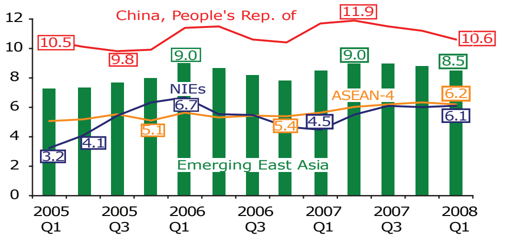
Emerging East Asia—A Regional Economic Update

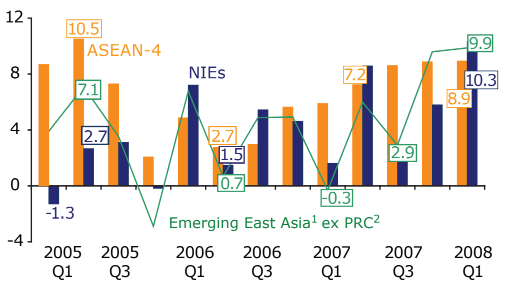
Recent Economic Performance

Figure 1: Regional GDP Growth[1]—Emerging East Asia[2]



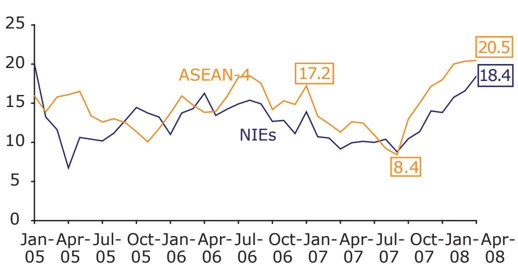
[1] Weighted by gross national income (atlas method, current $).
[2] Includes ASEAN-4, NIEs and People's Republic of China. Aggregates do not include Brunei Darussalam, Cambodia, Lao People's Democratic Republic, Myanmar, and Viet Nam, for which quarterly GDP data are not available.
Source: OREI staff calculations based on national sources.

Figure 2: Gross Domestic Investment Growth (y-o-y, %)



[1] Refers to ASEAN-4 and NIEs; does not include Brunei Darussalam, Cambodia, Lao People's Democratic Republic, Myanmar, and Viet Nam, for which quarterly data are not available.
[2] PRC = People's Republic of China
Source: OREI staff calculations based on CEIC data.

Figure 3: Merchandise Export Growth[1]—NIEs and ASEAN-4 ($ value, y-o-y, %)



[1] 3-month moving average.
Source: OREI staff calculations based on CEIC data.

Growth and Inflation

Stronger-than-expected economic growth in emerging East Asia during the first 3 months of 2008 gave way to moderation in the second quarter as slower growth in industrialized economies, particularly the US, began to impact the region.

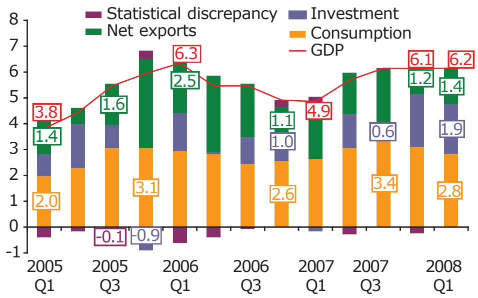
Supported by stronger investment and resilient exports, the combined gross domestic product (GDP) of the nine largest emerging East Asian economies grew 8.5% in the first quarter of 2008, easing from the peak of 9.0% in 2007.[1] Through March 2008, GDP grew 6.2% in the four middle-income countries of the Association of Southeast Asian Nations (ASEAN-4), and 6.1% in the four newly industrialized economies (NIEs)—both above the 2007 rate **(Figure 1)**. Moderation came mainly from the People's Republic of China (PRC), where the economy grew 10.6% in the first quarter, slowing from 11.9% in 2007. Regional exports have proved remarkably resilient against the backdrop of slower global output, providing a strong impetus to growth. However, early indicators such as industrial production, retail sales, and advance GDP estimates—although available for only a few economies—suggest that the region moderated somewhat during the second quarter. For example, second quarter GDP growth slowed to 10.1% in the PRC and to 1.9% in Singapore.

Despite an easing in growth momentum, exports remained generally resilient, boosting business investment, while the contribution of consumer spending to economic growth was mixed.

Investment strengthened markedly in ASEAN-4 and the NIEs, with gross domestic investment growing 9.9% in the year through March 2008, much higher than the 5.5% average over the past 5 years **(Figure 2)**. Exports also showed remarkable resilience despite the slowdown in the United States (US), as demand

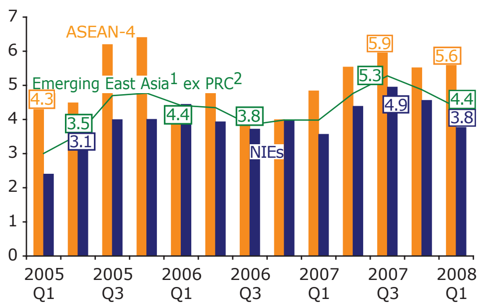
[1] The nine largest emerging East Asian economies include the People's Republic of China; the four newly-industrialized economies (NIEs) of Hong Kong, China; Republic of Korea (Korea); Singapore; and Taipei,China; and the four middle-income ASEAN countries (ASEAN-4) of Indonesia; Malaysia; Philippines; and Thailand.

Figure 4: Contributions to GDP Growth—Emerging East Asia ex. PRC[1] (y-o-y, %)



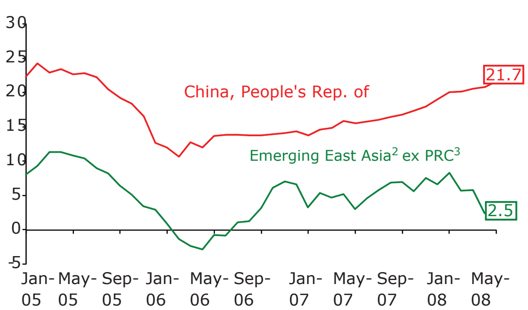
[1] PRC = People's Republic of China
Source: OREI staff calculations based on CEIC data.

Figure 5: Consumption Growth (y-o-y, %)



[1] Refers to ASEAN-4 and NIEs; does not include Brunei Darussalam, Cambodia, Lao People's Democratic Republic, Myanmar, and Viet Nam, for which quarterly data are not available.
[2] PRC = People's Republic of China
Source: OREI staff calculations based on CEIC data.

Figure 6: Retail Sales Growth[1] (y-o-y, %)



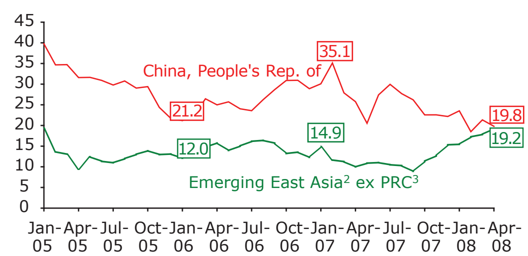
[1] 3-month moving average.
[2] Refers to Hong Kong, China; Indonesia; Singapore; Taipei,China; Thailand, and Viet Nam; does not include Brunei Darussalam, Cambodia, Lao People's Democratic Republic, Malaysia, Myanmar, Republic of Korea, and Philippines, for which monthly data are not available.
[3] PRC = People's Republic of China
Source: OREI staff calculations based on CEIC data.

elsewhere, particularly among the region's own economies, remained strong **(Figure 3)**. Currency depreciation in real effective terms for many of the ASEAN-4 and NIEs may have also supported their exports. Nevertheless, imports grew faster due to stronger investment and higher import prices, and thus the contribution of net exports to overall GDP growth was lower in the first quarter than during the past few years **(Figure 4)**. The contribution of consumption demand has been mixed across economies, as growth in consumer spending moderated after reaching a peak in the third quarter of 2007 **(Figure 5)**.

The PRC economy grew 10.4% in the first half of 2008—slower than the 12.2% in the second half of 2007—but maintained strong investment and robust consumption.

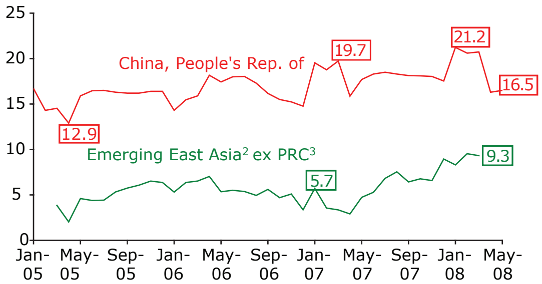
The Sichuan Province earthquake on 12 May caused extensive damage to human life and local infrastructure, but has so far had a limited impact on the overall PRC economy. Despite tighter monetary policy and the disruptive snowstorms in February, the investment boom has continued, with fixed-asset investment growing by 26.3% (y-o-y) in the first half of 2008 in nominal terms (although higher inflation implies it might be lower in real terms). Consumer spending also grew steadily—retail sales growth continued its upward trend through June (**Figure 6**). Imports surged 30% in the first 6 months of 2008, reflecting strong domestic demand even as export growth slowed—the trade surplus was down $13.1 billion (or 11.6%) compared with the same period in 2007 (**Figure 7**). Industrial production has

Figure 7: Merchandise Export Growth[1]
($ value, y-o-y, %)



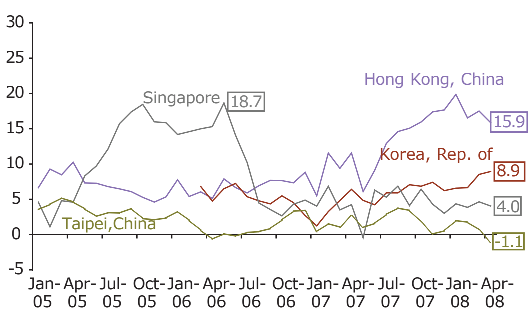
[1] 3-month moving average.
[2] Refers to NIEs, ASEAN-4 and Viet Nam; does not include Brunei Darussalam, Cambodia, Lao People's Democratic Republic, and Myanmar, for which monthly data are not available.
[3] PRC = People's Republic of China
Source: OREI staff calculations based on CEIC data.

Figure 8: Industrial Production Growth[1]
(y-o-y, %)



[1] 3-month moving average.
[2] Refers to ASEAN-4; Republic of Korea; Singapore; Taipei,China; and Thailand; does not include Brunei Darussalam, Cambodia, Hong Kong, China, Lao People's Republic, Myanmar, and Viet Nam, for which monthly data are not available.
[3] PRC = People's Republic of China
Source: OREI staff calculations based on CEIC data.

Figure 9: Retail Sales Growth[1]—NIEs
(y-o-y, %)



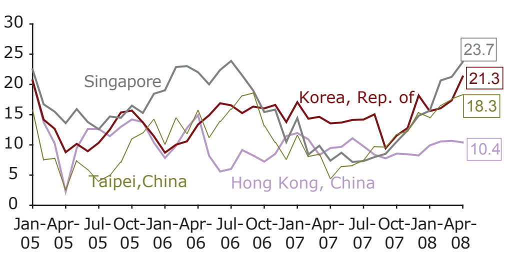
[1] 3-month moving average.
Source: OREI staff calculations based on CEIC data.

seen a drop in growth as well, growing a still strong 16.3% in the first 6 months of 2008 against the 18.5% rate over the same 2007 period (**Figure 8**).

In the NIEs, GDP growth improved to 6.1% during the first quarter, mainly driven by resilient exports and a rise in investment.

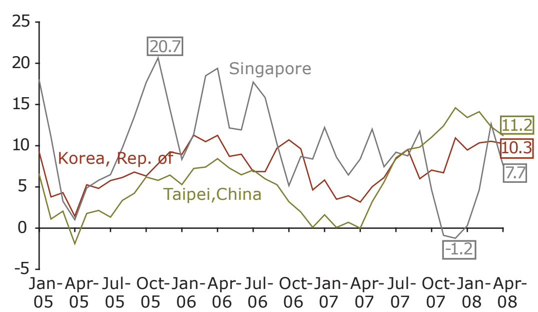
Investment surged dramatically in Singapore, growing 57% in the first quarter on a 139% increase (y-o-y) in spending on transport equipment. In Taipei,China, investment rose 12%, much stronger than in the past few years. It slackened in the Republic of Korea (Korea), but remained stable in Hong Kong, China. Private consumption was more mixed, with growth generally supported by robust incomes and a tight labor market in Hong Kong, China, and an acceleration in Singapore. But it slowed somewhat in Korea and Taipei,China. Slowing momentum in consumption growth left retail sales softer in all NIEs but Korea **(Figure 9)**. Nonetheless, slackening domestic demand was also evident in the Korean economy, with consumer sentiment deteriorating and monthly sales figures for consumer goods and automobiles slipping. Overall, the external sector performed surprisingly well, (**Figure 10**) with the trade surplus increasing in the first quarter despite a rise in import growth. As a result, net exports contributed 1.6% to the 6.1% aggregate growth. Buoyant exports derived from generally robust industrial activity in the NIEs **(Figure 11)**. However, Singapore's slower growth in the second quarter was largely due to a contraction in manufacturing output.

Figure 10: Merchandise Export Growth[1]—NIEs ($ value, y-o-y, %)



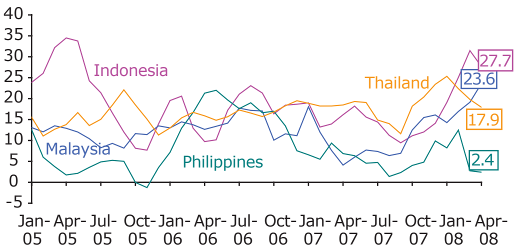
[1] 3-month moving average.
Source: OREI staff calculations based on CEIC data.

Figure 11: Industrial Production Growth[1]—NIEs (y-o-y, %)



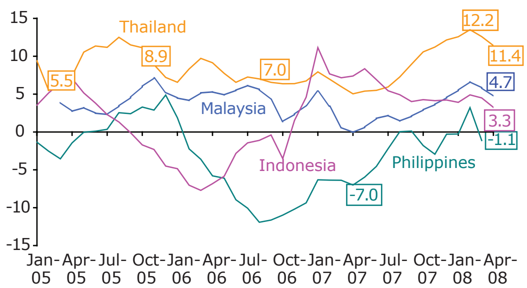
[1] 3-month moving average.
Source: OREI staff calculations based on CEIC data.

Figure 12: Merchandise Export Growth[1]—ASEAN-4 ($ value, y-o-y, %)



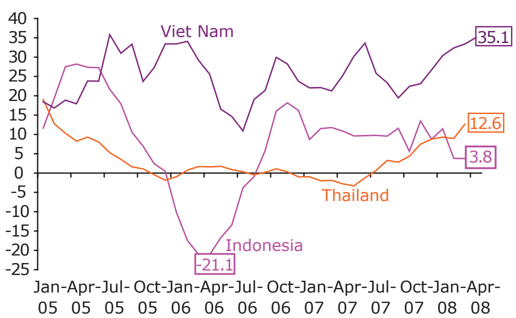
[1] 3-month moving average.
Source: OREI staff calculations based on CEIC data.

Figure 13: Industrial Production Growth[1]—ASEAN-4 (y-o-y, %)



[1] 3-month moving average.
Source: OREI staff calculations based on CEIC data.

Figure 14: Retail Sales Growth[1]—Selected Economies (y-o-y, %)



[1] 3-month moving average.
Source: OREI staff calculations based on CEIC data.

Stronger first quarter GDP growth of 6.2% in ASEAN-4 was largely driven by increased investment and private consumption.

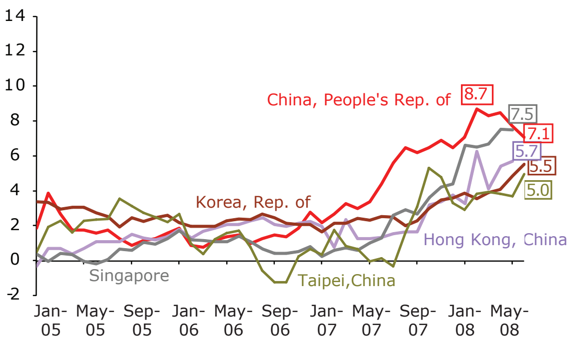
Investment was generally strong among ASEAN-4 economies in the first quarter, contributing about 1.7% to total GDP growth. This partly reflects the success of policy measures adopted over the past few years to improve the investment climate. High economic growth over the same period has also boosted household income and spending, although public consumption has slowed following elections in several countries. In Thailand, the return to civilian government after the December 2007 elections helped stimulate private consumption and investment spending in the first quarter—although the return of political tensions recently may deter some spending in the March–June quarter. In Malaysia, first-quarter investment contracted after surging in the last quarter of 2007. Exports grew steadily despite the US slowdown, as exports to non-US markets expanded, particularly to the European Union (EU) and Japan. Export growth contributed to the solid ASEAN-4 first quarter expansion, although the pace has eased somewhat in recent months, except for Malaysia (**Figure 12**). In the Philippines, exports have already slowed markedly due to the softening external demand for electronics. Second quarter GDP growth likely eased given the moderation visible in the region's industrial production **(Figure 13)** and retail sales **(Figure 14)**.

Most other ASEAN economies showed signs of moderation following mixed results in 2007.[2]

After posting an 11-year high of 8.5% in 2007, Viet Nam's GDP growth slowed in the first half of 2008—although it remained relatively strong at 6.5%—as domestic demand continued to expand rapidly. Cambodia's GDP grew an estimated 9.6% for 2007, while rising inflation and slowing US demand may have slowed growth in the first half of this year. In Myanmar, GDP growth in 2007 (fiscal year) is estimated at 5.5%, but was expected to slow in the aftermath of the devastating cyclone that struck the Irrawaddy delta in May. GDP in Brunei Darussalam was up 0.6% in 2007 due to relatively strong non-oil and gas sectors, but is expected to remain sluggish this year due to high oil and gas production costs and a reduction in oil output from maturing oil fields. The exception may be the Lao People's Democratic

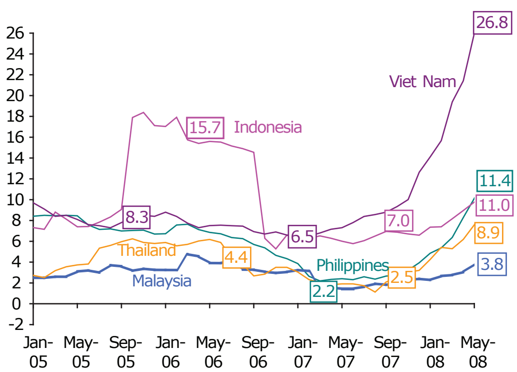
[2] Data for 2008 are unavailable for Brunei Darussalam, Cambodia, Lao PDR, and Myanmar.

Figure 15a: Inflation in NIEs and PRC—Headline Rates (y-o-y, %)



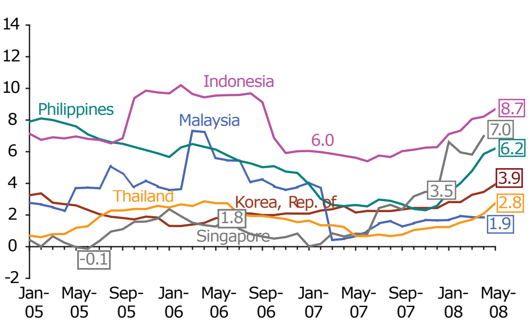
PRC = People's Republic of China
Source: OREI staff calculations based on CEIC data.

Figure 15b: Inflation in Selected ASEAN Economies—Headline Rates (y-o-y, %)



Source: OREI staff calculations based on CEIC data.

Figure 16: Core Inflation Rates (y-o-y, %)



Note: Official figures, except Malaysia (excl. food, fuel, utilities) and Singapore (excl. food, private transport).
Source: OREI staff calculations based on CEIC data.

Republic (Lao PDR), where GDP grew 8.0% in 2007 and may repeat that performance this year as mining and hydropower continue to drive output.

Even as economic growth showed signs of moderation in the second quarter, headline inflation rose sharply as global oil and food prices surged.

Driven largely by soaring food and energy prices, headline inflation reached multi-year highs in many regional economies. After rising steadily from 1.0% in early 2006, PRC inflation reached 8.7% in February, an 11-year high, before easing back to 7.1% in June. Headline inflation also rose sharply in the NIEs from mid-2007, when annual inflation ranged between zero and 2.5%, to between 3.7% and 7.5% in May **(Figure 15a)**. In Singapore, April inflation hit a 26-year high of 7.5%. Surging food and energy prices coupled with strong economic expansion have also pushed up prices across ASEAN. In May, headline inflation rose above 25% in Viet Nam. By June, it had reached 11.0% in Indonesia, 11.4% in the Philippines, and 8.9% in Thailand **(Figure 15b)**. The inflation surge is also partly due to the removal of fuel subsidies in some economies. Prior to the removal of the subsidies in early June, Malaysia had managed a slower inflation rate of around 3–4%, though still up from 1.5% in mid-2007.

Core inflation—which excludes food and energy—has begun to rise across emerging East Asia, indicating that a much more broad-based second-round effect may be underway.

Core inflation has risen steadily beginning in the second half of 2007, accelerating in some emerging East Asian economies in recent months **(Figure 16)**. The pick-up was most visible in Singapore and the Philippines, where core inflation rose to 6.8% and 6.2% respectively in May from 3.5% and 2.6% in December 2007. In Indonesia, it reached 8.7% in May, up from 6.3% in December 2007. The rise may also hint that inflation expectations have begun to drift. Higher inflation has also led to wage increases in some economies (see Special Section, page 48). Although the surge in global oil and food prices remains the main driver of the inflationary surge, rapid liquidity growth in the region over the past few years has been an important underlying factor.

Balance of Payments

The balance of payments remained in surplus across much of the region in the first half of 2008, sustained largely by continued, if narrowing, current account surpluses and strong capital inflows.

While export growth picked up in the first half despite a slowing US economy, emerging East Asia's imports accelerated even faster, resulting in a narrowing trade balance. The increase in import costs came from both price increases from imported raw materials and strong domestic demand, particularly from investment. But strong capital inflows to the region continued through the first quarter of 2008, contributing to higher balance of payments surpluses **(Tables 1a, 1b, 1c)**. Central banks in emerging East Asian economies with strong external positions continued to sterilize excess inflows to avoid appreciation pressures, resulting in stronger foreign exchange reserves.

External terms of trade have deteriorated across much of emerging East Asia, eating into the region's income due to continued high commodity prices.

With most emerging East Asian economies net importers of raw materials and exporters of manufactures, many have suffered deteriorating terms of trade due to rising commodity prices

Table 1a: Balance of Payments—ASEAN-4 (% of GDP)

	2000-2004 Average	2004 H1	2004 H2	2005 H1	2005 H2	2006 H1	2006 H2	2007 H1	2007 H2	2008 Q1
Current Account	**4.2**	**2.2**	**4.4**	**1.2**	**2.9**	**4.1**	**6.3**	**5.9**	**6.2**	**5.0**
Net goods	9.7	7.3	9.4	5.3	7.9	7.8	9.7	7.2	7.5	5.3
Net services	-3.4	-2.6	-2.7	-2.5	-3.2	-2.4	-2.2	-0.6	-0.4	-0.1
Net income	-3.6	-3.9	-3.6	-3.5	-4.1	-3.3	-3.0	-2.6	-2.6	-1.9
Net transfers	1.5	1.4	1.3	1.9	2.3	2.0	2.0	1.9	1.7	1.7
Financial Account	**-1.8**	**0.4**	**1.6**	**3.2**	**-2.5**	**1.2**	**-2.4**	**0.9**	**-2.6**	**7.0**
Net direct investment	0.9	0.9	1.3	2.9	1.9	2.0	1.4	0.9	0.2	0.8
Net portfolio investment	0.2	1.9	3.0	2.3	0.5	1.8	1.8	4.3	-2.0	4.5
Net other investment	-3.0	-2.4	-2.7	-1.9	-4.9	-2.6	-5.6	-4.3	-0.9	1.6
Capital Account	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**
Net errors & omissions	-0.4	0.7	-1.3	-1.6	-0.7	-0.0	-1.0	-0.5	-0.4	0.5
Overall Balance	**2.0**	**3.2**	**4.7**	**2.8**	**-0.3**	**5.3**	**3.2**	**6.3**	**3.2**	**12.6**

Note: Balance of payments definitions follow International Monetary Fund standards.
Sources: *International Financial Statistics,* International Monetary Fund; and CEIC.

Table 1b: Balance of Payments—NIEs (% of GDP)

	2000-2004 Average	2004 H1	2004 H2	2005 H1	2005 H2	2006 H1	2006 H2	2007 H1	2007 H2	2008 Q1
Current Account	**5.3**	**5.8**	**7.2**	**5.2**	**5.8**	**4.5**	**6.7**	**5.5**	**6.6**	**3.9**
Net goods	4.8	5.6	6.4	4.9	6.1	4.5	5.8	4.8	5.6	1.5
Net services	0.5	0.7	0.5	0.3	0.6	0.3	0.8	0.5	1.0	1.1
Net income	0.6	0.3	1.0	0.7	-0.2	0.5	0.7	0.9	0.7	1.9
Net transfers	-0.6	-0.8	-0.7	-0.7	-0.7	-0.8	-0.6	-0.7	-0.7	-0.6
Financial Account	**-0.9**	**1.7**	**-3.1**	**0.3**	**-4.4**	**-1.6**	**-3.3**	**-3.2**	**-4.3**	**1.1**
Net direct investment	0.5	-0.3	0.2	1.8	0.2	0.8	0.7	1.1	-0.7	0.8
Net portfolio investment	-2.8	-6.7	-0.2	-5.0	-1.3	-4.3	-6.1	-3.8	-4.4	-8.6
Net other investment	1.3	8.7	-3.2	3.5	-3.3	1.9	2.1	-0.5	0.9	8.9
Capital Account	**-0.2**	**-0.2**	**-0.2**	**-0.3**	**-0.2**	**-0.2**	**-0.2**	**-0.2**	**0.0**	**-0.1**
Net errors & omissions	0.6	0.5	1.0	0.6	0.6	0.5	0.2	0.1	0.6	0.4
Overall Balance	**4.7**	**7.8**	**4.9**	**5.7**	**1.8**	**3.2**	**3.3**	**2.3**	**2.9**	**5.3**

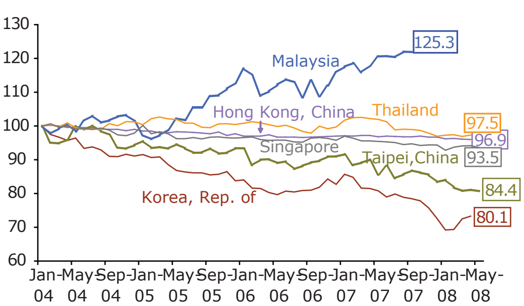
Note: Balance of payments definitions follow International Monetary Fund standards.
Sources: *International Financial Statistics,* International Monetary Fund; and CEIC.

Table 1c: Balance of Payments—People's Rep. of China (% of GDP)

	2000-2004 Average	2004 H1	2004 H2	2005 H1	2005 H2	2006 H1	2006 H2	2007 H1	2007 H2
Current Account	**2.7**	**1.1**	**6.5**	**7.0**	**7.4**	**8.0**	**10.6**	**11.8**	**11.2**
Net goods	3.3	0.8	5.7	5.6	6.3	7.0	9.2	9.8	9.6
Net services	-0.6	-0.8	-0.4	-0.4	-0.4	-0.5	-0.2	-0.2	-0.3
Net income	-1.0	-0.3	-0.1	0.5	0.5	0.3	0.5	0.9	0.7
Net transfers	1.0	1.4	1.4	1.3	1.1	1.2	1.0	1.3	1.1
Financial Account	**3.2**	**9.4**	**4.7**	**3.7**	**1.8**	**3.2**	**-2.1**	**6.4**	**-1.0**
Net direct investment	3.4	4.3	2.4	2.3	3.6	2.7	2.0	3.7	3.8
Net portfolio investment	-0.2	3.9	-0.9	-0.1	-0.3	-2.6	-2.6	-0.3	1.3
Net other investment	0.0	1.2	3.1	1.5	-1.5	3.1	-1.5	3.1	-6.0
Capital Account	**0.0**	**0.0**	**0.0**	**0.2**	**0.2**	**0.2**	**0.1**	**0.1**	**0.1**
Net errors & omissions	0.4	-1.0	3.7	-0.5	-0.9	-0.7	-0.3	0.9	0.2
Overall Balance	**6.4**	**9.4**	**14.8**	**10.4**	**8.4**	**10.7**	**8.4**	**19.2**	**10.5**

Note: Balance of payments definitions follow International Monetary Fund standards.
Sources: *International Financial Statistics,* International Monetary Fund; and CEIC.

Figure 17: Terms of Trade Indexes
(January 2005 = 100)

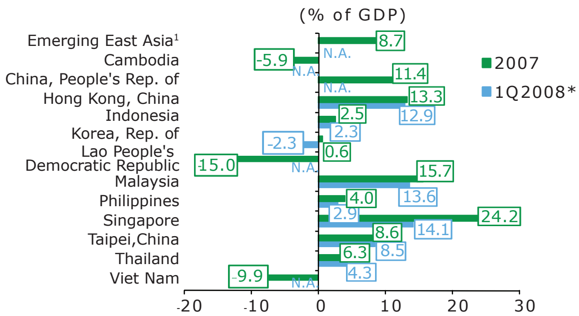


Source: OREI staff calculations based on CEIC data.

(**Figure 17**). The World Bank[3] estimates that worsening terms of trade over 2004–07 have cost emerging East Asian economies on average about 0.9% of regional GDP per year. With the exception of Indonesia, Malaysia, and Viet Nam (who are net exporters of commodities), most regional economies experienced terms-of-trade losses arising from high food and oil prices, creating depreciation pressures. The deterioration of the terms of trade has already hurt current account balances, especially in the region's net importers. And this has begun to affect exchange rates in some of these economies, reversing previously strong appreciation pressures from strong capital inflows.

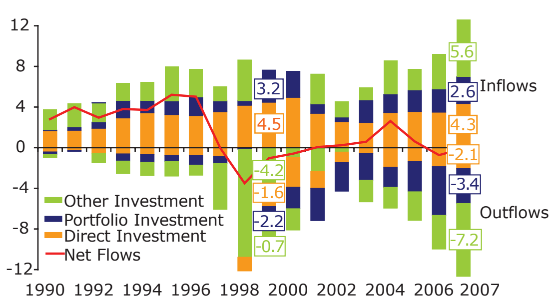
[3] World Bank. 2008. East Asia and the Pacific Regional Outlook Update, April.

Figure 18: Current Account Balance
(% of GDP)



[1] Includes ASEAN-4; NIEs; Cambodia; China, People's Rep. of; Lao People's Democratic Republic; and Viet Nam. Does not include Brunei Darussalam and Myanmar for which data are not available.
N.A. = Data not available.
Sources: *Asian Development Outlook 2008,* ADB, *International Financial Statistics*, International Monetary Fund, and CEIC.

Figure 19: Financial Account (% of GDP)



[1] Figures include People's Republic of China, of; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Taipei,China; Thailand; and Singapore.
[2] Due to data unavailability, figures for 1990–97 do not include Hong Kong, China and Taipei,China; 1998–99 figures do not include Taipei,China.
Sources: OREI staff calculations based on data from the *International Financial Statistics*, International Monetary Fund and national sources.

Across much of the region, current account surpluses narrowed—as high commodity prices drove up import costs faster than export revenues and domestic demand remained strong.

The PRC's overall trade surplus in the first half of 2008 fell by 11.6%, compared with the same period in 2007. In 2007, the PRC's current account surplus was 11.4% of GDP (**Figure 18**). In Taipei,China and Singapore, the trade surplus moderated, especially on the back of rising commodity import bills, with Taipei,China showing an increase in its investment income surplus. Korea saw a reversal from current account surplus to deficit, largely due to a huge drop in its services trade, caused by persistent growth in outbound tourism. Hong Kong, China's strong services trade and income surpluses led to a healthy current account balance, despite a deficit in the goods trade. Rising energy prices sustained strong export growth in Malaysia, but led to a smaller current account surpluses for Indonesia, Philippines, and Thailand. Export growth in Thailand was supported by favorable prices for agriculture products and booming tourism. Remittances from working abroad continued to aid the current accounts in Indonesia and the Philippines—overseas Filipino remittances grew 14.5% (y-o-y) despite a slower global economy. Among other ASEAN economies, Brunei Darussalam and Myanmar were running current account surpluses on commodity exports, but Viet Nam, Cambodia and Lao PDR had current account deficits between 6% and 15% of GDP. In Viet Nam, surging domestic demand, slowing external demand, and real currency appreciation pushed its trade deficit to an alarming $14.8 billion in the first half of 2008, well above the $12.4 billion total of all 2007.

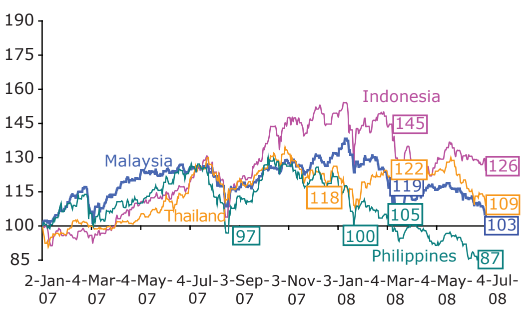
Strong capital inflows continued across much of emerging East Asia, particularly to PRC, Viet Nam, Malaysia and Thailand, while the NIEs showed small net inflows.

Capital inflows to the region remain strong **(Figure 19)**. In the PRC, capital inflows, particularly short-term and speculative, have accelerated on expectations for further renminbi appreciation, given the $281 billion increase in foreign exchange reserves in the first half of 2008—the financial account surplus was 2.3% of GDP in 2007. All of the NIEs ran small financial account surpluses in the first quarter of 2008. While capital inflows to Hong Kong, China; and Singapore were mostly direct or other investments, those

Figure 20a: Composite Stock Price Indexes—Emerging East Asia[1] and PRC[2] (last daily price, 2 January 2007 = 100, local index)

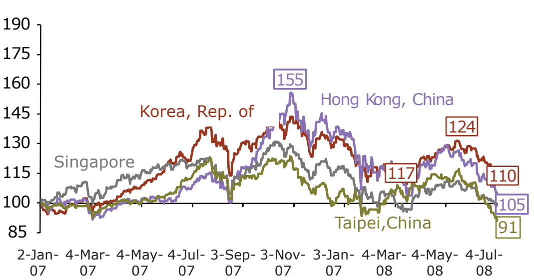
[1] Daily stock price indexes of Hang Seng (Hong Kong, China), JCI (Indonesia), KOSPI (Republic of Korea), KLCI (Malaysia), PCOMP (Philippines), STI (Singapore), TWSE (Taipei,China) and SET (Thailand) weighted by market captialization.
[2] Daily stock price indexes of combined Shanghai and Shenzen Composite, weighted by their respective market capitalization.
PRC = People's Republic of China
Source: OREI staff calculations based on Bloomberg data.

Figure 20b: Composite Stock Price Indexes—ASEAN-4[1](last daily price, 2 January 2007 = 100, local index)



[1] Daily stock price indexes of JCI (Indonesia), KLCI (Malaysia), PCOMP (Philippines) and SET (Thailand).
Source: OREI staff calculations based on Bloomberg data.

Figure 20c: Composite Stock Price Indexes—NIEs[1] (last daily price, 2 January 2007 = 100, local index)



[1] Daily stock price indexes of Hang Seng (Hong Kong, China), KOSPI (Republic of Korea), STI (Singapore), TWSE (Taipei,China).
Source: OREI staff calculations based on Bloomberg data.

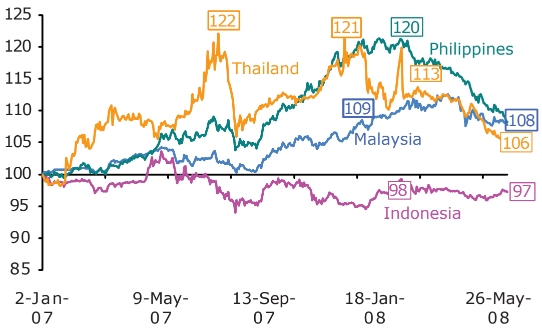
flowing to Taipei,China were largely portfolio investments—raised by the widening interest rate differential between Taipei,China and the US, and growing optimism over closer cross-straits economic links. In Korea, inflows of other investments of $16 billion, 45% more than net outflows in portfolio investment, indicated that borrowing from foreign banks might be increasing. While the financial account showed substantial surpluses in Malaysia and Thailand (15% and 19% of GDP, respectively) it was in deficit in Indonesia and roughly in balance in the Philippines. Capital inflows to Malaysia and Thailand were largely in the form of portfolio and other investments. Foreign direct investment continued to pour into Viet Nam, rising to $31 billion in the first half from $21.3 billion in 2007.

Financial Markets and Exchange Rates

In the first half of 2008, stock markets continued to trend downward from their record highs of October 2007 as global market turmoil worsened and equity markets in industrialized countries fell sharply.

Stock prices in the PRC have tumbled amid rising investor concern about valuation, tighter monetary policy, the impact of several natural disasters, and the general sell-off in global stock markets **(Figures 20a, 20b, 20c)**. As of end-June, the composite stock price index had fallen more than 50% from an all-time high in mid-October 2007. Stock prices in Hong Kong, China fell most among the NIEs, by close to 30% from their October peak, while losses in Korea, Singapore and Taipei,China ranged from 15% to 20%. By comparison, the Dow Jones Industrial Average fell 20% over the same period. The Philippine composite index declined 30% on concerns that the global economic slowdown, higher inflation, and weaker domestic growth prospects will undermine corporate profitability. Within the region, Viet Nam's stock market fell the most—60% since authorities began tightening monetary policy early this year. Stock markets in Indonesia and Malaysia, however, continued to rise until January this year, although they have retreated about 15% since. Thailand's stock market peaked in late May, as investor confidence returned for a while in the wake of the December vote—the market has fallen sharply since.

Figure 21a: Exchange Rate Indexes—ASEAN-4
(vis-à-vis US$, 2 January 2007 = 100)



Source: OREI staff calculations based on Bloomberg data.

Figure 21b: Exchange Rate Indexes—NIEs and People's Rep. of China
(vis-à-vis US$, 2 January 2007=100)

Source: OREI staff calculations based on Bloomberg data.

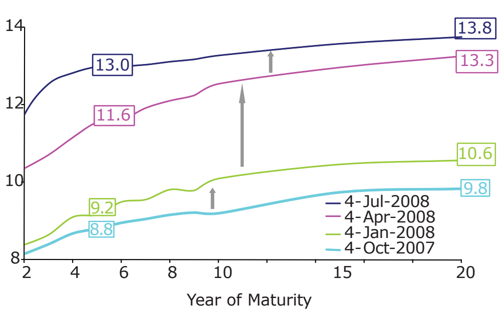
Trends in currency markets were mixed in the first half of 2008—some faced downward pressure against the US dollar from rising oil prices, inflation, and the effect of terms-of-trade deterioration, while others continued to strengthen, supported by strong balance of payments positions.

As inflation accelerates and the economic outlook dims, many currencies in the region have depreciated—after having appreciated significantly since August 2007 **(Figures 21a, 21b)**. Over the first 6 months of 2008, while the Indonesian rupiah and Malaysian ringgit were relatively stable (appreciating from 1% to 2%), the Philippine peso, Korean won, and "offshore" Thai baht depreciated 6–10%. However, the Chinese renminbi, Singapore dollar, and new Taiwan dollar appreciated from 5% to 7% over the same period. Strong balance of payments positions from current and capital account surpluses continued to place upward pressure on most currencies until recently, however, as evident from the rising foreign exchange reserves through the first quarter of this year—as regional authorities intervened in foreign exchange markets to curb appreciation.

Yield curves across the region's local currency bond markets have shifted upward in recent months as inflation surged and inflation expectations edged higher.

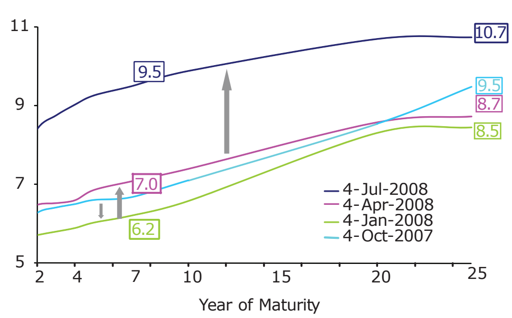
Rising inflation expectations have pushed yield curves upwards across the region, while investors expect higher policy rates to combat inflation. In Indonesia and the Philippines, where monetary authorities have begun tightening, yield curves also flattened somewhat compared to end-2007 on higher yields on shorter maturities **(Figures 22a, 22b)**. The trend in the NIEs is similar,

Figure 22a: Benchmark Yields—Indonesia
(% per annum)



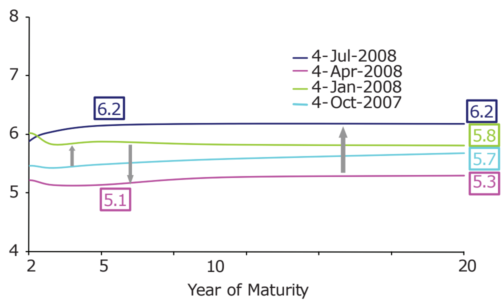
Source: Bloomberg.

Figure 22b: Benchmark Yields—Philippines (% per annum)



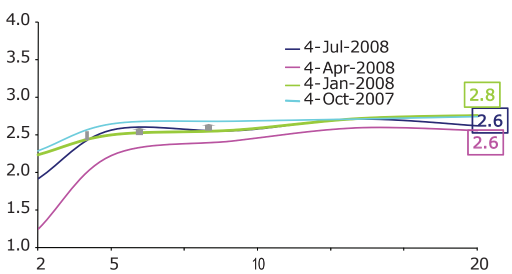
Source: Bloomberg.

Figure 22c: Benchmark Yields—Republic of Korea (% per annum)



Source: Bloomberg.

Figure 22d: Benchmark Yields—Taipei,China (% per annum)



Source: Bloomberg.

as yield curves shifted up from December 2007 to June 2008, on rising inflation expectations. Some flattening was also seen in Korea and Taipei,China, as central banks resumed tightening biases in the second quarter of 2008 **(Figures 22c, 22d)**. In the PRC, however, interest rates barely moved in the first half of 2008 despite overall tightening, as authorities resorted to quantitative rather than price measures to cool the overheated economy.

Monetary and Fiscal Policy

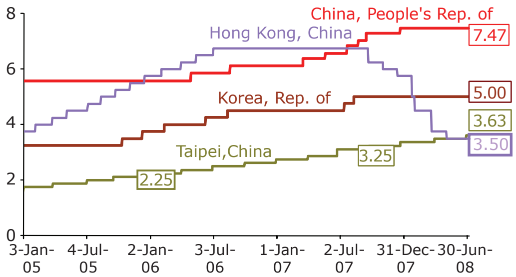
Across the region, monetary policy has become more cautious, given sharply rising inflation, the increased volatility of the region's financial markets, and the worsening outlook for major industrial economies.

While central banks in Indonesia, Philippines, and Thailand have started to raise policy rates, for example, other central banks have felt it sufficient to announce a shift in monetary policy focus to a tightening bias or employ other available monetary levers. Much depends on public confidence in the monetary authority itself and the current inflation expectations of the business community and consumers (see Special Section, page 48).

In the PRC, monetary policy is increasingly focused on the challenge of reining in inflation amid slowing external demand, while the NIEs have adopted tightening biases to moderate inflation.

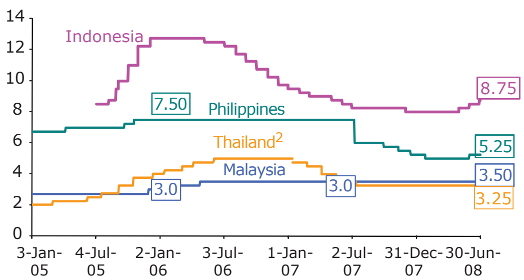
The monetary policy stance remains tight in the PRC, and the People's Bank of China has raised the bank reserve requirement ratio six times this year, bringing it to 17.5%—the latest move on 25 June. However, authorities have not raised policy interest rates since December 2007. This suggests they remain wary of putting pressure on indebted state enterprises and attracting greater inflows of "hot" money, especially as global benchmark rates have trended down. Signs of slowing domestic demand, exacerbated by the natural disasters in February and May, may test the authorities' inflation-fighting resolve. Among the NIEs, the Monetary Authority of Singapore tightened policy through a stronger currency by re-centering its Singapore dollar nominal effective exchange rate (NEER) policy band to its April level. The central bank in Taipei,China raised its policy rate both in March and June, following a December 2007 increase, as increasing international oil and commodity prices fed into domestic prices.

Figure 23a: Policy Rates[1]—NIEs and People's Rep. of China (% per annum)



[1] Hong Kong base rate (Hong Kong, China); Overnight call rate (Republic of Korea); official discount rate (Taipei,China); one year lending rate (People's Republic of China).
Source: Bloomberg.

Figure 23b: Policy Rates[1]—ASEAN-4



[1] Bank Indonesia rate, (Indonesia); overnight policy rate (Malaysia); reverse repurchase rate (Philippines).
[2] Bank of Thailand switched its benchmark from the 14-day to 1-day reverse repurchase rate on 17 January 2007.
Source: Bloomberg.

And the Bank of Korea has maintained its key rate at 5% for the 11th consecutive month, even though the economy shows signs of a slowdown. Hong Kong, China is a notable exception to the region's tightening trend as its US dollar peg limits monetary autonomy (**Figure 23a**).

Among ASEAN economies, Indonesia, Philippines, Thailand, and Viet Nam have raised policy rates, while others have shifted to a tightening bias using other available policy instruments.

As inflationary pressures mount, some ASEAN countries have begun to reverse their policy rate adjustments (**Figure 23b**). Bank Indonesia, for example, raised its benchmark interest rate 25 basis points three times (in May, June, and July) to 8.75%, a reversal of the quarter-point cut it made in December 2007 to stimulate economic growth. And Bangko Sentral ng Pilipinas raised its policy rate 25 basis points in June and 50 basis points in July to 5.75%—it had reduced rates 25 basis points four times between October 2007 and January this year. The latest move was by the Bank of Thailand, which hiked rates by 25 basis points on 16 July, after having kept its rate steady since July 2007. The three banks now say high world food and energy prices and the upward trend in domestic demand have contributed to inflationary pressures, and have indicated a readiness to act again. The State Bank of Viet Nam also raised its base policy rate three times so far this year—from 8.25% to 14%—along with a series of other measures to contain galloping inflation (**Box 1**). And Malaysia's central bank has kept its policy rate at 3.5% for 26 consecutive months, pointing out that inflation is generally supply-driven and that increasing the rate may dampen demand and weaken overall economic growth. It also indicated, however, that it may change its policy should inflation risks persist.

Authorities across ASEAN have taken various fiscal measures in response to high oil and food prices.

To contain the fiscal burden, Indonesia and Malaysia cut fuel subsidies and raised fuel prices 30% and 40%, respectively. In Indonesia's case, the reduction was only partial, and may prove insufficient to ease budgetary pressure as remaining subsidies remain high, and a program of direct cash assistance to protect the poor from the recent fuel price increase hurts its fiscal position. Malaysia plans to introduce several measures—including

Box 1: Viet Nam—Wake-up Call for Emerging East Asia?

Viet Nam's economy has fallen under increased scrutiny in recent months—as perceptions over its immediate future have dimmed. In May and June, the three major rating agencies—Standard and Poor's, Moody's, and Fitch Ratings—all downgraded Viet Nam's debt outlook to "negative." The dong has come under intense pressure over the past several weeks, with the black market exchange rate some 15% below the official level—non-deliverable forward contracts suggest that the dong may drop as much as 30% against the US dollar over the next 12 months. The stock market, after gaining 23% in 2007, has plummeted about 60% since the beginning of the year. A question increasingly being asked is whether Viet Nam is on the verge of a financial disruption, perhaps similar to the 1997 collapse in Thailand, which ignited the Asian financial crisis. Although Viet Nam's fundamentals appear in better shape than Thailand's in 1997 **(Table B1)**, it remains critical that authorities continue to act decisively to correct economic imbalances. Viet Nam's current plight is also sending some shivers up the economic spines of other emerging East Asian economies.

As one of Asia's fastest-growing economies, Viet Nam's output has grown by an average of 7.5% a year since 2000. It has been one of the world's most attractive new investment destinations, with foreign direct investment catapulting from 3.8% of GDP in 2006 to 9.3% in 2007, following its accession to the World Trade Organization. As the economy boomed and world food and oil prices surged, however, inflation soared from 8% last year to more than 26% in June 2008. Surging domestic demand, coupled with slowing external demand and a real appreciation of the dong have pushed the trade deficit to $16.9 billion in the first 6 months of the year, well above the $12.4 billion total for all of 2007. The current account deficit reached nearly 10% of GDP in 2007. Underlying the surging inflation and ballooning trade deficit has been the loose monetary and fiscal stance adopted by the government in recent years. Credit expanded by more than 50% in 2007, and despite interest rate hikes thus far this year, real rates have been negative due to rising inflation. Surging capital flows, reaching $17.5 billion (24.7% of GDP) in 2007, with ineffective sterilization by the State Bank of Viet Nam (SBV), boosted liquidity and thus inflation. The fiscal deficit has been between 4% and 5% of GDP in recent years.

As inflation continued to soar, authorities began a serious round of tightening, shifting the base rate up from 8.25% to 14.0% in early June. SBV has also widened the dong trading band to 2% in June from the 0.75% set in late 2007. And it increased reserve requirements (from 10% to 12%), forcing commercial banks to purchase about $1.3 billion in treasury bills. Credit growth throughout the banking system was capped at 30% for 2008. And the government has cut spending by postponing non-urgent public projects and requiring state agencies to cut at least 10% of their spending.

While Viet Nam's monetary policy faces a similar dilemma as Thailand's in 1997, the country's fundamentals appear stronger. Viet Nam's recent capital inflows have been mostly FDI, official development assistance, and other forms of medium- and long-term capital. Viet Nam's external debt was a low 16% of GDP as of the end of 2007, well below the 39% Thailand chalked up by the end of 1996. Also, the quality of Viet Nam's external debt appears sound, as the ratio of short-term debt to total debt was 6.8% by the end of 2007, much lower than Thailand's 25.4% at the end of 1996. Moreover, Viet Nam has already started to tighten monetary and fiscal policy, while Thailand did not react until it was hit by the crisis.

There are encouraging signs that the authorities' tightening polices are starting to work. Import growth has slowed while the dong is stabilizing. This year's rice harvest is expected to increase by 14.4% (y-o-y), which should help ease inflationary pressures at least from food. Strong FDI flows are continuing. However, the Thai experience from 1997/98 shows that if policy responses are weak or insufficient, a crisis could easily follow. Thus, it is critical that Vietnamese authorities continue to closely monitor the situation and act decisively and swiftly to prevent the economy from deteriorating further.

The lesson is that with highly mobile capital, even with a controlled capital account—as in Viet Nam—any attempt to control both interest rates and the exchange rate leads to a loss of monetary control and rising inflation. As emerging East Asian economies are facing a growing inflation challenge, greater exchange rate flexibility will make monetary policy more effective.

Table B1: A Comparison—Viet Nam in 2008 and Thailand in 1997

	Viet Nam		Thailand	
	4Q07	**1Q08**	**4Q96**	**1H97**
Current account balance/GDP	-9.9	-28.6	-5.9	-5.8
Portfolio investments/GDP	8.8	7.4	1.5	1.9
Foreign exchange reserve/imports (12 month average)	4.1	4.0	6.3	6.3
External debt/GDP	16.1	…	39.0	37.8
Short-term external debt/GDP	6.8	…	25.4	24.8
Foreign direct investment/GDP	9.2	7.9	0.8	1.2
Credit growth	49.8	57.0	14.1	16.7

… = data not available
Note: External debt data refers to total international claims reported by Bank for International Settlements.
Sources: *International Financial Statistics Online*, International Monetary Fund; Asia Development Bank Institute Working Paper 105; State Bank of Viet Nam; and CEIC.

price controls on basic commodities and subsidies to agricultural producers. The Philippines removed tariffs on fuel imports, yet felt the need to postpone its 2008 target for balancing the budget to 2009, so it could increase public spending to help the poor cope with rising food and fuel costs. Thailand reinstated fuel subsidies in March for 6 months to limit the impact on domestic prices, and is planning fiscal stimulus to boost its economy—raising the fiscal deficit. Viet Nam is trying to consolidate its fiscal position—a deficit of 5% of GDP in recent years—by cutting spending to non-priority public projects and requiring state agencies to reduce expenditures by at least 10%.

As the PRC's fiscal position has improved, it has provided more support for post-earthquake reconstruction and gained room to enhance social safety nets amid slowing growth.

The government recorded a fiscal surplus of 0.7% of GDP in 2007—said to be the first budget surplus in 20 years **(Table 2)**. Despite a rapid rise in government spending, the improvement resulted mainly from strong revenue growth supported by high inflows from corporate taxes, adjustment of the export-rebate system, and stamp duty on equity transactions. But the fiscal balance may fall back into deficit in the first half of 2008 due to a slowing economy and the responses to natural disasters. Through the end of June, the government had already allocated more than RMB54 billion (about one third of last year's fiscal surplus) for disaster relief and reconstruction. This may be partly offset by a planned cut in government administrative spending. Meanwhile, the government continues to rely on price controls or subsidies to combat inflation, although the latest hike in domestic fuel and electricity prices in late June will help ease the burden of fuel subsidies on the fiscal position.

Table 2: Fiscal Balance of Central Government (% of GDP)

	2000-2004 Average	2004	2005	2006	2007	2008[1]
Cambodia	-5.8	-4.6	-3.4	-3.0	-3.2	-3.2
China, People's Rep. of	-2.2	-1.3	-1.2	-0.8	0.7	-0.8
Hong Kong, China[2]	-2.4	1.7	1.0	4.0	7.2	-0.4
Indonesia	-1.5	-1.1	-0.5	-1.0	-1.2	-1.7
Korea, Rep. of	-0.7	-0.5	0.1	-1.3	-1.5	-1.2
Malaysia	-5.2	-4.1	-3.6	-3.3	-3.2	-3.1
Philippines	-4.4	-3.8	-2.7	-1.1	-0.2	-1.0
Singapore[2]	7.3	5.5	8.3	7.5	11.4	7.0
Taipei,China[2]	-2.2	-2.3	-1.8	-0.8	-0.1	-1.8
Thailand[2]	-1.1	0.1	-0.6	1.1	-1.7	-1.8
Viet Nam	-3.2	-4.7	-4.6	-4.1	-4.9	-5.0

[1] National budget except for Cambodia (IMF estimate); [2] fiscal year.
Sources: National sources, International Monetary Fund Article IV, and *Asian Development Outlook* 2005–2008 (ADB).

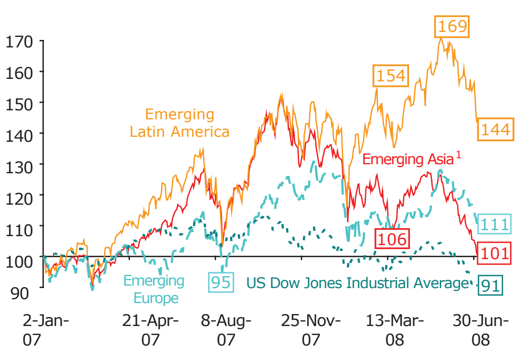
The NIEs maintained relatively strong fiscal positions during the first half of 2008, but new tax cuts and increased expenditures on infrastructure may weaken them as the year progresses.

Having improved its fiscal position in recent years, aided by spending cuts and revenue increases, the Hong Kong, China government in its new budget has proposed tax relief of 1.5% of GDP and sizeable expenditures for infrastructure projects. After narrowing in the last few years, the fiscal deficit in Taipei,China may rise again due to the combination of tax cuts, expenditure increases to bolster domestic demand, and social security commitments. In Singapore, the government announced an expansionary budget for the 2008/09 fiscal year, which will make use of targeted fiscal stimulus to help low- and middle-income families ride out the slowdown and cope with rising inflation. To contain inflation, the Korean government has cut or exempted import tariffs on agricultural and fuel products, and has planned to freeze almost all public utility rates.

Assessment of Financial Vulnerability

Financial volatility in global markets remains elevated, while the prospect of higher interest rates to combat inflation creates jitters amid tightening global credit conditions.

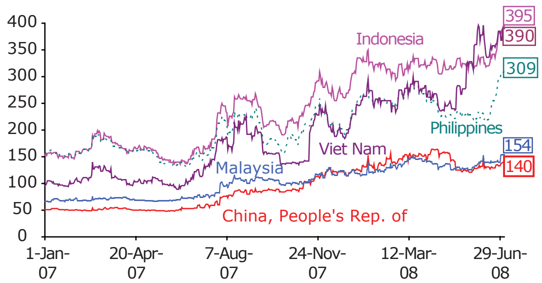
Figure 24: MSCI Indexes
(2 January 2007 = 100)



[1] Includes China, People's Rep. of; India; Indonesia; Republic of Korea; Malaysia; Pakistan; Philippines; Taipei,China; and Thailand.
Sources: Morgan Stanley Capital International (MSCI) Barra and Bloomberg.

Emerging East Asian equities have continued to move in tandem with US stock markets **(Figure 24).** Adverse developments in the US financial markets have prompted sell-offs, and the region's financial markets remain vulnerable to confidence effects and sudden swings in global financial conditions. Credit tightening is underway in major industrial countries, with stricter lending standards and greater funding costs. Widespread credit concerns have also widened emerging market sovereign bond spreads **(Figure 25)**. In addition, rising inflation points to higher interest rates—this is expected to further squeeze credit conditions. And any more deterioration of global financial conditions and a sharp rise in interest rates could severely constrain overall funding availability and increase the effective costs of capital, weighing on profitability in the region's banking systems.

Figure 25: JP Morgan EMBI Sovereign Stripped Spreads (Long-term foreign currency)



Source: Bloomberg.

Although the region's banking systems have reportedly small exposure to the US subprime and related credit derivatives, its financial markets and institutions remain in rough waters created by heightened investor risk aversion and a wave of asset re-pricing.

Massive write-downs in major global financial institutions resulted, for example, in the nationalization of Northern Rock, the US Fed imprimatur for the fire sale of Bear Stearns, the failure of US mortgage lender IndyMac Bancorp, and liquidation of some well-known investment funds, including Carlyle Capital. The action of the US Treasury Department and the US Fed to stand behind embattled mortgage buyers Fannie Mae and Freddie Mac have also sent shudders through the industry. Subprime-related losses are also on the rise in the region's banking systems, although the reported exposure is still limited compared with western counterparts. According to Japan's Financial Services Agency, its financial institutions' losses from the US subprime crisis nearly tripled initial estimates, amounting to a total of $4.1 billion in the final quarter of 2007, with Japan's two biggest banks—Mizuho Financial Group Inc. and Mitsubishi UFJ Financial Group, Inc—reporting much larger losses. Fairly substantial exposure to the subprime debt has also been revealed in some large PRC banks, including Bank of China, which is thought to hold the most at about $5.0 billion as of end-2007 after about a $3 billion write off; Industrial and Commercial Bank of China, which reportedly held over $1.2 billion, booked over 30% of that for potential subprime-related losses; and China Construction Bank wrote off more than half of its $1.2 billion down to $343 million in US-securities backed investment. Woori Bank of Korea also reported a loss of $445 million of its $491 million in assets linked to subprime loans and collateralized debt obligations. Nonetheless, these losses are still small compared with their total asset sizes. Thus far, the region's banking systems also remain relatively healthy when viewed through prudential, activity, and market indicators. Given these robust indicators, the region's banking systems are expected to weather the financial storm originating from the subprime turmoil relatively well. But continued banking and financial stability cannot be taken for granted given the persistence of global financial turbulence.

Table 3: Public and External Debt (% of GDP)

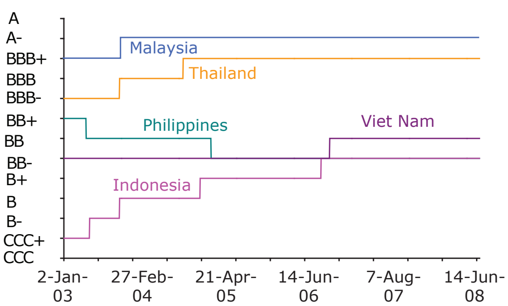
	2000-2004 Average	2004	2005	2006	2007	2008
Public Sector Debt						
China, People's Rep. of	19.3	18.5	17.9	17.3 p	...	...
Indonesia[1]	70.7	55.2	45.6	38.6	35.7p	33.9p
Korea, Rep. of[1]	21.1	25.2	29.5	32.2	33.3p	33.6p
Malaysia	66.8	66.7	62.5	56.5p	55.6p	...
Philippines[2]	93.2	95.2	86.0	73.9	62.3e	59.0p
Thailand	54.5	49.3	47.3	40.3	37.5	38.2p
External Debt						
China, People's Rep. of	12.9	12.8	12.6	12.7 p	...	...
Indonesia	71.8	53.5	46.6	36.6	31.2p	28.6p
Korea, Rep. of	26.5	25.3	23.7	29.7	35.8p	38.3p
Malaysia	48.4	44.6	39.6	35.2p	33.5p	...
Philippines	76.8	70.5	62.4	51.4	43.3p	36.8p
Thailand	49.3	35.7	32.5	32.8	29.4	27.7p

p = projection, e = estimate, ... = not available.
[1] Central government debt.
[2] Nonfinancial public sector debt.
Source: Article IV Consultations, International Monetary Fund.

Prudential indicators for emerging East Asian banking systems remain strong with sizable capital cushions.

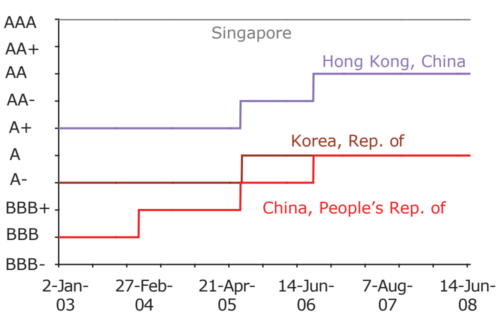
Against the backdrop of recent robust economic growth and strong financial conditions—in general, ample liquidity—many regional banking systems have turned to record profits in 2007, and in the process, have built up a large capital bases. At the same time, public and external debt burdens fell **(Table 3)** and sovereign risk ratings were upgraded **(Figures 26a, 26b, 26c, 26d)**. With assistance in debt restructuring and asset management, many banks also reduced their nonperforming loans (NPLs) substantially and boosted asset quality. Nonetheless, they continue to be exposed to increased global market volatility, which could prove more challenging in the months to come. Although exposure of the region's banks to the US subprime and the US mortgage market in general remains limited, several affected banks have made larger write-offs than originally projected as market conditions worsened further. Yet, by and large, the banking systems in the region have entered the current financial turmoil and global economic slowdown from a position of considerable strength. There is little evidence of a

Figure 26a: S&P Sovereign Ratings
(Long-term foreign currency)



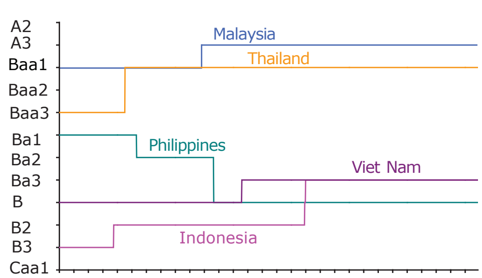
Source: Bloomberg.

Figure 26b: S&P Sovereign Ratings
(Long-term foreign currency)



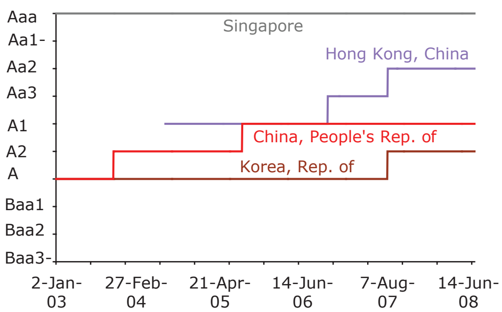
Source: Bloomberg.

Figure 26c: Moody's Sovereign Ratings
(Long-term foreign currency)



Source: Bloomberg.

Figure 26d: Moody's Sovereign Ratings
(Long-term foreign currency)



Source: Bloomberg.

credit crunch or liquidity problems hurting regional interbank markets. NPL ratios are generally on a downward trend **(Table 4)** and risk-weighted capital adequacy ratios are healthy **(Table 5)**. In addition, profitability remains strong, given the high rates of return on assets and equity **(Tables 6, 7)**. Improvements in core lending activities have been crucial to boosting profitability, while generally good financial conditions for most of 2007 also boosted returns on banks' securities holdings. That said, with a more difficult operating environment, lending activity and underlying earnings may slow and NPLs rise modestly.

Table 4: Nonperforming Loans (% of commercial bank loans)

	2000-2004 Average	2004	2005	2006	2007[1]	1Q2008
China, People's Rep. of	21.0	13.2	8.6	7.1	6.2	...
Hong Kong, China[2]	4.8	2.3	1.4	1.1	0.9	0.8
Indonesia	10.6	5.7	8.3	7.0	4.6	4.3
Korea, Rep. of	3.5	1.7	1.1	0.8	0.6	0.7
Malaysia[2]	8.9	6.8	5.6	4.8	3.2	3.0
Philippines[2]	14.8	12.7	8.2	5.7	4.4	4.5
Singapore	5.3	5.0	3.8	2.8	1.8	...
Taipei,China	5.2	2.8	2.2	2.1	1.8	...
Thailand	13.5	10.9	8.3	4.1	3.9	3.7

... = not available
[1] Data for Singapore as of Sep 2007.
[2] Reported nonperforming loans are gross classified loan ratio of retail banks.
Notes:
1. The table excludes nonperforming loans transferred from bank balance sheets to asset management companies.
2. The measurement of NPLs follows official definitions and differs across economies depending on loan classification (for example, whether a 3–month or 6–month rule is used), the treatment of accrued interest, and whether specific provisioning is deducted from the NPL measure.
3. For Malaysia and the Philippines, reported NPLs are net of specific provisioning.
Sources: National sources; CEIC; and *Global Financial Stability Report,* International Monetary Fund.

Table 5: Risk-Weighted Capital Adequacy Ratios (% of risk-weighted assets)

	2000-2004 Average	2004	2005	2006	2007[1]	Q1 2008
Hong Kong, China	16.1	15.4	14.8	14.9	13.4	14.3
Indonesia	12.0	19.4	19.5	20.5	19.3	20.5
Korea, Rep. of	11.2	12.1	13.0	12.7	12.9	...
Malaysia	13.4	14.3	13.6	13.1	12.8	12.6
Philippines	17.0	18.7	17.7	18.5	19.4	...
Singapore	17.7	16.2	15.8	15.4	14.0	...
Taipei,China	10.5	10.7	10.3	10.1	10.6	...
Thailand	13.2	13.0	14.2	14.5	15.3	15.2

... = not available.
Note: Based on officially reported risk-adjusted capital adequacy ratios under Basel I and applied to commercial banks (except Republic of Korea, where data includes nationwide commercial banks, regional banks, and specialized banks). Data for the Philippines is on a consolidated, not solo, basis. Data for Japan is for major commercial banks only.
[1]Data for Singapore as of Sep 2007; Philippines as of Jun 2007.
[2]Based on Basel II calculations. The previous years' calculations were based on Basel I.
Sources: CEIC, national sources, and *Global Financial Stability Report,* International Monetary Fund.

Table 6: Rate of Return on Commercial Bank Assets (% per annum)

	2000-2004 Average	2004	2005	2006	2007[1]
China, People's Rep. of	0.2	0.5	0.6	0.7	1.0
Hong Kong, China	1.2	1.7	1.7	1.7	1.9
Indonesia	1.7	3.5	2.6	2.6	2.8
Korea, Rep. of	0.4	0.9	1.3	1.1	1.1
Malaysia	1.3	1.4	1.3	1.3	1.5
Philippines	0.8	1.0	1.1	1.3	1.4
Singapore	1.0	1.2	1.2	1.4	1.4
Taipei,China	0.3	0.6	0.3	-0.4	2.2
Thailand	0.1	1.3	1.4	0.8	0.1

[1] Data for PRC and Hong Kong, China as of Jun 2007; for Singapore as of Sep 2007.
Sources: CEIC, national sources, and *Global Financial Stability Report*, International Monetary Fund.

Table 7: Rate of Return on Commercial Bank Equity
(% per annum, end of period)

	2000-2004 Average	2004	2005	2006	2007[1]
China, People's Rep. of		13.7	15.1	14.8	19.9
Indonesia	18.5	22.9	16.5	16.4	18.2
Hong Kong, China	15.3	18.7	18.4	18.9	…
Korea, Rep. of	6.3	15.2	18.4	14.6	14.6
Malaysia	16.2	16.0	16.8	16.2	19.7
Philippines	5.8	7.6	9.5	11.5	11.8
Singapore	9.6	11.6	11.2	13.7	13.4
Taipei,China	4.1	8.8	4.4	-7.3	2.6
Thailand	3.4	15.7	14.2	8.5	1.2

…= not available.
[1] Data for PRC as of Jun 2007; for Indonesia and Singapore as of Sep 2007.
Sources: CEIC, national sources, and *Global Financial Stability Report,* International Monetary Fund.

Subdued lending to the business sector has encouraged banks to move more aggressively into household, equity, and real estate lending, making them more susceptible to changes in equity prices, real estate prices, and consumer credit-worthiness.

The risk profiles of banks with increased household lending appear to reflect post-crisis changes in the economic landscape where business investment slowed sharply while domestic consumption began to pick up the slack. Also, in some economies, notably Indonesia and the Philippines, securities investment has been quite substantial—about a third of total assets—reflecting increased diversification of banking activity **(Table 8)**. These trends leave

Table 8: Securities Investment to Total Bank Assets of Commercial Banks (%)

	2000-2004 Average	2004	2005	2006	2007	1Q2008[1]
Hong Kong, China	16.9	19.2	19.6	20.2	17.9	16.4
Indonesia	18.3[1]	20.2	18.0	24.8	27.8	23.3
Korea, Rep. of	23.2	20.8	22.1	20.2	18.6	18.1
Malaysia	12.7	10.6	9.6	9.3	11.9	11.1
Philippines	26.6	31.6	32.0	30.0	28.3	29.1
Singapore	16.9	17.1	16.5	15.9	15.8	15.3
Taipei,China	13.6	14.2	12.1	12.0	11.9	12.1
Thailand	15.2	16.0	16.0	15.8	15.9	15.7

… = not available.
[1]Data for the Philippines as of Feb 2008.
Sources: CEIC, Hong Kong Monetary Authority, Bank Indonesia, and Bangko Sentral ng Pilipinas.

the region's bank balance sheets vulnerable to household net asset positions and market conditions. Generally, household indebtedness to GDP has not risen to alarming levels—most are within the 40–50% range, and in general more than half of that is in secured lending **(Tables 9a, 9b, 9c)**. Real estate lending has also increased in some economies along with higher property prices. With uncertain economic and financial market conditions expected to remain for much of the year, there is a need for closer monitoring of the overall situation—more so in economies without comprehensive and long-established credit registries and, in some cases, a lack of information about the distribution of credit across households. Regulatory authorities should also perform stress tests on the banking system using more adverse scenarios, and check for the robustness of the overall system to determine appropriate cushions.

Table 9a: Household Indebtedness (% of GDP)

	2000-2004 Average	2004	2005	2006	2007	1Q2008
Indonesia	6.2[1]	8.2	9.1	8.5	8.9	8.2
Hong Kong, China	59.3	58.1	55.5	52.0	51.4	52.1
Korea, Rep. of	29.7	35.3	37.6	40.8	40.3	42.0
Malaysia[2]	45.4	50.0	52.2	53.0	50.8	47.5
Philippines	5.5	5.2	4.7	4.2	4.3	…
Singapore[3]	…	50.1	48.1	44.9	45.3	43.2
Taipei,China	45.9	53.0	57.9	55.8	53.5	51.8
Thailand	…	24.5	24.6	23.6	23.4	22.0

Table 9b: Household Non-mortgage Indebtedness (% of GDP)

	2000-2004 Average	2004	2005	2006	2007	1Q2008
Indonesia	4.7[1]	6.4	7.1	6.3	6.5	6.0
Hong Kong, China	10.4	10.9	11.6	11.7	12.9	13.2
Korea, Rep. of	12.6	13.6	14.1	15.2	15.7	16.4
Malaysia[2]	20.0	21.9	23.6	24.7	23.6	22.0
Philippines	4.7	4.5	4.0	3.6	3.7	...
Singapore[3]	...	17.7	16.2	14.9	14.5	13.7
Taipei,China	17.8	21.5	23.3	19.2	16.6	15.8
Thailand	...	8.4	7.5	6.5	6.1	6.1

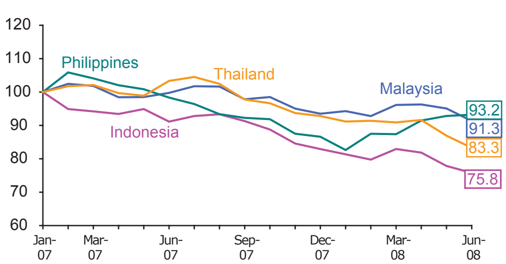
Table 9c: Household Mortgage Indebtedness (% of GDP)

	2000-2004 Average	2004	2005	2006	2007	1Q2008
PRC	...	10.6	10.0	10.6	11.6	...
Indonesia	1.4[1]	1.8	2.0	2.2	2.4	2.3
Hong Kong, China	48.9	47.3	43.9	40.3	38.5	38.9
Korea, Rep. of	17.1	21.8	23.5	25.6	24.6	25.6
Malaysia[2]	25.4	28.0	28.6	28.3	27.2	25.4
Philippines	0.8	0.7	0.6	0.6	0.6	...
Singapore[3]	29.7	32.4	31.9	30.0	30.8	29.5
Taipei,China	28.1	31.5	34.6	36.6	36.9	36.0
Thailand	14.3	16.2	17.1	17.1	17.2	15.9

... = not available.
[1] Refers to 2001–2004 average.
[2] Sum of loans for personal use, credit cards, purchase of consumer durable goods, and purchase of passenger cars for commercial banks, merchant banks, and finance companies. 2006 and 2007 data from commercial banks and merchant banks only.
[3] Refers to consumer loans from commercial banks and finance companies.
Sources: CEIC; Monthly Statistical Bulletin, Bank Negara Malaysia; Monthly Statistical Bulletin, Monetary Authority of Singapore; People's Bank of China; and Hong Kong Monetary Authority.

The region's banks and financial companies continue to underperform broader stock market indexes, but by no means to the extent suffered by their US and European counterparts.

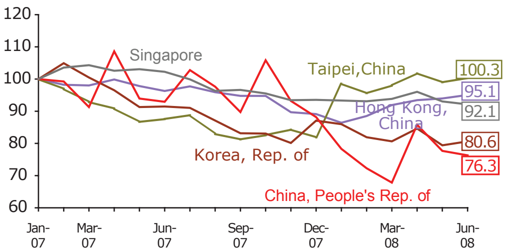
Figure 27a: Ratio of Financial Stock Price Index to Overall Stock Market Index—ASEAN-4 (January 2007 = 100)



Source: OREI staff calculations based on Bloomberg data.

Amid the continued fallout from the US subprime turmoil—onto global financial markets and the real US economy—regional stock markets have seen a broad retreat from end-2007 highs as a more sobering growth outlook for the region, narrowing current account surpluses, and rising inflation concerns have come into play. The region's financial institutions have certainly underperformed vis-à-vis the total market indexes on broadening credit concerns and a deteriorating earnings outlook **(Figures 27a, 27b)**. However, it looks likely that they

Figure 27b: Ratio of Financial Stock Price Index to Overall Stock Market Index—NIEs and PRC (January 2007 = 100)



Source: OREI staff calculations based on Bloomberg data.

have escaped the sharp market corrections, unlike their western counterparts—credited to their limited exposure to the problem assets and generally healthy balance sheets. Some banks are exposed to US subprime debt, but most have been spared severe write downs. Only a few smaller banks have had to seek capital injections to offset subprime-related losses. Nonetheless, at this point, for the regional banking systems as a whole the subprime crisis looks more likely to have an impact on earnings only, rather than on the solvency of the whole system.

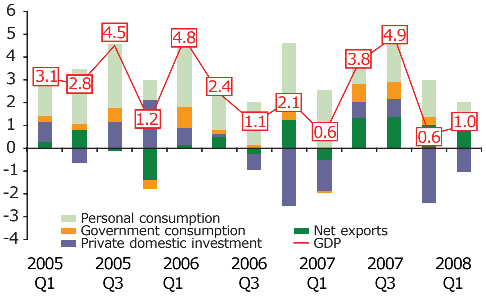
Economic Outlook, Risks, and Policy Issues

External Economic Environment

The global economic outlook has dimmed somewhat amid lower growth prospects, tighter credit conditions, and higher inflation.

Economic growth in the Organisation for Economic Co-operation and Development (OECD) countries is forecast to continue decelerating—to 1.8% in 2008 from 2.7% last year.[4] Weakening domestic demand is expected to slow growth further in the United States (US), while gross domestic product (GDP) growth in the eurozone and Japan is also likely to drop as export growth slows and investment spending softens. Financial turmoil originating in the US subprime sector has spread globally, with related balance sheet losses continuing to grow. Meanwhile, soaring global oil and food prices are crimping consumer spending.

Figure 28: Contributions to Growth—US (seasonally adjusted, annualized, q-o-q, % change)



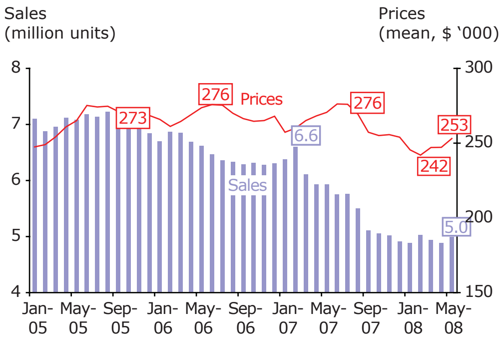
Source: US Bureau of Economic Analysis.

In the US, active monetary and fiscal easing have reduced fears of a recession for the moment; but as rising inflation constrains options for further stimulus, the likelihood of a protracted slowdown has increased.

The US economy grew an annualized 1.0% in the first quarter of 2008 (quarter-on-quarter, seasonally-adjusted annualized rate), although accelerating slightly from the disappointing 0.6% in the final quarter of 2007 **(Figure 28)**. The lackluster performance

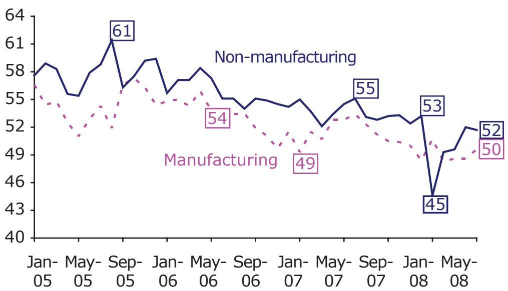
[4] Organisation for Economic Co-operation and Development, Economic Outlook No. 83. June 2008.

Figure 29: Existing Home Sales[1] and Prices—US



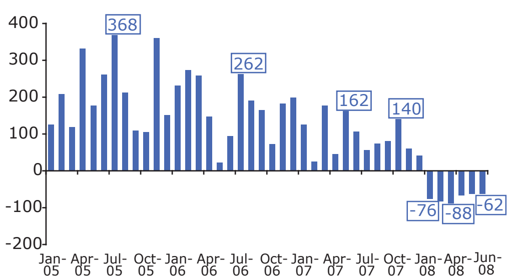
[1] Seasonally adjusted; annualized.
Source: CEIC.

Figure 30: US Business Activity Survey Indexes[1]



[1] Data survey from the Institute for Supply Management. The indexes are a summary measure showing the prevailing direction and scope of change. An index above 50% indicates that the manufacturing or non-manufacturing economy is generally expanding; below 50% indicates that it is generally declining.
Source: Bloomberg.

Figure 31: Change in Non-Farm Employment (in thousands)



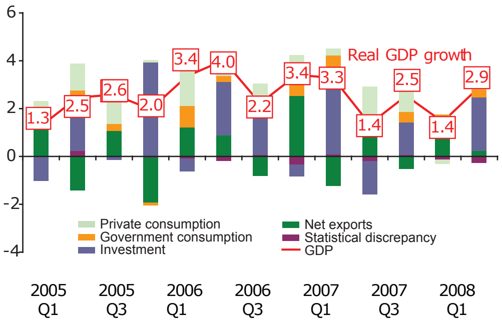
Source: OREI staff calculations based on US Department of Labor Bureau of Labor Statistics data.

showed the direct impact of the housing slump—with a large reduction in residential fixed investment—and a downturn in the inventory cycle. While the drop in home sales and prices is stabilizing somewhat **(Figure 29)**, the slump has spread into broader economic activity. The Institute for Supply Management indexes for manufacturing and non-manufacturing have been trending downward, with non-manufacturing slipping substantially in January before recovering slightly since **(Figure 30)**. As expected with slower business activity, nonfarm payroll employment is also trending downward, shedding another 62,000 in June, for a year-to-date loss of 438,000 **(Figure 31)**. A number of factors—such as weaker housing and stock markets, record high energy prices, and slower job growth—are expected to further dampen consumer spending in the months ahead. Against the increased odds of a recession, the US Federal Reserve (US Fed) has moved aggressively lowering the Federal Funds rate to 2% by end-April from 5.25% in September 2007. But inflation is rising rapidly, severely constraining the option for further policy easing. Headline inflation reached 5.0% in June, driven by rising food and energy prices. Although core inflation remained at 2.4%, the renewed surge in oil prices and US dollar weakness continue to raise the specter of high inflation. Although the effect of a hurried fiscal stimulus package of more than $152 billion—or about 1% of GDP—is expected to kick in over the next few months, the US economy is now forecast to grow 1.5% this year, with considerable downside risk suggesting a more protracted slowdown may be on the horizon.

Economic growth in the eurozone was better than expected in the first quarter, but a stronger euro, tighter credit, and heightened financial volatility are likely to take their toll on economic performance in the remaining months of 2008.

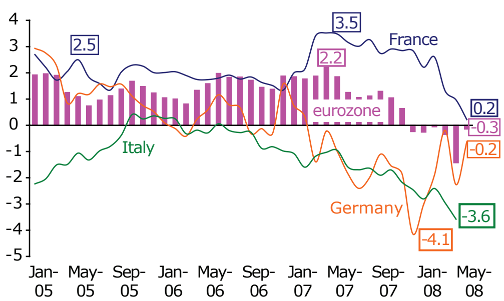
In the first quarter of 2008, eurozone growth accelerated to 2.9% (q-o-q, annualized) from 1.4% in the previous quarter, fueled by a strong pick up in Germany (**Figure 32**). Business investment, backed by relatively healthy corporate profits and inventory building, provided strong impetus. But a recovery in consumption remains fragile, while higher interest rates have taken the steam out of the housing market. Retail sales continue to trend downwards, with the latest data showing a drop of 0.2% (year-on-year, 3-month moving average) in Germany and 3.6% in Italy (**Figure 33**). Sluggish consumer spending

Figure 32: Contributions to Growth—eurozone (seasonally adjusted, annualized, q-o-q, % change)



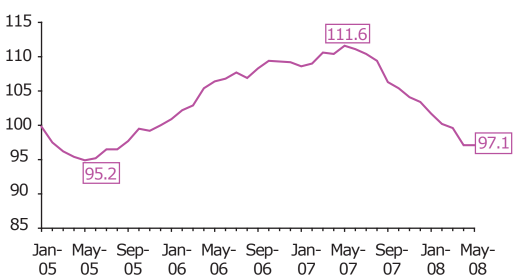
Source: Eurostat website.

Figure 33: Retail Sales Volume Growth[1] (y-o-y,%)



[1] 3-month moving average.
Source: OREI staff calculation based on CEIC data.

Figure 34: Economic Sentiment Indicator[1] **—eurozone**



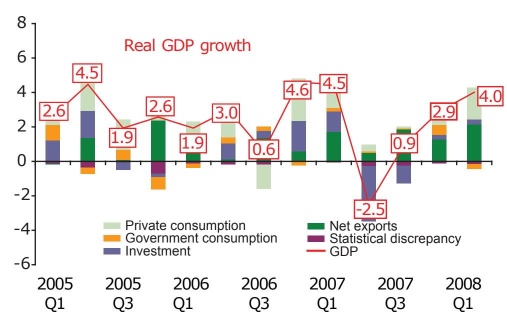
[1] The economic sentiment indicator is a composite index of business and consumer confidence indicators based on surveys of overall economic assessment and expectations in the eurozone.
Source: Bloomberg.

is also affecting industrial activity, evident from a weakening in both manufacturing and services. Meanwhile, driven by high oil and food prices, the harmonized consumer price index in June reached 4.0%—its highest level since consolidated data started being used in January 1997. The European Central Bank increased its benchmark interest rate 25 basis points to 4.25% on 3 July, reflecting heightened inflation concerns. The gloomier outlook, higher inflation, and tightening credit conditions have put a damper on consumer and business confidence (**Figure 34**). Although relatively low and still-rising employment and modest gains in eurozone wages provide support for the consumption recovery, a strong euro and softening global demand are expected to dampen export growth, curbing investment spending and weakening growth momentum over the course of the year. GDP growth in the eurozone is expected to reach 1.8% this year, with the current account dipping into a moderate deficit.

The Japanese economy shows remarkable resilience, but growth may have peaked as exports slow and demand—both from the US and domestically—shows weakness.

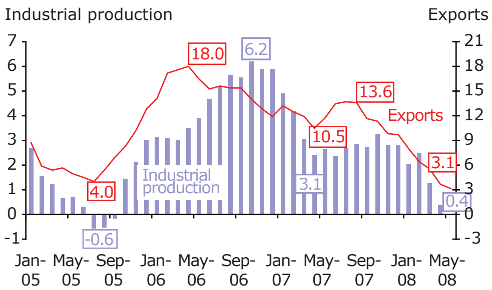
GDP growth continues apace—advancing an annualized 4.0% (q-o-q, annualized) in the first quarter of 2008 (Q1) after 2.9% in the previous quarter—on relatively strong exports and a pick up in consumer spending **(Figure 35)**. Although shipments to the US declined by 5.0% in Q1, exports to Europe, emerging East Asia, and elsewhere grew markedly, for total export growth in the first quarter of 7.0%. Private consumption also picked up, boosted in part by April's tax cuts on gasoline and new vehicle sales. But as exports face stronger headwinds–such as a stronger yen and weakening global demand—and continued

Figure 35: Contributions to Growth—Japan (seasonally adjusted, annualized, q-o-q, % change)



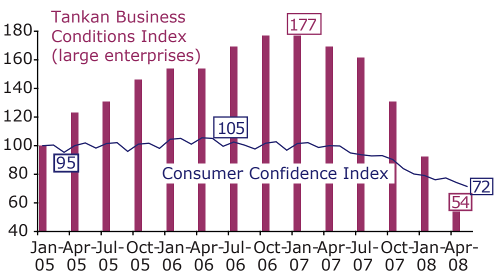
Source: Cabinet Office, Government of Japan.

Figure 36: Industrial Production and Export Growth[1]—Japan[2]



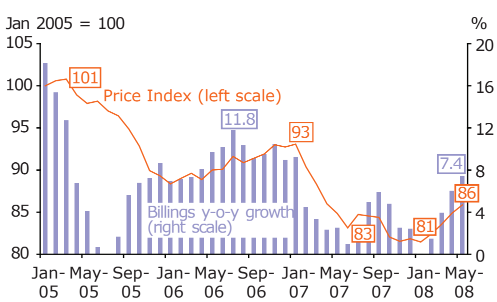
[1] In yen.
[2] 3-month moving average.
Source: OREI staff calculations based on CEIC data.

Figure 37: Business and Consumer Sentiment Indexes—Japan
(January 2005 = 100)



Source: OREI staff calculations based on Bloomberg data.

Figure 38: Semiconductor Worldwide Market Billings and Average Prices[1]



[1] Seasonally adjusted; 3-month moving average.
Source: OREI staff calculations based on Semiconductor Industry Association and Datastream data.

uncertainties about the strength of consumer spending as the temporary effect of tax cuts fades—the outlook for 2008 growth remains dim, with GDP expected to expand at about 1.5%. Exports are clearly losing momentum as US demand weakens and global high-tech orders remain sluggish. Industrial production is slowing in tandem **(Figure 36).** Rising food and energy prices are also hitting consumers and squeezing corporate profits. Consumer sentiment hit a 6-year low in May **(Figure 37)**. And the investment outlook remains cloudy amid slowing exports, while tighter building standards since June 2007 continue to restrain construction demand. Japan's central bank kept rates unchanged again in May, citing concerns about the prospects of a slowing economy.

Growth in the volume of world trade is expected to slow further to 7.6% in 2008[5] from an estimated 9.2% in 2007, as demand from major industrial countries continues to slacken.

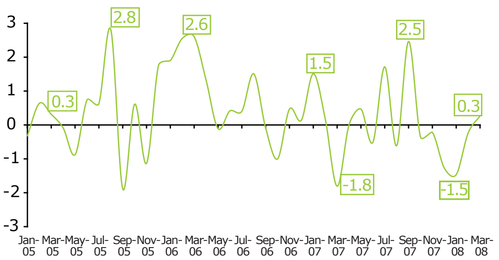
Although relatively robust growth in emerging markets is helping sustain world import demand, a decline in industrial production and overall trade seems unavoidable. World trade volume grew by an estimated 9.2% in 2007, down from 10.1% in 2006, and is expected to slow further to 7.6% this year. Weakening consumer spending and business investment have already started to weigh down import growth in major industrial countries. And it appears likely that—in the coming months—deepening credit concerns, high energy prices, a weaker US dollar, and reduced global demand will take their toll on industrial production in developing economies as well, including emerging East Asia. Some moderation is already visible in the People's Republic of China (PRC), partly reflecting the effects of the government's tightening measures.

The recovery in the global information technology (IT) industry, which resumed earlier this year, remains fragile as slowing growth in the US dampens demand for high-tech equipment and software, and competitive pressures keep product prices relatively low.

Global semiconductor sales, which faltered at year-end, are gradually recovering **(Figure 38)**. But IT spending in the US fell

[5] World Bank. 2008. *Prospects for the Global Economy.*

Figure 39: New IT Orders[1]—G3[2]
(% change)



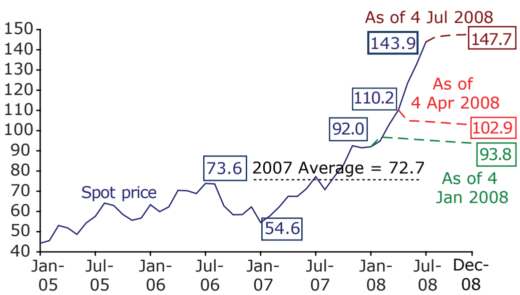
[1] Seasonally-adjusted, 3-month moving average, month-on-month.
[2] eurozone, Japan, and the United States.
Source: OREI staff calculations based on national sources.

by 0.9% in the first quarter of the year compared with the fourth quarter of 2007. And as the global economy slows generally, the prospects are dim for a quick rebound. New orders in major industrial countries have only begun to recover in recent months, while the pace remains weak as business confidence has sagged and private investment slowed **(Figure 39)**. Although chip prices have shown some recovery over the past several months, they have yet to return to the level prior to the current slump, which began in early 2007.

Crude oil prices continue to reach record highs as a tight demand/supply balance will likely keep prices elevated for an extended period.

The latest spike in oil prices can be attributed to a host of factors—including threats of supply disruptions in Nigeria and the Middle East due to political uncertainty, the prospect of persistent tightness in global oil markets, and market speculation (**Box 2**). Aggressive Fed rate cuts and a US dollar slide may also have fueled demand for oil and other commodities as a hedge against rising inflation. Oil futures prices have remained elevated at over $130 per barrel for most of 2008 **(Figure 40)**, suggesting that market expectations for oil prices have increased despite near-term growth concerns. Meanwhile, the Organization of the Petroleum Exporting Countries (OPEC) has left production levels unchanged since an increase in September 2007: before that, in December 2006, it actually cut the production quota to stall a potentially steep price fall. OPEC's reluctance to increase production, given rebuilding of inventories and worries about recession, adds additional support for oil prices.

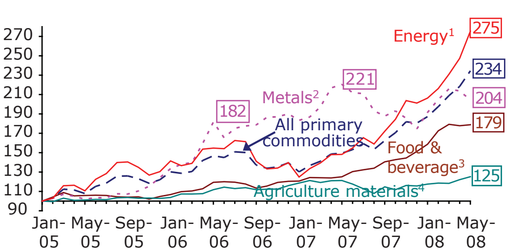
Figure 40: Brent Spot and Futures Prices[1] ($ per barrel)



[1] Historical prices are the monthly average of daily spot prices.
Source: Bloomberg.

Food prices were up 44.3% in May[6] from a year ago and are expected to remain high as competing demands for food—particularly rice—feedstock, and biofuel continue to keep prices elevated.

Figure 41: Primary Commodity Price Indexes (January 2005 = 100)



[1] Crude oil, natural gas, coal.
[2] Copper, aluminum, iron ore, tin, nickel, zinc, lead, uranium.
[3] Cereal, vegetable oils, meat, seafood, sugar, bananas, oranges, coffee, tea, cocoa.
[4] Timber, cotton, wool, rubber, hides.
Source: OREI staff calculations based on data from the *IMF Primary Commodity Prices,* International Monetary Fund.

Prices of major non-oil commodities continue to rise on tight supply, strong speculative buying by investment funds, and rising oil prices—which food and major metals prices tend to track closely **(Figure 41)**. Rice prices more than tripled from a year ago—rising 156% from January to May 2008—on concerns over a shortage of supply. Overall, prices of cereals were up 83.2% in

[6] IMF Primary Commodity Prices at http://www.imf.org/external/np/res/commod/index.asp.

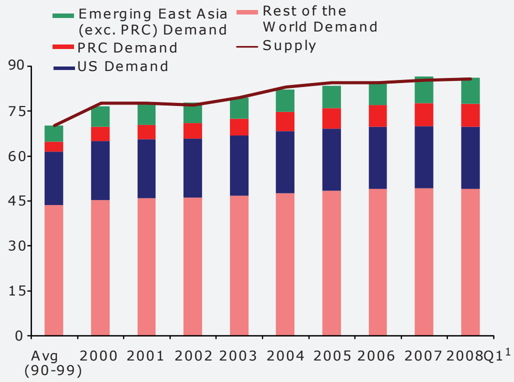
Box 2: Record Oil Prices—Are They Justified?

Oil prices continue to set new records—$147 per barrel (/bbl) on 3 July. They have been attributed to continued strong demand, geopolitical uncertainty, a fall in the value of the US dollar, and speculation. All these are important short-term factors. But do the fundamentals of demand and supply justify today's lofty prices?

There is no doubt the market is tight. It was mere 4 years ago that oil prices broke $40/bbl. Since then, global oil consumption has risen from 82.3 million barrels per day (mb/d) to an estimated 86.3mb/d (first quarter of 2008).[1] Slower economic growth and higher oil prices may be behind the modest contraction in oil demand in Organisation for Economic Co-operation and Development (OECD) economies since 2006—demand is expected to drop by 0.5 mb/d this year. But elsewhere, demand is projected to grow by 1.3 mb/d in 2008, with the vast majority from PRC, India, Russia, and the Middle East **(Figure B2.1a)**. This leaves worldwide oil consumption increasing by 0.7 mb/d this year. Estimates for 2009 are for consumption to increase by 1.4 mb/d.

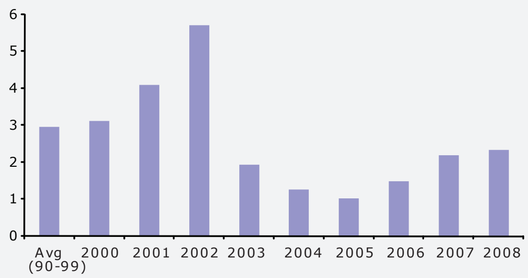
From the supply side, oil production has been barely keeping up, rising from 83.1 mb/d in 2004 to 85.9 mb/d (first quarter of 2008). Delays in key projects and rapid depletion of mature oil fields have slowed growth in supply from producers outside the Organization of the Petroleum Exporting Countries (OPEC). And, despite incremental production increases from Saudi Arabia, OPEC has appeared to be reluctant to raise output significantly to allow stocks to build and prices to soften. OECD commercial inventories—at 2.6 billion bbl or equal to 53 days of forward consumption—have fallen below their 5-year average (yet by industry standards remain comfortable).

Figure B.2.1a: Oil Demand and Supply
(in million barrels per day)



[1] Preliminary estimates for Q1 2008.
Source: US Energy Information Administration.

Figure B2.1b: OPEC Spare Capacity
(in million barrels per day)



Source: US Energy Information Administration.

Fears over supply disruptions continue, however, with unrest in Nigeria's oil fields, political standoffs over Iran's nuclear program, continued tensions between Israel and its neighbors, and erratic policies in producers such as Venezuela. This adds a relatively high political risk premium on oil. OPEC's surplus production capacity remains at a low, providing little cushion in case of unexpected oil market disruptions **(Figure B2.1b)**. Although OPEC's surplus capacity has rebounded from its 2005 low to an estimated 2.3 mb/d this year, it remains below the 1990–1999 average of 3.0 mb/d. This is partly due to underinvestment from the late 1980s to early 2000s, a period of stable, relatively low prices. Downstream infrastructure—refining, transportation, and distribution—has fallen behind as well, adding to price pressures on high quality crude and refined products. Recent high prices have ignited some new exploration and drilling, but it will take up to a decade for this new oil to come on stream. Given the limited surplus capacity, actual or perceived supply disruptions can easily push prices higher, increasing price volatility.

Nevertheless, tight market conditions are not new. Some market analysts say the recent surge in oil prices may reflect a shift in portfolios away from dollar-denominated financial assets, using commodities as "alternative assets," in the wake of financial turbulence linked to the US subprime mortgage market and weakening of the US dollar. Another popular explanation is the drop in real interest rates, which push commodity prices higher.[2] Lower interest rates bring down the cost of carrying inventories (hence, increasing inventory or simply keeping oil underground); and encourage speculators to shift into commodity futures contracts from financial assets that yield lower returns (a classic case of the so-called "carry trade").

Indeed, the recent price surge has not been oil-specific. Precious metals,

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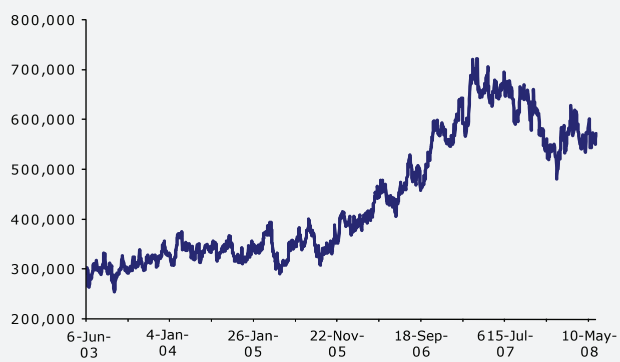
[1] The estimates for oil demand and supply are from US Department of Energy. Available at: http://www.eia.doe.gov/emeu/steo/pub/contents.html.

[2] See Frankel, Jeffrey (2006). "The Effect of Monetary Policy on Real Commodity Prices" in John Campbell (editor) *Asset Prices and Monetary Policy*, University of Chicago Press. He argues that the sharp reduction in interest rates by the Federal Reserve has triggered the recent rally in commodity prices. But in the long run, the general price level adjusts to the change in money supply. As a result, the real money supply, real interest rate, and real commodity price eventually return to where they were. He uses an analogy of the famous theory of exchange rate overshooting, with the price of commodities substituted for the price of foreign exchange. Some empirical evidence support the theory: Monetary policy news and real interest rates, along with other factors, do appear to be significant determinants of real commodity prices historically.Available at:http://www.voxeu.org/index.php?q=node/1178.

aluminum, copper, lead, and food—such as rice, wheat, and edible oils—have all set record highs over the past two years. Most contracts are US dollar-denominated. And with the dollar down more than 33% since 2002 (against a US Federal Reserve index of major currencies), the oil price increase in dollar terms is exaggerated—up almost 76% in dollar terms over the 2 years ending May 2008 against about 44% in euro terms.

Tight supplies forecast for the next several years also feed expectations that global demand will continue to outpace world supply—fueling speculation. The total number of open interest in crude oil futures, for example, jumped nearly 35% from end-2005 to end-2007, while global demand for petroleum grew only 3.7% **(Figure B2.2)**. Financial flows into oil futures markets apparently exceed what can be explained by the necessary physical delivery of oil to refineries. This influx of new money drives futures prices higher still. Longer-term futures are generally well-below spot prices. But the anticipated price for 2013 crude has moved steadily upward—from around $86/bbl in January 2008 to more than $130/bbl in the second week of June 2008. This also drives speculation, which feeds a negative loop where higher oil prices contribute to higher inflation, which in turn lowers real interest rates and the value of the dollar, which boosts oil prices, and so forth.

Figure B2.2: Brent Crude Oil Futures Market Open Interest ($ billion)



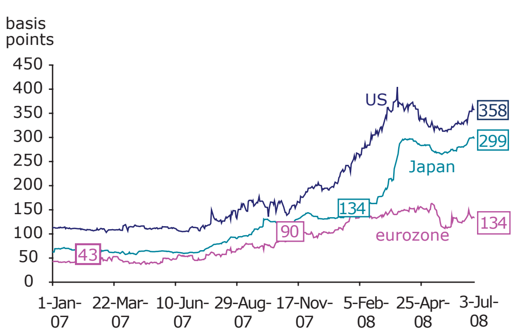
Source: Datastream.

What does the future hold for oil prices? Can they reach the $200/bbl threshold? Theoretically, the answer is "yes," because both oil supply and demand are very inelastic in the short run and do not respond quickly to even large price shifts. With the continuing rise in demand for oil and increasingly high technological costs for bringing new oil supply to the market, tight conditions are expected to persist and perhaps intensify. These supply and demand responses are structural and will take time. Politics, price controls, and environmental issues also will affect investment growth.

But many industry experts say that the true price of crude oil—as determined by the fundamentals of supply and demand—should be in the $60–70 per barrel range. A report[3] by the Japanese government shows that oil's "fundamental price" was $60/bbl in the second half of 2007—based on an analysis of historic crude oil prices from the first quarter of 1992 to the fourth quarter of 2007. Oil prices may overshoot in the short run, but over the medium- to long-run, oil producers and consumers will react to the price increase with fundamentals of demand and supply determining prices of crude—like any other commodity. It is highly uncertain what will be the equilibrium price over the long-run, although oil prices are unlikely to return to the $20–25/bbl—or near the 1985–1995 average.

[3] Japan's Ministry of Economy, Trade, and Industry *FY 2007 Annual Report.*

Figure 42: Corporate Bond Spreads[1]



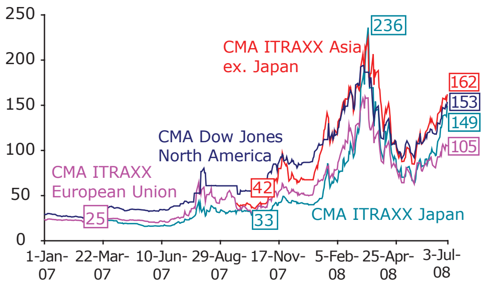
[1] Refers to the difference between yields of 5-year bonds issued by BBB-rated finance companies and yields of sovereign benchmark bonds of the same tenor.
Source: Bloomberg.

May from a year ago. Prices of metals and other raw materials resumed their upward spiral early this year—after having eased somewhat in the second half of 2007—and a tight market balance suggests they will remain elevated.

Concerns over deteriorating credit conditions amid slowing global growth were also reflected in widened global corporate credit spreads across the board.

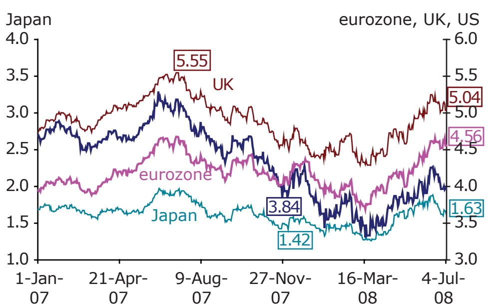
The cost of protecting corporate bonds from default remains high, although down from the record highs at the height of the financial turmoil in March **(Figure 42)**. Credit quality remains under pressure amid the weaker outlook for corporate earnings

Figure 43: Credit Default Swap Indexes
(Investment Grade, Senior 5-Year)



Source: Datastream.

Figure 44a: 10-year Government Bond Yields (% per annum)



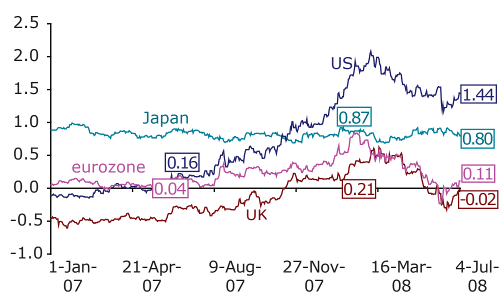
Source: Bloomberg.

from a slowing global economy **(Figure 43)**. Inflation risks are also running strong, pushing US, United Kingdom (UK), euro, and Japanese government bond yields substantially higher across the board, while yield curves have generally flattened in recent months on the expectation for imminent hikes in policy rates **(Figures 44a, 44b)**.

The economic slowdown in major industrial countries, rising inflation, and continued global credit unease will likely dampen the recent rapid growth in emerging East Asian economies.

As economic growth continues to slow in industrialized countries, external demand for emerging East Asian exports is expected to soften. Also, the rise in inflation in these countries is expected to directly affect consumer spending, reducing demand for household goods produced within the region—such as consumer electronics. Subprime-related losses continue to mount among financial institutions, with investors requiring increasingly higher risk premiums on mortgage-based and complex derivative securities. There are concerns that tighter global credit will further spill over into broader economic activity by reducing loans to businesses and households as lending standards are tightened in major industrial countries. Although aggressive easing by the US Fed has somewhat calmed investor nerves, broader market strains remain, with investor scrutiny heightened and as liquidity continues to dry up in several market segments. Combined, these trends are likely to dampen recent economic growth rates in emerging East Asia.

Figure 44b: 10-year and 2–year Government Bond Yields (% per annum)



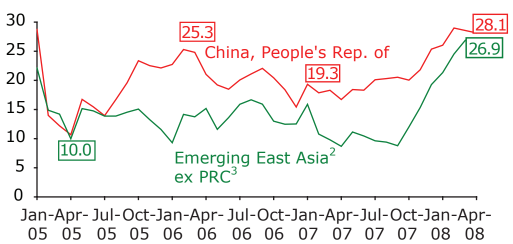
Source: Bloomberg.

Regional Economic Outlook for 2008 and 2009

Emerging East Asia is expected to see slowing yet solid growth as it weathers the current global economic headwinds relatively well—GDP growth is projected to reach 7.6% in both 2008 and 2009.

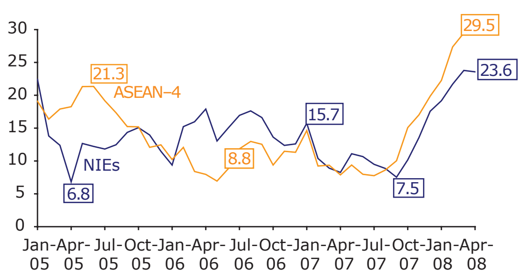
Emerging East Asia is facing stronger headwinds as external demand weakens, global oil and food prices remain elevated, the global IT recovery remains fragile, and the subprime-generated financial turmoil continues to work itself out. There are signs, however, that the region's economies are weathering these external shocks well, bolstered by strong momentum in domestic demand. The region's growth is expected to stay slightly above the long-term 2000–2007 trend in both 2008 and 2009, although about one and a half percentage points off its 2007 peak **(Table 10)**. This is despite the significant slowdown anticipated for the PRC, whose 2008 growth projection is about two percentage points off its torrid 11.9% growth last year. A healthy if moderating expansion is expected across most of the region's other economies, with 2008 GDP growth likely to reach 5.5% in ASEAN and 4.7% in the NIEs. The resilience of emerging East Asia's export growth reflects the region's much broader market and product bases—helping it weather market- or product-specific external shocks. But strong import growth, reflecting robust domestic demand and high commodity prices, has reduced current account surpluses in most economies in the region **(Figures 45a, 45b)**. The outlook for exports is also weaker for the second half of 2008 as the US economy slows further and there are indications that demand from other major industrial economies has also begun to soften. Although export growth is moderating, generally healthy domestic demand and sustained high commodity prices are likely to push import bills higher, further compressing current account surpluses across the region.

Figure 45a: Merchandise Import Growth[1] ($ value, y-o-y, %)



[1] 3-month moving average.
[2] Refers to NIEs, ASEAN-4, and Viet Nam; does not include Brunei Darussalam, Cambodia, Lao People's Democratic Republic, and Myanmar, for which monthly data are not available.
[3] PRC = People's Republic of China
Source: OREI staff calculations based on CEIC data.

Figure 45b: Merchandise Import Growth[1]—NIEs and ASEAN–4 ($ value, y-o-y, %)



[1] 3-month moving average.
Source: OREI staff calculations based on CEIC data.

Having peaked at 11.9% in 2007, GDP growth in the PRC economy is expected to cool somewhat in 2008 on the back of a more protracted US slowdown and continued tightening policies.

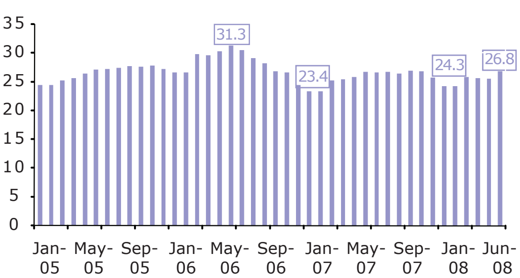
The massive earthquake in the southwestern province of Sichuan took a significant toll in lives and local property. But because

Table 10: Annual GDP Growth Rates (%)

	Average 1996–2006	2003	2004	2005	2006	2007	2008 Q1	2008 Q2	ADB Forecasts 2008	ADB Forecasts 2009
Emerging East Asia [1,2]	6.6	6.9	8.0	7.8	8.7	9.0	8.5	...	7.6	7.6
ASEAN [1,2]	4.2	5.4	6.5	5.7	6.0	6.5	6.3	...	5.5	5.8
Brunei Darussalam	1.9	2.9	0.5	0.4	4.4	0.6	...	...	...	...
Cambodia	8.6	8.5	10.0	13.5	10.8	9.6	...	...	7.5	7.0
Indonesia[3]	3.1	4.8	5.0	5.7	5.5	6.3	6.3	...	6.0	6.2
Lao PDR	6.4	5.8	6.9	7.3	8.3	8.0	...	...	7.7	7.8
Malaysia[4]	5.0	5.8	6.8	5.3	5.8	6.3	7.1	...	5.4	5.6
Myanmar[5]	10.9	13.8	13.6	13.6	12.7	5.5	...	...	...	...
Philippines[6]	4.3	4.9	6.4	5.0	5.4	7.2	5.2	...	5.5	5.6
Thailand	3.1	7.1	6.3	4.5	5.1	4.8	6.0	...	5.0	5.2
Viet Nam	7.3	7.3	7.8	8.4	8.2	8.5	...	...	6.5	6.8
Newly Industrialized Economies[1]	4.5	3.2	6.0	4.8	5.6	5.6	6.1	...	4.7	4.9
Hong Kong, China	3.8	3.0	8.5	7.1	7.0	6.4	7.1	...	4.9	4.9
Korea, Rep. of	4.6	3.1	4.7	4.2	5.1	5.0	5.8	5.0	4.7	4.9
Singapore	5.6	3.5	9.0	7.3	8.2	7.7	6.9	1.9	4.9	5.8
Taipei,China	4.6	3.5	6.2	4.2	4.9	5.7	6.1	...	4.5	4.8
China, People's Rep. of	9.3	10.0	10.1	10.4	11.6	11.9	10.6	10.1	9.9	9.7
Japan	1.3	1.4	2.7	1.9	2.4	2.1	1.3	...	1.5	1.5
US	3.2	2.5	3.6	3.1	2.9	2.2	2.5	...	1.5	1.6
eurozone	2.2	0.8	2.1	1.6	2.8	2.6	1.7	...	1.8	2.0

. . . = not available
[1] Aggregates are weighted according to gross national income levels (atlas method, current $) from *World Development Indicators* (World Bank).
[2] Excludes Brunei Darussalam and Myanmar for all years as weights are unavailable.
[3] GDP growth rates from 1999–2000 are based on 1993 prices, while growth rates from 2001 onward are based on 2000 prices.
[4] Growth rates from 1999–2000 are based on 1987 prices, while growth rates from 2001 onward are based on 2000 prices; 2007 growth rate figure is based on the International Monetary Fund World Economic Outlook Database April 2008.
[5] For FY April–March.
[6] Figures for 2004–2006 are not linked to the GDP figures 2003 backwards due to National Statistics Office revisions fo sectoral estimates.
Sources: ADB; government estimates (Brunei Darussalam); Eurostat website (eurozone); Economic and Social Research Institute (Japan); Bureau of Economic Analysis (US).

Figure 46: Urban Fixed Asset Investment—People's Republic of China
(nominal, year to date, y-o-y growth, %)



Source: CEIC.

Sichuan accounts for less than 5% of total PRC output its overall economic impact is likely to be limited. PRC growth projections remain at a still brisk, albeit slower, 9.9% rate for this year and 9.7% in 2009. Although a series of tightening measures to curb rapid investment growth and asset price inflation appears to have had some impact, increased public spending—especially related to the upcoming Olympic Games and efforts to encourage the rural economy—continues to offset the overall effect of these measures. Fixed-asset investment growth is accelerating once more following the 2007 year-end moderation **(Figure 46)**, with growth reaching 26.8% (y-o-y) in the first 6 months of 2008. With inflation still relatively high, though moderating, more tightening may be expected. A gradually appreciating renminbi, continued monetary tightening, and an expected deceleration in external demand growth should lead to an easing in overall GDP growth.

GDP growth in the NIEs is forecast to slow to 4.7% in 2008 amid the weakening external environment before rising to 4.9% in 2009.

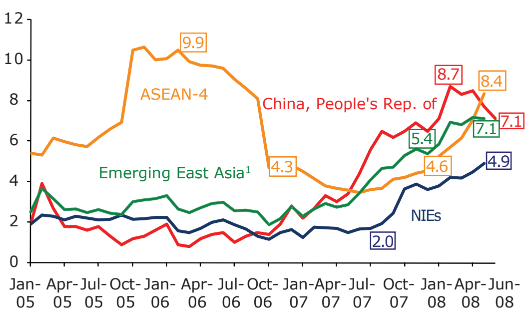
In Korea, despite this year's still-robust first quarter, GDP growth is expected to moderate on the back of deteriorating consumer sentiment, rising oil costs, and slowing global demand. In Singapore, strong domestic demand—largely driven by healthy business investment—and buoyant exports continue to support growth, while some moderation is expected in the near term on higher commodity prices, a stronger currency, and weaker external demand. As one of the region's most open economies, Hong Kong, China, is likely to be affected more dramatically by the anticipated US and PRC slowdown, although strong domestic demand is expected to take up some of the slack. In Taipei,China, slowing exports and industrial activity are expected to soften GDP growth, although strengthening domestic demand should provide some countervailing support.

Aggregate GDP growth in ASEAN is expected to ease from its 2007 peak of 6.5% to a still robust 5.5% this year—with prospects in Indonesia, Malaysia, and Philippines moderating.

Economic expansion in three of the big four ASEAN economies is expected to moderate. Indonesia's GDP growth will likely ease amid slowing exports, but buoyant consumption and strong investment with perhaps some fiscal easing, will help support growth around 6% in 2008–09. Malaysian economic growth is projected to slow to 5.4% in 2008—down from 6.3% last year—as industrial activity softens, particularly in the manufacturing sector, undermined by weaker US demand for consumer electronics. For the Philippines, the outlook has weakened on the deteriorating external environment: softer global demand for exports and soaring rice and fuel prices dampen consumer spending. In contrast, Thailand's economy will likely accelerate from 4.8% in 2007 to 5.0% this year, as expansionary fiscal policy and a largely accommodative monetary stance help mitigate slower export growth. The outlook for Viet Nam continues to deteriorate with the economy expected to grow 6.5% this year, down from 8.5% in 2007, as rampant inflation threatens to overturn what has so far been resilient consumption, and the widening trade deficit undermines currency and financial stability. Economic expansion in Cambodia and the Lao PDR is also moderating, with 2008 GDP growth forecast to slow to 7.5% and 7.7% respectively. Cambodia is still broadening its economic base, but for now remains narrowly focused on tourism and garments, the latter facing ever-increasing global competition and a challenging short-term future. In the Lao PDR, lofty global energy and commodity prices continue to support strong investment in mining and hydropower, providing the main impetus for growth.

Inflation will likely continue to plague much of emerging East Asia, as current record global energy and food prices seep down into overall economic activity, and there are few signs that they will subside any time soon.

Figure 47: Regional Inflation—Headline Rates (y-o-y, %)



[1] Weighted by gross national income (atlas method, current $).
Source: OREI staff calculations based on CEIC data.

Rising price pressures have affected the entire region **(Figure 47)**. In recent months, consumer price inflation has reached multi-year highs in many economies—a 26-year high in Singapore (7.6% in April); a 13-year high in Taipei,China (5.3% in October); a 12-year high in Viet Nam (25.2% in May); an 11-year high in the PRC (8.7% in February); a 10-year high in Hong Kong, China (6.3% in February); and a 9-year high in Korea (5.5% in June). Excluding food and energy prices, core inflation is also rising across much of the region (see Special Section, page 48). Headline inflation is expected to remain elevated in 2008 for most emerging East Asian economies **(Table 11)**. While elevated food and energy prices are largely behind recent inflationary pressures, robust growth, ample liquidity, and ongoing pricing reforms—to remove subsidies or rationalize prices of public utilities—are also contributing to the price trend. Across the region, most inflation targets set for 2008 have already been breached, increasing pressure on monetary authorities to take further action.

Table 11: Annual Inflation Rates (%)

	Average 1996–2006	2003	2004	2005	2006	2007	2008 Q1	2008 Q2	ADB Forecasts 2008	ADB Forecasts 2009
Emerging East Asia [1,2]	2.8	1.7	3.5	2.8	2.7	3.9	6.5	...	6.3	4.6
ASEAN [1,2]	6.4	3.4	4.2	6.3	7.2	4.0	6.4	...	8.0	5.5
Brunei Darussalam[3]	0.5	0.3	0.9	1.1	0.2	0.4	...	...	...	...
Cambodia	4.2	1.2	3.8	5.9	4.7	5.9	0.0	...	...	...
Indonesia	14.5	6.8	6.1	10.4	13.3	6.4	7.6	10.1	10.1	7.8
Lao PDR	30.5	15.5	10.5	7.2	6.9	4.5	...	...	...	...
Malaysia	2.6	1.1	1.4	3.0	3.6	2.0	2.6	...	4.1	3.4
Myanmar[4]	21.2	24.9	3.8	10.7	25.7	36.9	...	...	...	...
Philippines	5.9	3.5	6.0	7.7	6.3	2.8	5.5	9.8	7.2	5.3
Thailand	3.4	1.8	2.8	4.5	4.7	2.2	5.0	7.6	6.1	3.7
Viet Nam	4.4	3.2	7.7	8.3	7.4	8.3	16.4	24.5	19.4	10.2
Newly Industrialized Economies[1]	2.1	1.3	2.3	2.2	1.7	2.3	4.1	...	4.1	3.3
Hong Kong, China	0.2	-2.6	-0.4	0.9	2.0	2.0	4.6	...	4.7	4.3
Korea, Rep. of	3.5	3.5	3.6	2.8	2.2	2.5	3.8	4.8	4.1	3.3
Singapore	0.8	0.5	1.7	0.5	1.0	2.1	6.6	...	5.8	3.3
Taipei,China	1.0	-0.3	1.6	2.3	0.6	1.8	3.6	4.2	3.3	2.7
China, People's Rep. of	1.6	1.2	3.9	1.8	1.5	4.8	8.0	7.8	7.0	5.0
Japan	0.0	-0.2	0.0	-0.3	0.2	0.1	1.0	...	1.1	0.8
US	2.6	2.3	2.7	3.4	3.2	2.9	4.2	...	4.0	2.5
eurozone	1.9	2.1	2.1	2.2	2.2	2.1	3.3	...	3.3	2.3

. . . = not available
[1] Aggregates are weighted according to gross national income levels (atlas method, current $) from *World Development Indicators* (World Bank).
[2] Excludes Brunei Darussalam and Myanmar for all years as weights are unavailable.
[3] Based on the International Monetary Fund World Economic Outlook Database April 2008.
[4] For FY April–March.
Sources: Various national sources; 2008 and 2009 forecasts are OREI staff estimates based on June 2008 Consensus Forecast (Consensus Economics, Inc.).

Soaring global food and oil prices also imply adverse terms-of-trade effects for the region's net importers, resulting in a significant loss of income and narrowing current account surpluses.

The onslaught of global food and oil prices has led to a terms-of-trade shock in many emerging East Asian economies, particularly those that are net importers of food and fuel. The macroeconomic impact—real income loss, slowing consumption and investment, narrowing trade balances, and depreciating currencies—is increasingly visible. Indeed, many regional currencies have depreciated since the latter half of 2007. This negative terms-of-trade effect is unlikely to reverse—it may in fact intensify—over at least the coming 18 months. And any permanent deterioration in the terms of trade would soften consumption and investment demand while hurting labor markets, forcing macroeconomic managers to adjust accordingly.

Emerging East Asia's aggregate current account surplus is expected to narrow to about 8% of GDP in 2008, after reaching a peak of about 9% in 2007.

While narrowing slightly, current account surpluses are expected to remain sizable in the PRC; Hong Kong, China; Malaysia; and Singapore. Current accounts are expected to be close to balance in Indonesia, Korea, Philippines, and Thailand. And Cambodia, Lao PDR, and Viet Nam will likely run sizeable deficits. Although heightened financial volatility still poses a risk to the direction and magnitude of financial flows, capital inflows to the region are expected to remain strong overall in 2008 on diverging growth prospects and widened interest rate gaps with the US. Although growing inflationary concerns may lead authorities to allow currencies to appreciate faster, continued current and capital account surpluses are likely to add to foreign exchange reserves across the region **(Table 12)**.

Risks to the Outlook

Emerging East Asia's still solid growth outlook is vulnerable to three potentially harmful risks: (i) higher-than-expected inflation; (ii) a sharper or protracted economic slowdown in the US; and (iii) another bout of global financial turbulence.

Surging food and oil prices have pushed inflation higher, threatening macroeconomic stability and constraining policy options amid slowing growth. The region already faces several critical risks stemming from the possibility of a sharp deterioration in global economic and financial conditions, transmitted through financial flows and trade channels. While strong balance of payments positions and foreign exchange reserve accumulation may help absorb some of the initial shock, still-rapid regional credit growth only adds upward pressure on inflation and currencies. Should global credit conditions continue to deteriorate in a climate defined by high financial market volatility, domestic

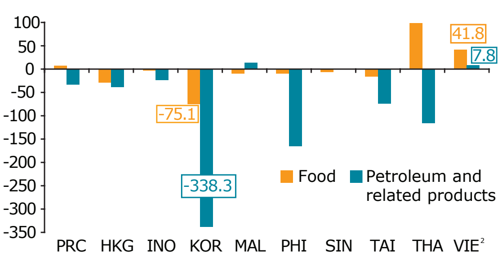
Table 12: Foreign Exchange Reserves (excluding gold)

	Value ($ billions)						**% change** (y-o-y)				**% change from Dec 2007**
	Dec 06	**Mar 07**	**Jun 07**	**Sep 07**	**Dec 07**	**Mar 08***	**Dec 05**	**Dec 06**	**Dec 07**	**Mar 08***	**Mar 08**
Brunei Darussalam	0.5	0.6	0.6	0.6	0.7	0.7	-2.2	5.9	30.6	21.8	0.0
Cambodia	1.2	1.2	1.4	1.5	1.8	2.1	1.0	21.4	56.1	64.8	13.7
PRC[1]	1,068.5	1,204.0	1,334.6	1435.6	1,530.3	1,684.3	33.7	30.1	43.2	39.9	10.1
Hong Kong, China	133.2	135.3	136.3	140.8	152.6	160.7	0.6	7.2	14.6	18.8	5.3
Indonesia	41.1	45.7	49.4	51.2	55	56.8	-5.2	24.0	33.8	24.4	3.4
Korea, Rep. Of	238.9	243.8	250.6	257.2	262.2	264.2	5.7	13.6	9.7	8.3	0.8
Lao PDR	0.3	0.4	0.5	0.5	0.5	0.6	4.9	40.2	62.2	51.6	10.8
Malaysia	82.1	88.2	98.1	97.9	101.0	120.0	6.0	17.6	23.0	36.0	18.8
Myanmar	1.2	1.7	1.8	1.8[2]	1.8[2]	1.8[2]	14.7	60.3	44.3[2]	5.2[2]	0.0[2]
Philippines	20.0	21.7	23.5	27.9	30.2	32.8	21.4	25.7	50.9	51.3	8.6
Singapore	136.3	137.7	144.1	152.5	163.0	177.6	3.2	17.3	19.6	29.0	9.0
Taipei,China	266.1	267.5	266.1	262.9	270.3	286.9	4.8	5.1	1.6	7.2	6.1
Thailand	65.3	69.1	71.3	78.7	85.2	107.5	4.2	28.8	30.5	55.5	26.1
Viet Nam	13.4	18.3	20.8	22.6	23.6	26.3	28.5	47.9	76.3	43.7	11.5
Emerging East Asia	**2,068.1**	**2,235.3**	**2,398.8**	**2,531.6**	**2,678.2**	**2,922.2**	**16.6**	**21.2**	**29.5**	**30.7**	**9.1**
Japan	879.7	892.7	897.6	927.3	952.8	992.6	0.1	5.4	8.3	11.2	4.2
East Asia	**2,947.8**	**3,128.0**	**3,296.4**	**3,459.0**	**3,631.0**	**3,914.8**	**10.6**	**16.0**	**23.2**	**25.2**	**7.8**

*If data is unavailable for reference month, data is for most recent month where data is available.
[1] PRC = People's Republic of China.
[2] Values were taken from the latest available quarter.
Sources: *International Financial Statistics*, International Monetary Fund; Institute of International Finance, Inc.; and Ministry of Finance (Japan).

demand could fall further in major industrial countries, with more significant spillover onto the regional economy. Emerging East Asian economies that have seen rapid increases in capital inflows and higher rates of credit growth over the past several years—including Indonesia, Korea, and Philippines—also remain vulnerable to sudden reversals in investor sentiment. This volatility could be exacerbated, for example, by a sudden unwinding of carry trades or abrupt currency movements.

Figure 48: Net Food and Petroleum Exports (2007, % of Trade Balance[1])



[1] Absolute value of trade balances.
[2] As of 2006.
Source: OREI staff calculations based on data from CEIC and UN COMTRADE.

Rapidly rising inflation threatens to dampen consumer spending and risks a wage-price spiral that could derail the region's recent solid growth.

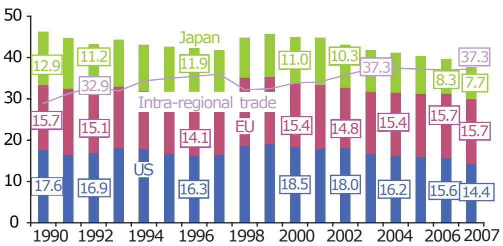
Emerging East Asian economies rely heavily on oil imports—and food in some cases **(Figure 48)**. In 2007, the region imported crude oil worth $258.1 billion, or nearly 10% of its total imports: including Japan, the amount reached $362.4 billion, or 10.8% of the total import bill. While global oil prices have reached historic highs, further spikes remain possible despite expectations of a gradual easing in the oil market demand/supply balance and of speculative buying (see Box 2). Food prices have also soared, crimping consumption and forcing some governments to take remedial actions to avoid the possibility of social unrest. Sharply rising input costs have already seeped into broad consumer prices and wages. The risk of a full-blown price effect through a wage-price spiral threatens to undo years of macroeconomic stability in many of the region's economies. A strong pick up in headline inflation will likely dampen consumption growth in many of the region's economies, even as slowing external demand requires further reliance on domestic demand for growth. High inflation also complicates monetary policy. Many of the region's central banks face the challenge of balancing the risk of slowing economic activity with rising prices. Given the currently low US policy rate, any aggressive tightening in emerging East Asia to combat inflation could fuel capital inflows and exacerbate asset price inflation. In the PRC; Hong Kong, China; and Viet Nam, in particular, relatively rigid exchange rate regimes—combined with rising food prices, rapidly growing domestic demand, tightening labor markets, and strong foreign exchange inflows—could push inflation out of control.

A sharper or more protracted slowdown in the US economy could ignite a greater global economic downturn, further disrupting the external environment for emerging East Asia.

The slumping US housing market and broadening credit turmoil continue to spill over into the business sector and real economy, further threatening the US labor market. And with the persistent contraction in private residential investment also dragging down growth, a slowing of consumption demand could prove devastating. Heightened anxiety in financial markets and credit tightening could stall what has been resilient household consumption. Heavily indebted US consumers already face significant new headwinds as job prospects worsen while rising inflation erodes real income. And consumer confidence remains weak—the Reuters/University of Michigan Index of Consumer Sentiment [7] hit a 28-year low in June. The stagflationary mix of slowing growth and rising inflation is a major risk to the US economy. Recent episodes of financial turmoil also expose the effects that changing US economic conditions have on global

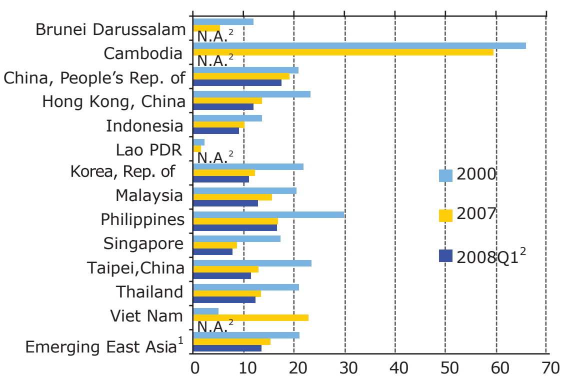
[7] The Reuters/University of Michigan Surveys of Consumers are monthly surveys of consumer attitudes and expectations about the US economy.

Figure 49a: Trade links (share of G3 in Total Exports of Emerging Asia[1])



[1] Includes Brunei Darussalam; Cambodia; People's Republic of China; Hong Kong, China; Indonesia; Republic of Korea; Lao People's Democratic Republic; Malaysia; Myanmar; Philippines; Singapore; Taipei,China; Thailand; and Viet Nam.
Source: International Monetary Fund, *Direction of Trade Statistics.*

Figure 49b: US Market Share of Total Exports (%)



[1] Includes Brunei Darussalam; Cambodia; People's Republic of China; Hong Kong, China; Indonesia; Lao People's Democratic Republic; Republic of Korea; Malaysia; Philippines; Singapore; Taipei,China; Thailand; and Viet Nam.
[2] 2008Q1 data are not available for Brunei Darussalam, Cambodia, Lao People's Democratic Republic, and Viet Nam.
N.A. = not available.
Source: CEIC.

financial markets—dampening domestic demand in many advanced economies, with cascading effects on emerging East Asian economies. Although in gradual decline, the region's trade links with the US remain substantial **(Figures 49a, 49b)**—the US remains an important source of demand for many emerging East Asian exporters, and for the PRC in particular (19% of total exports in 2007, and still higher if re-exports through Hong Kong, China are factored in). Including the eurozone and Japan, G3 economies still account for more than 38% of regional exports when taking into account intraregional trade of intermediate goods driven by vertical integration of production chains across the region.

Any further global financial turbulence could undermine currency and financial stability in the region amid re-pricing of financial risk worldwide.

A flurry of announcements of subprime-related losses continues to infect broader financial markets. Although reported losses on subprime exposure are slowly winding down, massive write-downs have weakened balance sheet positions for many large global banks and the de-leveraging process at financial institutions is still underway. Some of the larger banks in the region's more advanced economies—for example, Bank of China in the PRC and its Hong Kong, China branch; Woori Bank in Korea; and the DBS Group in Singapore—have also reported larger-than-expected losses on exposure to US subprime and related mortgage assets this year. Any further unexpected losses in financial markets could push these impaired banking systems into crisis, aggravating overall credit conditions, and thus affecting the magnitude and volatility of financial flows to the region. The recent sell-off in regional stock markets—synchronized with the global financial turmoil—also highlights the vulnerability of the region's currency and financial markets to a sharp re-pricing of financial risk, despite relatively small exposure to the US subprime and related credit derivatives. The global financial system is navigating rough waters. Should equity markets in major industrial countries fall abruptly as the broadening credit turmoil severely affects real economies, the region's financial markets may experience substantially higher volatility and further losses in asset values. A related concern is that rising US inflation may force the US Fed to begin tightening before a firm recovery takes hold. The reversal may be as quick and aggressive as the recent easing, potentially exacerbating swings in regional currencies and market volatility.

Policy Issues

Heightened inflationary pressures will require decisive tightening of monetary policies in many emerging East Asian economies.

To address rising inflationary threats, many of the region's monetary authorities have begun tightening in recent months (see Figures 23a, 23b). But many of them remain behind the curve in reacting to inflation due to country-specific constraints and the deteriorating external outlook. The risk of inaction is rising, and the region's monetary authorities need to formulate more forceful and preemptive policy responses. In doing so, however, care needs to be taken to account for country-specific trade-offs and constraints. In economies such as the PRC and Viet Nam, for example, further tightening is clearly warranted given rapid growth and strong domestic demand in an increasingly inflationary environment. For most other emerging East Asian economies, the dilemma of addressing inflationary pressures at the expense of slower economic growth is more acute (see Special Section page 48). Across the region, there are signs that insufficient policy responses have allowed cost-driven price increases to feed higher inflation expectations, thus threatening to trigger a vicious wage-price spiral. The balance of risks is clearly being tilted toward high inflation. Timely and preemptive action in times of price volatility is critical to controlling inflationary expectations and maintaining policy credibility, thus ensuring that sustained, robust growth is not derailed.

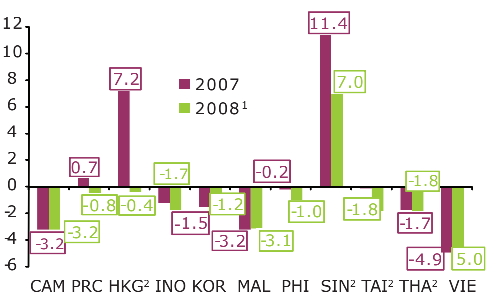
But limited currency flexibility across much of emerging East Asia has complicated monetary policy, as the wide gap between US and regional policy rates continue to attract strong capital inflows.

Capital flows have remained strong because of the widened gap between low US rates and higher rates across much of emerging East Asia. This continues to support already strong liquidity growth and adds to inflation pressures. It is made more difficult in some economies with rigid exchange rate regimes—the generally greater exchange rate flexibility of recent years notwithstanding—and reluctance in others to let currencies rise faster. Indeed, the monetary authority in Hong Kong, China, under the dollar peg, lowered interest rates automatically in tandem with the US policy rate cuts since the latter half of 2007, despite signs of rising inflation. More aggressive tightening to head off inflation may boost inflows of foreign capital further, increase sterilization costs, and threaten still greater inflation pressures, if the authorities attempt to maintain stable exchange rates. In many economies, efforts to sterilize the effect of rising foreign exchange inflows on domestic money supply have been only partly effective, while sterilization, given often inefficient management of the region's large foreign exchange reserves, can carry a high fiscal cost. Many of the region's central banks are reluctant to deal with inflation more directly by raising interest rates in part because of this situation. Recent capital controls to circumvent these problems, however, are often inefficient economically and potentially disruptive. Against this backdrop, allowing more exchange rate flexibility can help mitigate imported inflation, while reducing the cost of sterilization. Enhancing currency flexibility will also allow more leeway for monetary policy to successfully combat inflation.

In economies with healthy fiscal positions, authorities can consider carefully-designed fiscal support to cushion the most vulnerable from the immediate effects of food and energy price increases.

Fiscal policy can play a crucial role in the current complicated and constrained monetary environment, balancing the risks of monetary tightening. Often the poor bear the brunt of tighter monetary conditions, and they are already reeling from rising food and energy costs, which account for a much larger portion of expenditures. Yet many economies in the region, after recent strong revenue efforts and prudent spending policies, boast sound fiscal positions of modest deficits and sustainable public debt levels. This allows room to respond in case downside risks materialize. Indeed, Hong Kong, China; Malaysia; Singapore; and Thailand have already begun some fiscal stimulus. Nonetheless, there is concern that increased fiscal spending may fuel demand-side pressures and aggravate the inflationary environment. Across emerging East Asia, the fiscal situation varies dramatically: deficits range from 5.0% of GDP in Viet Nam, to 1.0% in the Philippines, whereas Singapore is running a sizeable surplus **(Figure 50)**. The PRC's fiscal position is expected to switch from positive to negative this year, reflecting a planned increase in spending. Many governments need to maintain prudence in the face of still-high—even if more sustainable—public debt-to-GDP ratios. They include Indonesia; Korea; Malaysia; Philippines; and

Figure 50: Fiscal Balance (% of GDP)



[1] National budget except for Cambodia (IMF estimate).
[2] Fiscal year.
Sources: National sources; Asian Development Outlook 2008 (ADB); International Monetary Fund.

Thailand. While others—including Korea and Hong Kong, China—need to be aware of the fiscal challenges presented by aging populations. Moderating growth and increased subsidies also challenge several economies and could reverse some recent fiscal consolidation, while the effect of subsidies on either inflation or social protection is highly doubtful. Malaysia, for example, spent MYR12.2 million on total subsidies (9.8% of total government expenditure in 2007) to cap retail fuel prices, and the fiscal cost rose even higher during the first half of 2008, prior to the government raising fuel prices by 40% in June. Indonesia spent IDR88.8 trillion on oil subsidies, or 11.7% of total government expenditure. If fuel subsidies are reinstated or rise as oil prices climb, it could dilute or reverse hard-won fiscal progress. It is thus important that fiscal support is carefully targeted at the poor, or channeled efficiently into much-needed infrastructure development that feeds long-term growth.

Administrative controls to tame inflation are tempting, but artificial price-fixing and subsidies can breed problems later.

Some governments have resorted to regulatory controls and/or subsidies to combat inflation without having to raise interest rates or allow currencies to appreciate faster—which may either compromise macroeconomic stability due to sustained high capital inflows. Many of the region's economies have adopted measures to cap domestic price increases. For example, the PRC imposed price controls on food and capped prices on fuel and public services. Malaysia temporarily rationed and stockpiled cooking oil, and built inventories of other daily essentials such as wheat and soy beans—to questionable effect. Many others continue to subsidize food and fuel. Though these administrative measures may temporarily help alleviate symptoms of underlying inflationary pressures, they bypass the fundamental supply and demand balance, and thus can ultimately be more costly. First, price controls and subsidies tend to maintain, or even stimulate, demand for oil, food, and other commodities—ultimately allowing world prices to rise even further. Second, increased food and energy subsidies erode fiscal ability to provide social protection and support for a slowing economy, and reduce funds available for development. Regulatory controls and subsidies, therefore, should only be valid for a specified period, with clearly identified targets, to minimize market distortions.

The negative terms-of-trade shock is very real and requires structural economic adjustment; delaying necessary measures due to exchange rate or other structural rigidities may result in higher future costs.

On the back of strong current account surpluses and large foreign exchange reserves, many emerging East Asian economies have thus far weathered the negative terms-of-trade shock relatively well. But signs of stress are emerging and the persistence of deteriorated terms of trade suggests that the region's economies need to embrace more fundamental changes to ease the impact. A permanent shift in terms of trade implies a loss of real national income for a net importing country, as the country will have to pay more for the goods it imports. For example, a fall in a country's export price relative to its import price will reduce the income of its exporters, leading to a decline in activity and employment in its export industries. Adverse terms of trade also hurt the current account balances of importing countries, causing deterioration of their balance of payments and putting downward pressure on currencies. Among the region's economies, Korea, Philippines, Thailand, and Viet Nam are already experiencing some pressure on their external accounts and currencies. If these countries try to maintain the exchange rate by reducing domestic money supply, the negative impact on domestic demand will be further exacerbated. For countries with weaker external positions, this negative terms-of-trade effect could be more damaging. Greater currency flexibility will help absorb the negative terms-of-trade shock. But given that the current terms-of-trade shock will likely persist, it is also important for the region's economies to advance structural reforms that will facilitate the necessary economic adjustments. If wages were to adjust quickly to the terms-of-trade shock, the export industry could maintain its competitiveness in global markets, thus mitigating the negative effect on economic activity. Flexible wages will also lessen the burden of adjustment from the exchange rate movement. Overall, economies that have more economic flexibility and agility, effective governance, and well-functioning institutions tend to be more successful in absorbing negative terms-of-trade shocks by commanding substantial flexibility in domestic prices and wages.

Deeper and more comprehensive structural reforms are needed to upgrade the investment climate in several emerging East Asian economies.

The recent financial turmoil reinforces the lessons many emerging East Asian economies learned from the Asian financial crisis. These include diversifying the economic base and export markets, and establishing a resilient and robust financial sector. The economies that have performed relatively well amid the US slowdown and global credit turmoil are the ones that have heeded these lessons. Still, weaknesses and gaps remain. There is need to improve the investment climate and business environment, accelerate post-crisis financial sector reform agendas, deepen financial markets, strengthen regional integration, and promote energy efficiency and conservation, among others. With the external sector currently slowing, weaknesses hindering business investment—such as policy uncertainty, poor governance, ineffectual legal and institutional frameworks, and a weak regulatory mandate—stand out much more. Ways to address these include more comprehensive structural reforms to improve efficiency and competitiveness—minimizing unnecessary regulatory barriers, encouraging private sector incentives and market discipline, creating a level playing field across sectors, and fostering competition to upgrade institutional capacity.

Nurturing more efficient and liquid financial markets would not only help channel capital into productive use, but would also enable more effective management of capital flows and foreign exchange reserves.

Deepening financial systems and implementing market reforms are crucial, if only long-term, ways to build financial stability. Measures to develop deeper, more broad-based, and transparent financial markets can be accelerated to allocate financial resources more efficiently and to strengthen the resilience of domestic financial systems against fickle international investors. The subprime crisis exposed regulatory shortcomings across financial systems, especially in the US. The lesson is that reform is an ongoing process, particularly where market players are so adept at sniffing out and taking advantage of regulatory loop-holes or other systemic weaknesses. While emerging East Asia's banking and financial sectors have made good progress, rapid financial globalization requires keeping up with the evolving financial environment and innovations in risk management, governance, information sharing, and prudential oversight. With the massive build-up of foreign exchange reserves incurring significant carrying costs, and the US dollar depreciating sharply, many emerging East Asian governments also face increased valuation risks from inefficient reserve management and a potentially significant fiscal burden. Using sovereign wealth funds to reduce costs and financial risks is one way to deal with reserve management—though it is critical to establish a proper legal and institutional framework for effective governance, transparency, and management accountability. But deeper and more efficient financial systems are also essential to establish institutional and systemic market support for the effective management of capital flows and foreign exchange reserves.

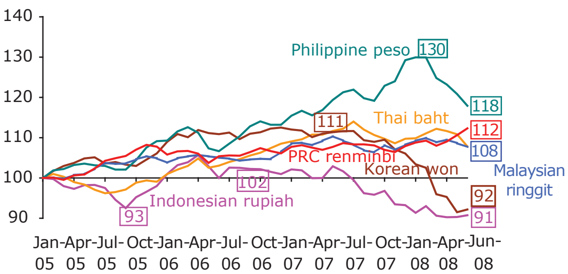
Measures to promote energy efficiency and conservation—in step with market forces—can ease macroeconomic management and help address pressing environmental issues.

Sustained oil price hikes constrain policy options for dealing effectively with the external slowdown—both in monetary (high inflation) and fiscal terms (fuel subsidies). Fiscal measures are at best short-term and inefficient, given the long-term nature of oil market tightness. Also, when economies are unable to (or choose not to) allow market signals to work, there is an implicit incentive to pollute and waste energy—many of the region's urban areas are shrouded in smog. Aside from the human cost, failure to deal with these problems could undermine economic soundness and growth. Promoting energy conservation and efficient energy markets is crucial, focusing on (i) reducing subsidies and bringing local prices in line globally to eliminate wasteful, low-value uses; (ii) avoiding distorting and possibly ineffective administrative price controls; (iii) introducing taxes and providing market incentives to promote energy efficiency; and (iv) fostering competitive energy markets that reward private sector innovation.

Closer exchange rate coordination among emerging East Asian economies could aid in better macroeconomic management; the objective should be to promote intraregional exchange rate stability while maintaining extra-regional exchange rate flexibility.

The ongoing US subprime turmoil and its spillover on to the US real economy underscores the urgent need for emerging East

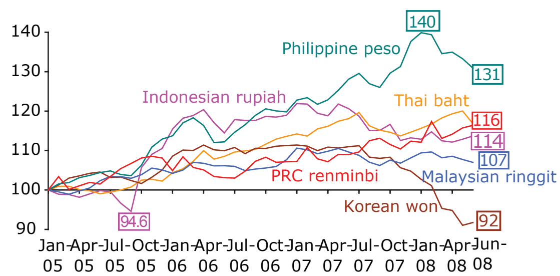
Figure 51a: Nominal Effective Exchange Rate[1] (broad indexes, January 2005 = 100)



[1] Weighted average of a basket of 51 bilateral exchange rates. The weights are derived from manufacturing trade flows. An increase is an appreciation.
Source: Bank for International Settlements.

Asian economies to use existing interdependencies—and potential new ones—as shock absorbers to help mitigate both the effects of exogenous events and to act as an alternative growth engine to help the global economy. The recent—and sustained—growth seen in many of the region's economies stems in no small part from the strong growth and robust demand of regional partners. Against this backdrop, monetary policies divergent from the US, coupled with rising inflation in the region, may add upward pressure on regional currencies **(Figures 51a, 51b)**. A sudden loss of export competitiveness coming from rapid bilateral currency movements against the US dollar is a risk. An enhanced and better coordinated regional strategy on exchange rate policy could help regional currencies rise faster against the US dollar to combat imported price-driven inflation, while mitigating unilateral appreciation pressures and thus maximizing the benefits of strong intraregional trade dynamics amid slowing external demand.

Figure 51b: Real Effective Exchange Rate[1] (broad indexes, January 2005 = 100)



[1] Weighted average of a basket of 51 bilateral exchange rates adjusted by relative consumer prices. The weights are derived from manufacturing trade flows. An increase is an appreciation.
Source: Bank for International Settlements.