ADBI Working Paper Series

Thailand’s Growth Rebalancing

Somchai Jitsuchon and
Chalongphob Sussangkarn

No. 154
October 2009

Asian Development Bank Institute

Somchai Jitsuchon is Research Director for Macroeconomic Development and Income Distribution, Thailand Development Research Institute. Chalongphob Sussangkarn is Distinguished Fellow of the Thailand Development Research Institute. The authors would like to thank Josef Yap, Suahasil Nazara, and other participants at the ADBI Conference on “Global Financial and Economic Crisis: Impacts, Lessons and Growth Rebalancing”, held on 22–23 April 2009 in Tokyo for useful comments and suggestions on an earlier version of this paper.

Suggested citation:

Somchai, J., and C. Sussangkarn. 2009. Thailand’s Growth Rebalancing. ADBI Working Paper 154. Tokyo: Asian Development Bank Institute. Available: http://www.adbi.org/working-paper/2009/10/06/3344.thailand.growth.rebalancing/

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

This paper reviews Thailand’s structural changes, the 1997 crisis experience, and recovery and lessons from the crisis. The paper then discusses the impacts of the subprime crisis on the Thai economy and the policy responses to date. The paper ends by discussing strategies to rebalance growth by reducing the dependence on exports as the main growth engine.

The recovery from the 1997 crisis left Thailand more dependent than ever on exports as the main engine of growth, with the ratio of exports to gross domestic product (GDP) increasing from a precrisis level of about 38% to about 65% recently. The lessons learned from the 1997 crisis led to a more risk-averse financial system, and this helped Thailand avoid the direct impacts of the subprime crisis. However, being highly dependent on exports, Thailand, along with other export oriented East Asian economies, is now heavily affected by the indirect impacts of the subprime crisis, especially in the export industries. Exports and GDP have dropped sharply over the past two quarters.

The government has been using fiscal stimulus and monetary easing measures to try to improve the economy. These measures are mostly short-term in nature, and if the subprime crisis is protracted, then the sustainability of the fiscal stimulus will be called into question. In the medium- to long-term, Thailand needs to move to a more balanced growth path, depending less on exports (although exports will still be important) and more on other, domestic sources of growth. The paper concludes by discussing a number of policy strategies that will contribute to a more balanced growth path.

JEL Classification: E65, F14, F30, F40 and O11

Contents

1. INTRODUCTION

This paper starts by reviewing Thailand's 1997 crisis and recovery experiences. Through macroeconomic mismanagement, by mid-1997 the country basically became insolvent in terms of not having enough useable foreign reserves to back up its foreign currency obligations, and had to abandon the basket peg and float the baht. Recovery was slow and was driven mainly by the export engine. Lessons learned from the crisis and postcrisis reforms led to a more risk-averse financial system, and this helped to shield the Thai financial system from the direct impacts of the subprime crisis. However, the indirect impacts through the trade channel have been very severe. The paper highlights the fiscal and monetary policy responses that have been carried out. It suggests that these measures are mainly short-term in nature and have not yet addressed the need to rebalance Thailand's growth path to be sustainable and less dependent on the export engine in the future. The paper ends by discussing some key strategies that could help Thailand achieve a more balanced and sustainable growth path.

2. CRISIS AND RECOVERY

As one of the most vibrant economies in the region for past several decades, Thailand has undergone continued restructuring of its economy. Starting from a resource-based agricultural economy in the 1960s, the country moved with considerable speed toward light industrialization. A policy shift to export orientation in the late 1970s brought about the fastest growing episode of the Thai economy from the mid 1980s to the mid 1990s. During this period, both exports (especially exports of manufactured products) and investment played major roles as engines of growth. A realignment of major currencies after the Plaza Accord was also regarded as a driving force behind this extraordinary growth. Unfortunately, the episode was also characterized by a bubble and massive speculation, where investments were made with little regard to sound and supportive economic fundamentals. It was only a matter of time before the whole structure would collapse, and it did in the economic crisis of 1997.

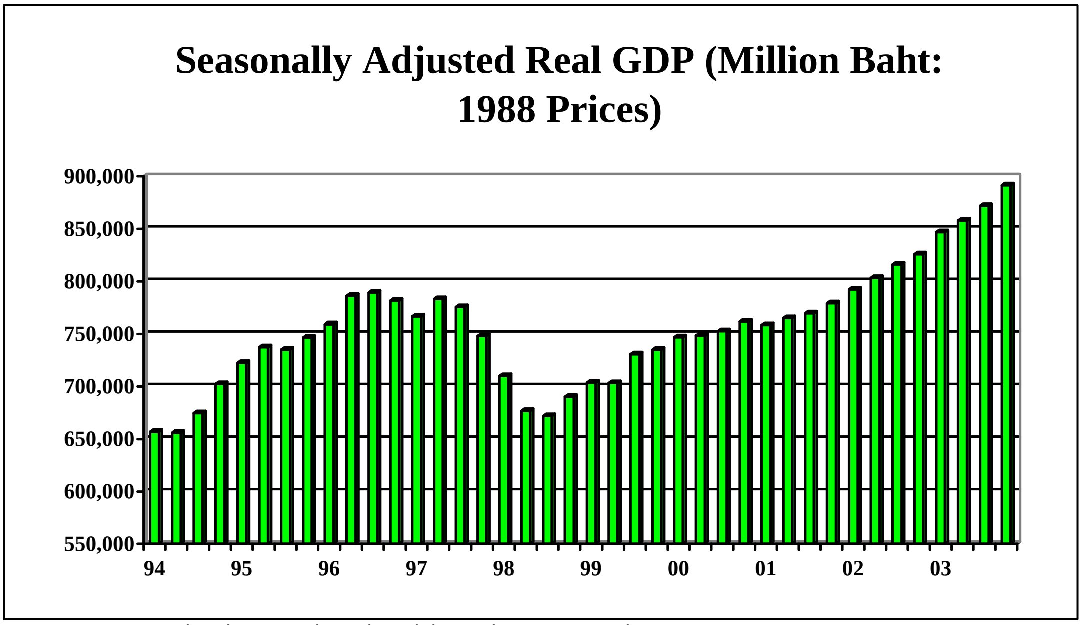
The economic crisis of 1997 not only put an end to the hyper-growth era, it has caused one of the most abrupt and profound restructurings of the Thai economy. Due to the authorities' futile attempt to defend the value of the baht, Thailand used up almost all of its foreign reserves and by mid 1997 became essentially insolvent, in the sense that its foreign reserves were insufficient to meet its foreign currency obligations. The baht was floated on 2 July 1997 and Thailand had to seek assistance from the International Monetary Fund (IMF).

The baht float resulted in a depreciation of more than 50% in the first six months. Firms that relied on foreign borrowing to finance their investments faced huge balance sheet problems and credit difficulties. Most of these firms could not service their debt which became nonperforming loans, and some corporations ceased to operate and vanished. Many of these corporations used to be among the country's leading firms that drove the economic growth. As a result, aggregate investment and private consumption fell sharply and the economy contracted by more than 10% in 1998.

Because of the large depreciation of the baht and the economic contraction, the current account turned from a precrisis deficit of about US$1 billion per month to a surplus of about US$1 billion per month toward the end of 1997. Thailand's foreign reserve position recovered fairly quickly. By the middle of 1999, the usable foreign reserves had increased to more than US$16 billion, from approximately US$2.8 billion in the middle of 1997, and Thailand did not need to draw any more from the IMF loan package.

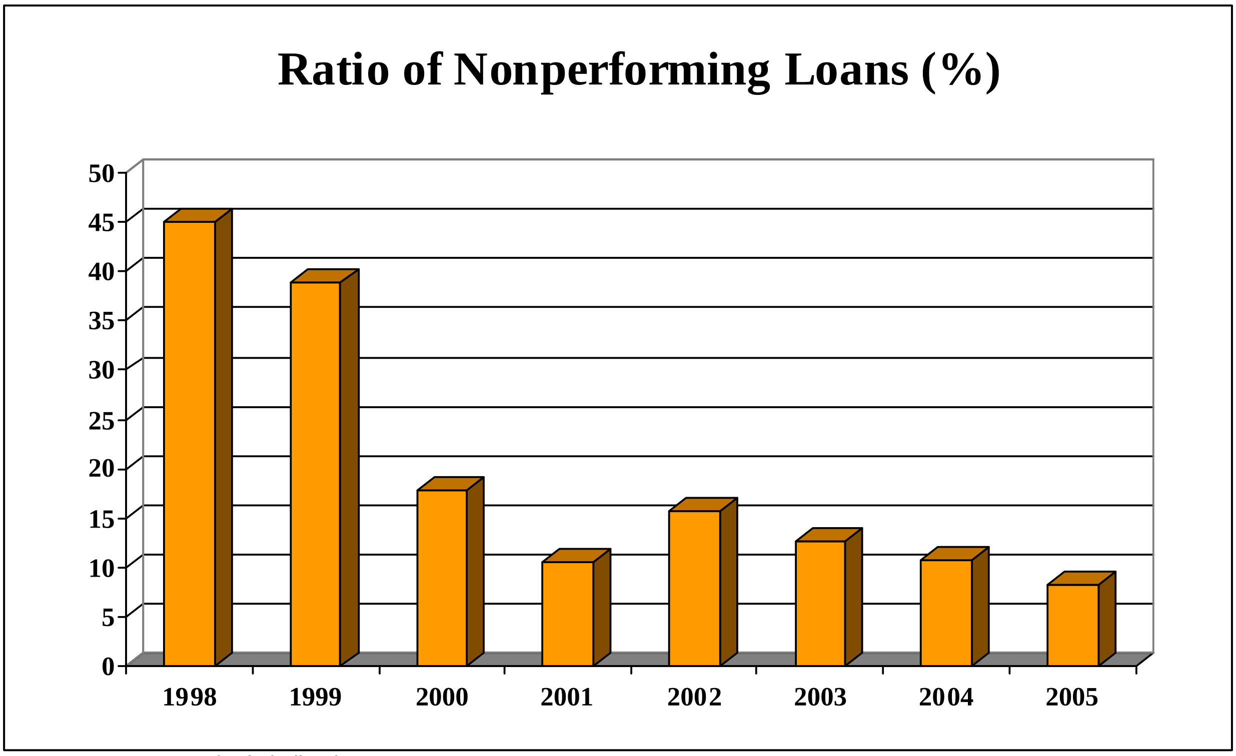
Even though the foreign reserve position recovered fairly quickly, it took much longer for an overall economic recovery to be achieved. From Figure 1, it can be seen that the economy bottomed out around the third quarter of 1998. However, it took almost five years before output recovered to its precrisis peak. It took even longer to clean up non-performing loans in the financial system. After the crisis, the ratio of nonperforming loans in the financial system jumped to almost 50% by the end of 1998 (Figure 2). It took about eight years after the onset of the crisis before the NPL ratio declined below 10%.

Figure 1: Real GDP Trend



Source: National Economic and Social Development Board.

Figure 2: Ratio of Nonperforming Loans in the Financial System

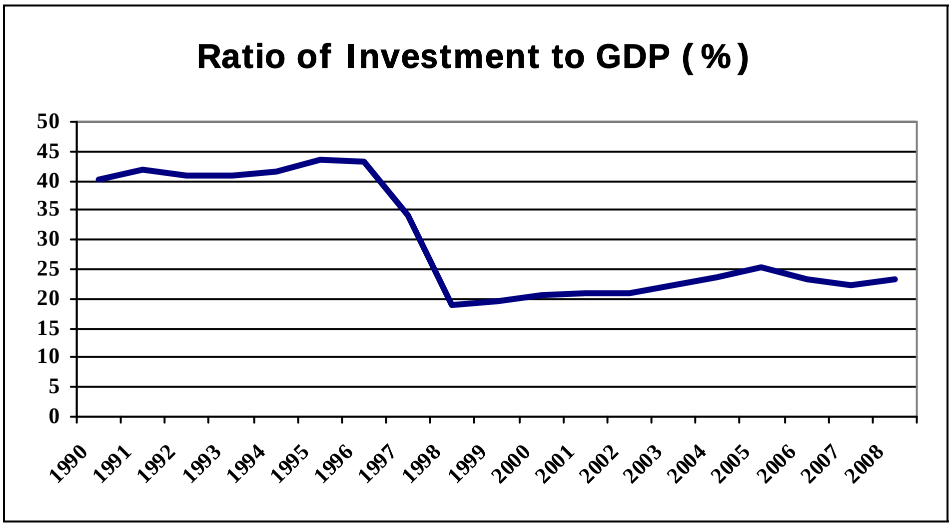


Source: Bank of Thailand.

With a slow recovery in the output level, there was a lot of excess capacity in the economy and little need for new private investment. At the same time, much of the corporate sector was going through debt restructuring and did not have the financial capacity for new investment either. Thus, investment declined substantially from the precrisis level and contributed little to the postcrisis recovery. The share of investment in GDP declined by more than half from the precrisis level; from above 40% precrisis to less than 20% in 1998 (see Figure 3). The ratio has remained less than 25% to the present day. While the precrisis ratio was too high, given the speculative bubble at that time, the current ratio is still much lower that what one might expect in a normal situation; for example, the average ratio from 1985-1990 was about 30%. The recovery from the crisis to a semblance of a normal economic situation took about eight years. Unfortunately, Thailand has since been hit by a period of political turmoil, and this has kept the economy from going back to anything like its normal growth path.

While domestic demand has played a relatively minor role in postcrisis growth, it has been the external sector (exports of goods and services) that has provided the growth impetus since the crisis. This is not too surprising. Thailand was an export-led economy prior to the crisis, so that with further stimulus coming from the depreciation of the baht, the export sector was able to easily respond and provided the impetus for the growth and recovery of the economy. Given that investment has not yet fully recovered, the export sector has continued to be the main engine of growth, until the recent adverse impacts of the subprime crisis.

Figure 3: Ratio of Investments to GDP, 1990-2008 (in %)



Note: calculated at current baht value.
Source: National Economic and Social Development Board.

Table 1: Share of Export of Goods and Services to GDP, Various Countries (in %)

Country	1990–1996	1997–2006	Differences[a]	2006
Indonesia	26.3	35.6	9.3	30.9
Republic of Korea	27.2	39.9	12.6	43.2
Malaysia	83.2	114.9	31.8	117.0
Philippines	32.6	50.2	17.6	46.4
Thailand	37.9	64.6	26.7	73.7

[a] In absolute terms, not percentage difference, ie basis points.

Source: World Development Indicators 2008.

The role played by the export sector was important in helping to cushion the impacts of the crisis on the poor. Higher domestic prices of agricultural commodities, a result of the currency depreciation, helped the rural sector to absorb some of the urban areas laid-off workers, particularly from the construction and manufacturing sectors. Other export sectors also helped in this regard. Even so, unemployment in both the rural and urban areas and poverty incidence increased in Thailand after the crisis.[1]

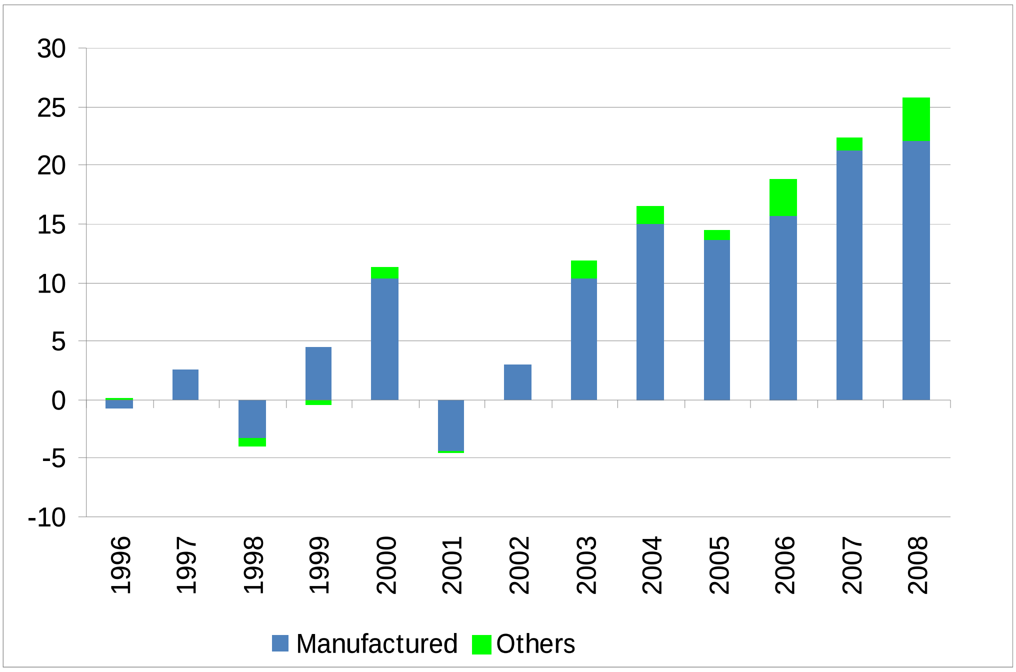
With exports as the main growth sector, the share of export of goods and services (including tourism) to GDP rose from an average of about 38% during 1990-1996 to an average of about 65% during 1997-2006, and increase of 26.7%. This is not uncommon among countries hit by the 1997 crisis as can be seen in Table 1. It must be noted, however, that Thailand's increased dependence on exports is more pronounced than most countries. For example, Korea's export share in GDP increased by 12.6 % and that of Philippines increased by 17.6% during the same period. The exception in Table 1 is Malaysia, with an increase in export share in GDP of 31.8% during the same period. It can be seen that Malaysia's economy is extremely open, with the ratio of exports to GDP greater than 100% in recent years.[2]

Most of the increase in merchandise exports in the postcrisis period came from the manufacturing sector (Figure 4). This is not that surprising, as the structure of Thailand's exports has been increasingly shifting toward manufacturing over the past three decades, and manufactured exports now account for about 88% of total exports. However, within manufacturing, there are different types of sectors, such as food, labor intensive sectors, more technologically based sectors, as well as resource based sectors, such as chemicals and petroleum. To better illustrate how Thailand's export structure has been changing over time, Figure 5 classifies merchandise exports into five categories; 1) Agriculture and Food, 2) Labor intensive manufacturing, 3) High technology manufacturing, 4) Resource based exports, and 5) Other exports. First, it can be seen that Thailand's export structure has been fairly diversified in recent years. Together, the labor intensive and high technology sectors account for about 60% of total exports. The other three main categories each account for about 14% of total exports. The diversity is further emphasized once it is noted that income from tourism is also about 10% of total merchandise exports.

[1] Other crisis affected countries in the region also had similar experiences (Sussangkarn, Flatters, and Kittiprapas 1999).

[2] Among countries in Southeast Asia, this is also the case for Singapore.

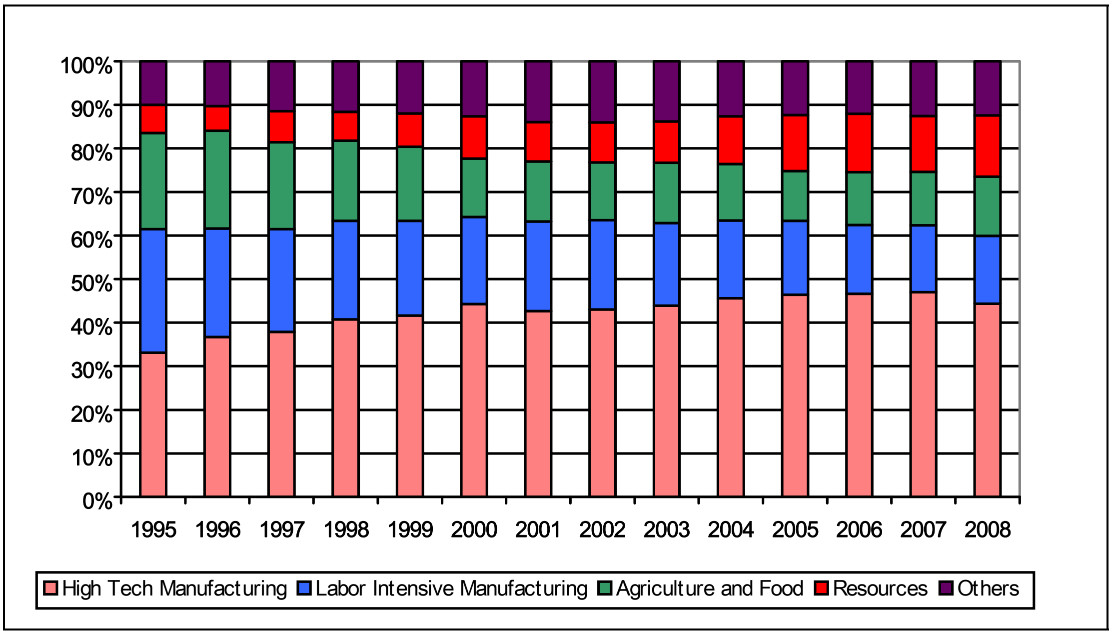
Figure 4: Changes in Export Value from Previous Year, 1996-2008 (billions US$[a])



a Calculated at current exchange rate for US$-baht.

Source: Bank of Thailand.

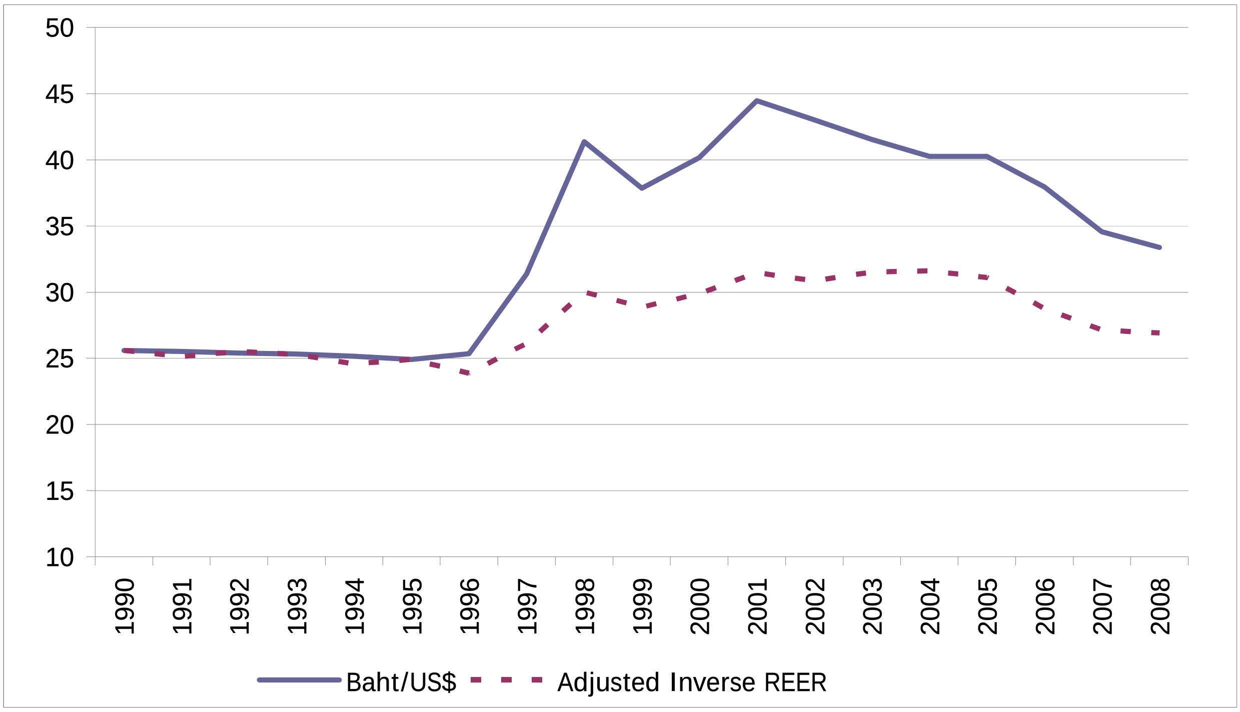
Figure 5: Structure of Merchandise Exports, 1995-2008 (in %)



Note: Calculated at current US dollar value.
Source: Bank of Thailand.

Since the mid-1990's, the total share of labor intensive and high technology manufactured exports has been relatively stable, at around or just above 60% of total exports. Between these two groups, however, the share of the high tech group has been increasing by about 10-15 percentage points. Actually, without the crisis, the share of the labor intensive group would have declined even more. Prior to the crisis, there was already a lot of talk about the labor intensive exporters as being "sunset" industries. The effects of fierce competition from cheaper producers, such as the People's Republic of China and Viet Nam, was already being felt prior to the crisis. In fact, intense competition was one factor that caused exports to decline by about 2% in 1996, compared with growth of more than 20% in each of the previous two years. This was one reason for the attack on the baht in early 1997, which eventually led to the crisis.

Figure 6: Movement of Exchange Rate, 1990-2008



Note: REER= real effective exchange rate. Inverse REER indicator is adjusted to have the same value (at 1990) as the US dollar.
Source: Bank of Thailand.

The crisis led to a substantially depreciation of the baht against the US$. While many other regional currencies also weakened, the real effective exchange rate of the bath still weakened by a significant amount for a number of years after the crisis (Figure 6). Particularly important also was the fact that the People's Republic of China kept its exchange rate fixed to the US$ after the crisis. These changes in the exchange rates gave a lifeline to the labor intensive export sectors in Thailand, and they have managed to keep going over the past decade or so. In the past couple of years, however, as the baht has appreciated from current account surpluses and large capital inflows, the labor intensive sectors have found it more difficult to compete again, even ignoring the recent impacts from the subprime crisis.

Apart from the labor intensive manufactured export sectors, the share of total exports for agriculture and food exports has also been declining. This depends to some extent on commodity prices, and in the two to three years prior to the sub-prime crisis, rising commodity prices have helped to slightly increase the export share of this sector, which is now around 13.5%.[3] Given that Thailand has a natural comparative advantage in agriculture, evidenced by being a top exporter of many agricultural products, such as rice, rubber, tapioca, sugar and frozen seafood, there is still room for future growth for Thai agriculture and food exports. There is a lot of potential for increasing value added from this sector, through improved quality control, value-added processing, packaging and marketing.

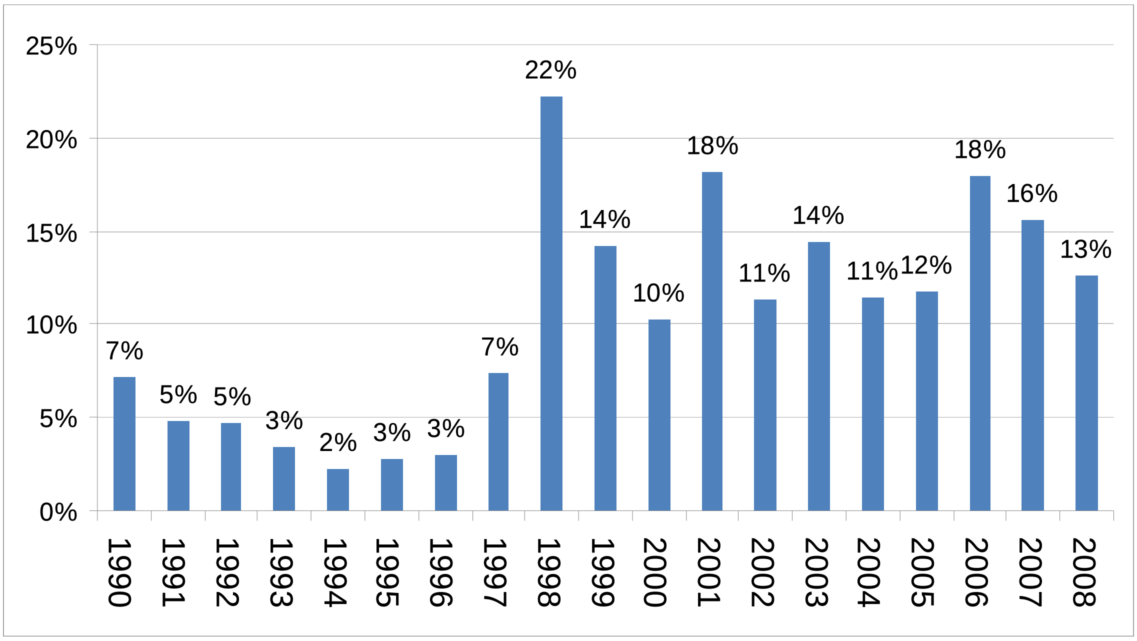
The largest export sector now is the high technology sector. This is in line with the need for Thailand to move up the technological ladder, as other countries with cheaper labor take over much of the labor intensive export market. Unfortunately, this is not a sector where

[3] Rising commodity prices, particularly oil, also led to the increased share of resource based exports (shown in Figure 5) in recent years.

Thailand has a natural comparative advantage. The Thai industrial corporate sector tends to be strong in areas where Thailand does have some natural comparative advantages, such as in food related sectors and in services (tourism related). For high tech products, local Thai companies do not have the technological capability to compete effectively with multinational corporations. Thailand has relied mainly on a strategy of attracting foreign direct investment (FDI) to develop various parts of the high technology sector. Thus, the high technology sector is driven mainly by foreign investment with some domestic Thai companies managing to link to the supply chain of these products. This strategy has been fairly successful in many sectors. For example, while some countries in Southeast Asia opted to go for the development of a "national car" a couple of decades ago, Thailand was very open to automotive investment from all the major companies. This has made Thailand the largest automobile producer in the region, with a particular niche in the pick-up truck segment, where Thailand is the second largest producer of pick-up trucks in the world after the US. Local companies have also been able to participate extensively in the auto parts industry and this has further increased Thailand's competitiveness in the auto industry.

Figure 7 shows the share of FDI in total investment. This share has increased after the 1997 crisis. This is a reflection of the decline in domestic investment from the excessive levels prior to the crisis. It is also a reflection of the continued inflow of FDI into Thailand. These are the investments that have been driving the high technology export sector as discussed above.[4]

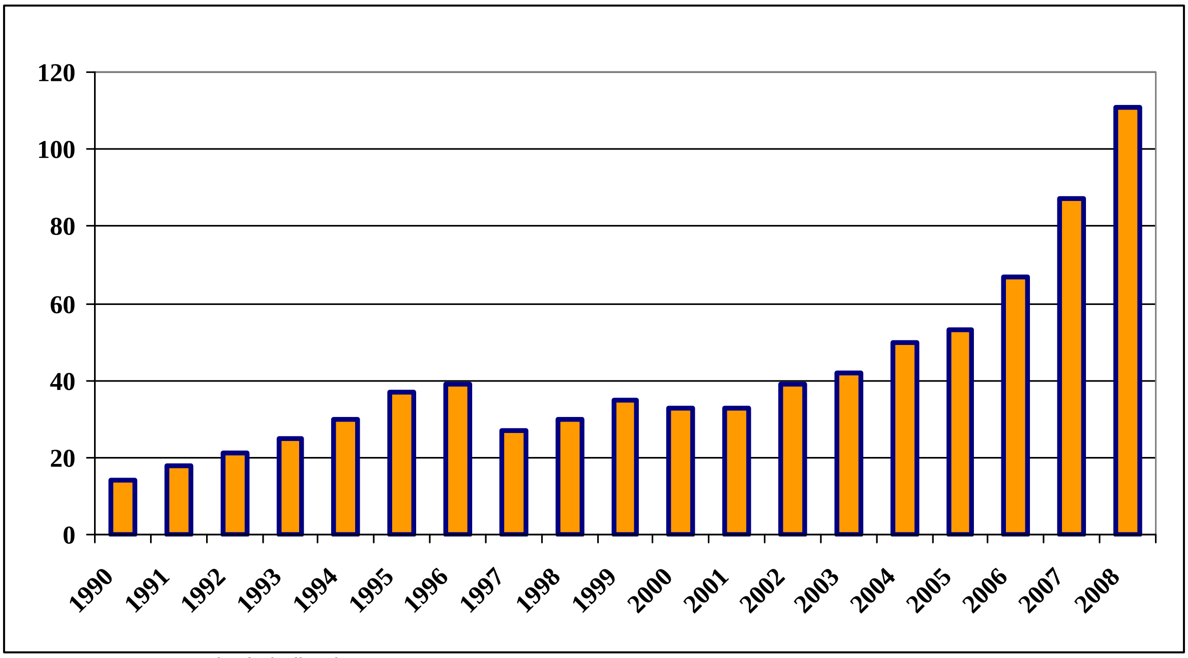
Figure 7: Ratio of FDI to Total Investment, 1990-2008



Note: Calculated at current baht value.
Source: Bank of Thailand.

[4] Much of the FDI inflows in the first two to three years after the crisis were not greenfield investment but came in to buy existing distressed assets, particularly in the financial sector.

Figure 8: Gross Foreign Reserves, 1990–2008 (billions US$)



Source: Bank of Thailand.

Given that exports have been driving economic growth after the crisis and investment has been sluggish, it is not surprising that for most of the postcrisis period Thailand experienced current account surpluses. Between 1998 and 2007, the only year Thailand did not have a current account surplus was 2005, when the rapid increase in energy prices led to a deficit. This also occurred in 2008; again due to a rapid rise in oil prices in the early part of the year as well as the indirect impacts of the subprime crisis on exports in the last quarter of the year.

In the first few years after the crisis, it was crucial for Thailand to accumulate foreign reserves. This was in order to recover from the near insolvency resulting from the futile attempt to defend the baht, and also to be in a position to exit from the IMF program. Thailand managed to exit the IMF program around mid-1999, and fully repaid all the money that was borrowed from the IMF package in 2003. Since then, foreign reserves have been increasing rapidly (Figure 8). This was not really a conscious decision to accumulate reserves as such, but more due to the need to prevent the exchange rate from strengthening too much in order to protect the export engine, which has basically been Thailand's only growth engine after the crisis.

The challenge for exchange rate management became particularly acute in 2006 because of large capital inflows into the country. Although the central bank has been buying foreign currencies to ease the strengthening trend of the baht, the baht strengthened from about 41 baht/US$ at the end of 2005 to about 37.6 baht/US$ at the end of the third quarter of 2006. The capital inflow became even more rapid in the last quarter of 2006. Between the beginning of October 2006 and the middle of December 2006, the central bank intervened extensively in the foreign exchange market to buy up foreign currencies that were flowing into the country. It was buying an average of about US$800 million per week for 10 consecutive weeks. Yet, the baht strengthened at the most rapid pace ever, reaching about 35.2 baht/US$ by the middle of December 2006.

Because of the baht appreciation, the authorities were under tremendous political pressures from businesses to intervene more and more. The loss of export competitiveness through currency appreciation from rapid capital inflows was seen to be unrelated to any economic fundamentals, and as exports were Thailand's main engine of growth, the loss of this engine would have wide implications for the economy as a whole. So on 18th December 2006, Thailand imposed capital controls on capital inflows by copying measures that Chile had used in the early 1990's. Inflows were subject to a 30% unremunerated reserve requirement (so only 70% of the inflows could be invested) and the capital inflow needed to be kept in the country for at least one year, otherwise there will be fine equal to 10% of the capital amount. The next day the stock market crashed by 15% and the authorities had to reverse the controls on those inflows coming to invest in the stock market.

In hindsight, it seems clear that the authorities did not really understand that a requirement to keep the capital inflow in the country for at least one year is extremely severe, because very few investors can afford to park their money in one place for that long without the flexibility to move it if needed. The inflows also created a lot of distortions and also a lot of administrative challenges for the authorities, particularly when different inflows are treated differently and there are possibilities of leakages of one type of inflow into another. One can argue that when a country has to deal with very large capital inflows (or outflows), capital control measures should not be ruled out per se, as they can provide an added valuable instrument for the authorities to manage the stability of the economy. However, it is very dangerous to simply copy measures that may have worked for some country at some point in the past. The financial system changes so rapidly and financial globalization is now much more extensive than in the early 1990's, so measures that might have worked then may be counter-productive in the present day. If capital controls are to be introduced then they must be very well designed and the authorities must be very sure of how the market will respond to them. In the Thai case, the capital controls were eventually removed in March 2008 when conditions were more favorable, as the trade balance turned into deficit following large increases in world oil prices.[5]

3. LESSONS FROM THE 1997 ECONOMIC CRISIS

There are many important lessons that can be drawn from the 1997 crisis.[6] The most important is probably that while financial globalization can bring benefits from better access to financial resources, it can also bring about a lot of volatilities and risks, and needs extremely prudent management. Given Thailand's past development successes based on real sector globalization (through trade and FDI), the country was regarded as an example of the so-called "East Asian Economic Miracle" (World Bank 1993), and was praised internationally as being a model that other countries should emulate. Given these successes, the authorities may have become overconfident, and embarked on policies of financial liberalization in the hope of turning Bangkok into a major financial center for the region. Unfortunately, there was insufficient understanding of the implications of financial liberalization, and an incorrect policy regime was pursued and this eventually led to the crisis.

The crucial mistake of the authorities was to liberalize capital flows while sticking to a fixed exchange rate system and also trying to pursue an independent monetary policy; the classic Mundell "impossible trinity" (Mundell 1963). Thailand had successfully used a fixed exchange rate system since the end of the Second World War, and this had contributed to economic stability and growth for many decades. However, these successes were mostly achieved under an environment of modest financial capital flows. The mistake was to stick to this old paradigm in the 1990's when capital flows became very large and very volatile.

Prior to the crisis, the baht was fixed to a basket of currencies with the US dollar having by far the largest weight in the basket. This resulted in a fairly stable baht/US$ rate for many years prior to the crisis. However, Thailand also tried to pursue an independent interest rate policy. This can be seen from the gap between the Thai overnight inter-bank rate and the US overnight federal funds rate. This gap averaged about 4% between January 1989 and June

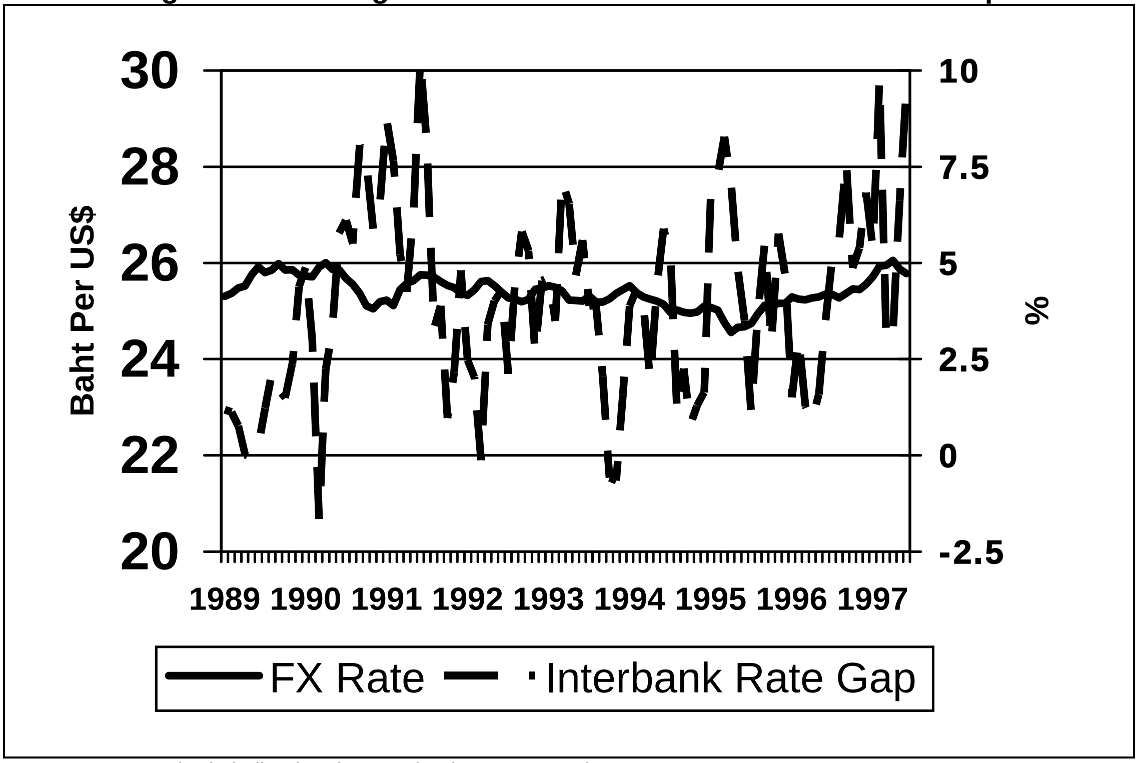
[5] The new Bank of Thailand Act that was passed in 2006 also provided additional instruments for the Bank of Thailand to use for more effective sterilization of exchange rate interventions.

[6] See Sussangkarn and Vichyanond (2007) for detailed discussions of the crisis and lessons.

1997 (the last month before the float of the baht), and sometimes reached up to 10% (see Figure 9). With liberalized capital flows, this inevitably led to a large amount of capital flows into Thailand.

Most of these capital flows came in the form of external debt, which rose rapidly from US$ 29 billion in 1990 (34% of GDP) to US$ 108.7 billion in 1996 (59% of GDP). Even more dangerous was the fact that much of this debt was short-term debt (with a maturity of less than one year).[7] By the end of 1996, the total short-term foreign debt was about US$ 47.7 billion, which was larger than the amount of official foreign reserves at the time which was about US$ 38.7 billion. Even after taking into account the foreign assets of the banking system, the total foreign assets (official and private) were less than the amount of short-term foreign debt of the country. If these short-term foreign debt were not rolled over, there would not be enough foreign assets in the country to service these debt.

Figure 9: Exchange Rates and the Thai-US Interbank Rate Gap



Source: Bank of Thailand and US Federal Reserve Bank.

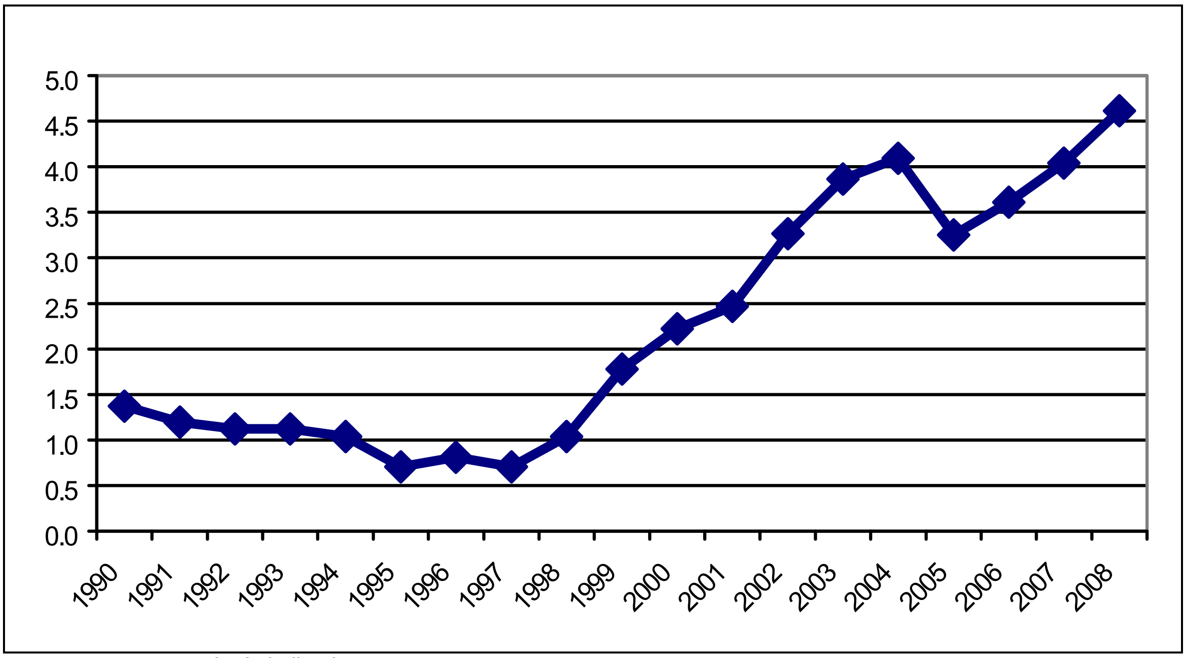
These large capital inflows fueled the economic bubble in Thailand. There was excessive investment in non-trade sectors, particularly real estate. There was also a lot of crony capitalism. Persons sitting on boards of financial institutions also sat on many boards of client companies. Banks were lending to clients without sufficient scrutiny. One bank that eventually failed, lent almost 60% of its total lending to projects initiated by relatives and friends of the owners and managers. Clearly, corporate governance as well as risk management needed to be significantly improved in order to avoid a similar crisis in the future.

The authorities were also viewing the economic situation with the wrong paradigm. As capital flows increased, the foreign reserves also increased, as the foreign borrowings were converted into local currency to invest in the country. The authorities were viewing this as a sign of strength and were looking at the adequacy of foreign reserves in terms of the number of months of imports that they covered (a current account paradigm). The fact that foreign reserves were also needed to cover foreign debt, particularly short-term debt, (a capital

[7] This is related to the provisioning requirement of the Basel Capital Accord; see Sussangkarn and Vichyanond (2007).

account paradigm) was not well-understood. This was a painful lesson from the crisis. After the crisis, the country's short-term debt has been carefully monitored to make sure that the country does not return to a situation anything like the precrisis one. The ratio of foreign reserves to external short-term debt has increased substantially, to almost five to one at the end of 2008, from less than one to one just before the crisis (see Figure 10).

Figure 10: Ratio of Foreign Reserves to External Short-term Debt



Source: Bank of Thailand.

To avoid a similar crisis, economic management needs to be much more prudent. The authorities need to understand and look out for various risks to the economy. Major policy changes (like financial liberalization prior to the crisis) need to be carefully studied to understand the full implications and risks involved. It is also very important to carry out appropriate sequencing of policy changes.

Another important lesson is the need to improve the country's social safety nets to be able to respond appropriately to an economic crisis. After the crisis, it was very apparent that the social safety nets available at that time were very inadequate. Laid off workers had little protection, and fiscal expenditures to cushion the impacts could not be dispersed quickly enough. Borrowing from multilateral organizations, such as the World Bank and the Asian Development Bank, could not be dispersed quickly enough because of many rules and regulations on procurement and disbursement imposed by the lenders. On this issue, Thailand was very grateful that the Japanese government came forward with the so-called Miyazawa Initiative, providing financial assistance in a way that could be disbursed very quickly. Since the crisis, the system of social safety nets has been improved in many areas, most notably in the areas of universal healthcare scheme and the unemployment insurance under the Social Security System.[8]

[8] See Chandoevwit (2006) and NaRanong and NaRanong (2006) for discussions of the social security system and the healthcare scheme.

4. IMPACTS OF THE SUBPRIME CRISIS ON THE THAI ECONOMY

In the current subprime crisis, it is fortunate that the Thai financial system was not directly affected in a significant way. One small bank had to be re-capitalized because of exposures to toxic assets. Most other banks avoided exposures to these assets or were exposed just marginally. There were certainly people going round trying to sell the various Collateralized Debt Obligations (CDOs) to financial institutions. That the Thai financial system avoided falling prey to these toxic assets must be related to the lessons that have been learned from the 1997 crisis. From the painful experiences of that crisis, the Thai financial sector is now much more risk averse than before. Also being a less sophisticated financial system than those in the West, there was little understanding of what these debt instruments were, and because of the risk aversion, financial institutions avoided them.

The stock market was of course affected in line with stock markets around the world. As financial markets in the advanced economies experienced liquidity crunches, there was a massive liquidation of liquid investment assets in the emerging markets and a massive outflow of capital. Fortunately, Thailand had more than sufficient foreign reserves to cover for this capital outflow, and depreciation pressure on the exchange rate could be managed fairly easily. Other countries were not so fortunate, and some countries experienced a severe depreciation of their local currency. This shows that it is no longer sufficient to think of having enough foreign reserves to cover the current account and short-term debt; reserves also need to cover other contingent liabilities, such as foreign holdings of stocks and bonds that can be quickly liquidated, converted to foreign currency, and then taken out of the country.

Even though the financial system managed to avoid the direct impacts of the subprime crisis, the country is now seriously affected by the crisis indirectly through the trade channel. This has become very apparent since the last quarter of 2008. Prior to that, Thai exports were still growing rapidly, at more than 20% year on year in US$ value. Starting in November 2008, export growth turned negative and has been negative ever since.

As an economy highly dependent on export of goods and services (as was discussed earlier), the Thai economy has now been hit hard by the global recession and the resulting decline in world trade. After exports grew by more than 20% in the first three quarters of 2008, exports declined by about 9.4% in US$ value in the fourth quarter of 2008 (Table 2). Real GDP declined by 4.2% in that quarter, making the overall growth for 2008 to be a mere 2.6 %, much lower than the forecasts of around 4-5% before the impacts of the subprime crisis were evident. The picture was even worse in the first part of 2009. Exports fell by about 20% in the first quarter of 2009, and real GDP dropped by 7.1%, which is getting close to the level of declines seen after the onset of the 1997 crisis.

Table 2: Exports and Real GDP Growth Rates (%)

Years[a]	Export Growth (Year-on-year growth in %;Nominal in US$)	Real GDP Growth (Year-on-year growth in %)
2006	18.7%	5.2%
2007	17.0%	4.9%
2008 H1	23.3%	5.6%
2008 Q3	28.4%	3.9%
2008 Q4	-9.4%	-4.2%
2009 Q1	-19.9%	-7.1%

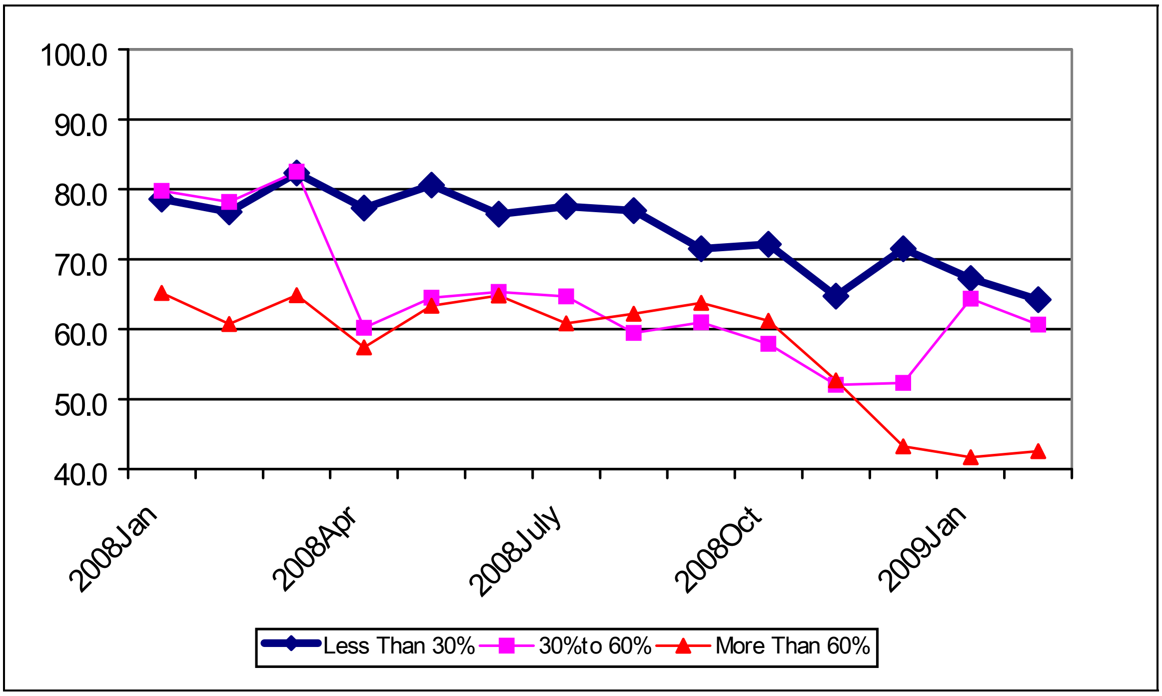
a H= Half year; Q= Quarter year.

Sources: Bank of Thailand and the National Economic and Social Development Board.

One of the indicators that points to a shrinking economy is the heavily depressed capacity utilization of manufacturing productions. Figure 11 shows that capacity utilization rates fell across-the-board since the beginning of 2008 and particularly since around the end of the third quarter of 2008. As expected, the firms or industries more dependent on the export market experienced deeper production declines. Among highly export dependent firms (exports greater than 60% of total sales), capacity utilization is now less than 50%. Other indicators also move in the same direction; with private investment, private consumption, employment, among others, all falling.

Figure 11: Capacity Utilization Rate of Manufacturing,

Firms Classified by Export Ratio to Total Sales (%)



Source: Bank of Thailand.

Obviously, the growth prospects of the Thai economy will depend on the prospects for growth and trade at the global and regional level. While there are signs every now and then that the western economies may begin to bottom out in the not too distant future, overoptimism about this prospect would be rash. As in the case of the 1997 crisis, even if the economy bottoms out, this does not mean that the problems are over. As indicated earlier, Thailand bottomed out five to six quarters after the start of the crisis, but it took five years before output returned to precrisis level. The decline in the nonperforming loan ratio to less than 10% took even longer; about eight years. Thus, in the case of the subprime crisis, a quick return to business as usual appears to be out of the question.

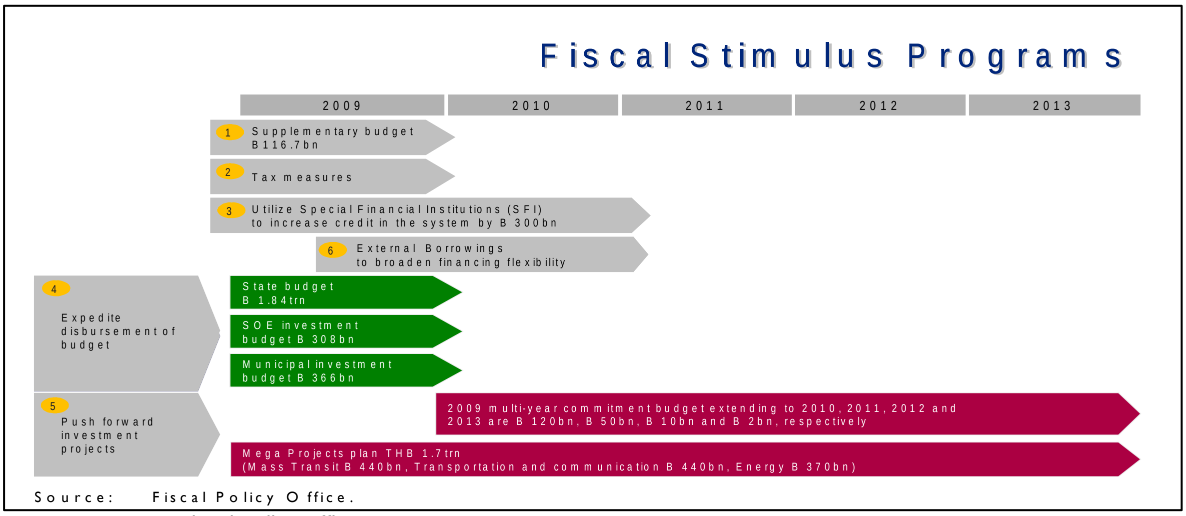
5. POLICY RESPONSES

Like governments all around the world that are facing the negative consequences from the subprime crisis fallout, the Thai government has responded to the crisis with various expansionary fiscal and monetary policies.

5.1 Fiscal Stimulus Programs

There have been six fiscal measures to stimulate the Thai economy, as shown in Figure 12. Increased government spending and tax cuts are the most common measures. A special Mid-year Budget Act amounting to baht116.7 billion was passed in early 2009, shortly after the current government took office. The details of this mid-year budget are in Table 3. There are two cash transfer programs amounting to around baht28 billion (about US$800 million); baht18.9 billion for living cost subsidies to low-income households and baht9 billion as supplementary income for the elderly).

Figure 12: Fiscal Stimulus Programs



Source: Fiscal Policy Office.

Table 3: Additional Mid-year Supplementary Budget (Millions baht)

Projects / Expenditure items	Amount
Total mid-year supplementary budget	**116,700.0**
Economic recovery and confidence restoration	**37,464.7**
1.1 Living cost subsidy for low-income earners and government officials	18,970.4
1.2 Extension of five measures to reduce living costs	11,409.2
1.3 Water resources for farmers and agriculture	2,000.0
1.4 Road construction in villages and rural area	1,500.0
1.5 Commercial funds for low income earners	1,000.0
1.6 Tourism promotion	1,000.0
1.7 Small water resource and water management projects	760.0
1.8 Small- and medium-size enterprise promotion	500.0
1.9 Economic confidence restoration and national image promotion	325.0
Revenue creation, Quality of life enhancement and social security	**56,004.8**
2.1 Free education program for the first 15 years	
2.2 Social development fund	19,001.0
2.3 Monthly allowance for senior citizens	15,200.0
2.4 Unemployment reduction and labor potential promotion	9,000.0
2.5 Health care promotion	6,900.0
2.6 Civil servant and police officers housing scheme	3,000.0
2.7 Clinic and health station development	1,808.0
	1,095.8
Expenditure under emergency circumstances	**4,090.4**
Treasury cash repayment	**19,139.5**

Source: Fiscal Policy Office, Ministry of Finance.

Table 4: Tax Measures

Sector	Policy Details
Individual Taxpayers	Expand minimum taxable income from baht60,000 to baht1 million, which would be subjected to 0.5% tax rate
Community Enterprises	Income tax exemption for community enterprises with an annual income of less than baht1.8 million (previously baht1.2 million) for 58,000 community enterprises nationwide (only for income received between 2009 to 2010)
Venture Capital	Income tax exemption for any gains resulting from a transfer of stock from a small- and medium-sized enterprise (SME) to venture capitalists (only applicable for SMEs with assets worth less than baht200 million, or those with less than 200 workers)
Real Estate	Personal income tax allowance of up to baht300,000 for houses or condominiums purchased or transferred in 2009 and tax allowance of up to baht100,000 for mortgage interest payment.
Tourism	Double tax deduction for conference and meeting expenses incurred in Thailand
Investment Fund	Exemption of income tax for dividend income and capital gains from sales of SME stock until 2012
Debt Restructuring	Exemption of income tax and stamp duty arising from debt restructuring that takes place in 2009
Mergers and Acquisitions	Exemption of income tax from merger or acquisition of businesses that takes place in 2009

Source: Fiscal Policy Office.

Both theory and the experience of some low-income countries indicate that cash transfers are among the most effective ways to both stimulate the economy as well as mitigate the negative impacts of a crisis on the poor and other vulnerable groups. One caveat is that the transfer must be made to the right target groups, that is, any leakage to ineligible recipients, such as high-income people, must be kept to a minimum. However, the two transfer programs implemented by the current government do not strictly meet this criterion.

The living-cost subsidies were given to private employees included in the Social Security System who earn less than baht15,000 per month. Since all Social Security System workers receive wages at or above the minimum wage, and the minimum wage is about twice the official poverty line, it is likely that the subsidies did not to go the very poor, who account for about 10% of the total population. Most of the poor are those working in the informal sector or in agriculture, and are not part of the Social Security System. As the subsidy tended to benefit urban low-income workers, albeit not the very poor, the stimulating effect could still be high, as the marginal propensity to spend among the urban low-income group is likely to be the highest compared to other urban population subgroups. The same leakage problem occurs with the monthly allowance for the elderly. Because the allowance is universal (given to rich and poor alike), most of it will benefit non-poor elderly people.

Table 4 summarizes tax measures that have been initiated in response to the current crisis. The total tax loss from these measures is estimated at around baht40 billion. The effectiveness of these measures in terms of stimulating the economy is expected to be lower than direct government transfers, as most taxpayers are not poor. Also, some sector-specific tax incentives, such as those in real estate, are more likely to work only if the general economy is already on the recovery path.

5.2 Monetary Easing

Again, like in most other countries, monetary policy has also been eased in response to the looming economic crisis. In fact, the monetary authorities (the Bank of Thailand) switched its position quite abruptly from a fear of inflation following the rapid hike in fuel and food prices in early 2008 to a serious concern over an economic downturn in the fourth quarter, when indirect impacts from the sub-prime crisis began to hit Thailand's export. The Monetary Policy Committee (MPC) decided to lower the policy interest rate on 3 December 2008 by 100 basis points. By the end of May 2009, there have been three other interest rate cuts, amounting to another 150 basis points.

Most economists agree that loose monetary policy can only play a secondary role in revitalizing an economy suffering from rapidly shrinking external demand. The main cause of the problem is from vanishing orders from overseas, and lowering the financial cost will not do much to help. Actually, the main problem for most firms now is access to credit rather than the cost of credit. With the downturn, banks became much more stringent about lending. Existing loans may be trimmed or recalled completely and getting a new loan becomes very difficult. Loans from abroad, which were a part of the rapid capital inflows a couple of years ago, have also dried up as liquidity problems hit the financial system in the advanced economies. Thus, getting credit to those that can make productive use of it is probably the key problem at this time. This is not an easy problem to solve, as it is not straightforward to separate those who can make productive use of the credit from those that will quickly be added to the list of nonperforming loans for banks. Of course, one area that will really benefit from the low interest rates is the fiscal cost of government spending, as the government will be able to finance its rapidly growing debt relatively inexpensively.

Table 5: Monetary Policy Decisions

Decision Dates	Announced Policy Interest Rate (%)	Decision
16-Jan-08	3.25	Hold
27-Feb-08	3.25	Hold
9-Apr-08	3.25	Hold
21-May-08	3.25	Hold
16-Jul-08	3.50	Raise 25 bps.
27-Aug-08	3.75	Raise 25 bps.
8 Oct 08	3.75	Hold
3-Dec-08	2.75	Cut100 bps
14-Jan-09	2.00	Cut 75 bps
25-Feb-09	1.50	Cut 50 bps
8 Apr 09	1.25	Cut 25 bps
20 May 09	1.25	Hold

Source: Bank of Thailand.

One area of monetary policy which is likely to become an issue of heated debate is exchange rate management. It is natural for an economy like Thailand, where exports are such an important part, that when problems arise for the export sector, such as rapid capital inflows leading to significant appreciation of the currency back in 2006/07 or contraction of export demand as in the current situation, there will be calls from the export sector (which is very vocal) for a weaker exchange rate. This influence is reinforced by the fact that there are countries in the region, countries that can be regarded as competitive with Thailand for certain products, whose currencies have weakened considerably as a result of the large withdraw of capital resulting from the sub-prime crisis, such as South Korea, Indonesia and India. Some of these countries have fundamental problems of lack of enough reserves to back up the short-term debt as well as the contingent liabilities on reserves as discussed earlier. However, what ever the reason for the large depreciation of other countries' exchange rates, the business sector can make a persuasive case that they should also be helped by weakening the local currency.

There is, therefore, a danger of the whole region, which is generally dependent on the export engine, descending into an episode of competitive depreciation. This would benefit no one. It would also make it much more difficult to make the adjustments needed to rebalance the region's growth path, to one less dependent on exports, with an increased role for domestic demand in economic growth. For example, public infrastructure investment, which will be a very important component of growth rebalancing for many economies, will become much more costly because it normally has a high import content.

5.3 Limitations

Most of the policy responses to the crisis are directed to the short-term need to shore up the economy in the face of the economic contraction. Fiscal injections are expected to generate greater domestic consumption, which will ease the pain of domestic producers and consumers. Not much attention has been paid to how to make the fiscal injections sustainable. Even less thought has been given to what a new "rebalanced growth path" for the country might look like and how it could be achieved.

Policymakers seem to hope that the current crisis will be short and that fiscal injections can provide a temporary relief before everything returns to normal. As indicated earlier, this is likely to be wishful thinking. Even if the US and other western economies hit bottom this year, it may take a while before full recovery is achieved. And it is unlikely that a full recovery will mean that East Asian exports can play as big a role in East Asian economies as it did before the crisis. Thus, some fundamental restructuring of the Thai economy, as well as those of other East Asian countries, will be necessary in order to pursue a new growth path which is less dependent on exports. This will certainly not be easy and cannot be achieved in the short-term.

If recovery from the crisis is long and drawn out, then the sustainability of the fiscal injections will become a major issue. If growth depends mainly on fiscal injections, then to be effective, larger and larger injections will be needed each year. If US$10 billion is injected this year and the same amount is used next year, then this is basically zero growth. So if a country were to rely on fiscal injections to generate growth over an extended period, then it could lead to a massive build up of public debt, even though it may have started the crisis with a fairly healthy fiscal position. Once the financial situation begins to become normalized, interest rates could shoot up, as countries around the world all need to borrow to finance their fiscal injections. This could become a major impediment to growth for a sustained period, as many countries that went through the debt crisis in the aftermath of the second oil shock know only too well.

6. STRATEGIES TO REBALANCE GROWTH

For an export dependent economy like Thailand, the current crisis may be harder to deal with than the 1997 crisis. As discussed earlier, Thailand exported her way out of the 1997 crisis, assisted by the depreciation of the baht. This was a natural recovery path for the country, as Thailand, in a similar way to most of the other East Asian economies, is used to the export-led growth path. East Asia has followed the export-led development path for decades, following the successful example set by Japan. This was regarded as a "flying geese" pattern of development (Akamatsu 1962).

During the 1997 crisis, the advanced economies were not affected much (with the exception of Japan which has extensive economic links with other parts of East Asia). Thus, the main export markets for East Asian products could provide the demand for increased exports from East Asia; from both the crisis affected countries as well as from newly emerging production powerhouses, such as the People's Republic of China.

The current situation is very different. The crisis has led to a collapse of world demand for exports, which hits at the very heart of the East Asian model of export-led growth. Exporting their way out of the current crisis is out of the question for East Asian economies. Indeed, many economists view the global imbalance—with East Asia exporting its way to growth, creating a huge balance of payment surpluses, and vast accumulation of reserves, while the US runs bigger and bigger deficits—as being a partial cause of the subprime crisis and subsequent credit crunch. Of course, while the global imbalance may have provided excessive liquidity to the financial markets in the West, a much more fundamental cause of the subprime crisis, however, is the regulatory failure in the West, particularly the US, that allowed a huge explosion of toxic assets, built up from subprime mortgages, throughout the financial system.

It is likely that a sustainable solution to the current crisis will involve not only a strengthening of financial regulations everywhere, but also better mechanisms to prevent a build up of vast global imbalances, as occurred in the past decade. However, correcting such deep-rooted global imbalances takes time, as many major economies or economic groups will have to undergo substantial restructuring. For example, economists know that the US economy must consume and import less and export more, while East Asia and other major trading partners to the US must do the opposite. However, switching from importing to exporting, and vice versa, does not involve just changing numbers on paper, but real adjustments at a firm level and other microeconomic policy changes, such as retraining laborers to be able to shift to new economic sectors, which may require very different skills.

Another important change that is likely to be needed in correcting the global imbalances is a substantial realignment of major currencies. The US dollar certainly needs to be much weaker against its major partners' currencies. Again, this is not an easy adjustment to make. East Asia is certainly facing a huge dilemma on this. On the one hand, not implementing changes that would prevent a reemergence of huge global imbalances in the future runs the risk that a future financial crisis will hit East Asian economies severely, as in the current crisis. On the other hand, working to bring about a realignment of currencies, particularly a significant weakening of the US$, will mean that East Asia will need to accept a book loss on the value of the huge amount of US$ denominated assets that are held by the region.

Whatever might be the solution to preventing a crisis like the subprime crisis in the medium-to long-term, it is clear that East Asia has been forced to make a significant adjustment to its development strategy in the short- to medium-term. In the short-term, countries have been making sizeable fiscal injections to try to shore up the economy, hurt by the collapse of the export engine. The Thai short-term response was discussed earlier. In the medium-term, some form of growth rebalancing will be necessary. This does not mean that exports will no longer be important to East Asia, as it is very unlikely that much of the production base that feeds the global consumer demand for manufactured products can shift back to the advanced economies, or that another region could replace East Asia in this production role. What rebalancing means is that East Asia needs to rely less on the export engine and supplement it with other engines based on domestic demand. This, again, is not that easy to achieve. It will require a significant restructuring of various economies, and also the implementation of appropriate policies to make sure that domestic demand driven growth, such as through investment, does not generate large economic bubbles and current account deficits similar to what occurred prior to the 1997 crisis.

In the case of Thailand, one can say that the economy has not grown in a well-balanced manner since the 1990s. During the economic bubble of the 1990s, growth was driven by excessive and speculative investment. When the 1997 crisis occurred, Thailand then had to rely too much on the export engine to restore growth and overall economic health. The current overreliance on exports makes the country highly vulnerable to the current global recession, as was already seen from recent export and growth figures. There have been discussions in academic and policy circles about rebalancing growth to be more dependent on domestic demand and less on exports. How to achieve these goals, however, is not clear and little serious analysis has been carried out on this issue.

Actually, the issue of Thailand being highly dependent on external trade was discussed seven to eight years ago, when the rapid rise in exports, which enabled Thailand to recover from the crisis, significantly increased exports' share of the economy. Many were already voicing concerns that the increased dependence on exports makes Thailand more vulnerable to the volatilities in both its trading partners' economic conditions and world trade. However, it is difficult to be precise when calculating whether a country depends too much on exports. Certainly, there are countries that have much higher ratio of exports to GDP than Thailand (Malaysia; Singapore; Hong Kong, China; and Japan, to name a few), and the growth experiences in those countries have been very successful. It is true that when external conditions deteriorate, the more open economies experience greater transmission to the domestic economies (see e.g. Rodrik 1996). However, volatilities from short-term external factors does not mean that these export driven economies do not on average perform well over time. Actually, the more open, export led economies tended to perform better than those which were more inward looking (e.g. Sussangkarn 1997). Certainly, having to compete in the export markets can bring about efficiency spillovers. There is also evidence supporting the view that, for Thailand, the degree of openness positively affects the total factor productivity (TFP) (Tinakorn and Sussangkarn 1998; Sussangkarn, Jitsuchon, and Vajragupta 2003).

Irrespective of the impacts of openness on volatilities and growth, it is clear that the fall out from the subprime crisis will mean that Thailand (and other East Asian export led economies) will have to accept a reduced dependence on the export engine over the next several years, and probably over the course of the medium-term. It is therefore of interest to see what might be some of the important strategies to generate sustainable growth given lower export dependence.

One obviously important strategy is increased domestic investment, which will have to be mainly public investment as the private sector has been considerably weakened by the crisis and there is a large amount of excess capacity in the manufacturing and services sectors. It is not entirely clear, however, that an investment led growth strategy can be sustainable. If the investment is not excessive, then it should be sustainable. In that case, however, the growth generated may not be very high. If investment becomes excessive, then there is a danger of large adverse impacts on the current account and external stability. There is also a danger of creating a bubble, as was done just prior to the 1997 crisis. So managing the size of the public investment to ensure that it is at an appropriate level will be important. The quality of these investments will be equally important. Thailand has made wasteful and inefficient investments in megaprojects in the past, including both purely public sector projects and those given out as concessions to the private sector. This is again a very important issue needing careful planning and monitoring.

There are other strategies that will be important parts of a growth rebalancing strategy. In the rest of this paper, we highlight three important strategies from analyses in Sussangkarn, Jitsuchon, and Vajragupta (2003). That paper used a computable general equilibrium (CGE) model of Thailand to carry out policy analyses on how to achieve a moderate average growth path, given an assumed decline in the role of exports in the Thai economy. It was assumed that the ratio of exports to GDP will decline by about 10 percentage points over a five-year time horizon. The paper found that growth would slow down significantly. The paper then analyzes various strategies that could increase growth while ensuring sustainability in the sense of maintaining external stability. In the analyses, the current account was kept fixed for each scenario, with the level of investment being endogenous.

The analyses highlighted three strategies that will be important for growth rebalancing. These are 1) increasing total factor productivity, 2) deepening the production structure of the economy and 3) lowering energy dependence.

6.1 Improving Total Factor Productivity (TFP)

Improving TFP is the best way to make growth more well-balanced. With higher productivity, the country can compete better on a long-term basis. At the same time, higher productivity will translate into higher wage rates and higher real income of the working population, enhancing the purchasing power of the domestic market.

In the past, productivity gains in Thailand came primarily from resource mobilization between economic sectors, and from the accumulation of physical capital, usually in the form of imported technology (Tinakorn and Sussangkarn 1998). Resource mobilization had limits, as the country depleted its natural resources at an alarming rate. The ability for people to move from low-paid agricultural work to higher-paid industry and service jobs is also approaching its limit, as agriculture currently accounts for less than 10% of GDP, and most farmers already have substantial non-farm income. Relying on accumulating imported capital is not a sustainable way of improving productivity either, as the value-added tends to be small.

Real productivity gains should come from improving human capital. In this regard, there is plenty of room for Thailand to make more progress. The education and training system needs to improve a lot. Thailand's international rankings in education and training lag behind its performance in other areas, such as physical infrastructure. Table 6 shows that there are many sub-areas in education and training which are troublesome. For example, although Thailand has made much progress in secondary enrollment since 1990s, its ranking is still low.

Table 6: International Ranking of Thai Education and Training (Selected Indicators)

Indicator	World Rank[a]
Quality of primary education	64
Primary enrollment	61
Education expenditure	46
Secondary enrollment	85
Tertiary enrollment	44
Quality of the educational system	53
Quality of math and science education	55
Quality of management schools	49
Internet access in schools	42
Local availability of research and training services	58
Extent of staff training	51

[a] The total number of countries in the sample was 134.
Source: The Global Competitiveness Report 2008-2009, World Economic Forum (WEF).

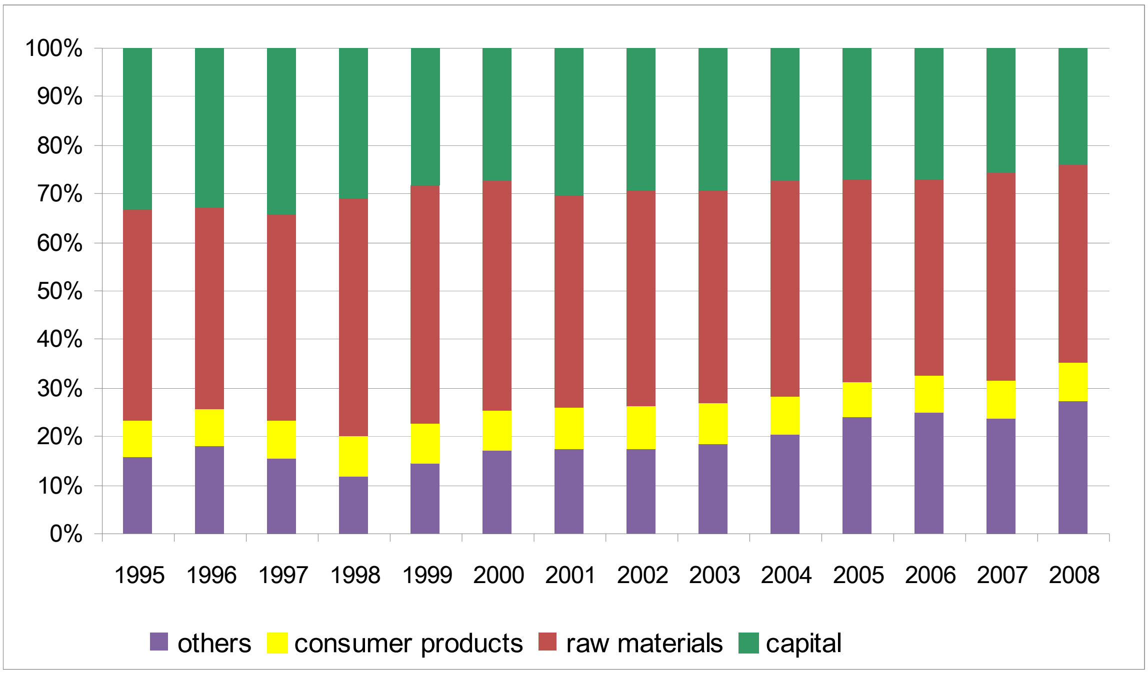
Improvement in scientific and technological capabilities is another important area. Investment and expenditures on scientific research and development is low in Thailand compared to more advanced countries, and much of the investments that have been made have not yielded commercial benefits. There has been great difficulty in linking research and development to commercial products.

6.2 Deepening the Production Structure of the Economy

Deepening the production structure means reducing the import content of various sectors in the economy in order to increase domestic demand. The focus here is more on intermediate demand and the stress is not on protectionism, but rather on encouraging a deeper and more diversified production base.

The structural weakness of Thailand's reliance on exports is that most of the leading exports have high import content. As shown in Figure 13 almost half of Thailand's imports are raw materials and intermediate goods. When combined with imports of capital, these two import groups account for two thirds to three quarters of total imports. Thailand is clearly a member of regional production networks that spread the production of parts to many countries. In theory, this international division of labor benefits all member countries. In practice, however, a country will benefit more if more parts are produced within that country, as this lowers the import volume while raising export volume. To increase parts production in Thailand, a highly developed domestic network of industry clusters must be put in place, and logistical arrangements must be efficient.

Figure 13: Import Structure (in %)



Source: Bank of Thailand.

To reduce intermediate imports, the key issue is to increase the productive capacity of local producers so that they can increase links to the supply chain of various industries. Thailand has seen some successes regarding this in the past for some industries, particularly the auto industry. In its early days in Thailand, most of the auto industry was simply the assembly of completely knocked down parts imported from abroad. Over time, the share of locally produced parts steadily increased. This occurred as local producers improved the quality of their products, up to international standards. More FDI in the parts industry, some as joint ventures with local companies, also helped this process. The auto sector in Thailand is now very competitive with a high local content, and some locally made parts are now exported.

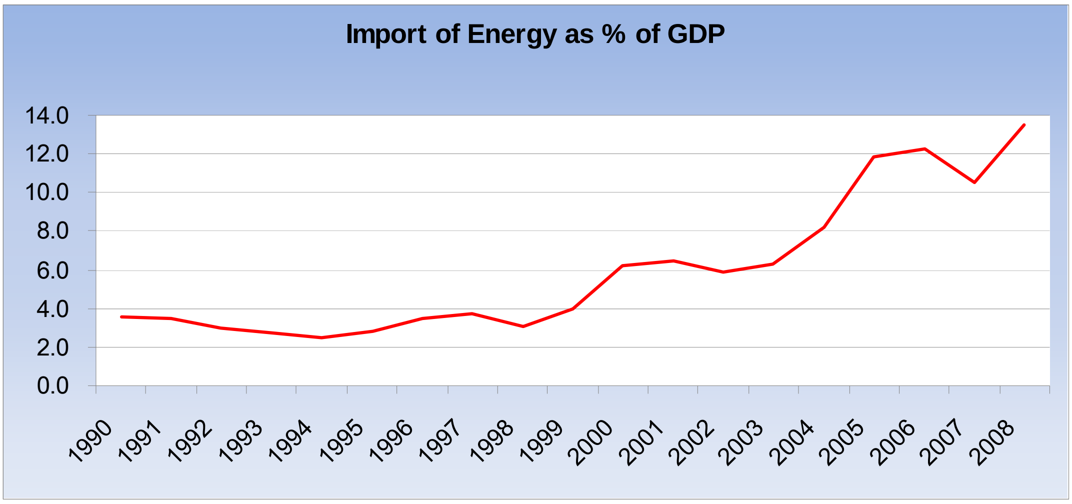
The production deepening will reduce the ratio of imports to GDP. This reduction of import share brings the potential for higher growth. In the CGE analysis, it was found that a reduction of total import share of GDP by five percentage points across all import categories increased economic growth by an average of 1.6% per annum. The auto industry experience is one that Thailand can attempt to emulate in many other industries. This should be an important part of the medium-term growth strategy to craft a rebalanced growth path.

6.3 Lowering Energy Vulnerability

Import dependence is probably most important when it comes to energy imports. As shown in Figure 14, the proportion of imported energy to GDP went up from less than 4% in 1998 to 12–14% in 2006–2008, an increase by three times in less than a decade. As a result, the economy became very vulnerable when energy prices went up, and the vulnerability becomes more and more serious. Not having sufficient domestic energy sources is only a small part of the problem, using energy inefficiently is a much bigger problem.

A policy of lowering energy dependence can also be used to promote new industries and contribute directly to growth. For example, the Thai government initiated the so-called “Eco-car” project in 2007. These eco-cars are small cars (with an engine size, in cubic centimeters, of less than 1,300 for gasoline engines and less than 1,400 for diesel engines) that can achieve a mileage rate of more than 20 kilometers per liter, comply with both the Euro 4 emissions standards and stringent safety standards. The main incentive for the development of eco-cars was a reduction in the excise tax from 30% to 17%. After the project was announced, seven manufacturers applied to the Board of Investment for promotional privileges to carry out an eco-car project. Output was initially due to come to the market in late 2009 or 2010. Unfortunately, with the current crisis, this will be postponed until market conditions get better. Nevertheless, these fuel efficient and environmentally friendly cars should be able to drive a new growth path for the auto industry in Thailand.

Figure 14: Dependence on Imported Energy (in %)



Source: Bank of Thailand and the National Economic and Social Development Board.

6.4 Other Rebalancing Factors

There are obviously many other important aspects of growth rebalancing strategies. For Thailand, income distribution is another important issue. In terms of income distribution, Thailand is among the most unequal countries in the world. The Gini coefficient has remained stubbornly above 0.5 during the past three decades. One of the important consequences of high inequality is the relatively small size of domestic market, as wealth concentrates among only a handful of the rich. A successful redistribution of wealth would therefore increase the domestic market size and make growth better balanced. This is especially true for a country with moderate average income levels like Thailand. Measures to improve income inequality range include fiscal measures, micro credit policies, and equitable enforcement of rules of law, among others. Another important by-product of a more equal income distribution is the reduction in political polarization, which is damaging Thai politics and economy at the moment.

7. CONCLUSIONS

The recovery from the 1997 crisis left Thailand more dependent than ever on exports as the main growth engine, with the ratio of exports to GDP increasing from a precrisis level of about 38% to about 65% recently. The lessons learned from the 1997 crisis led to a more risk-averse financial system, and this helped Thailand avoid the direct impacts of the subprime crisis. Being highly dependent on exports, however, Thailand, along with other export oriented East Asian economies, is now greatly affected by the indirect impact of the subprime crisis on exports. Both exports and GDP fell over the past two quarters.

The Thai government has been using fiscal stimulus and monetary easing measures to try to shore up the economy. These measures are mostly short-term in nature, and if the subprime crisis is protracted, then the sustainability of the fiscal stimulus will be called into question. In the medium- to long-term, Thailand needs to move to a more balanced growth path, one less dependent on exports (although exports will still be important) and more on other, domestic sources of growth. The paper suggests a number of key strategies that could help Thailand achieve a more balanced and sustainable growth path. The main strategies include 1) a focus on increasing total factor productivity, 2) further deepening the production structure of the economy, and 3) reducing dependence on imported energy. In addition, improving the country's highly skewed income distribution will also help to increase domestic consumption demand.

REFERENCES

Akamatsu, Kaname. 1962. A Historical Pattern of Economic Growth In Developing Countries. *Journal of Developing Economies* 1(1): 3-25.

Chandoevwit, Worawan. 2006. Policy Challenges for the Social Security for Private Employees. *TDRI Quarterly Review* 21(4): 11-19.

Mundell, Robert A. 1963. Capital Mobility and Stabilization Policy Under Fixed and Flexible Exchange Rates. *Canadian Journal of Economics and Political Sciences* 29(November): 475-485.

NaRanong, Viroj and Anchana NaRanong. 2006. Universal Health Care Coverage: Impacts of the 30-Baht Health-Care Scheme on the Poor in Thailand. *TDRI Quarterly Review* 21(3): 3-10.

Rodrik, Dani. 1996. Why Do More Open Economies Have Bigger Governments? NBER Working Paper No. 5537. Cambridge, MA: National Bureau of Economic Research.

Sussangkarn, Chalongphob. 1997. Thailand: Looking Ahead to 2020 in Light of Global and Regional Changes. *TDRI Quarterly Review* 12(2): 3-13.

Sussangkarn, Chalongphob, Frank Flatters, and Sauwalak Kittiprapas. 1999. Comparative Social Impacts of the Asian Economic Crisis in Thailand, Indonesia, Malaysia and the Philippines: A Preliminary Report. *TDRI Quarterly Review* 14(1): 3-9.

Sussangkarn, Chalongphob, Somchai Jitsuchon, and Yos Vajragupta. 2003. Globalization of Thailand: Economic Impacts and Restructuring for Sustainability. Paper (in Thai) presented at TDRI’s 2002 Year-end Conference, Thailand Development Research Institute, Bangkok.

Sussangkarn, Chalongphob and Pakorn Vichyanond. 2007. Ten Years After the Financial Crisis in Thailand: What Has Been Learned or Not Learned? *Asian Economic Policy Review* 2(1): 100-118.

Tinakorn, Pranee and Chalongphob Sussangkarn. 1998. Total Factor Productivity Growth in Thailand: 1980-1995. TDRI Research Report No. M45. Bangkok: Thailand Development Research Institute.

World Bank. 1993. *The East Asian Miracle: Economic Growth and Public Policy.* New York: Oxford University Press.