, Basri and Rahardja also argue that exports of services played an important role because of surprisingly strong exports in tourism, creative design, and workers' remittances are likely to have a direct link to private consumption.

3.2 Thailand's stimulus policies in 2008–2009

The Thai government implemented three types of policies to rebuild confidence, regain economic recovery, and stimulate economic growth. First, two fiscal stimulus packages, Stimulus Packages 1 and 2 (SP1 and SP2), with the combination of tax measures, were implemented at different time periods. The combined total fiscal expenditure package was 467 billion baht (117 and 350 billion baht for SP1 and SP2, respectively) and another 40 billion baht for tax reductions. As a result, the government pursued aggressive fiscal deficit targets in 2009 and 2010 of 5.6% and 3.6% of GDP, respectively (see Figure 6). Second, the Bank of Thailand launched a quick monetary policy response by lowering the policy interest rate (1-day repurchase rate) from 3.75% to 1.25% over the period between December 2008 and April 2009. Third, the quasi-fiscal policy, that is, credit expansion by the six Special Financial Institutions (SFIs) owned by the government, was implemented as a fast-track policy to provide liquidity to corporations, small and medium-sized enterprises (SMEs), and as personal credits to households. In total, an extra targeted credit expansion of 301.500 billion baht was added to the regular business plans of the six SFIs.

The government issued the SP1 package of 117 billion baht as a mid-year supplementary budget. The budget plan was set around November 2008 (2 months after the GFC 2008 had begun), passed the parliamentary process in February 2009, and the first expenditure items were disbursed by the end of March 2009 (5 months after the GFC began). The SP1 was designed to stimulate growth through four different types of demand creation – adding income for quick consumption expenditure, boosting government expenditure via quick investment programs, stimulating private investment especially by SMEs and community-based investments, and promoting the export and tourist industries.

At the same time, the government announced a tax reduction package covering a wide range of tax exemptions including property tax, income tax for SMEs and community enterprises, corporate income tax for the tourist industry, and venture capital tax. The tax reduction measures have their own limitations since they would only

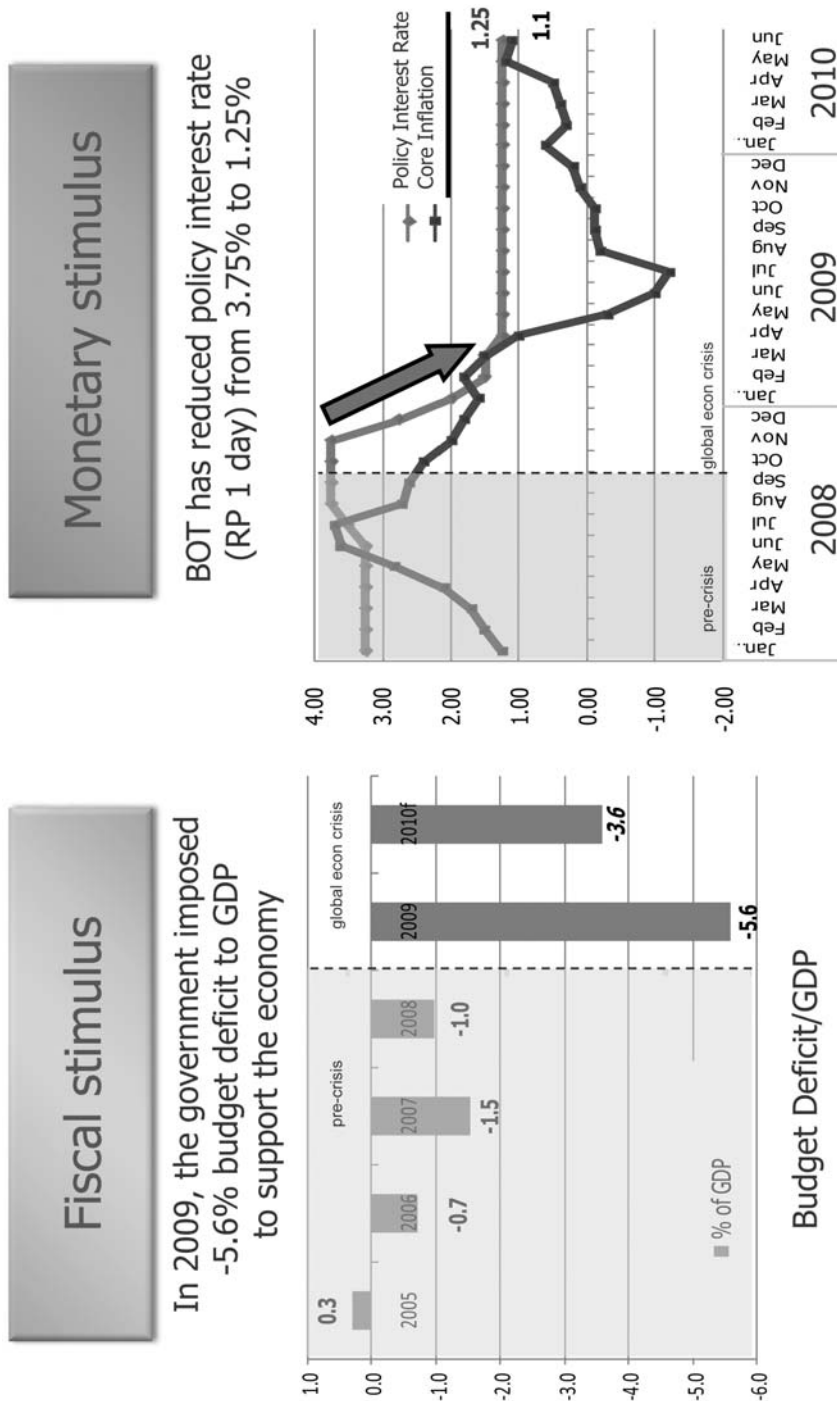


Figure 6 Size of fiscal stimulus and interest rate policy after the crisis.

benefit tax payers, a relatively well-to-do group of people and businesses, and the tax reduction would only come into effect when taxpayers file their tax applications at the end of the fiscal year. The SP1, however, focused on immediately boosting the income of the poor and increasing expenditure in the rural areas, and, therefore, is considered to be more effective than the tax measures. However, as the budgetary process for fiscal expenditure takes a long time (5 months in this case), the fiscal expenditure type of policy, in this case, proved to be an untimely policy response. The most effective and timely implementable policy seems to be the quasi-fiscal policy, the extra credit expansion of the SFIs, since the 305.1 billion baht expansion came immediately by using the already established credit infrastructure. Also, it can be used to focus on specific groups which bore most of the impact of the crisis such as farmers, the poor, exporters, small tourist operators, and other SMEs. All credit lines have credit officers to screen and monitor loan applications, which increase the cost-effectiveness to the government.

In 2008, when the SP1 package and tax reduction measures were planned, it was estimated that the GFC impact would reduce GDP growth from around 5% to 2%. The policy package seemed sufficient in boosting economic growth by about 1.5%. However, the contractions of export demand and the number of tourist arrivals were more acute than expected. The government then introduced the SP2, an unprecedentedly large fiscal stimulus package, called Thai-Kem-Kang (TKK) or Strong Thailand Program 2009–2012. It was aimed at not only creating domestic demand, countering the GFC's impacts, but also at improving the economic and social strength of the country by 2012. The list of SP2 projects, categorized by the government's objectives as covering a total budget of about 350 billion baht (see Table 5), indicated that about 30% was designated for job creation and the improvement of the quality of life, which were training and investment projects at the community level, about 21% was devoted to basic public services development including logistics, energy, tourism, health care and others, and another 14% was set aside for water resource management mainly small irrigation projects in rural areas.

The government spending plan, in accordance with various stimulus measures including SP1 and SP2, would last for 5 years from 2009 to 2013. The SP1 which began in 2009 was designed to work in tandem with tax measures and extra financial credit from SFIs. The disbursement of the SP2 was planned to last for 3 years (2010–2013).

4. Impacts of Stimulus Policies

4.1 Estimating the impact of the fiscal stimulus in Indonesia

There are several issues that arise in estimating the impact of fiscal policies in Indonesia. First, as was briefly mentioned earlier, the decentralization which has been undertaken by the Indonesian government since 2000 has diminished the control that the central government has to influence spending at the regional level. Therefore, we only estimate the effect of fiscal variables directly controlled by the central government. We are confident that this would capture most of the impact of fiscal policy in Indonesian economy because spending by central government still accounts for 66–70% of total spending.

Table 5 Fiscal stimulus package 2 (SP2 or Thai-Kem-Kang, TKK)

Objective/sector	Budget framework	Disbursement as of February 24, 2012					Total	
		FY2009	FY2010	FY2011	FY2012	FY2009–12	Disbursement rate (%)	
1. Food and energy security	59,462	–	37,324	14,460	–	53,903	91	
2. Basic public service development	74,867	–	44,020	17,870	–	65,068	87	
3. Create tourism potential	5,390	–	1,777	750	–	2,594	48	
4. Create new economy revenue	1,311	–	870	405	–	1,276	97	
5. Develop education quality	51,981	–	26,426	12,975	–	41,573	80	
6. Develop public health quality	1,177	–	327	398	–	795	68	
7. Create job and improve quality of	106,253	30,000	53,116	11,069	–	95,693	90	
8. Government policies	40,000	–	39,513	487	–	40,000	100	
Total	340,440	30,000	203,372	58,413	–	300,902	88	
Expenditure under emergency circumstances	8,500	–	1,029	2,949	–	4,134	49	
Grand total	348,940	30,000	204,401	61,362	–	305,036	87	

Note: The data are as of February 24, 2012.

Source: Public Debt Management Office (PDMO), Thailand.

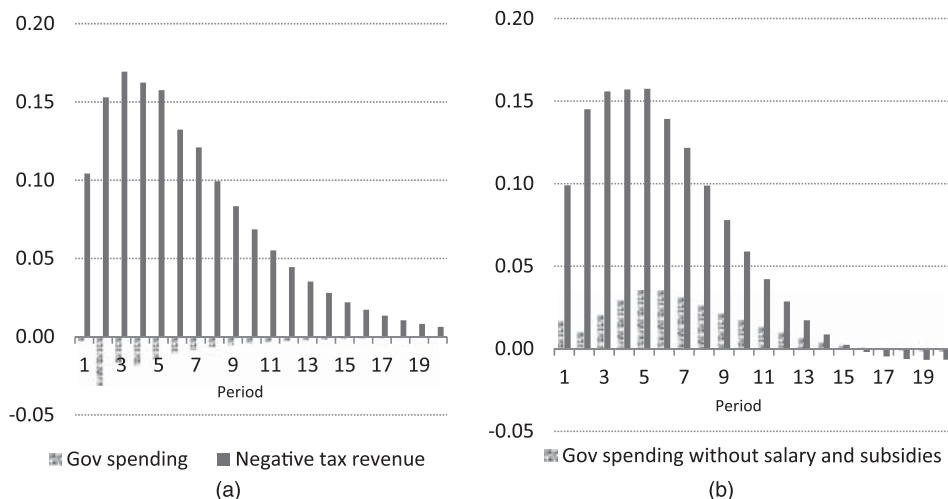


Figure 7 (a and b) Estimated impact on real GDP of a 1 standard deviation unanticipated shocks in government spending and negative tax revenue.

Taken from Basri and Rahardja (2012).

Second, it is quite impossible to come up with a consistent measure of discretionary spending because Indonesia changed the format of its government statistics in 2000. Instead, here we deliberately broaden the scope of government spending to include personnel and subsidies. Third, close to 60% of the fiscal stimulus introduced during the global crisis was a permanent tax cut that had been discussed with the parliament. This complicates the effort to conduct an event study to measure the impact of the fiscal stimulus on the Indonesian economy during the global financial crisis.

Nevertheless, there are good reasons and theoretical arguments that both government spending and taxes affect GDP. But since those fiscal variables are not necessarily independent, the effect of one can impact on the other. Therefore, we decided to estimate the potential impact of the fiscal multiplier on economic growth using a vector autoregressive (VAR) approach. We run a structural VAR of real GDP, central government spending, and tax revenues using the identification approach suggested by Blanchard and Perotti (2002). The other advantage of using a VAR is that we can isolate the impact of contemporaneous shocks in government spending or taxes on GDP from the anticipated movement of these fiscal variables.

The path of impact multiplier over time for output is given by the graphs of impulse response functions presented in Figure 7a and b. The result in Figure 7a interestingly suggests that unanticipated shocks in central government spending have a small, or, in fact, negative effect on real GDP. Both Figure 7a and b suggest that the impact multipliers for unanticipated tax shocks to real GDP are higher than those of unanticipated shocks in government spending. We find that a one standard deviation of a negative unanticipated shock in tax revenue shows a strong positive impact on real GDP of 0.1% in the

first quarter and 0.56% in four quarters. This result differs slightly from the results of the World Bank (2010) which found a considerable positive impact of the growth of central government spending on the growth of Indonesian real GDP. Our results are more similar to the recent findings on the impact of fiscal policy in East Asian countries using structural VARs, but with additional identification for the business cycle and monetary policy (Iha *et al.*, 2010).

In Figure 7b, we use an alternative definition of central government spending which reflects more the discretionary policy decisions rather than commitments. Here, we exclude salaries, subsidies, and interest payments on domestic government bonds from the definition of government spending to dampen the impact of spending that had been pre-committed. The results from using this measure of central government spending in the VAR suggest that a one standard deviation shock in unanticipated discretionary spending by the central government has a 0.016% and 0.07% impact on real GDP by the first and fourth quarter, respectively.⁴ This result might be attributed to capital and social spending which are less pre-committed. As can be seen from Figure 7b, the multiplier of an unanticipated discretionary spending shock on real GDP reaches its peak by the fifth quarter.

One possible explanation for the lack of an impact of central government spending on Indonesian GDP is that subsidies have been more pro-cyclical. Second, the rigidity of subsidy commitments can, sometimes, put pressure on the government budget. Subsidies are considered to be tied to political commitments made by the central government to the Parliament. In some episodes of high global commodity prices, the subsidy bills increased sharply and raised questions of the capacity of the government budget to maintain the subsidy while increasing social spending. This situation can often turn into episodes of macroeconomic uncertainty that increase borrowing costs. Third, even the disbursement of discretionary spending is marred with delays, back-loading, and complicated procurement for government agencies to purchase goods and services.

Meanwhile, changes in tax code or tax policies can be internalized relatively more efficiently by individuals and private companies. We believe that this is quite plausible given the fact that Indonesia introduced a permanent tax cut in 2009, which can reduce the forward-looking adjustments by corporations and households given the current strong position of the Indonesian government budget.

In summary, using quarterly data on realized spending and revenues of the Indonesian central government, our simulation exercise suggests that a fiscal stimulus in the form of tax cuts would have had a larger impact on the Indonesian economy during the global financial crisis. We also find that an increase in government spending has less of an impact on economic activity. Delays in disbursements of central government spending could reduce the effectiveness of a policy decision. We also think that government spending might not necessarily boost the economy as long as the government considers increases in subsidies as part of the spending package. Instead, we find that increases in discretionary spending, such as capital expenditure and social spending, can have a desirable impact on economic activity in subsequent periods.

4.2 Impacts of the stimulus policies in Thailand

The SP1 was designed for a quick impact on income and consumption. Since the target groups are those in the low income groups and job creation in the rural areas, individuals which have high marginal propensities to consume (MPC) and to invest (MPI), the SP1 should have a high stimulatory impact on the Thai economy. The Fiscal Policy Office of Thailand's Ministry of Finance estimated that the disbursement of SP1 was around 100 billion baht in 2009, and together with the predicted tax reductions and possible extra SFIs' credit expansion and other government expenditure during the year would create extra GDP growth in 2009 of around 1.26%. As the actual GDP growth in 2009 was -3.8%, the effectiveness of the first group of stimulus policies (SP1 plus tax measure and credit expansion alone) was to rescue the Thai economy from a contraction of 5.1%. Most of the estimated impact came from the 100 billion baht expenditure measures which resulted in a 1% increase in GDP. The tax reduction measure totaling 10 billion baht and the 300 billion baht credit extension through SFIs contributed by increasing GDP by 0.06% and 0.2%, respectively. The impact of the expenditure measures was much larger than that resulting from the tax reduction since government disbursement was the main item of the package and was around 10 times as large as the tax reduction. Extra credit expansion through SFIs also had a significant positive impact on growth.

In the case of SP2, the total approved budget was 350 billion baht. As of February 24, 2012, the disbursement rate of this budget stood at 87% (305 billion baht). Within the 305 billion baht expenditure, it created actual investment of approximately 119 billion baht (or 40% of the total disbursement). In the first nine months (October 2009–June 2010), actual investment spending from the budget, carryover, and state-owned enterprises (SOEs) (excluding TKK investments) contracted by 16.2% compared to the same period for the previous year. Including TKK investments, nominal public investment increased by 8%, suggesting that TKK not only compensated for the reduction of the capital budget, but also contributed to public investment growth. The remaining TKK funding is expected to continue to contribute 15 billion baht to public investment in fiscal 2012 given the borrowing authorization under the Emergency Decree.

As presented in Table 6, SP2 had a significant impact on Thailand's GDP in 2010 by lifting GDP growth from the base case of 6.85–7.80%. This stems from the 230 billion baht spending on various projects under the TKK program.

Thus, unlike the result for Indonesia, Thailand's fiscal stimulus during the period of the GFC consisted mostly of expenditure measures which had a significant impact on growth. The estimated impacts are derived from a structural macroeconomic model (Sangsubhan & Wangcharoenrungs, 2012) and differ from the structural VAR estimates in Jha *et al.* (2010), for example. Structural VAR estimates are more data dependent, and the results for Thailand are often negative or negligible. It is arguable that the current account response during the AFC when Thailand experienced massive capital flight and a severe currency devaluation may be different from the more recent GFC when Thailand was simply being impacted by external shocks as a small open economy. In fact, as shown in Table 2, Thailand is not the only country in the region that implemented a fiscal stimulus package, but many countries in Asia are also moving in the same

Table 6 Estimated impact of SP2 on real GDP growth

Real GDP (%y-o-y)			
Year	Base case	With SP2	Difference
2008	2.58	2.58	0
2009	-2.44	-2.33	0.11
2010	6.85	7.8	0.95
2011	-0.14	-0.1	0.04
2012f	4.94	5.5	0.56

Source: Fiscal Policy Office, Ministry of Finance, Thailand.

Note: The estimates are as of February 2012.

direction. The estimated impacts of ‘Asia’s simultaneous fiscal stimulus’ on the Thai economy via external shocks as derived in the FPRI World Macro Model (Sangsubhan & Wangcharoenrungs, 2012) indicate that ‘Asia’s simultaneous fiscal stimulus’ contributed to Thailand’s GDP growth in 2009 and 2010 by 0.9% and 0.3%, respectively. This means that the overall regional fiscal stimulus is important to the recovery of Asia in the aftermath of the 2008 GFC.

Nonetheless, as a result of the countercyclical expansionary fiscal policy implemented by the government to counter the impacts of the GFC, as well as domestic political and weather related problems, the government had to adjust its limit for debt-to-GDP ratio to 60% of GDP in 2009.

5. Exit Policy and Fiscal Sustainability

How is the fiscal position after the GFC? In Indonesia, as the GFC started to wane in 2010, the proportion of the fiscal stimulus in Indonesia was mostly unchanged. The components of the fiscal stimulus like the reductions in corporate tax rates and personal income taxes, and the higher income tax-free limits are permanent rather than temporary. In addition, the stimulus in the form of the reduction in the price of diesel oil and electricity billing for industrial users can also be seen as ‘quasi-permanent’. In Thailand, as the SP1 and SP2 was phased out in 2010 and 2011, respectively, many of the current expenditure programs were still continued in the regular annual budget. The energy price subsidy, the supporting of the rice price, and the development of education quality are examples. As a result, current expenditure exceeded 75% of the total budget, and left only 15–16% for capital investment.

Keeping in mind their high infrastructure requirements, the Indonesian and Thailand governments also continued to increase expenditure on infrastructure. In other words, the fiscal stimulus pattern has not undergone much change post-GFC. So, the fiscal stimulus in Indonesia and Thailand formed a new expenditure pattern or a new

'norm'. Thus, in the case of Indonesia and Thailand, it is difficult to discern a practical exit strategy from the fiscal stimulus. The important question is, thus, if the fiscal policy formed a new normal pattern, will fiscal sustainability be upset and will both countries be trapped in a permanent deficit situation? So far, the recent stimulus packages will not push Indonesia and Thailand into the trap considering the small size of their packages relative to their respective GDPs and their low debt/GDP ratios. However, it is true that a prolonged stimulus policy or a sequential stimulus one after another would create real problems of fiscal sustainability in the future.

6. Lessons and Implications

Although Asia was well aware of the GFC and instituted prudential fiscal and monetary policies accordingly, the impacts of the GFC nonetheless stunted Asia's economic progress in 2009. As for the first line of defense, both the Thai and Indonesian economies were well guarded by low budget deficits, low public debts, and sufficient capitalization in the banking system with insignificant amounts of collateralized debt obligations and credit default swaps in the financial sector. However, when the GFC went across Asia, the degree of its impacts varied depending on the export dependency of each economy. Thailand, which was dominated by manufacturing exports, experienced a deep reduction in export volumes. Indonesia, which basically exported primary commodities, for example, oil, gas and agricultural products, suffered from declining export prices.

No matter what the degree of the impacts would be, the countries in Asia decided that a crisis of this size required a domestic fiscal or a fiscal and financial stimulus policy. Indonesia chose to focus on income tax cuts, adding to the larger than expected fiscal deficit due to the built-in stabilizer. These policy responses seemed to sufficiently sustain domestic demand during the crisis. Moreover, the income tax cuts, in the case of Indonesia, provided a better stimulus, compared to typical expansionary government expenditure. In contrast, Thailand chose to implement broad-based fiscal stimulus measures which were biased toward expanding fiscal expenditure through the Stimulus Packages 1 and 2 (SP1 and SP2). In the case of Thailand, the impact of the GFC was mainly on low income groups and labor, most of whom did not earn enough to reach the lowest income tax bracket. These groups will not benefit from a lower income tax rate. Therefore, the government decided to increase government transfers and create economic activity aimed directly at the poor and the potentially unemployed persons. It was a natural policy choice to cushion the slow down in domestic demand and to reduce the income disparity problem. It is estimated that the SP1 and SP2 induced increases in GDP in 2009 of 1.26% and 0.11%, respectively. The stimulus measures prevented Thailand from experiencing further economic contraction in the year 2009.

Generally, it is of the utmost important that every country needs to prepare for the worst external impacts by instituting prudential macroeconomic policy. The well guarding of the maximum fiscal deficit level, as in the case of Indonesia which instituted an upper bound for fiscal deficit of 3% of GDP, the Maastricht criteria, and the

commitment not to produce public debt above 60% in the case of Indonesia and Thailand, proved to be a prudent fiscal policy for both countries. It provided comfortable space for fiscal stimulus if a future crisis occurs without jeopardizing the sovereign risk. The stimulus packages may look the same on the surface, but they should be engineered to fit the size and type of needs of each country in order to effectively reduce the external impacts of a shock at the minimum cost.

Specifically, however, the cases of Thailand and Indonesia provided a similar drawback, that is, the stimulus packages seem to create the 'new norm' for government expenditure pattern in the following years. The income tax cut in the case of Indonesia and pro-poor government expenditure in Thailand did not become short-term policies as first planned. They were built into the budget in the following years. This raises the concern that the prolong crisis and continuing of fiscal stimulus would at the end defeat the fiscal prudential purposes.

Notes

- 1 The ASEAN 10 countries are Brunei, Cambodia, Indonesia, Laos PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.
- 2 The discussion on Indonesia draws on Basri and Rahardja (2012).
- 3 These figures refer to the total exports of goods and services in the national account as a percent age of GDP in 2008.
- 4 Using the disbursement of discretionary spending by the central government, our estimates of the impact of central government spending on GDP is similar to those found by the World Bank (2010).

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