

The global financial crisis and macroeconomic policy in Southeast Asia

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Introduction

The remarkable record of economic growth achieved by Singapore, Malaysia, Thailand, and Indonesia in the 1980s and early 1990s earned these countries the title of “miracle” economies in the famous World Bank study *The East Asian Miracle* (1993). This and other efforts to account for their success identified macroeconomic stability as a key feature promoting trade, investment growth, and relatively efficient resource allocation. In these four countries, stable nominal exchange rates relative to the US dollar – a key signal to investors, both domestic and foreign – were supported by domestic fiscal and monetary policies that eschewed large public sector deficits and inflation taxes, avoided excessive private sector credit creation relative to GDP growth, and maintained a flexible approach to external shocks that has been praised as “pragmatic orthodoxy” (Corden 1996).

Sadly, the “miracle” did not last for long. The relaxation of controls on international capital flows – especially those of highly liquid portfolio investment and short-term debt – in Thailand, Indonesia, and Malaysia (Singapore’s capital account had always been open) diminished the power of monetary policy as a tool to counter inflationary pressures. At the same time, rapidly rising domestic demand (driven by “miracle” rates of income growth) began to push up prices of non-tradables like land, creating debt-financed asset price bubbles, and to raise real wages, reducing the competitiveness of labor-intensive manufactures. These were the drivers of real exchange rate appreciations in the mid-1990s. In the absence of adequate monetary or fiscal policy responses current account deficits widened, setting up an ultimately unsustainable tension between the maintenance of fixed exchange rates and the preservation of international reserves.

The Asian financial crisis of 1997 was a catastrophically large and sudden international response to these imbalances. It wiped out several years of gains from “miracle” growth; it also induced some major macroeconomic policy changes. Most visible among these were moves from fixed to floating (or at least, less tightly managed) exchange rates, and decisions at country level to hoard foreign reserves as insurance against any future crisis. Less obviously, in most countries there was continued progress on microeconomic reform, including tariff and commercial policy liberalization, which further increased the region’s exposure to global trade.¹ Most countries also made

improvements in financial system governance, for example in prudential regulations, to reduce systemic risk.

At the same time the world economy itself was also undergoing a major structural shift, notably driven by China's rise to prominence as a participant in global trade and investment and in Asian regional production networks. By the 2000s, the fortunes of Southeast Asia's large economies were tied more tightly than ever before to those of the global market.

However, the global market had also become frighteningly unstable. The September 2008 collapse of the US financial firm Lehman Brothers, which with over \$600 billion in debt became the largest bankruptcy in US history, was the first domino to fall in a sequence that precipitated global recession – the scale and duration of which had not been seen since the 1930s. This has become known as the global financial crisis, or GFC.

In 2009, GFC reduced demand for exports from Southeast Asian countries, where exports are a major growth driver. Recession in the developed countries led to a contraction in output from Asian countries through export shortfalls. Expansionary and accommodative monetary policy in response to recession in the US and other industrialized economies, through low interest rates and liquidity injections, caused massive capital inflows to Southeast Asia. Although these inflows led to booming stock markets and sustained investment and consumption in some countries, regional currencies also appreciated substantially and this exacerbated the export downturn. Although their growth paths tended to converge over time, Southeast Asian countries experienced dissimilar impacts of the GFC. To see why some countries performed better than others during the crisis, in this chapter we examine factors affecting vulnerability and resilience to external shocks. Factors such as the structure of aggregate demand and the role of macroeconomic policy response must have contributed to the depth and duration of regional downturns after the global economic slowdown.

The next section of this chapter discusses the impact of the GFC on exports and output, followed by an examination of the impacts on the financial sector. Then there is an analysis of business synchronization in Southeast Asian economies before a review of macroeconomic policy responses in terms of fiscal and monetary policy. Exchange rate policy is also examined in light of rapid capital movement. The final section provides concluding remarks.

Impact of the global financial crisis on growth and current accounts

Southeast Asian economies have become integrated with the global economy through trade liberalization and capital account opening. The GFC's impact was delivered through monetary and trade channels. Domestic interest rates and capital flows were directly affected, especially in those countries whose capital markets are most closely connected to world financial centers. The GFC directly impacted the real sector through falling export demand from high-income countries under stress. The 2008 GFC differed from the 1997 Asian financial crisis (AFC), insofar as in 2009, Southeast Asian financial institutions were only mildly affected. In contrast to the 1997 shock, the GFC's impact was more pronounced in the real sector than in the financial sector.

Malaysia and Singapore, the two wealthiest and most open economies in the region, experienced considerable growth fluctuations during the GFC. In 2001, during a mild recession in the USA, their output growth had declined by more than the average of Southeast Asian economies. In 2009, when the GFC-induced recession was at its deepest, output in Malaysia and Singapore also contracted by more than other countries in the region. Yet both countries showed resilience: just one year after the crisis they each underwent a spectacular rebound.

Southeast Asian economies are vulnerable to external shocks from global economic fluctuations. One reason behind differences in output growth is the underlying economic structure exposing each country to external shocks through differences in trade and capital flow linkages. Other than in 2009, Indonesia's growth rate was lower than average for the region. Since 2000, Myanmar's economy has expanded at a higher rate than the regional average, because of a low base income level, an increasingly open economy, and more reliance on market mechanisms.

Whether a country performed poorly or not during the GFC depended in part on the importance of exports in its GDP. Between 2000 and 2011, Singapore, the most open economy in the region, had an average share of exports to GDP of 210 percent. During these years, Myanmar's average share of export to GDP was less than 1 percent. Malaysia and Singapore's volatile output growth and the relatively stable growth of Myanmar's economy are extreme cases. Indonesia, the largest economy in the region, depends less on exports, which accounted for 31 percent of GDP during the 2000s. Indonesia, therefore, is not as vulnerable to export fluctuations as are countries with higher export dependency such as Cambodia (59 percent), Thailand (66 percent), or Malaysia (106 percent).

During the GFC in 2009, Vietnam and Cambodia, whose export dependency ratio was over 60 percent, experienced deep output contractions. Figure 18.1 demonstrates that Southeast Asian economic growth rates were synchronized with the boom and bust caused by global output fluctuations. An exceptionally high degree of globalization implies correspondingly high exposure of the economy to external shocks, and this gives a reason to examine the merits of an export-driven growth strategy. If Southeast Asian economies were to rely more on domestic demand-led

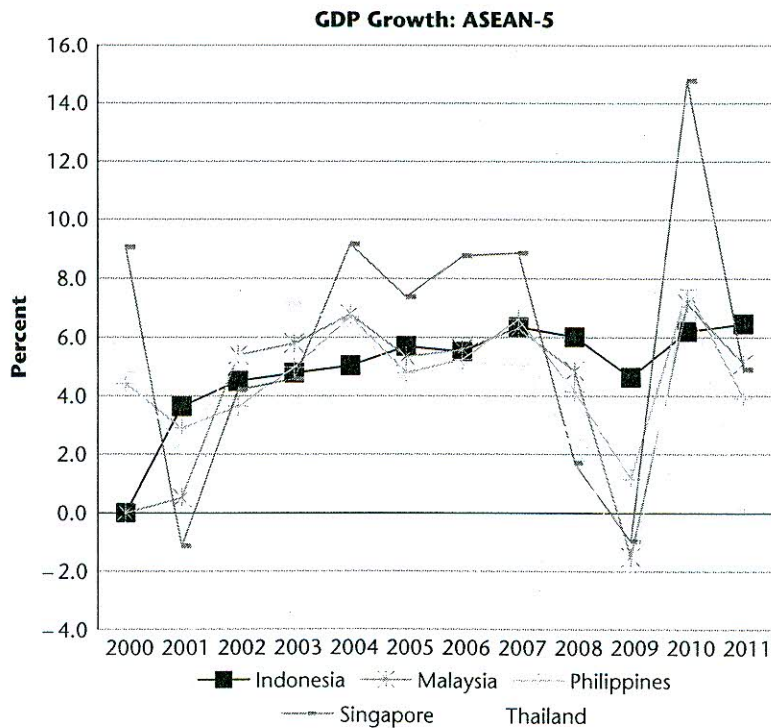


Figure 18.1 GDP growth in the major ASEAN economies
Source: ADB Statistical Data Base.

growth, could they still exploit economies of scale and the competitive environment of an outward-oriented development strategy? The answer is related to the availability of effective macroeconomic policy to lessen the magnitude of business cycles and shorten the length of recessions. After the global economic slowdowns in 2001 and 2009, Southeast Asian economies followed V-shaped recoveries.

World trade volume fluctuates more widely than world output growth. Rapid world economic expansion translates into an acceleration of export and output growth in export-led growth economies. Similarly, a decelerating world output growth results in poor export performance and much lower GDP growth rate in export-dependent countries.

This is what happened in 2001, 2009, and 2011, as seen in Figure 18.2. This figure compares the average export growth rate from 2000 to 2008 and then during the GFC. Synchronized output growth was caused by a similar degree of export exposure to the world market. No Southeast Asian economy was spared the impact of world recessions. But the strong rebound of exports from Southeast Asian economies after 2009 bodes well for the resilience and flexibility of the export sector in response to changing demand conditions.

After the AFC, the region's saving-investment gaps had expanded due to a widespread investment collapse. With wider saving-investment gaps, Southeast Asian economies in general experienced a current account surplus. The GFC, by contrast, reduced exports, thereby lowering the current account surplus in 2008. Enlarged current accounts in Indonesia, Thailand, the Philippines and Singapore were due to output contractions in 2009, which also curtailed import growth (Table 18.1).

A current account surplus need not mean a strong economy. A slow-growing economy would not require rapid growth in imports of capital goods, for example. If demand for imports is income-elastic, a current account surplus might reflect low growth and enlarging savings gaps.

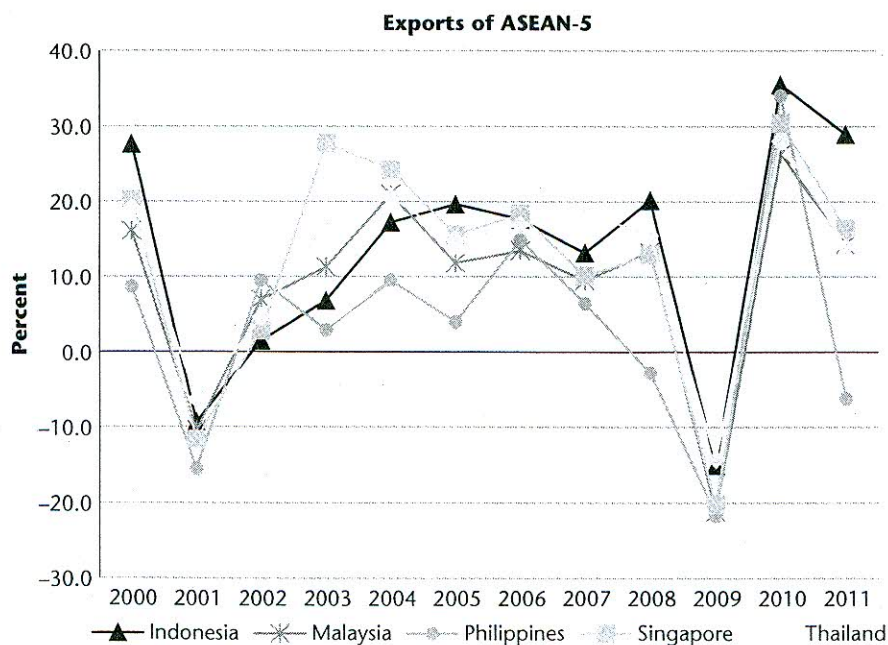


Figure 18.2 Export growth in the major ASEAN economies
Source: ADB Statistical Data Base.

Table 18.1 Post-GFC current account surplus in ASEAN-5 economies (percent of GDP)

	<i>Indonesia</i>	<i>Malaysia</i>	<i>Philippines</i>	<i>Singapore</i>	<i>Thailand</i>
2000–07	2.8	3.1	1.0	18.7	3.0
2008	0.0	5.1	2.1	14.7	0.8
2009	2.0	4.5	5.6	19.0	8.3
2010	0.7	3.4	4.5	21.8	4.1
2011	0.2	3.6	3.1	24.6	1.7

Source: ADB Statistical Data Base.

Table 18.2 Post-GFC current account deficit in CLMV economies (percent of GDP)

	<i>Cambodia</i>	<i>Lao PDR</i>	<i>Myanmar</i>	<i>Vietnam</i>
2002–07	–4.2	–1.4	3.6	–3.3
2008	–10.1	1.5	4.9	–11.9
2009	–8.9	–1.1	3.1	–6.8
2010	–8.0	0.5	3.3	–4.0

Source: ADB Statistical Data Base.

This is true of Thailand and the Philippines, where investment opportunities were relatively low in 2009 and 2010.

Although Lao PDR and Myanmar both experienced current account surpluses prior to the GFC, their surpluses declined in 2009 (Table 18.2). Vietnam and Cambodia have sustained current account deficits for many years. These deficits increased as the world economy slowed at the onset of the GFC in 2007. This widening of current account deficits could have several causes. First, exchange rate policies demand examination, to see if currency overvaluation prevented external adjustment. Second, another reason for a current account deficit is foreign direct investment. When the low-income CLMV countries (Cambodia, Lao PDR, Myanmar, and Vietnam) receive massive capital inflows in the form of FDI, it usually drives up imports of machinery and construction materials. In 2013, Laos experienced a trade deficit for the first time in decades after FDI rose by over 40 percent in 2011 and 2012. This large deficit also put pressure on the Lao currency (the kip) to depreciate, because the country had reached a critically low level of international reserves.

In 2013, a growth slowdown in China led to dismal export performance in the region, including Thailand. When the Thai economy decelerates, exports from Laos to Thailand are adversely affected (Laos' major export to Thailand is hydropower). This subregional economy has been connected by increasing trade intensity during years of local trade liberalization. For this reason, Lao exports are far more vulnerable than most other countries to a downturn in Chinese imports, as seen in Figure 18.3.

The impact of the GFC on ASEAN countries can be observed from Table 18.3. The export slump in 2009 differed sharply from the high export growth from 2000 to 2008. As noted, however, the sharp rebound of exports in 2010 and 2011 augurs well for the resilience of these economies. Imports were affected by the strong world income effects, despite strengthening ASEAN currencies.

Because of high levels of average propensity to consume in low-income countries, fiscal stimulus in such nations will have a stronger impact than in high-income countries such as Singapore or Brunei (Table 18.4).

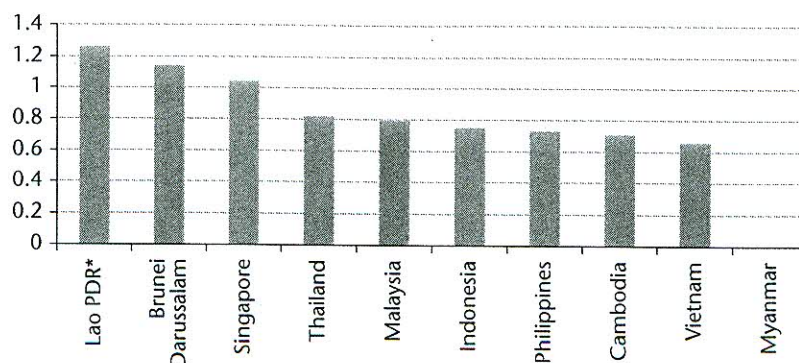


Figure 18.3 Estimated elasticity of exports with respect to China's imports

Source: Author's calculation.

Notes: Elasticity of Lao exports is based on Thailand's export growth. All estimated. Coefficients are statistically significant at 0.01 level of confidence.

Table 18.3 Impact of the GFC on ASEAN export growth, 2009–11

	Export growth (percent per year)			
	2000–08	2009	2010	2011
Brunei Darussalam	18.4	-32.0	30.2	33.1
Cambodia	13.9	-14.2	29.7	35.8
Indonesia	12.7	-15.0	35.4	29.0
Lao PDR	17.2	-3.6	65.8	6.1
Malaysia	10.3	-21.1	26.5	14.4
Myanmar	20.7	8.8	17.7	3.9
Philippines	4.2	-21.7	34.0	-6.7
Singapore	13.3	-20.2	30.6	16.5
Thailand	13.3	-13.7	28.7	16.0
Vietnam	21.0	-8.9	26.5	34.2

Source: ADB Statistical Data Base.

Table 18.4 Aggregate demand: structural differences and similarities

	Percent to GDP (Average 2006–08)		
	Private consumption	Exports	Tax revenue
Brunei Darussalam	19.2	72.1	33.7
Singapore	38.8	210.4	12.9
Malaysia	44.7	105.7	14.5
Thailand	53.7	66.4	15
Indonesia	62.3	31.2	12.7
Vietnam	65.2	68.5	24.1
Philippines	74.1	42.6	13.6
Cambodia	79.5	59.1	9.8
Myanmar	82.6	0.2	3.9

Source: ADB Statistical Data Base.

Impacts of the global financial crisis on the financial sector

Evidence of the nexus between growth and financial development is abundant. Strong economic growth requires financial resources. In developing countries where direct finance through capital markets is not pervasive, bank credit remains a fundamental source of indirect finance for investors. ASEAN countries other than Singapore are bank-based economies, relying heavily on bank credit expansion for capital accumulation. The ratio of bank loans to GDP is seen as a measurement of progress in financial deepening. Figure 18.4 indicates that Laos and Cambodia are still at the early stages of economic development, by this measure. The bank credit to GDP ratio in both countries is much lower than in the other ASEAN-5 countries.

While the corresponding ratio in Malaysia and Thailand is above 100 percent of GDP, it is considerably lower in Singapore, where direct financing for investors is available in the stock and bond markets. The ratio demonstrates the economy's strength. In bank-based economies, the demand for bank credit increases during a boom, but banks are less willing to lend during a slump. In addition, low output growth generates low demand for bank loans. The impact of the GFC on bank loan activity in Southeast Asia can be observed from Figure 18.4. Except for Singapore, the rising trend of the bank loan–GDP ratio stagnated in ASEAN-5 countries, reflecting a slowdown in economic activity. Even in Vietnam, where bank credits expanded much faster than GDP growth, bank loan growth decelerated in 2008 before resuming a rising trend, which had continued since 2000.

In general, bank performance worldwide was adversely affected by the GFC where banks had a large loan exposure to the export sector. Since peaking during the AFC, non-performing loans (NPLs) in most Southeast Asian economies had declined steadily from 2005 to 2011. In 2009, the rate of decline slowed somewhat, but the NPL to total loan ratio remained well below 4 percent (Figure 18.5). In addition to relatively low exposure to the export sector, Southeast Asian commercial banks had invested little in collateral debt obligations backed by the US subprime loans. Southeast Asian banks remained healthy, therefore, and did not suffer greatly from the GFC.

Singaporean banks experienced the lowest level of non-performing loans due to strong growth in the real sector. Banks in Indonesia and Malaysia were able to reduce NPLs to 2 percent in 2011, because of the strength of both economies. The rate of return on bank equity in strong recovery economies increased considerably after a rapid recovery in line with bank credit expansion.

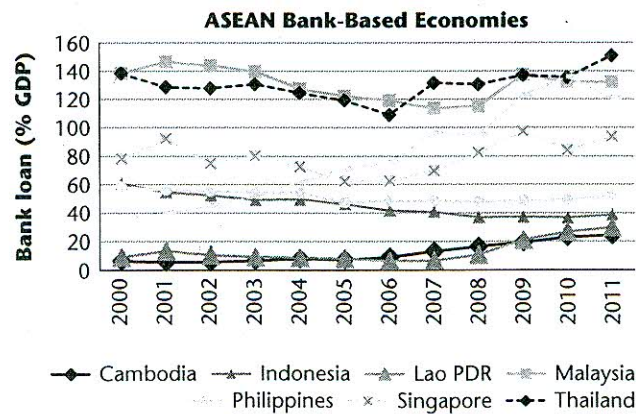


Figure 18.4 Bank loans to GDP, ASEAN economies
Source: ADB.

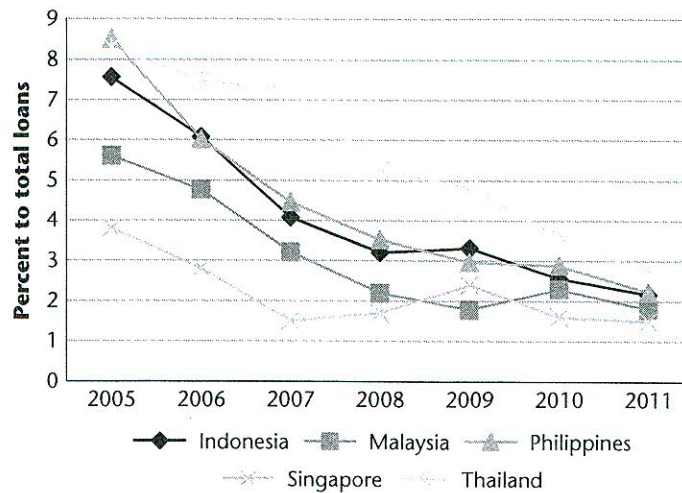


Figure 18.5 Banks' non-performing loans
Source: ADB.

Thailand had the highest rate of non-performing loans among the ASEAN-5 countries (Figure 18.5). Thai banks did not perform well in 2006 and 2007 due to uncertainties from political turmoil. Nevertheless, in general the declining trend of NPLs was unbroken during the GFC. Southeast Asian countries were well prepared as they had undergone extensive financial reforms following the 1997 crisis. In particular – and in contrast with the AFC – improved prudential rules and regulations were in place before the GFC exploded.

A lack of developed capital and bond markets in developing countries has been attributed to the after-effects of the AFC. Evidence of this “original sin” hypothesis can be seen in Figure 18.6. The percentage of stock market capitalization in Singapore and Malaysia is the highest among ASEAN countries. Firms in these economies have alternative means of financing investment projects, relying less on bank borrowing. Other countries in the region, with lower levels of development, exhibit lower values of stock market capitalization. Firms in these economies rely on bank loans more than firms in Singapore and Malaysia. In 2003, there was a rebound from the 2001 world “dotcom” recession. Share prices in Singapore, Malaysia, Indonesia, and Thailand increased in response to the economic upturn.

Note the peaks and troughs of market capitalization between 2000 and 2011. They followed a broadly similar pattern throughout the region. The 2008 GFC severely hit ASEAN stock markets. The cycle’s depth was far more accentuated in countries with open capital markets. Likewise, the rebound was also more spectacular in the same countries, again because of their close ties to world capital markets.

In the 2000s, after Southeast Asian countries opened their capital accounts and began reducing tariffs among group members, business cycles became synchronized. Stock price movements in Singapore, Indonesia, Malaysia, the Philippines, and Thailand are increasingly interrelated, since the financial and real sectors of ASEAN-5 have become more firmly integrated. Money market interest rates are also moving more in line and stock market returns in these countries also move together.

Using the Singaporean rate of return on the stock market as a benchmark, in 2006, the correlation of stock returns in Thailand and the Philippine markets was below 0.5, indicating

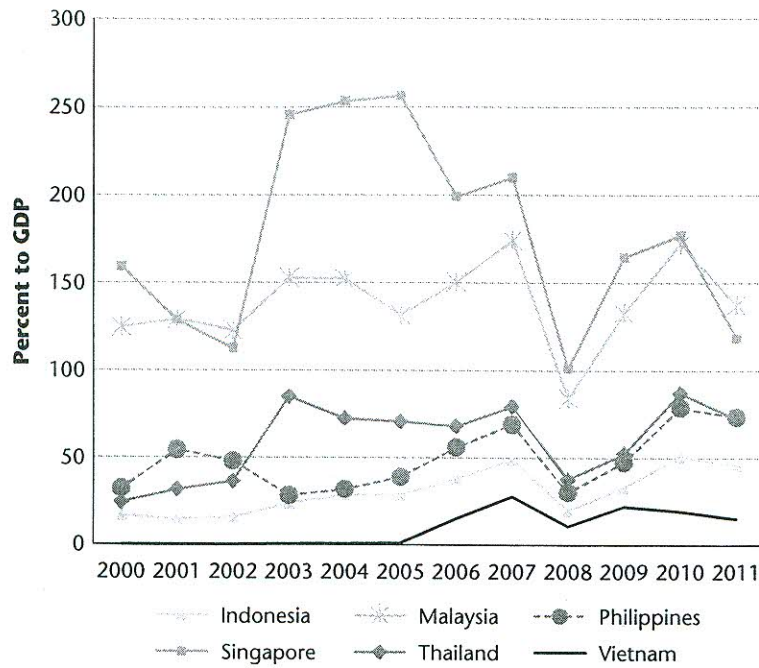


Figure 18.6 Stock market capitalization
Source: ADB.

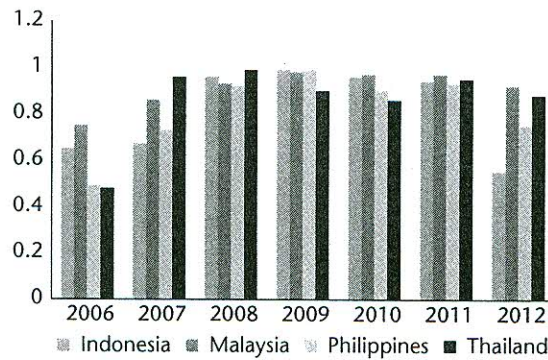


Figure 18.7 Stock market returns: correlation with Singapore
Source: ADB.

that domestic conditions still mattered greatly for investor sentiment (Figure 18.7). At the height of the GFC between 2008 and 2011, however, the correlation coefficients of stock returns among ASEAN-5 countries were above 0.9. Capital inflows from developed and troubled economies alike into Southeast Asia demonstrated how portfolio investors in the USA and Eurozone saw these economies as part of a buoyant region with strong growth potential.

Co-movements of stock prices in ASEAN-5 bode well for the impact of external factors on ASEAN-5 market sentiment. In 2012, correlation coefficients declined in Indonesia and the

Philippines. Domestic factors in those countries exerted influence on the market rate of return. As long as the wealth effect on consumption is weak, consequences of volatile stock markets on private consumption will be minor. A more serious risk is in the fluctuations of the exchange rate resulting from rapid capital inflows and outflows.

One danger of ASEAN capital market integration is that shocks can be transmitted easily in times of boom and bust. Consequently, a lesson from the volatile years since the GFC is that Southeast Asian economies must create instruments to cope with future shocks. If the region is to retain its reputation for “pragmatic orthodoxy”, macroeconomic policy responses must be readily available to cope with external shocks caused by overexposure to globalization. This was especially important as the US economy began to resume growth following the GFC. As the US Federal Reserve began to “taper” its stimulus-oriented quantitative easing (QE) monetary policy in late 2013, there was a sharp outflow of portfolio investment from ASEAN. Regional currencies depreciated abruptly. This depreciation favorably affected the export sectors, but depressed regional stock markets.

Business cycle synchronization

Evidence that international capital flows contributed to business cycle synchronization was provided by Kim and Kim (2013). They find that capital movements caused boom–bust cycles in the region. An output boom is driven by increases in consumption and investment following capital market liberalization. If this hypothesis is true, then an output *contraction* might have been expected to occur after the US monetary authority ended its quantitative easing policy, because higher interest rates in the US market would cause massive capital outflow from emerging markets, including Southeast Asia. The beginning of tapering in 2013 did indeed lead to capital outflows; however, these were not large enough to induce recession in Southeast Asia. On the other hand, the simultaneous capital outflows provided additional support to the capital-market theory of business cycle synchronization. In another study Takeuchi (2011) used a dynamic general equilibrium model for eight East Asian developing economies and found that increases in business synchronization are largely attributable to the growing vertical fragmentation (i.e. regional integration) of production and network trade. Allegret and Essahbi (2011) demonstrated that increasing bilateral trade in East Asia resulted in increased long-run business synchronization, while short-run cycles are related to individual country shocks and convergence of macro policy responses to shocks. Moneta and Ruffer (2006) showed that business cycle synchronization in East Asia reflected strong export synchronization rather than consumption and investment dynamics, while oil prices and the yen–dollar exchange rates also play a role in synchronizing activity. Cortinhas (2007) shows a positive correlation between intra-industry trade and business synchronization in ASEAN nations.

From 2001 to 2012, bilateral trade intensity and growing network trade may explain the high correlation of output growth among Singapore and other ASEAN-5 countries (Figure 18.8). Reliance on an export-led growth strategy leads to co-movement of ASEAN-5 growth rates. Distance also determines the volume of trade between countries with common borders. Similar export patterns imply that a positive or a negative demand shock from the world market can affect output growth.

In the group of transition economies, CLMV growth rates are also closely related. The correlation coefficient of output growth rate between Vietnam and Myanmar was 0.94, 0.88 for Vietnam and Cambodia, and 0.84 for Cambodia and Myanmar. Thus, business cycle synchronization is also seen among CLMV countries. Along with Vietnam, Cambodia, Laos, and Myanmar share common borders with Thailand. In the longer run, the business cycle in CLMV must also synchronize with the ASEAN-5.

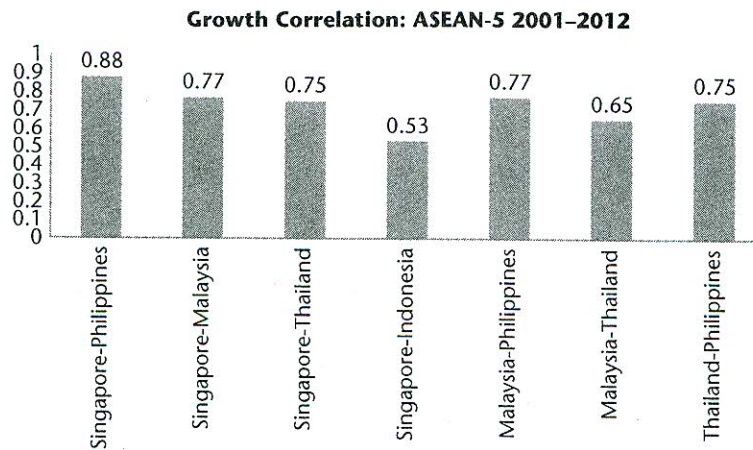


Figure 18.8 Output growth correlation: ASEAN-5
Source: ADB.

Principal component analysis is employed to reduce the dimensionality of GDP growth rates while retaining most of the variation for two groups: ASEAN-5 and CLMV countries. The first principal component with the largest variance accounts for much of the data variability. We define the first principal component as the principal growth components (PGC), as shown in Figure 18.9. The movement of the series represents regional business cycles.

Between 2000 and 2011, the correlation coefficient between the two PGC series was only 0.52. Nevertheless, the two growth cycles moved more closely together after 2007, when the region experienced the effects of the GFC. Southeast Asian economies became more integrated with the world economy through increasing volumes of intra-ASEAN regional trade. From 2000 to 2011, ASEAN-5 countries relied heavily on exports as engines of growth. Using the same principal component analysis to extract common export growth rates from the two regional groups, we find that the correlation coefficient from the principal components of ASEAN-5 export growth and the principal component for ASEAN-5 output growth is 0.94, indicating that export and growth cycles

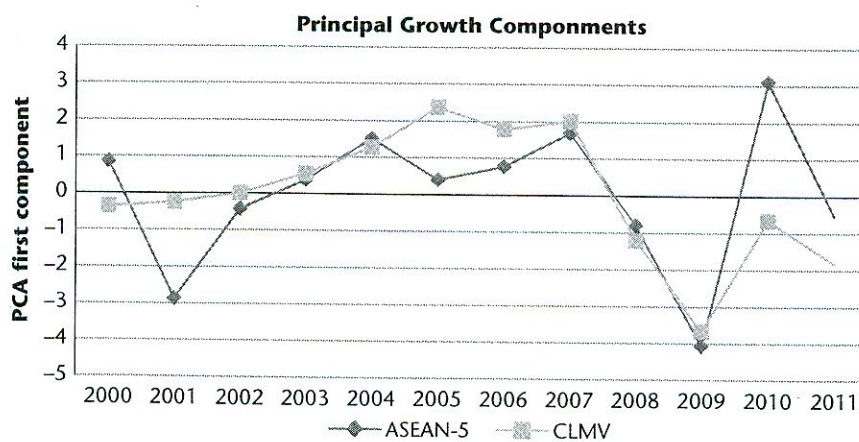


Figure 18.9 Business cycle synchronization: ASEAN-5 and CLMV
Source: Calculated principal components of growth rates.

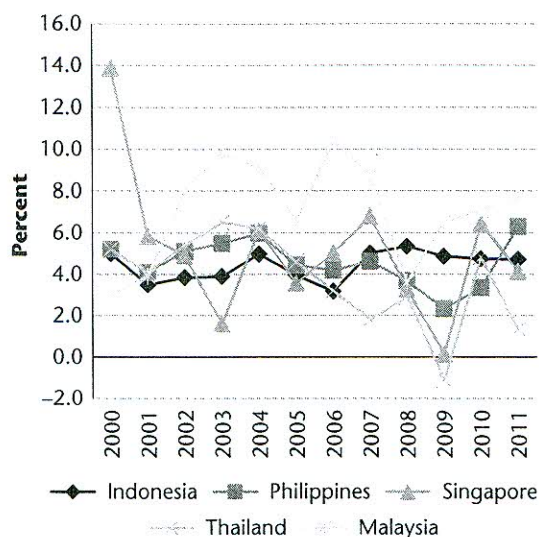


Figure 18.10 Consumption cycle in ASEAN-5
Source: ADB.

are closely related. Thus, boom–bust cycles are related to export cycles. A common commodity export demand shock would lead to a similar pattern of output fluctuations. Using the principal growth component measurements, ASEAN growth cycles are related to CLMV export cycles by a correlation coefficient of 0.6. The ASEAN-5 and CLMV are increasingly interconnected, so that booms and busts in ASEAN-5 can generate a spillover effect to neighboring country exports.

Growth in ASEAN-5 was driven by private consumption (Figure 18.10). The world recession in 2001 was accompanied by a decline in household consumption in Singapore, Malaysia, and Thailand. In 2009, the GFC also hit ASEAN-5 in the form of a reduction in consumer spending. Indonesia and the Philippines did not suffer much from the GFC, as consumption was not severely affected. From a policy point of view, maintaining private consumption seems to be the key to minimizing the impact of export demand shocks during world economic downturns.

The GFC's impact on private consumption was caused by output contraction. With increased uncertainty about jobs, incomes, and asset prices, consumers revised their expected incomes downward. When consumers postpone purchasing consumer durables, excess output capacity rises. Postponement of private investment was due to low capacity utilization of plants and equipment. Indonesia's private consumption did not contract, unlike other ASEAN countries. Since Indonesia has a larger share of consumption expenditure in GDP, Indonesia did not suffer as much as Thailand, Singapore, and the Philippines. And, as noted earlier, the share in the Indonesian economy of trade (and for that matter, foreign investment) is lower than for the other large ASEAN economies.

In the long run, the consumption share in GDP falls as the level of per capita income rises. If a low-income country experiences an export shortfall, it can offset this by stimulating domestic demand through fiscal stimulus. The recession will be deeper in countries where the private consumption share is low, particularly when consumer confidence is subdued. In an economy with a large share of private consumption, the fiscal multiplier will be higher than in high-income countries with a smaller share of private consumption in GDP. In this type of economy, fiscal stimulus need not be massive, provided that consumer confidence remains high. In 2007, when investor sentiment and consumer confidence were low, fiscal stimulus was not as effective as it would have been in a stable political situation.

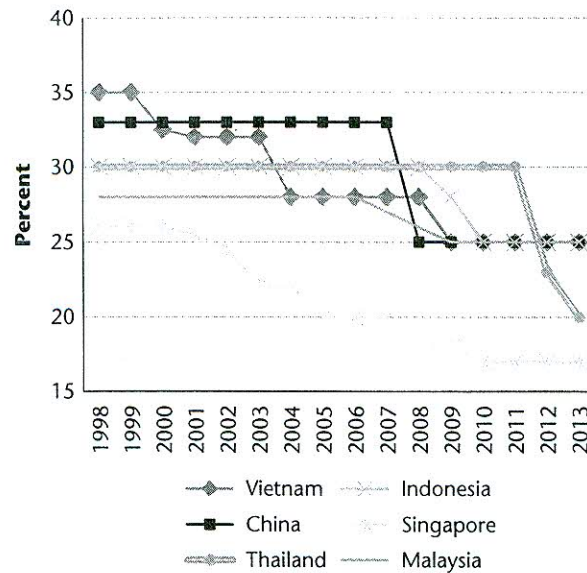


Figure 18.11 Corporate income tax rates in major ASEAN economies

Lipsey and Sjöholm (2011) argue that Indonesia received lower foreign direct investment than other countries in the region because of a poor business environment, inefficient government institutions, and a low level of human and infrastructure capital formation. Athukorala and Swarnin (2011) observe that Malaysia's relative attractiveness for FDI in the region has eroded due to a dualistic investment regime and narrow domestic human capital base. Nevertheless, Malaysia benefits from a complementary FDI relationship with China as a location of high-end activities within global production networks. If FDI is a small proportion of total capital formation, then fluctuations in total investment will depend on factors affecting domestic investment. When FDI is complementary to domestic investment, investment cycles will be dictated by an investment environment shaped by macroeconomic factors.

There is a race for ASEAN countries to cut corporate income taxes to attract FDI (Figure 18.11). Singapore has led the group in cutting its corporate tax rate. Vietnam aggressively reduced taxes from 35 percent in 1998 to 25 percent in 2013. In 2013, Indonesia, Vietnam, Malaysia, and China all employed a corporate tax rate of 25 percent. Thailand followed China in suddenly cutting its corporate tax rate from 30 percent to 20 percent within two years. At this level, Thailand's corporate income tax rate is the second lowest rate in the region, after that of Singapore.

The timing of the tax cut is crucial as it is intended to stimulate foreign and domestic investment at a time of economic slowdown. It remains to be seen whether cutting tax rates can divert FDI, because other fundamental factors also determine FDI flows. Note that the role of automatic fiscal stabilizer will be reduced because of lower tax rates.

Capital formation slowed in 2008 and 2009 when the GFC hit the region, causing investor sentiment to deteriorate and lowering consumer confidence. Collapses of financial institutions, stock market crashes in developed countries, and the intensified Eurozone debt crisis all contributed to delays in investment decisions (Figure 18.12). Investment rebounded in 2010, but the recovery was brief because of the imminent fear of a "double-dip" recession in Europe and the USA. Decelerating output growth in China and India further dampened the investment outlook.

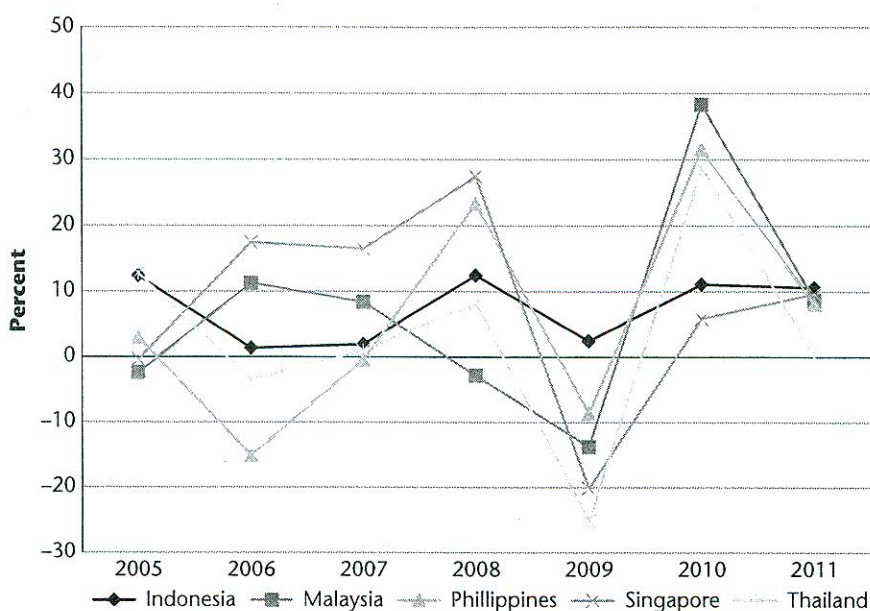


Figure 18.12 Investment cycles in ASEAN-5 economies
Source: ADB Statistical Data Base.

On balance, it appears that the main effect of the GFC on Southeast Asian economies was a large fall in capital formation. If sustained, this fall will ultimately reduce their long-term rate of economic growth. Since all countries in the region have sound reasons to try to maintain the pace of economic growth, it follows that macro policy must be used to stabilize investment fluctuations. An important question is whether low interest rates can revive private investment, and/or whether other policy instruments should also be deployed.

Macroeconomic policy responses to the global financial crisis

In this section, we discuss how Southeast Asian countries use macro policy to deal with recession caused by the global economic slowdown. To compensate for declining exports, fiscal and monetary policy must be employed to stimulate domestic demand. With differences in fiscal space, levels of international reserves, and degree of development in money and capital markets, each country responded differently under certain constraints.

Fiscal policy

If public debt has not reached a critical level, then an expansionary fiscal policy can stimulate private spending to compensate for export shortfalls in times of world economic downturn or recession.

Fiscal spending can be used as a short-term countercyclical policy during crises. Tang et al. (2013) investigated the effectiveness of fiscal policy in ASEAN nations and concluded that government spending has only a weak impact on output. They also found, contrary to expectations, that tax increases have *expansionary* impacts on output, an effect that they attributed to concerns over public finance during the Asian and global financial crises. If Tang et al.'s findings

Table 18.5 Budget deficit after the GFC

Percent of GDP				
	2000–08	2009	2010	2011
<i>CLMV</i>				
Cambodia	-1.6	-6.3	-3.1	-4.5
Lao PDR	-3.7	-3.3	-2.2	
Myanmar	-2.4	-4.6	-4.5	
Vietnam	-1.4	-3.9	-4.5	-2.5
<i>ASEAN-5</i>				
Indonesia	-1.2	-1.6	-0.7	-1.2
Malaysia	-4.4	-6.7	-5.4	-4.8
Philippines	-2.8	-3.7	-3.5	-2.0
Singapore	6.4	1.6	7.7	4
Thailand	-1.7	-3.9	-2.4	-1.8

Source: ADB.

are correct, a tax reduction can produce an unconventional impact on output contraction. Green (2010) found that although monetary policy was employed in response to the GFC in Southeast Asia, fiscal expansion was slow to be used. Even if discretionary fiscal policy was too sluggish in reacting to business cycles, automatic fiscal stabilizers can mitigate the impact of global financial crises.

Unlike other emerging market countries where large budget deficits are more typical, Southeast Asian countries with sufficient fiscal space could conduct expansionary fiscal policies to compensate for shortfalls in external demand. Singapore, for example, had a budget surplus before the GFC (Table 18.5). From 2000 to 2008, this surplus was 6.4 percent of GDP on average. However, the surplus declined during the GFC, as the Singapore government used expansionary fiscal policy to raise domestic aggregate demand, so as to compensate for a decline in exports. Similarly, the budget deficit of the Indonesian government was low prior to the crisis, compared to other ASEAN countries. Moreover the Indonesian government did not have to resort to as much fiscal stimulus as Malaysia, the Philippines, and Thailand. The latter three countries are more exposed to trade shocks than Indonesia, and rely less on domestic consumption.

For the transition economies, the GFC led to enlarged budget deficits. Sharp falls in tax revenue coupled with a rise in public spending caused large budget deficits in Cambodia, Vietnam, Lao PDR, and Myanmar (Table 18.5). As in the other ASEAN economies, however, the deficit situation improved as these economies turned around.

Tax revenues rise and fall with output growth, producing some degree of automatic fiscal stabilizers. Vietnam, Thailand, the Philippines, Indonesia, and Myanmar all experienced lower tax revenues in 2009. Apart from Malaysia, Southeast Asian countries were able to collect more tax revenues after the economic recovery in 2010.

Monetary policy

In general, monetary policy is used to achieve stable long-term output growth with price stability. This can be done by avoiding excessive swings of monetary aggregates and keeping their growth rates in line with output growth. Expansionary monetary policy can also mitigate the impact of global slowdowns. As long as the central bank's key policy rate is well above zero, an expansionary

monetary policy can be employed to stimulate consumption and investment expenditures to compensate for drops in export demand.

However, countries with less sophisticated financial institutions find it difficult to cope with external shocks by employing monetary policy instruments to respond to changing external demand. Pham and Riedel (2012) have argued that financial sector liberalization precluded Vietnam from pursuing an independent monetary policy to control inflation. A pegged exchange rate and free capital inflows, as well as a lack of monetary policy instruments, complicated the conduct of monetary policy, resulting in Southeast Asia’s highest inflation rate. Singapore, by contrast, is an open economy with free flows of trade and capital and well-developed financial institutions. The movement of the SIBOR rate (the benchmark short-term interest rate) is in line with the LIBOR and US federal funds rates.

Although Singapore’s key rates match closely with those in global markets, those of other countries in the region are typically higher. The differentials over global benchmark rates reflect country-specific systemic economic and political risk. Accordingly, when a country’s interest rate differential declines without a change in the underlying risk factors, it indicates that the monetary policy stance has become more expansionary than in the rest of the world. Since 2002, the money market interest differentials among Southeast Asian nations have narrowed, especially for Indonesia, Malaysia, and the Philippines. With more open capital accounts, it is difficult to pursue an independent monetary policy. Countries face the “trilemma” problem, that with an open capital account they cannot simultaneously determine both domestic monetary policy and the level of the exchange rate.

The actions of some Southeast Asian monetary authorities during the GFC reflect their efforts to find a balance between using expansionary monetary policies to stimulate domestic demand and preventing a collapse of the exchange rate. In 2007, Indonesia, and the Philippines aggressively cut their policy rates (Figure 18.13). Their expansionary monetary policies continued between 2010 and 2012, in response to the global economic slowdown.

As a response to the ongoing GFC, the Bank of Thailand successfully raised its interest rate to ward off inflationary pressure, thereby creating a wider interest rate gap. This in turn led to increased capital inflows and, as a result, the baht strengthened against the dollar, compared to

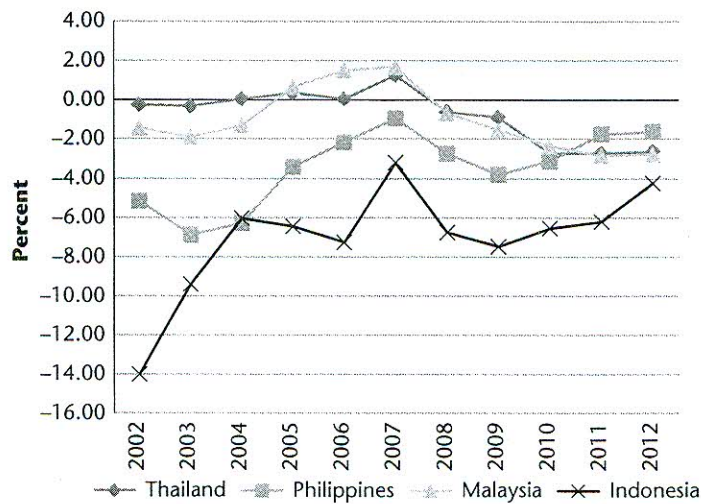


Figure 18.13 Money market rate differentials relative to Singapore
Source: ADB.

Table 18.6 Growth rate of broad money, ASEAN-5 economies (percent per year)

	<i>Indonesia</i>	<i>Malaysia</i>	<i>Philippines</i>	<i>Singapore</i>	<i>Thailand</i>
2005–06	15.6	16.3	15.9	12.8	7.1
2007	19.3	9.5	10.7	13.4	6.3
2008	14.9	13.4	15.4	12.0	9.2
2009	13.0	9.5	7.7	11.3	6.8
2010	15.4	7.2	10.7	8.6	10.9
2011	16.4	14.4	6.5	10.0	15.2

Source: ADB.

other currencies in the region. A stronger domestic currency can dampen inflationary impacts from low interest rate policies intended to stimulate domestic demand.

Indonesia, as mentioned, cut interest rates aggressively at the beginning of the GFC. From 2007 to 2011, Indonesian money supply and price levels grew faster than in other ASEAN-5 countries (Table 18.6). Rising inflationary pressures caused the Indonesian rupiah to depreciate. To counter this, in 2013 Bank Indonesia raised its key policy rate by 25 basis points to 6 percent, ending its loose monetary regime to curb rising inflation, despite weakening global commodity prices and investment activity. However, this induced a “mini-crisis” since through the interaction of monetary and exchange rate policies with domestic distortions – specifically, the policy of fixing nominal fuel prices so as to subsidize consumption and repress inflation. However, currency depreciation widened the gap between foreign and domestic fuel prices, increasing the fiscal burden of the fuel subsidy. Eventually the strain of the subsidy on the government budget became so high that the government had to reduce the subsidy rate. As in all developing countries, inflationary expectations will rise when food prices increase, following more realistic fuel prices. The central bank was forced to raise the key policy rate to contain inflation. There is always a trade-off between price stability and output growth.

In transition economies, financial development occurs with widespread financial services provided by commercial banks. While Singapore, Thailand, Malaysia, Indonesia, and the Philippines controlled monetary growth effectively, Vietnam, Cambodia, Myanmar, and Lao PDR let their money supply grow rapidly (Table 18.7). For fast-growing transitional economies, where the demand for money increases more rapidly than income, inflationary pressure will be mitigated as the velocity of money will not rise. Inflation in Myanmar and Lao PDR remained subdued, as opposed to Vietnam and Cambodia.

Table 18.7 Growth rate of broad money: CLMV economies (percent per year)

	<i>Cambodia</i>	<i>Lao PDR</i>	<i>Myanmar</i>	<i>Vietnam</i>
2005	15.8	7.9	27.3	30.9
2006	40.5	26.7	27.3	29.7
2007	61.8	38.7	29.9	46.1
2008	5.4	18.3	14.9	20.3
2009	35.6	32.4	30.6	29.2
2010	21.3	39.1	42.5	33.3
2011	21.5	25.2	30.5	12.1

Source: ADB.

Notwithstanding the prevalent dollarization in CLMV, monetary growth is much higher than in other ASEAN-5 countries. During transformation from rural to urban regions, the demand for money increases. If an excess supply of money exists as a result of financing budget deficits, inflationary pressures will build. In 2012, property prices in Laos increased by 15 percent as a result of foreign investment in large-scale real estate projects.

As observed by Takagi and Kozuru (2010), output and price correlations have increased in post-crisis Asia. Shocks originating within the region have risen. Increasing interdependence results in co-movements of output and price cycles, but greater regional interdependence does not imply weaker linkages with the rest of the world.

Output cycles are not the only phenomena that have become more synchronized. Inflation trajectories in Southeast Asia also show a similar pattern, decelerating during the slump of 2009 and accelerating during the recovery (Figure 18.14). Those countries simultaneously experiencing booms and busts would also have to withstand pressures from excess demand on price levels. Price stability in Southeast Asian economies depends largely on the ability to control the money supply, which results from exchange rate policies and methods of financing budget deficits. Southeast Asian economies are subject to similar external supply shocks that temporarily threaten price stability. Price stability can be maintained in the long run, provided that aggregate demand can be kept in line with production capacity. If inflation is driven by the demand side, there will be a trade-off between growth and price stability. High output growth must be sacrificed to curb inflationary pressure. If inflation is driven by the supply side such as by energy price shocks, then the output growth and inflation rate would be negatively correlated. Fiscal policy and monetary policy must be coordinated to strike a balance between price stability and output growth.

Exchange rate policy

Although currency appreciation can hurt exports, a strong currency can facilitate importation of capital goods and reduced imported inflation. Exchange rate and monetary policies must strive to achieve an optimal mix so as to strike a balance between export growth and price stability.

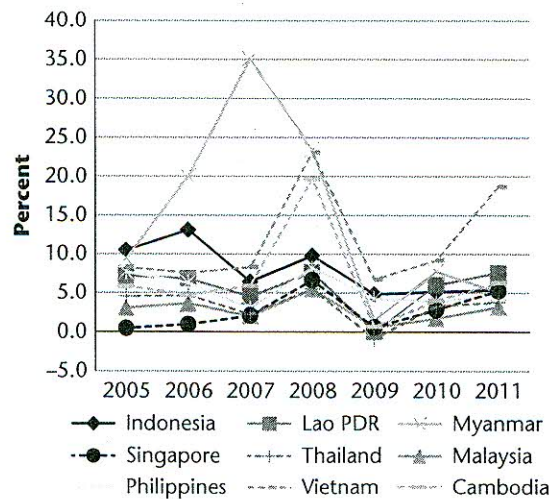


Figure 18.14 Inflation synchronization in ASEAN
Source: ADB.

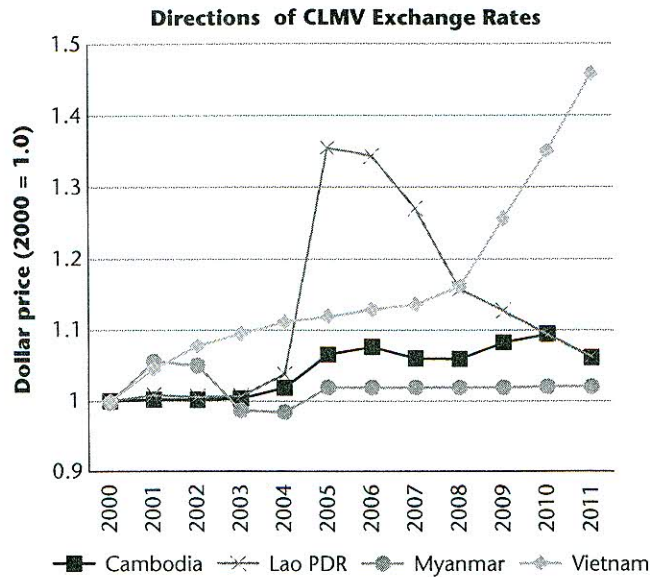


Figure 18.15 Trends in CLMV exchange rates
Source: ADB.

Some Southeast Asian economies that depend on exports of traditional commodities faced a difficulty in allowing their currencies to appreciate during the GFC, since to do so would hamper exports. Myanmar and Cambodia maintained exchange rate stability throughout the GFC (Figure 18.15). The Bank of the Lao-PDR has consistently used a managed floating exchange rate regime to maintain exchange rate stability. Since 2003, it fixed the kip and let it then depreciate by more than 30 percent in 2005. With continued capital inflows, Lao PDR has allowed its currency to appreciate against the dollar and depreciate against the baht of Thailand, its major trading partner.

As Figure 18.15 shows, the Vietnam dong has depreciated more than 45 percent since 2000. This is because it must respond to real exchange rate appreciation caused by high inflation. The rate of depreciation of the dong accelerated during the GFC, making Vietnamese exports more competitive in markets where they compete with other Southeast Asian countries. However currency depreciation also leads to higher imported inflation, which offsets gains in international competitiveness. Partly for this reason, Vietnam has endured the highest inflation rate in the region. A high rate of currency depreciation would not hurt the domestic banking sector if Vietnamese banks did not borrow heavily from abroad in dollars and could attract more foreign investment from neighboring countries. Inflationary expectations are important as they can generate speculation in property and foreign exchange markets. After a steep devaluation, inflation may accelerate if it fuels inflationary expectations. As long as there is a large difference in the official and market rates for the dollar, black market activity persists. In 2012, inflation in Vietnam was 9.2 percent, yet monetary policy was expansionary. To stimulate demand, the State Bank of Vietnam made cuts in key policy rates over six times. In 2012, GDP grew by 5 percent – the lowest growth rate since 1999. In Vietnam, growth is a major priority compared to price stability.

If growth is driven by exports, an economy can lose international competitiveness from domestic currency appreciation. Since 2000, the Malaysia ringgit, Singapore dollar, and Thai baht have appreciated substantially against the dollar, despite intervention by the central banks

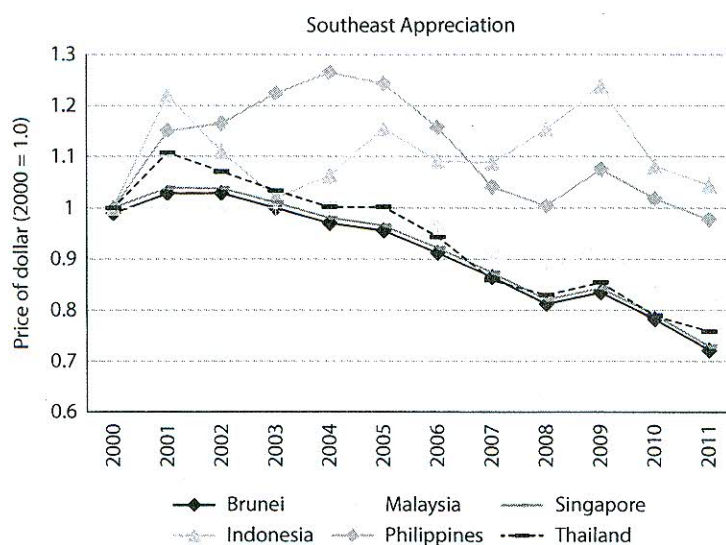


Figure 18.16 Exchange rate appreciation in ASEAN economies

Source: ADB.

(Figure 18.16). While the Philippine peso depreciated from 2000 to 2004, it has since followed a rising trend against the dollar. Indonesia experienced more fluctuations as described above, but even its currency appreciated after the GFC.

During the US mild recession in 2001 and financial turmoil in 2009, domestic currencies of Southeast Asian economies had similarly appreciated against the dollar. This rising trend continued into 2013. During the GFC the currencies of Brunei, Singapore, and Thailand experienced the greatest appreciation, followed by Malaysia. Indonesia experienced the lowest appreciation rate, while the Philippine peso reversed the depreciation trend and eventually regained its original value of 2000. Currency appreciation is a natural consequence of a surplus on the balance of payments. An attempt to resist the trend of currency appreciation can be counterproductive as undervaluing domestic currencies can further complicate macroeconomic management. Often, the fear of appreciation can be unwarranted since exports are more sensitive to the output effect of changing world trade volumes than the substitution effect of currency appreciation.

Currency appreciation did not hurt exports as much as might be inferred from the actual rate of appreciation, because exports also require imported intermediate products. This reflects the long-term structural change in Southeast Asian production in exports from final to intermediate manufactured products. This shift implies that a loss of competitiveness caused by currency appreciation would be proportional to export composition. The lower the share of final manufactured exports among total exports, the greater the burden imposed by a currency appreciation imposed upon competitiveness of exports.

Because of large capital inflows into Southeast Asia in the aftermath of the GFC, currency appreciation cannot be resisted in the long run. Also, while currency appreciation might slow exports, it can also mitigate the impact of imported inflation. This can be seen as a form of financial Dutch disease – the idea that inflows of export earnings (or, in this case, of foreign investment) will lead to rising prices of domestic non-tradables and thus fuel inflation. By resisting the trend of currency appreciation, central banks must intervene in foreign exchange markets. Accumulation of international reserves leads to an expansion of the monetary base, which results in rising price

levels in the non-traded sector caused by expanding domestic credit. Adverse consequences of this financial form of Dutch disease had been demonstrated by property bubbles in Southeast Asian countries before the 1997 Asian financial crisis. With increasing flows of capital into Southeast Asia, especially CLMV countries, the same policy mistakes which some ASEAN-5 nations made in the early 1990s might occur again.

Finally, long-term structural changes in the pattern of Asian and global trade are also altering the drivers of Southeast Asian exchange rates. Because of its increasing importance in the global economy, China's output growth increasingly shapes the business cycle of Southeast Asia. The movement of the renminbi affects the direction of Southeast Asian currencies. This can be seen by examining determinants of the real effective exchange rate (REER) index, a measurement of competitiveness provided by the Bank for International Settlements (BIS).

An investigation of REER determinants for ASEAN currencies reveals that they are affected by the dollar, yen, and renminbi. An appreciation of these three currencies causes a depreciation of ASEAN currencies. From 2000 to 2007, before the GFC, movement of the dollar had the greatest impact on the ASEAN REER, followed by the yen, and then the renminbi. An appreciation of the dollar caused an immediate depreciation of ASEAN currencies. After the onset of the GFC, however, the renminbi had the greatest impact on ASEAN currencies, dominating the influence of the dollar and the yen. Depreciation of the dollar and yen caused appreciation of the renminbi, which in turn caused depreciation in ASEAN-5 currencies.

An appreciation of the renminbi causes an abrupt depreciation of the Singapore dollar, due to its greater flexibility relative to other regional currencies. The impact of a change in the movement of the renminbi has a long lag effect; over time, renminbi depreciation leads to losses of competitiveness in ASEAN currencies. Looking to the future, the consequence of this structural shift in the regional and global real economies means that any future slowdown in China's economic growth and/or depreciation of the renminbi relative to the US dollar will require more aggressive stimuli from fiscal and monetary authorities in anticipation of a recession caused by China's business cycle.

Concluding remarks

In 2008, Asian developing countries' growth rates slowed after the Global financial crisis of 2007. With a decline in exports caused by the global recession, economic uncertainty and pessimism further dampened private consumption and investment. Some Southeast Asian economies performed well compared to other countries, given a similar structure of export dependency on the world economy. Their ability to stabilize aggregate demand by means of fiscal stimuli helped maintain the growth despite a sharp fall in exports in 2009. Public debt in these countries is manageable, providing sufficient fiscal space to respond to export demand shocks.

Southeast Asian economies' business cycles are synchronized by impacts of foreign capital flows and supply-chain effects of the global economic slowdown on network trade. Southeast Asian financial sectors have been less vulnerable to external shocks as a result of strengthened rules and regulations by central banks. When key policy interest rates were reduced, Asian bank credit did not expand rapidly because of enlarging saving-investment gaps that started with the collapse of investment after the 1997 financial crisis. Although exchange rates of these countries appreciated against the US dollar, shrinking exports do not adversely affect output growth as long as export shortfalls are compensated by stimulus-driven expansion of domestic demand.

Boom-bust cycles are related to export cycles, which are affected by world economic activity and the policy responses of giant economies. The appreciation of real effective exchange rates of ASEAN-5 countries and subsequent losses of international competitiveness requires policy makers to rethink stabilization strategies by taking into account the increasingly influential role of the

Chinese business cycle. China's exchange rate policy has produced a new environment and this calls for a reassessment of exchange rate policy in the Southeast Asian economies.

Foreign direct investment in the region has increased considerably and will be intensified by Myanmar's newly adopted outward-orientation policy. Whether Vietnam, Cambodia, Lao PDR, and Myanmar can escape the adverse impacts of the Dutch disease depends on the flexibility and effectiveness of countercyclical macroeconomic policy in reining in domestic monetary growth. In response to future global shocks, each country's fiscal and monetary policies must be well coordinated to ensure a rapid revival of domestic demand and therefore a minimal departure from the trend growth path.

In terms of depth of recession and speed of recovery, the local impact of the GFC is pale compared to that of the Asian financial crisis. The high share of consumption in GDP makes it the most important source of volatility, followed by investment, both of which are affected by business sentiment and consumer confidence.

Note

- 1 Hill (2014) provides a succinct update on the "pragmatic orthodoxy" thesis for Southeast Asia in the 2000s.

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