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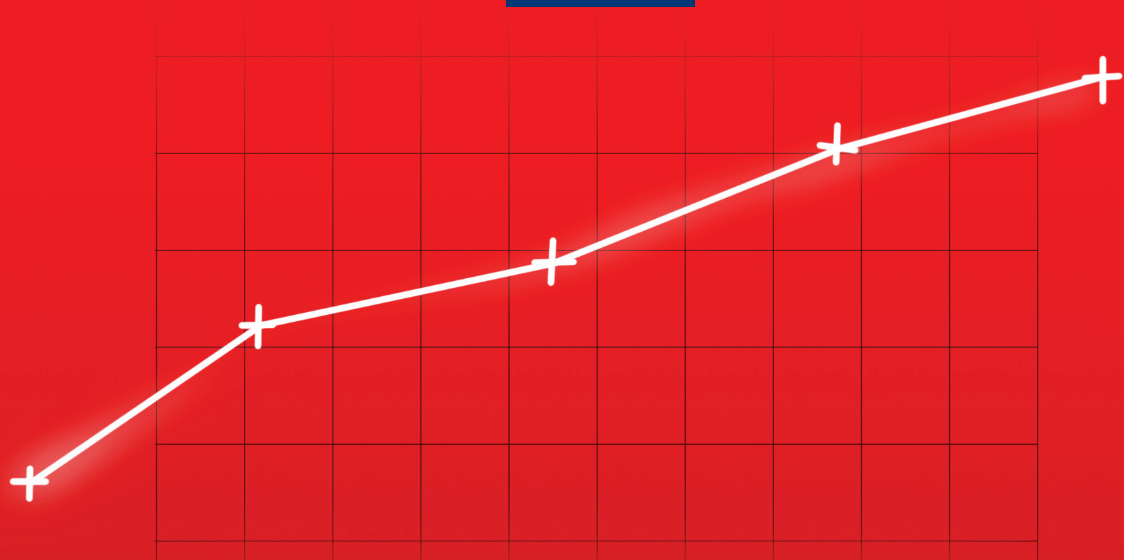

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Contents

Abbreviations and Acronyms

ABMI	Asian Bond Markets Initiative
ADB	Asian Development Bank
ADO	Asian Development Outlook
AEM	Asia Economic Monitor
AFDM+3	ASEAN+3 Finance and Central Bank Deputies' Meeting
AFMM+3	ASEAN+3 Finance Ministers' Meeting
ARIC	Asia Regional Integration Center
ASEC	ASEAN Secretariat
ASCU	ASEAN Surveillance Coordinating Unit
ASEAN	Association of Southeast Asian Nations
ASEAN+3	ASEAN plus People's Republic of China, Japan, and Republic of Korea
ASEAN-4	Indonesia, Malaysia, Philippines, and Thailand
ASP	ASEAN Surveillance Process
BIS	Bank for International Settlements
BI	Bank Indonesia
BSA	bilateral swap agreement
BSP	Bangko Sentral ng Pilipinas
CAR	capital adequacy ratio
CMI	Chiang Mai Initiative
CMIM	Chiang Mai Initiative Multilateralization
ECB	European Central Bank
ERPD	economic review and policy dialogue
EWS	early warning system
FSA	Financial Services Authority
Fed	Federal Reserve
G3	US, eurozone, Japan
G7	Group of Seven industrialized economies
G20	Group of 20
GDP	gross domestic product
HKMA	Hong Kong Monetary Authority
HP	Hodrick-Prescott filter
IMF	International Monetary Fund
ISM	Institute for Supply Management
IT	information technology
JCI	Jakarta Composite Index
KLCI	Kuala Lumpur Composite Index
KOSPI	Korean Stock Price Index
Lao PDR	Lao People's Democratic Republic
LIBOR	London Interbank Offered Rate
M2	broad money
MSCI	Morgan Stanley Capital International Inc.
m-o-m	month-on-month
NEER	nominal effective exchange rate
NIE	newly industrialized economy
NPL	nonperforming loan
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
OREI	Office of Regional Economic Integration
PCOMP	Philippine Composite Index
PRC	People's Republic of China
PMI	purchasing managers' index
Q3	third quarter
q-o-q	quarter-on-quarter
REMU	Regional Economic Monitoring Unit
repo	reverse repurchase
SET	Stock Exchange of Thailand
SIV	special investment vehicle
SME	small- and medium-sized enterprise
STI	Straits Times Index
TOR	terms of reference
TWSE	Taiwan Stock Exchange Index
UK	United Kingdom
US	United States
VaR	value-at-risk
y-o-y	year-on-year

Emerging East Asia—
A Regional Economic Update

Highlights

Recent Economic Performance

- Beginning the second quarter of 2009, economic growth in emerging East Asia rebounded strongly, with domestic demand picking up as confidence returned.

- Inflation across the region remained muted in the second half of 2009 despite the recovery beginning to take hold.

- Balance of payments across the region improved in 2009 as current account surpluses increased and capital inflows returned to the region.

- Stock markets in emerging East Asia continued to rebound in the second half of 2009, though still below early 2008 levels.

- Almost all currencies in the region appreciated against the US dollar in the second half of 2009 with strong capital inflows and an improved regional economic outlook.

- Movements in bond yield curves in emerging East Asian markets were mixed in the second half of the year with changes generally small.

- With recovery in its early stages and inflation low, authorities have continued to maintain an accommodative stance in monetary and fiscal policy.

- Emerging East Asia's banking systems weathered the financial storm well, showing strong profits, ample capital cushions, and improved prudential oversight.

Outlook and Risks

- Large and timely liquidity support, unprecedented monetary easing, and substantial fiscal stimulus have helped advanced economies begin to emerge from the worst global downturn since the Second World War.

- Emerging East Asian economies have performed better than anticipated this year thanks to swift policy responses and an improved external environment; GDP is now expected to grow 4.2% in 2009 and 6.8% in 2010.

- Major downside risks to the outlook include (i) a short-lived recovery in developed economies, (ii) policy errors such as premature policy tightening, (iii) a slower-than-expected pick up in private demand, and (iv) destabilizing capital flows.

Policy Issues

- Emerging East Asia now faces the challenge of converting economic rebound to sustained recovery.

- With the global recovery tentative, monetary policy should remain accommodative where feasible, with a watchful eye on inflation and asset prices.

- Fiscal stimulus must continue, where there is room, to bolster domestic demand.

- Stimulus exit strategies must be planned carefully—if done too soon, recovery may be at risk; if too late, fiscal deficits and monetary expansion could become unsustainable and inflationary.

- Emerging East Asia must play a constructive role in reshaping the global economic architecture through its expanded influence in global forums such as the G20.

- It is time to take regional cooperation to the next level, in trade, finance, and economic surveillance.

Regional Surveillance for Economic Stability

- With the multilateralization of the Chiang Mai Initiative, the need for effective regional surveillance in East Asia has taken on a more immediate, yet evolving, purpose.

- Regional surveillance by an objective regional institution should create a more effective crisis prevention mechanism.

- Most importantly, an effective regional surveillance mechanism can help bring East Asian policy dialogue—and cooperation in general—to the next level.

- An effective regional surveillance mechanism for East Asia should (i) clearly define the purpose of surveillance, (ii) coordinate with other multilateral and regional institutions, (iii) use objective indicators for analysis, (iv) ensure the surveillance unit's independence, and (v) report results directly to senior policymakers.

- For regional surveillance to grow stronger, enhanced capacity to conduct surveillance is needed along with an appropriate institutional mechanism to carry it out.

Recent Economic Performance

Growth and Inflation

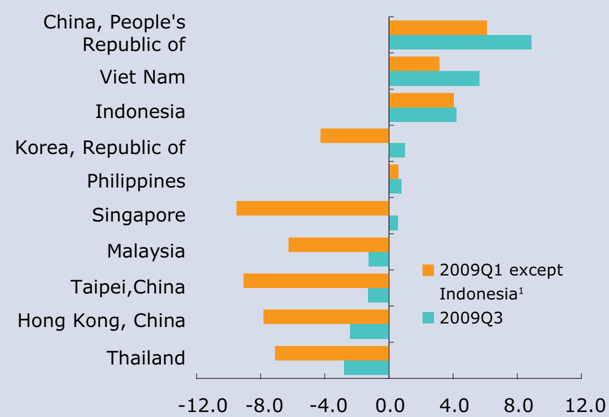
Beginning in the second quarter of 2009, economic growth in emerging East Asia is now rebounding strongly.

Due to timely and forceful policy stimulus measures, an improving external environment, and restocking of depleted inventories, many emerging East Asian economies have shown evidence of a strong rebound from the sharp downturn in late 2008 and early 2009 **(Figure 1)**. The combined gross domestic product (GDP) of the 10 largest economies in emerging East Asia[1] grew 5.0% year-on-year[2] in the third quarter of 2009, well above growth rates in the previous three quarters **(Figure 2)**. Buoyed by massive fiscal and monetary stimulus, the People's Republic of China (PRC) by far recorded the strongest performance, growing 8.9% in the third quarter of 2009. The four middle-income economies of the Association of Southeast Asian Nations (ASEAN-4)[3] and Viet Nam expanded by 1.2% in the third quarter, while economic growth in the four newly-industrialized economies (NIEs)[4] contracted slightly by 0.1% in the third quarter, which was a major turnaround from the NIEs' 6.3% contraction in the first quarter of 2009.

Domestic demand has begun to pick up in the region as confidence returns.

Hardest hit by slumping external demand, investment in the NIEs is showing signs of

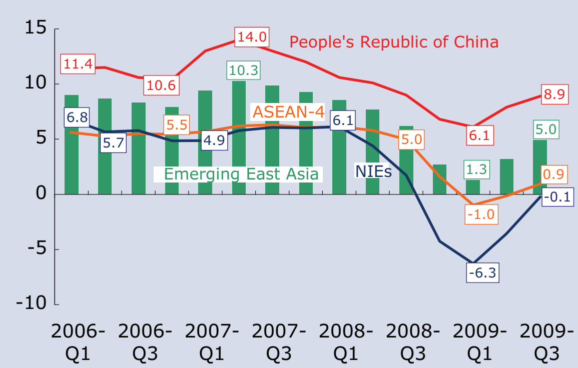
Figure 1: Quarterly GDP Growth
(y-o-y, %, 2009Q3 vs. 2009Q1)



GDP = gross domestic product, y-o-y = year-on-year.
[1]2009Q2 for Indonesia since its GDP growth bottomed in 2009Q2.

Source: OREI Staff calculations based on CEIC data.

Figure 2: Regional GDP Growth[1]—Emerging East Asia[2] (y-o-y,%)



ASEAN-4 = Indonesia, Malaysia, Philippines, and Thailand; GDP = gross domestic product; NIEs = Hong Kong, China; Korea, Republic of; Singapore; and Taipei,China.
[1]Weighted by gross national income (atlas method, current $). [2]Includes ASEAN-4; NIEs; China, People's Republic of; and Viet Nam.

Source: OREI staff calculations based on national sources.

[1]The 10 largest emerging East Asian economies are the China, People's Republic of; Hong Kong, China; Indonesia; Korea, Republic of; Malaysia; Philippines; Singapore; Taipei,China; Thailand; and Viet Nam.

[2]All growth figures are year-on-year unless otherwise indicated.

[3]Indonesia, Malaysia, Philippines, and Thailand.

[4]Hong Kong, China; Korea, Republic of; Singapore; and Taipei,China.

Figure 3a: Domestic Demand Growth—NIEs (y-o-y, %)

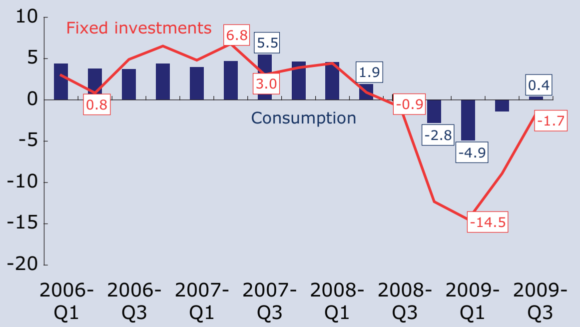
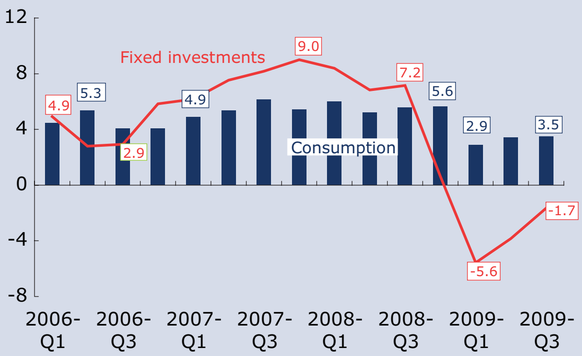


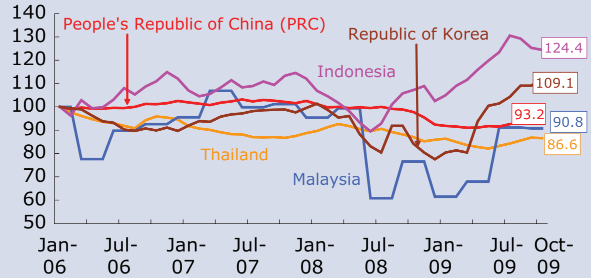
Figure 3b: Domestic Demand Growth—ASEAN-4 (y-o-y, %)



y-o-y = year-on-year.
NIEs = Hong Kong, China; Korea, Republic of; Singapore; and Taipei,China. ASEAN-4 = Indonesia, Malaysia, Philippines, and Thailand.

Source: OREI staff calculations based on CEIC data.

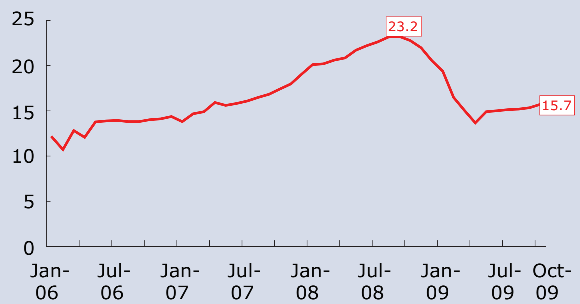
Figure 4: Consumer Confidence Indexes—Selected Economies (January 2006 = 100)



Note: China Consumer Confidence Index for the PRC, Indonesia Consumer Confidence Index for Indonesia, South Korea Composite Consumer Sentiment Index (quarterly prior June 2008) for the Republic of Korea, Malaysia Consumer Sentiments Index (quarterly) for Malaysia, and Thailand Consumer Confidence Index for Thailand.

Source: National Bureau of Statistics (People's Republic of China), Bank Indonesia (Indonesia), Korea National Statistical Office and Bank of Korea (Republic of Korea), Malaysia Institute of Economic Research (Malaysia), and The University of the Thai Chamber of Commerce (Thailand).

Figure 5: Retail Sales Growth[1]—People's Republic of China (y-o-y, %)



[1]3-month moving average.

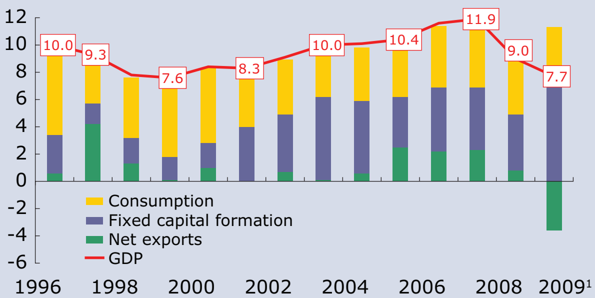
Source: OREI staff calculations based on CEIC data.

recovery. In the third quarter of 2009, the decline in investment slowed to -1.7% compared with a decline of 14.5% in the first quarter **(Figure 3a)**. In ASEAN-4, investment declined 1.7% in the third quarter compared with a fall of 5.6% in the first quarter **(Figure 3b)**. While still weak, consumption in the NIEs has also shown signs of recovery, growing a slight 0.4% in the third quarter following three quarters of decline. Improvements in consumer confidence have likely contributed to the recovery in consumption and investment **(Figure 4)**. Continued resilience in the PRC's retail sales growth suggests that private consumption remains strong **(Figure 5)**.

The PRC's economic growth remained robust throughout the global crisis as huge fiscal and monetary stimulus sustained investment and consumption.

The PRC economy looks well set to return to rapid growth, having expanded 8.9% in the third quarter. The main contributors were investment and consumption, while net exports

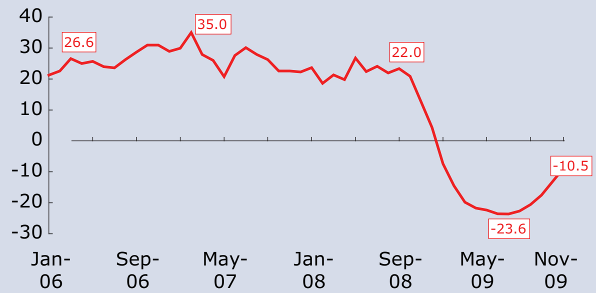
Figure 6: Contributions to GDP Growth—People's Republic of China
(y-o-y, %, percentage points)



¹2009Q1–2009Q3.
GDP = gross domestic product.

Source: China Statistical Yearbook and National Bureau of Statistics of China.

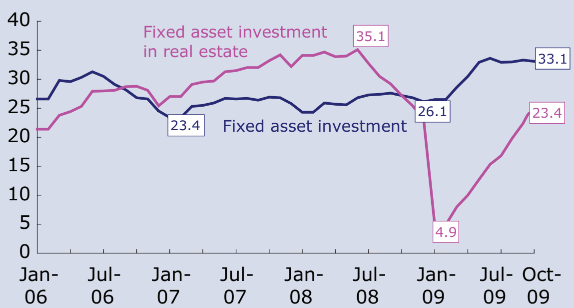
Figure 8: Export Growth¹—People's Republic of China ($ value, y-o-y, %)



y-o-y = year-on-year.
¹3-month moving average of merchandise exports.

Source: OREI staff calculations based on CEIC data.

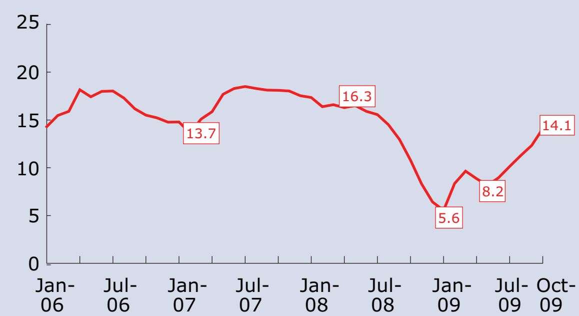
Figure 7: Fixed Asset Investment—People's Republic of China
(nominal, year-to-date, y-o-y growth)



y-o-y = year-on-year.

Source: CEIC.

Figure 9: Industrial Production Growth¹—People's Republic of China (y-o-y, %)



y-o-y = year-on-year.
¹3-month moving average.

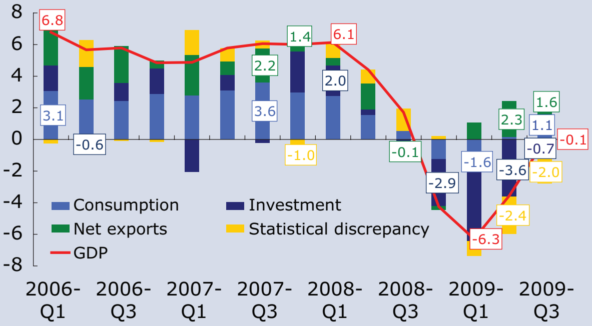
Source: OREI staff calculations based on CEIC data.

declined **(Figure 6)**. Fixed asset investment grew 33.1% in October, driven by strong government investment **(Figure 7)**. Consumption spending also remained strong as retail sales grew 16.2% in October. The economy was badly hit by the fall in external demand, with exports declining 13.8% in October. However, the pace of contraction has been slowing since May 2009 **(Figure 8)**. Leading indicators continue to suggest that domestic demand remained strong in the fourth quarter with industrial production growing by 16.1% in October 2009 **(Figure 9)**.

Economic growth in the NIEs returned in the second half of 2009 after being badly hit by plummeting global demand.

The Republic of Korea (Korea) and Singapore saw economic growth return in the third quarter of 2009 after three consecutive quarters of contraction. Singapore grew 0.6% in the third quarter driven by biomedical and electronics manufacturing. In Korea, GDP also expanded 0.9% due to improvements in exports and manufacturing. However, Hong Kong, China's

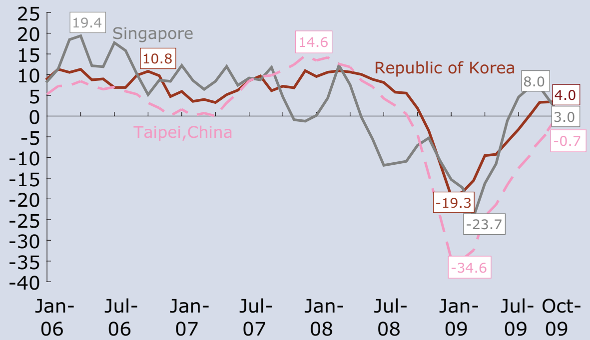
Figure 10: Contributions to GDP Growth—NIEs[1]
(y-o-y, %, percentage points)



GDP = gross domestic product, y-o-y = year-on-year.
[1]Refers to Hong Kong, China; Korea, Republic of; Singapore; and Taipei,China.

Source: OREI staff calculations based on CEIC data.

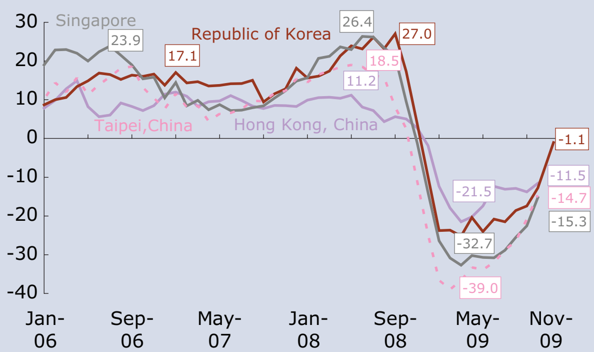
Figure 12: Industrial Production Growth[1]—NIEs (y-o-y, %)



y-o-y = year-on-year.
[1]3-month moving average.

Source: OREI staff calculations based on CEIC data.

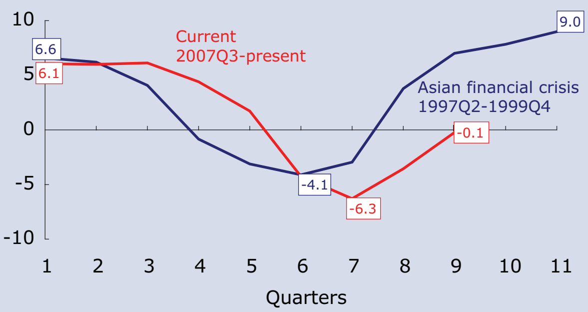
Figure 11: Export Growth[1]—NIEs
($ value, y-o-y, %)



y-o-y = year-on-year.
[1]3-month moving average of merchandise exports.

Source: OREI staff calculations based on CEIC data.

Figure 13: GDP Growth during Crisis Periods—NIEs[1] (quarterly, % change)



[1]Newly industrialized economies (NIEs) refers to Hong Kong, China; Korea, Republic of; Singapore; and Taipei,China. Gross domestic product (GDP) growth rates for Taipei,China during the Asian financial crisis are based on 2000 prices while growth rates for the current crisis are based on 2006 prices. Growth rates for Hong Kong, China during the Asian financial crisis are based on 1998 prices. Growth rates for the rest of the NIEs are based on 2000 prices.

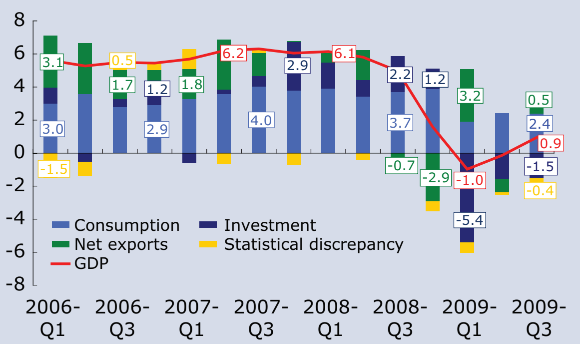
Source: OREI staff calculations based on data from national sources.

economy contracted 2.4% in the third quarter as weak export performance offset higher government spending. Taipei,China's GDP in the third quarter declined by 1.3%, dragged down by a decline in investment. On a quarterly basis, Taipei,China is showing positive gains after four consecutive quarters of declines. Fiscal stimulus and improved external demand contributed to the turnaround in NIEs' growth **(Figure 10)**. The decline in exports in the NIEs appears to have reached bottom in the first half of 2009 and is working its way toward recovery **(Figure 11)**. Leading indicators such as industrial production and retail sales have continued to move higher in recent months **(Figure 12)**. However, as a group, the NIEs are recovering slower than after the 1997/98 Asian financial crisis, and the decline now is also steeper **(Figure 13)**.

The four middle-income ASEAN economies improved during the second half of 2009, supported by fiscal stimulus and some returning export demand.

In the third quarter of 2009, ASEAN-4 economies turned the corner, growing 0.9%. Investment improved significantly and domestic consumption remained resilient **(Figure 14)**. Thailand and Malaysia continued to suffer, however, and their GDPs contracted by 2.8% and 1.2%, respectively, during the third quarter. As they are the most open of the four, they were hit hard by double-digit declines in exports **(Figure 15)**. Leading indicators such as industrial production suggest that the situation is improving with the pace of contraction easing in recent months **(Figure 16)**. Indonesia's GDP grew 4.2% in the same period as interest rate cuts, stimulus measures, and election-related spending boosted private consumption. The Philippine economy grew by a worse-than-expected 0.8% in the third quarter as government and private consumption offset weak exports and investment. Compared with the 1997/98 Asian financial crisis, ASEAN-4 performed much better with a shallow decline and a quicker turnaround **(Figure 17)**.

Figure 14: Contributions to GDP Growth—ASEAN-4[1] (y-o-y, %, percentage points)



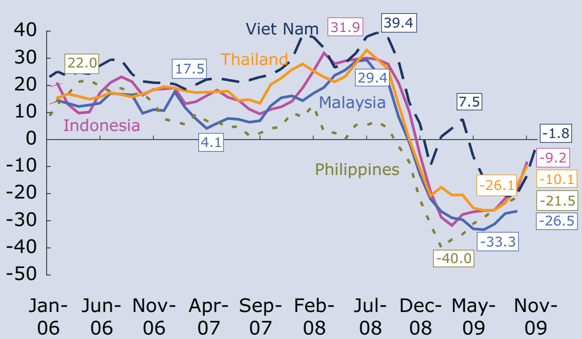
GDP = gross domestic product, y-o-y = year-on-year.
[1]Refers to Indonesia, Malaysia, Philippines, and Thailand.

Source: OREI staff calculations based on CEIC data.

Due to stronger domestic demand, the smaller ASEAN economies by-and-large performed better than their larger ASEAN brethren.

Viet Nam has stayed on a strong growth path, its economy expanding 5.8% in the third quarter of 2009, supported by stimulus. In the first half of 2009, its economy grew 3.9%. Cambodia's growth slowed to 6.7% in 2008 after growing 10.2% in 2007. In Lao PDR, the economy grew 7.1% in the first half of 2009 due to rising mineral prices and higher hydropower production. Brunei Darussalam's GDP contracted by 1.9% in 2008 due to lower oil and gas output, while economic growth

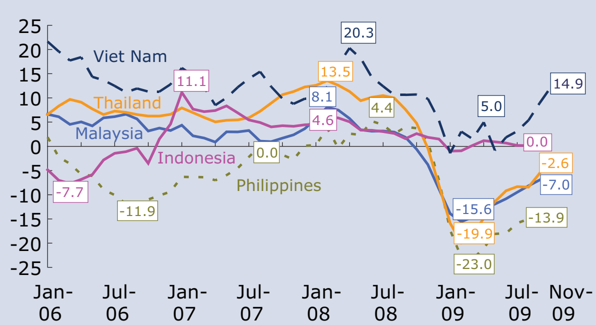
Figure 15: Export Growth[1]—ASEAN-4 and Viet Nam ($ value, y-o-y, %)



y-o-y = year-on-year.
[1]3-month moving average of merchandise exports.

Source: OREI staff calculations based on CEIC data.

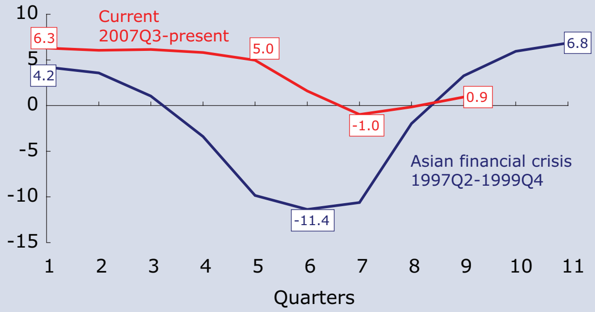
Figure 16: Industrial Production Growth[1]—ASEAN-4 and Viet Nam (y-o-y, %)



[1]3-month moving average.

Source: OREI staff calculations based on CEIC data.

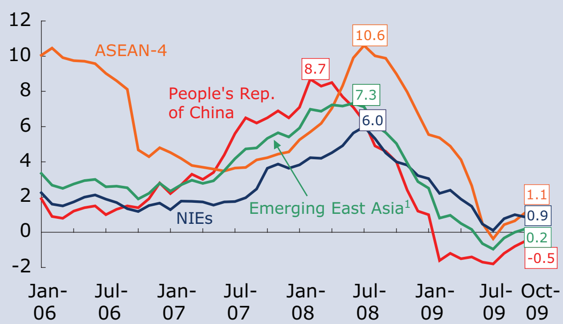
Figure 17: GDP Growth during Crisis Periods—ASEAN-4[1] (quarterly, % change)



[1]Refers to Indonesia, Malaysia, Philippines, and Thailand. Gross domestic product (GDP) growth rates for Indonesia and Malaysia during the Asian financial crisis are based on 1993 and 1987 prices, respectively. Growth rates for the current crisis are based on 2000 prices.

Source: OREI staff calculations based on data from national sources.

Figure 18: Regional Headline Inflation Rates (y-o-y, %)



ASEAN-4 = Indonesia, Malaysia, Philippines, and Thailand; NIEs = Hong Kong, China; Korea, Rep. of; Singapore; and Taipei,China; y-o-y = year-on-year.
[1]Refers to ASEAN-4; NIEs; China, People's Republic of; and Viet Nam.

Source: OREI staff calculations based on CEIC data.

Figure 19a: Headline Inflation Rates—NIEs and PRC (y-o-y, %)

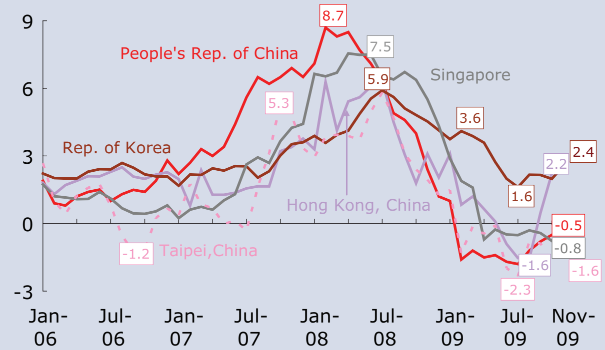
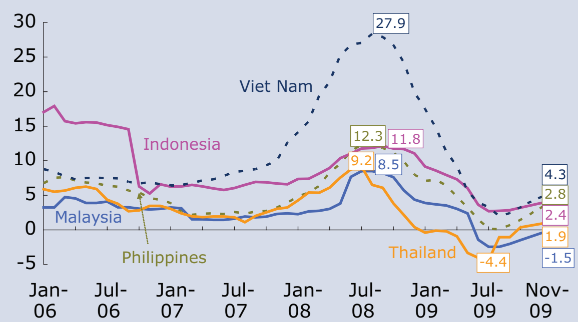


Figure 19b: Headline Inflation Rates—Selected ASEAN Economies (y-o-y,%)



PRC = People's Republic of China, y-o-y = year-on-year.

Source: OREI staff calculations based on CEIC data.

in Myanmar is expected to grow minimally in 2009 after a significant estimated drop in 2008.

Inflation across the region remained muted in the second half of 2009 despite the recovery beginning to take hold.

Headline inflation remained subdued in all emerging East Asian economies, with prices rising by 0.2% in October 2009, due mainly to continued deflation in the PRC; Malaysia; Singapore; and Taipei,China. The highest inflation rate in November was in Viet Nam, but remained only at 4.3% **(Figures 18, 19a, 19b)**. Core inflation continued to decline in most emerging East Asian economies during the second half of 2009 **(Figures 20a, 20b)**. In Malaysia, core inflation dropped to -7.1% in August 2009, while Thailand; Taipei,China; and Singapore also had negative core inflation rates in the same period. Since July, both headline and core inflation have begun to reemerge. As a result of the economic

Figure 20a: Core Inflation Rates—NIEs
(y-o-y, %)

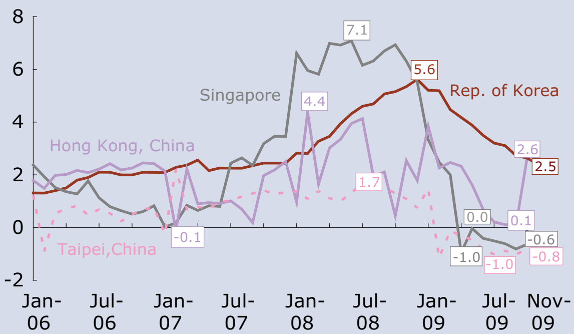
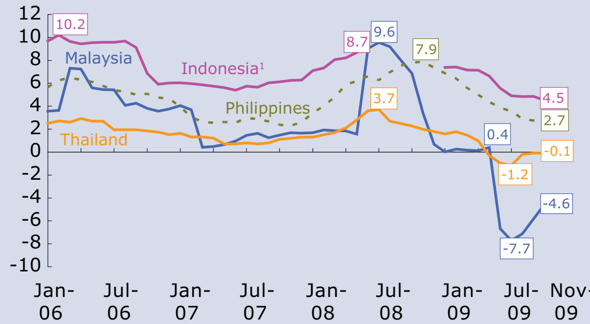


Figure 20b: Core Inflation Rates—ASEAN-4
(y-o-y, %)



y-o-y = year-on-year.
Note: Official figures, except for Hong Kong, China (excluding food and utilities); Singapore (excluding food and private transport); and Malaysia (excluding food, fuel, and utilities).
[1]Series break due to unavailability of data.

Source: OREI staff calculations based on CEIC data.

Figure 21a: Housing Price Changes[1]—PRC, Indonesia, Malaysia, Thailand (%, y-o-y growth)[2]

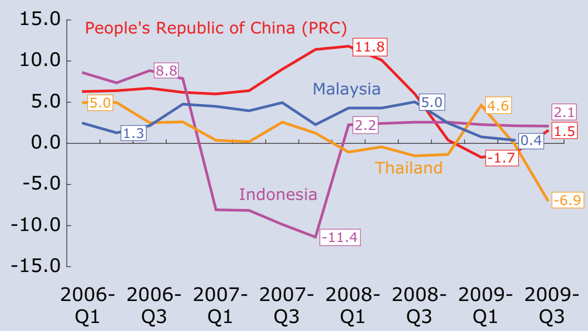
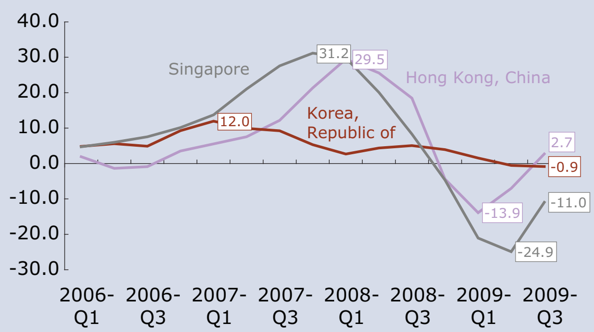


Figure 21b: Housing Price Changes[1]—NIE-3
(%, y-o-y growth)[2]



[1]Figures for Hong Kong, China; China, People's Republic of; Indonesia; and Singapore refer to residential property price index; for Republic of Korea and Thailand it refers to housing price index. [2]Data as of 2009Q3 except for Malaysia, which is as of 2009Q2. Monthly index growth rates were averaged to get quarter growth rates for Hong Kong, China and Republic of Korea.

Source: OREI staff calculations based on CEIC data.

rebound, housing prices are recovering as well **(Figures 21a, 21b)**.

Balance of Payments

The balance of payments across the region improved in 2009 as current account surpluses increased and foreign capital inflows returned.

The balance of payments improved considerably across the region in the first half of the year **(Tables 1a, 1b, 1c)**. Although exports fell sharply, imports declined even quicker, leading to higher current account surpluses for many economies **(Figure 22)**. As stability continues to return to the global financial system, investors have begun returning to the region as well. However, capital outflows continued in ASEAN-4—though at a slower rate. With the exception of Viet Nam, all of emerging East Asia increased their total reserves **(Table 2)**.

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

	2000–2004 Average	2004H1	2004H2	2005H1	2005H2	2006H1	2006H2	2007H1	2007H2	2008H1	2008H2	2009H1
Current Account	**4.2**	**2.2**	**4.4**	**1.2**	**2.9**	**4.0**	**6.3**	**5.5**	**6.4**	**4.4**	**3.0**	**7.3**
Net goods balance	9.7	7.3	9.4	5.3	7.9	7.7	9.5	8.3	9.0	7.2	6.4	7.9
Net services	-3.3	-2.6	-2.7	-2.5	-3.2	-2.4	-2.3	-1.8	-1.6	-1.8	-2.4	-0.3
Net income	-3.6	-3.9	-3.6	-3.5	-4.1	-3.3	-3.0	-2.8	-2.7	-2.7	-2.8	-2.1
Net transfers	1.4	1.4	1.3	1.9	2.3	2.0	2.0	1.9	1.8	1.7	1.7	1.9
Capital and Financial Account	**-1.8**	**0.4**	**1.7**	**2.9**	**-2.6**	**1.6**	**-1.6**	**1.2**	**-2.3**	**2.8**	**-7.6**	**-4.2**
Capital account[1]	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0
Net direct investment	0.9	0.9	1.3	2.7	1.7	1.8	1.4	1.1	0.6	0.5	0.0	0.3
Net portfolio investment	0.2	1.9	2.9	2.1	0.6	2.0	1.9	4.3	-2.2	1.0	-6.3	-1.0
Net other investment	-2.9	-2.5	-2.6	-1.9	-5.0	-2.3	-5.0	-4.2	-0.7	1.3	-1.3	-3.5
Net errors and omissions	-0.4	0.7	-1.3	-1.3	-0.6	0.1	-0.9	-0.2	-0.4	0.1	0.0	0.2
Overall Balance	**2.0**	**3.2**	**4.7**	**2.8**	**-0.3**	**5.7**	**3.8**	**6.5**	**3.8**	**7.3**	**-4.6**	**3.3**

ASEAN-4 = Indonesia, Malaysia, Philippines, and Thailand; GDP = gross domestic product.
[1]Capital account records acquisitions less disposals of non-financial assets by resident units and measures the change in net worth due to saving and capital transfers.

Source: *International Financial Statistics Online*, International Monetary Fund; and CEIC.

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

	2000–2004 Average	2004H1	2004H2	2005H1	2005H2	2006H1	2006H2	2007H1	2007H2	2008H1	2008H2	2009H1	2009Q3[2]
Current Account	**5.2**	**5.6**	**6.9**	**4.8**	**5.5**	**4.0**	**6.1**	**5.2**	**6.1**	**3.9**	**4.9**	**9.1**	**5.9**
Net goods balance	4.9	5.5	6.3	5.0	6.2	4.2	5.6	4.5	5.3	2.0	1.7	6.4	7.5
Net services	0.4	0.7	0.5	0.3	0.6	0.4	0.8	0.5	1.1	1.5	2.3	1.9	-1.3
Net income	0.6	0.2	0.9	0.3	-0.7	0.1	0.3	0.9	0.3	1.1	1.3	1.3	0.3
Net transfers	-0.6	-0.8	-0.7	-0.7	-0.7	-0.8	-0.6	-0.7	-0.6	-0.7	-0.4	-0.5	-0.5
Capital and Financial Account	**-1.2**	**1.2**	**-3.2**	**0.6**	**-4.2**	**-1.3**	**-3.1**	**-3.7**	**-4.0**	**-0.4**	**-6.6**	**1.7**	**4.6**
Capital account[1]	-0.2	-0.2	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	0.0	0.0	0.2	0.4	0.0
Net direct investment	0.5	-0.7	0.1	1.5	0.1	0.6	0.4	0.5	-1.7	-0.7	0.9	0.1	0.1
Net portfolio investment	-2.7	-6.5	-0.2	-4.6	-0.7	-3.2	-5.5	-4.6	-4.7	-4.7	-5.5	-2.0	2.0
Net other investment	1.3	8.5	-2.9	4.0	-3.4	1.6	2.3	0.5	2.5	5.1	-2.3	3.3	2.5
Net errors and omissions	0.6	1.0	1.0	0.3	0.6	0.3	0.2	0.6	0.7	-0.7	0.6	0.0	-0.8
Overall Balance	**4.7**	**7.8**	**4.8**	**5.7**	**1.8**	**3.0**	**3.2**	**2.2**	**2.8**	**2.9**	**-1.1**	**10.8**	**9.8**

NIEs = Hong Kong, China; Korea, Republic of; Singapore; and Taipei,China.
[1]Capital account records acquisitions less disposals of non-financial assets by resident units and measures the change in net worth due to saving and capital transfers. [2]Excludes Hong Kong, China as data is not yet available.

Source: *International Financial Statistics Online*, International Monetary Fund; CEIC; and national sources.

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

	2000–2004 Average	2004H1	2004H2	2005H1	2005H2	2006H1	2006H2	2007H1	2007H2	2008H1	2008H2	2009H1
Current Account	**2.4**	**0.9**	**5.7**	**6.9**	**7.4**	**7.9**	**10.8**	**11.2**	**10.8**	**10.0**	**9.7**	**6.6**
Net goods balance	2.9	0.7	4.9	5.5	6.4	6.9	9.2	9.3	9.3	6.9	9.4	5.8
Net services	-0.5	-0.7	-0.4	-0.4	-0.4	-0.5	-0.2	-0.2	-0.2	-0.2	-0.4	-0.8
Net income	-0.9	-0.3	-0.1	0.5	0.5	0.3	0.8	0.9	0.7	2.0	-0.3	0.8
Net transfers	0.9	1.2	1.2	1.2	1.1	1.2	1.0	1.2	1.1	1.3	0.9	0.7
Capital and Financial Account	**2.8**	**7.9**	**4.1**	**3.9**	**2.0**	**3.3**	**-2.2**	**6.2**	**-0.9**	**3.8**	**-2.2**	**3.0**
Capital account[1]	0.0	0.0	0.0	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Net direct investment	3.0	3.6	2.1	2.3	3.6	2.7	1.7	3.5	3.6	2.1	2.2	0.8
Net portfolio investment	-0.2	3.3	-0.7	-0.1	-0.3	-2.5	-2.6	-0.3	1.2	1.0	0.9	1.0
Net other investment	0.0	1.0	2.7	1.5	-1.5	3.0	-1.5	2.9	-5.8	0.5	-5.4	1.2
Net errors & omissions	0.3	-0.9	3.2	-0.5	-0.9	-0.7	-0.3	0.9	0.2	0.9	-1.8	-0.5
Overall Balance	**5.5**	**7.9**	**12.9**	**10.2**	**8.5**	**10.5**	**8.3**	**18.3**	**10.1**	**14.7**	**5.7**	**9.1**

GDP = gross domestic product.
[1]Capital account records acquisitions less disposals of non-financial assets by resident units and measures the change in net worth due to saving and capital transfers.

Source: *International Financial Statistics Online*, International Monetary Fund; and CEIC.

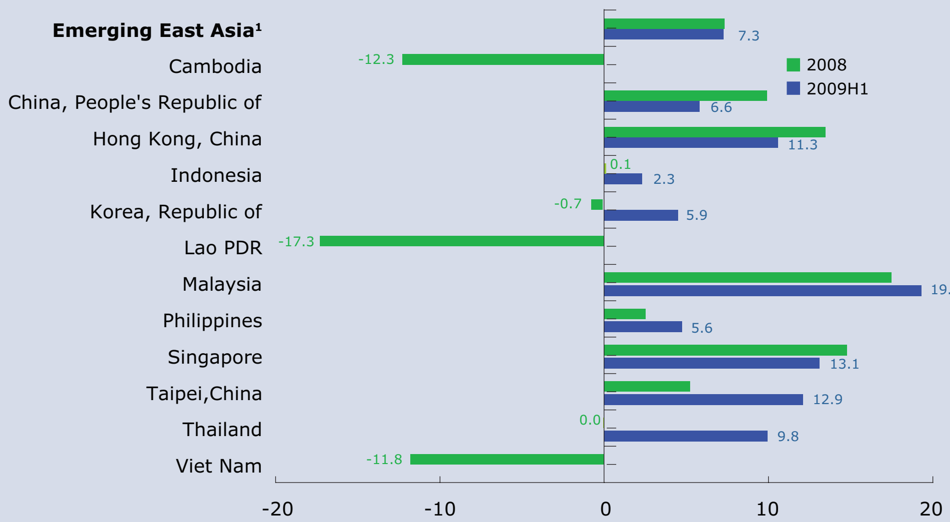
With imports falling faster than exports, higher current account surpluses resulted for many economies in the region.

The current account surplus for the NIEs and ASEAN-4 widened in the first half as imports fell faster than exports, resulting in higher trade surpluses **(Figures 23, 24)**. In the third quarter, the NIEs' current account surplus narrowed to 5.9%. In the PRC, due to the dramatic fall in exports, the current account surplus as a percent of GDP also fell—to 6.6% in the first half of 2009 from 9.7% in the second half of 2008. However, the pace of the decline in exports is slowing down.

In 2009, the capital and financial accounts showed surpluses in the NIEs and PRC as capital began flowing once again to the region.

Capital inflows into the region resumed in the first half of 2009 as confidence returned to financial markets and the financial crisis began to wane. The PRC's capital and financial accounts returned to net inflows in the second quarter **(Figure 25)**. The increase in the total reserves by $153.3 billion in the third quarter of 2009 shows that capital continued to flow into the PRC. The NIEs' capital and financial accounts also show that the surplus expanded further in the third quarter, with both other investment and portfolio investment both showing net inflows **(Figure 26)**. ASEAN-4 posted smaller deficits in their capital and financial accounts as portfolio investment outflows moderated significantly **(Figure 27)**. Despite the weak global economic condition in 2009, foreign direct investment continued to flow into emerging East Asia.

Figure 22: Current Account Balance (% of GDP)



PDR = People's Democratic Republic.
[1]Excludes Brunei Darussalam, Cambodia, Lao PDR, Myanmar, and Viet Nam for the period 2009H1; excludes Myanmar for the period 2008. Data are not available for these countries for the said periods.

Source: *Asian Development Outlook Update 2009,* ADB; *International Financial Statistics Online*, International Monetary Fund; CEIC; and national sources.

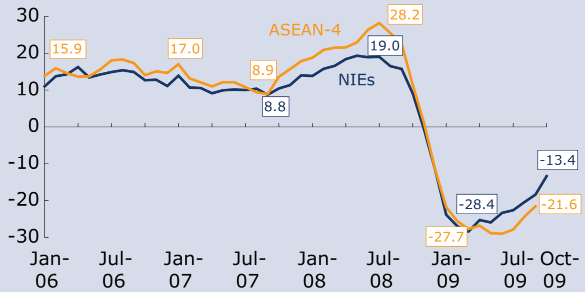
Table 2: Total Reserves (excluding gold)

	Value ($ billion)				**% Change** (y-o-y)				**% Change** (m-o-m)			
	Mar-09	**Jun-09**	**Sep-09**	**Oct-09**	**Mar-09**	**Jun-09**	**Sep-09**	**Oct-09**	**Jul-09**	**Aug-09**	**Sep-09**	**Oct-09**
Brunei Darussalam	0.7	0.8	1.1	—	1.5	7.3	59.0	—	0.7	31.8	8.5	—
Cambodia	2.4	2.6	2.8	—	14.4	16.0	18.9	—	2.7	2.4	2.9	—
China, People's Rep. of	1956.8	2135.2	2288.5	—	16.2	17.9	20.0	—	2.0	2.1	2.9	—
Hong Kong, China	186.2	206.9	226.9	240.1	15.9	31.3	41.4	55.1	5.4	2.4	1.7	5.8
Indonesia	52.7	55.4	60.0	63.1[2]	-7.3	-3.3	9.0	30.7[2]	-0.3	0.9	7.7	1.6[2]
Korea, Republic of	206.3	231.7	254.2	264.1	-21.9	-10.2	6.1	24.5	2.5	3.3	3.6	3.9
Lao PDR	—	—	—	—	—	—	—	—	—	—	—	—
Malaysia	87.4	91.2	94.7	94.8	-27.1	-27.4	-13.5	-5.1	-0.4	2.4	1.9	0.1
Myanmar	—	—	—	—	—	—	—	—	—	—	—	—
Philippines	34.5	34.8	37.5	37.9	5.2	6.2	13.1	16.8	1.5	3.8	2.3	1.0
Singapore	166.3	173.2	182.0	184.3	-6.3	-2.0	7.8	13.7	0.5	1.2	3.3	1.3
Taipei,China	300.1	317.6	332.2	347.2[2]	4.6	9.0	18.2	23.7[2]	1.1	1.3	2.1	1.7[2]
Thailand	113.7	118.3	129.1	132.5	5.8	14.7	29.0	30.9	2.2	3.2	3.4	2.6
Viet Nam	23.0	20.3	18.8[2]	—	-13.0	-9.0	-16.0[2]	—	-5.9	-1.4	—	—
Emerging East Asia	**3130.1[1]**	**3387.8[1]**	**3627.8[1]**	**1364.0[3]**	**7.2[1]**	**11.5[1]**	**17.8[1]**	**25.0[3]**	**1.9[1]**	**2.1[1]**	**2.9[4]**	**2.7[3]**
Japan	996.0	996.2	1028.1	1031.2	0.3	1.8	5.5	7.4	0.3	1.9	0.9	0.3
East Asia	**4126.1[1]**	**4384.0[1]**	**4655.9[1]**	**2395.2[3]**	**5.4[1]**	**9.1[1]**	**14.8[1]**	**15.5[3]**	**1.6[1]**	**2.1[1]**	**2.4[4]**	**1.5[3]**

m-o-m = month-on-month, y-o-y = year-on-year, — = data not available.
[1]Excludes Lao People's Democractic Republic (Lao PDR) and Myanmar as data are unavailable. [2]If data is unavailable for reference month, data is for most recent month in which data is available. For Indonesia and Taipei,China, data refers to November 2009. [3]Excludes Brunei Darussalam; Cambodia; China, People's Republic of; Lao PDR; Myanmar; and Viet Nam as data are unavailable. [4]Excludes Lao PDR, Myanmar, and Viet Nam as data are unavailable.

Source: *International Financial Statistics Online*, International Monetary Fund; CEIC; and national sources.

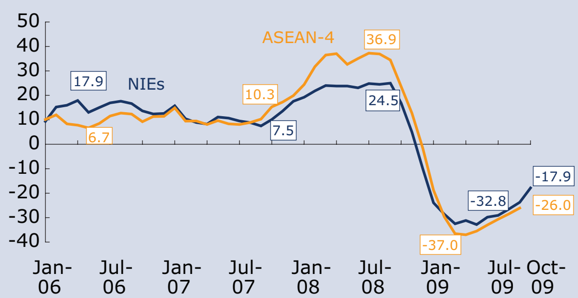
Figure 23: Export Growth[1]—NIEs and ASEAN-4 ($ value, y-o-y, %)



ASEAN-4 = Indonesia, Malaysia, Philippines, and Thailand; NIEs = Hong Kong, China; Korea, Republic of; Singapore; and Taipei,China.
[1]3-month moving average of merchandise exports.

Source: OREI staff calculations based on CEIC data.

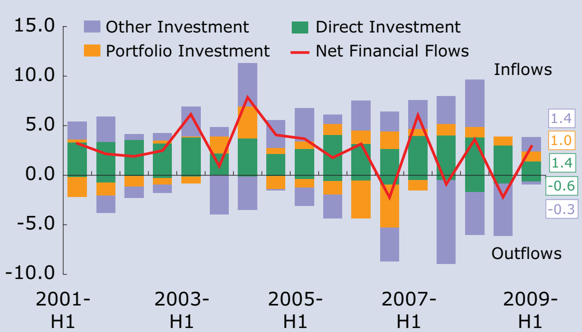
Figure 24: Import Growth[1]—NIEs and ASEAN-4 ($ value, y-o-y, %)



ASEAN-4 = Indonesia, Malaysia, Philippines, and Thailand; NIEs = Hong Kong, China; Korea, Republic of; Singapore; and Taipei,China.
[1]3-month moving average of merchandise imports.

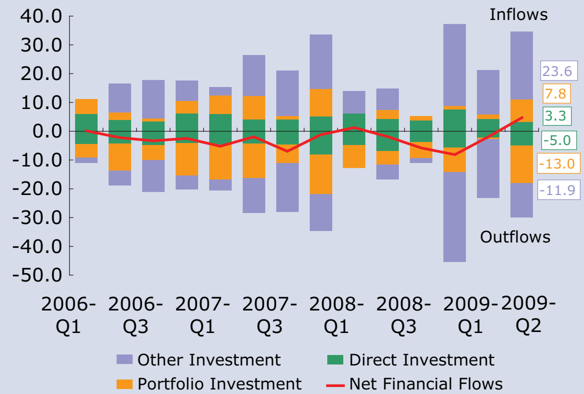
Source: OREI staff calculations based on CEIC data.

Figure 25: Financial Account Flows—People's Republic of China (% of GDP)



Source: OREI staff calculations based on data from national sources.

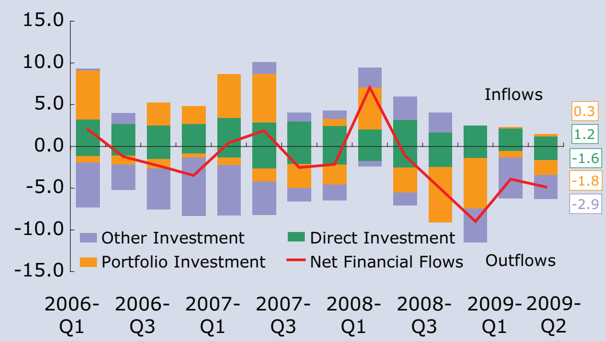
Figure 26: Financial Account Flows—NIEs (% of GDP)



NIEs includes Hong Kong, China; Korea, Republic of; Singapore; and Taipei,China.

Source: OREI staff calculations based on data from *International Financial Statistics Online,* International Monetary Fund; and national sources.

Figure 27: Financial Account Flows—ASEAN-4 (% of GDP)



ASEAN-4 includes Indonesia, Malaysia, Philippines, and Thailand.

Source: OREI staff calculations based on data from *International Financial Statistics Online,* International Monetary Fund; and national sources.

Financial Markets and Exchange Rates

Stock markets in the region continued to rebound in the second half of 2009.

Equity markets in the region continued to rack up gains in the second half of 2009 as foreign funds flowed back into the region due to the improving outlook for the region's economies **(Figures 28a, 28b, 28c)**. Despite the gains, however, the region's equity markets remain below early 2008 levels. The best performing stock markets in 2009 were the PRC and Indonesian markets, which both rose more than 80% **(Figure 29)**. Large gains were also recorded in Taipei,China (67%), Philippines (65%), Viet Nam (58%), and Thailand (57%). As a comparison, the stock markets in the developed economies rose much more modestly, with the FTSE 100 and Dow Jones Industrial Average growing by 17% and 15%, respectively, during the same period.

Almost all regional currencies appreciated against the US dollar in the second half of 2009 as capital inflows returned and the regional economic outlook improved.

Since world financial markets started to stabilize in March, almost all emerging East Asia's currencies have appreciated against the US dollar **(Figure 30)**. The strongest gains were recorded by the Indonesian rupiah and Korean won, with both appreciating by more than 20%. A significant increase in portfolio inflows helped push up the value of the Korean won while the appreciation in Indonesian rupiah was supported by better-than-expected economic growth. Over the same period, however, the PRC yuan and Hong Kong dollar mimicked US dollar movements. The strength of the region's currencies may slow the recovery of exports. In late November, the Vietnamese dong has been devalued by more than 5%.

Figure 28a: Composite Stock Price Indexes—People's Republic of China[1]
(last daily price, 2 January 2008 = 100, local index)

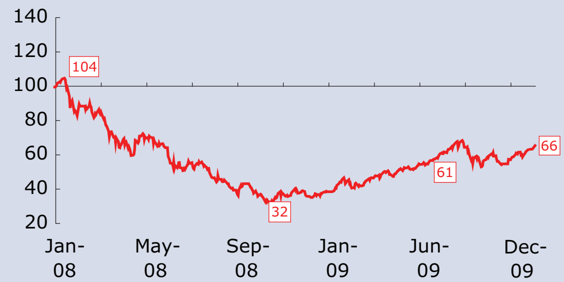


Figure 28b: Composite Stock Price Indexes—NIEs[2] (last daily price, 2 January 2008 = 100, local index)

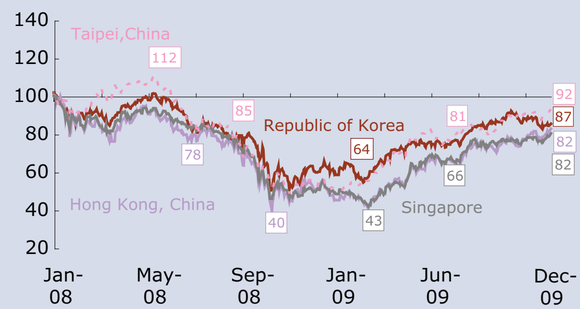
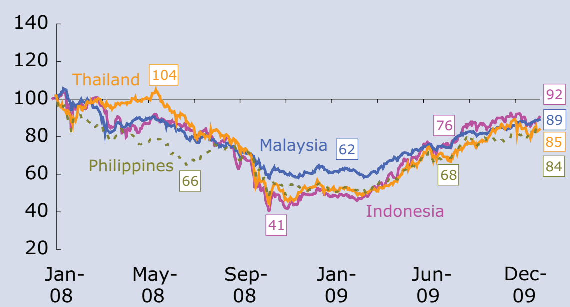


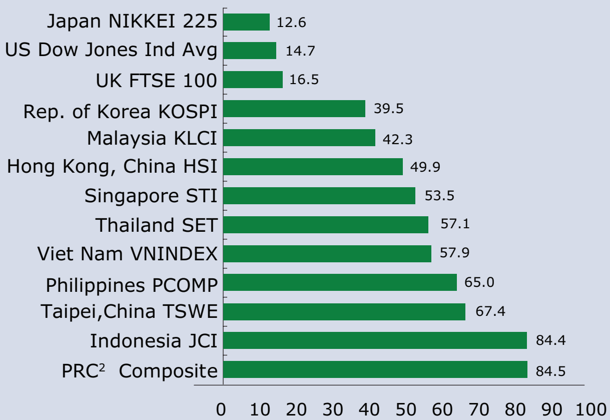
Figure 28c: Composite Stock Price Indexes—ASEAN-4[3] (last daily price , 2 January 2008 = 100, local index)



[1]Daily stock price indexes of combined Shanghai and Shenzhen Composite, weighted by their respective market capitalization. [2]Daily stock price indexes of Hang Seng (Hong Kong, China); KOSPI (Korea); STI (Singapore); and TWSE (Taipei,China). [3]Daily stock price indexes of JCI (Indonesia), KLCI (Malaysia), PCOMP (Philippines), and SET (Thailand).

Source: OREI staff calculations based on Reuters and Bloomberg data.

Figure 29: Stock Price Indexes[1]
(2 January 2009 to 3 December 2009, % change)



[1]Latest closing as of 3 December 2009. [2]People's Republic of China (PRC).

Source: OREI staff calculations based on data from Reuters and Bloomberg.

Movements in bond yield curves in emerging East Asian markets were mixed in the second half of the year with the changes generally small.

In the second half of 2009, bond yield curves have shifted upward in Korea, Thailand, and the PRC, on the back of the improving economic outlook. Meanwhile, over same period, reduced sovereign risks due to robust growth pushed Indonesia's yield curves downward **(Figures 31a, 31b, 31c, 31d, 31e, 31f)**. Yield curves in other countries have changed little.

Figure 30: Change in the Exchange Rate versus US dollar[1] (%)

PRC = People's Republic of China.
[1]Based on monthly average of $ value of local currency. Average value for November is from 2 November to 20 November.

Source: OREI staff calculations based on Reuters data.

Figure 31a: Benchmark Yields— People's Republic of China (% per annum)

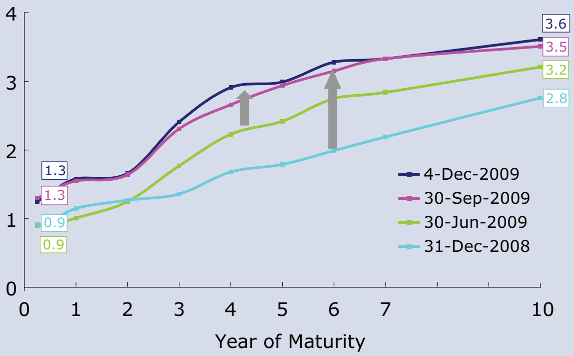


Figure 31d: Benchmark Yields—Indonesia (% per annum)

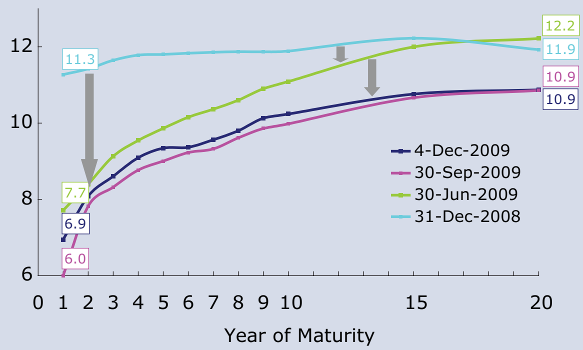


Figure 31b: Benchmark Yields— Hong Kong, China (% per annum)

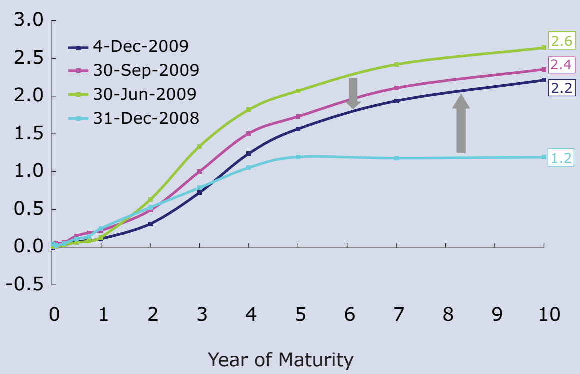


Figure 31e: Benchmark Yields—Malaysia (% per annum)

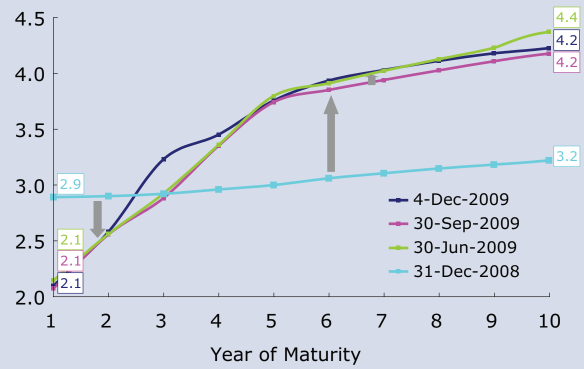


Figure 31c: Benchmark Yields— Republic of Korea (% per annum)

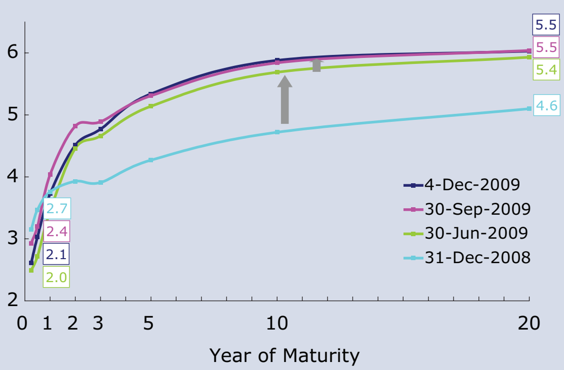
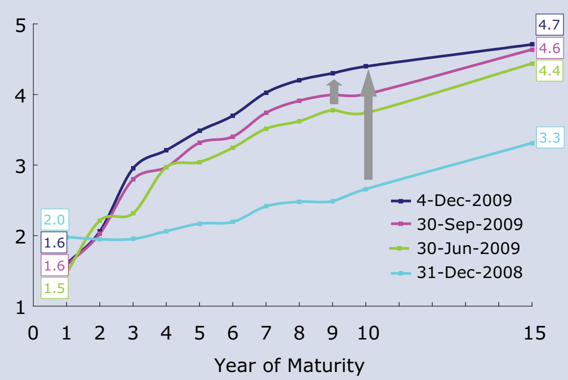


Figure 31f: Benchmark Yields—Thailand (% per annum)



Source: Bloomberg.

Monetary and Fiscal Policy

With the recovery still in its early stages and inflation low, authorities have continued to maintain an accommodative stance in monetary and fiscal policies.

Central banks across emerging East Asia have continued to maintain low interest rates as economies in the region largely remain in the early stages of recovery **(Figures 32a, 32b)**. It is still premature to consider raising interest rates, particularly as the region's low inflation suggests there remains considerable spare capacity in most economies. Authorities are continuing to implement the fiscal stimulus packages introduced in late 2008 and early 2009.

Emerging East Asian economies have kept interest rates low to support growth, yet surging credit growth has prompted some economies to fine tune their monetary policy.

The last policy rate cut in emerging East Asia was a 25 basis points cut by Bank Indonesia in August. The first policy rate hike in the region came 25 November, via the State Bank of Viet Nam, which raised interest rates from 7% to 8% and devalued the reference rate of the Vietnamese dong by more than 5%—due to excessive credit growth, increasing inflationary pressures, and a worsening balance of payments. In the PRC, there are also concerns that the high bank lending growth (about 30% this year) due to expansionary monetary policy may lead to asset bubbles and a rise in nonperforming loans. As a result, the China Banking Regulatory Commission issued rules to discourage the use of loans for speculative purposes and to improve the risk management systems of banks. It also instructed banks to raise their bad-loan reserve ratios to 150% of their current stock of nonperforming loans by the end of 2009. Interest rates have also remained low in the other emerging East Asian economies to support growth. While still keeping interest rates low, some economies have started announcing measures to restrain speculative excesses in bank lending. Hong Kong, China has introduced new prudential policies to ensure banks' prudential risk management on residential mortgage lending, particularly in the luxury sector of the market. Korea, meanwhile, has implemented guidelines to reduce risky consumer lending practices.

Figure 32a: Policy Rates[1]—PRC; Hong Kong, China; Republic of Korea; and Taipei,China (% per annum)

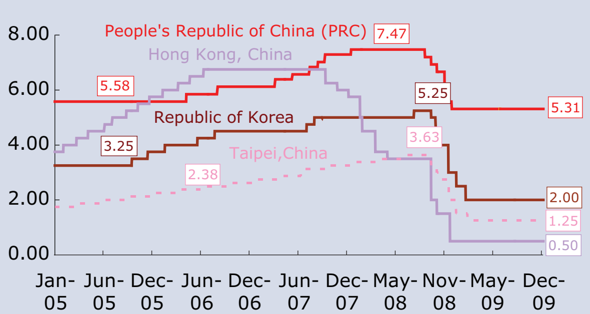
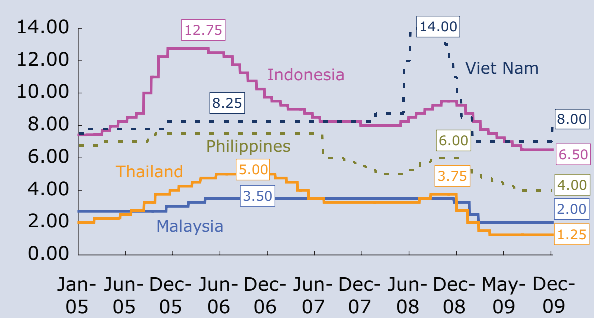


Figure 32b: Policy Rates[2]—ASEAN-4 and Viet Nam (% per annum)



[1]One-year lending rate (People's Republic of China); Hong Kong base rate (Hong Kong, China); Korea base rate (Republic of Korea); and discount rate (Taipei,China). [2]State Bank of Indonesia (SBI) rate before July 2005 and Bank Indonesia (BI) rate from July 2005 onwards (Indonesia); overnight policy rate (Malaysia); reverse repurchase (repo) rate (Philippines); 14-day repo rate before 17 Jan 2007 and 1-day repo rate from 17 Jan 2007 onwards (Thailand); prime rate (Viet Nam).

Source: Bloomberg and Datastream.

Fiscal stimulus has helped the economic rebound in 2009 in most emerging East Asian economies.

The PRC is seeing the benefit of its massive fiscal stimulus. It is expected to continue to maintain its economic stimulus spending, allocating CNY908 billion in June 2009 to boost domestic demand. In September, Korea increased its 2010 budget by 2.5% from the 2009 amount and will allocate increased investment in social welfare programs for the working class. It will also gradually withdraw the temporary support being offered to stave off the crisis. Singapore introduced an Extended Job Credit Scheme worth S$675 million to promote job creation. Cambodia increased government expenditure by 28% to KR7.3 trillion in 2009, while in Viet Nam, the government is extending its 4% interest rate subsidy program to the end of the first quarter of 2010. Rising government expenditure has increased fiscal deficits in all emerging East Asian economies, yet most fiscal positions remain quite sound **(Table 3)**. Because many emerging East Asian economies have managed their fiscal policy prudently in recent years, their public debt remains manageable even after expanding government expenditure significantly in 2008 and 2009 **(Table 4)**.

Table 3: Fiscal Balance of Central Government (% of GDP)

	2000–2004 Average	2004	2005	2006	2007	2008	2009[6]	2010[7]
Cambodia[1]	-5.3	-4.5	-2.5	-2.7	-2.9	-1.7	-3.2	—
China, People's Rep. of[1]	-2.2	-1.3	-1.2	-0.8	0.6	-0.4	-3.1	—
Hong Kong, China[4]	-2.4	1.6	1.0	3.9	7.5	0.1	-3.9	—
Indonesia	-1.2	-1.1	-0.2	-0.9	-1.2	0.0	-2.6	-1.6
Korea, Rep. of[5]	1.4	0.6	0.4	0.4	3.5	1.2	-2.1	-0.4
Malaysia[2]	-5.0	-4.1	-3.6	-3.3	-3.2	-4.8	-7.4	-5.6
Philippines	-4.4	-3.8	-2.7	-1.1	-0.2	-0.9	-3.2	-2.8
Singapore[1,4]	7.0	6.9	9.0	8.3	13.9	8.5	-3.5	—
Taipei,China[1]	-3.2	-2.9	-0.6	-0.3	-0.4	-0.9	-4.0	-4.2
Thailand[4]	-0.4	0.3	0.2	0.1	-1.1	-0.3	-4.0	-3.5
Viet Nam[3]	-4.5	-4.9	-4.9	-5.0	-4.9	-4.5	-7.0	-6.2

— = not available.
Data updated as of 11 Nov 2009.
[1]General government balance. [2]Federal government balance. [3]State budget balance. [4]Fiscal year. [5]Consolidated budget balance. [6]Budget deficit estimates in 2009 budgets of respective countries, except for Cambodia 2009 (International Monetary Fund projection); People's Republic of China, Indonesia, and Thailand (*Asian Development Outlook Update*); Hong Kong, China (June 2009 projection of the Hong Kong Monetary Authority); Philippines and Viet Nam (revised government targets). [7]2010 budget estimates and government targets.

Source: National sources; *Asian Development Outlook* (various issues), ADB; *Article IV reports,* International Monetary Fund; and CEIC.

Table 4: Public and External Debt (% of GDP)

	2000–2004 Average	2004	2005	2006	2007	2008	2009
Public Sector Debt							
China, People's Republic of	19.3	18.5	17.8	16.5	20.2	17.7	—
Hong Kong, China	0.7	2.4	2.2	1.8	1.5	1.3	2.4[5]
Indonesia[1]	70.7	55.2	45.6	39.0	35.1	33.2	—
Korea, Republic of[1]	21.1	25.2	29.5	32.2	32.1	29.1	33.0[4]
Lao People's Democratic Rep.	77.6	88.2	79.7	64.6	60.7	55.2	57.2[p]
Malaysia[2]	42.1	45.7	43.8	42.2	41.6	41.5	48.6[4]
Philippines[3]	88.7	95.4	82.2	73.3	63.1	64.2	63.8[4]
Singapore	96.9	101.1	100.3	95.1	96.3	99.2	102.4[4]
Taipei,China[1]	28.0	30.4	31.0	30.4	28.6	31.6	—
Thailand	52.9	48.1	46.5	40.4	38.8	38.1	45.6[5]
Viet Nam	38.5	42.4	44.5	44.1	46.3	44.4[e]	47.5[p]
External Debt							
Brunei Darussalam	9.6	8.7	7.7	7.0	7.5	7.9[e]	5.5[e,6]
Cambodia	27.2	25.7	24.6	21.5	21.9	16.0[e]	16.5[e,6]
China, People's Republic of	8.1	6.7	6.8	6.0	5.5	4.1	3.6[6]
Hong Kong, China	128.9	138.6	141.6	153.6	170.7	173.8	164.6[6]
Indonesia	57.5	42.5	40.5	29.2	20.8	20.6	18.3[6]
Korea, Republic of	22.3	20.3	19.1	23.1	26.7	26.5	27.5[6]
Lao People's Democratic Rep.	64.9	59.9	62.7	55.1	57.5	45.5[e]	42.8[e,6]
Malaysia	43.2	44.4	44.7	41.5	38.4	27.0	27.6[6]
Myanmar	59.5	52.4	42.7	35.7	25.0	9.7[e]	9.2[e,6]
Philippines	78.0	76.9	73.9	60.1	52.5	36.4	36.8[6]
Singapore	266.6	270.9	261.4	238.3	280.5	276.0	248.0[6]
Taipei,China	14.1	24.6	22.2	18.3	20.0	16.2	14.3[6]
Thailand	38.3	26.3	24.8	22.3	17.1	11.9	11.8[6]
Viet Nam	29.3	33.2	31.7	31.4	35.5	31.5	25.3[6]

GDP = gross domestic product, e = estimate, p = projection, — = not available.
[1]Central government debt. [2]Federal government debt. [3]National government debt. [4]As of Jun 2009, until which data is available. [5]As of Sep 2009, until which data is available. [6]As of Mar 2009, until which data is available.

Source: *Article IV Consultations*, International Monetary Fund; CEIC (public debt); and Joint External Debt Hub database (external debt).

Assessment of Financial Vulnerability

With global financial conditions improving, the region's financial systems are returning to normal.

The financial turmoil that roiled Asian economies in the early part of 2009 has passed and fears of the stress associated with the 1997/98 Asian financial crisis have faded. Strong fiscal and external positions allowed the region's economies to ride out the financial storm relatively unscathed. Still, vulnerability remains, and may in fact be increasing in some economies.

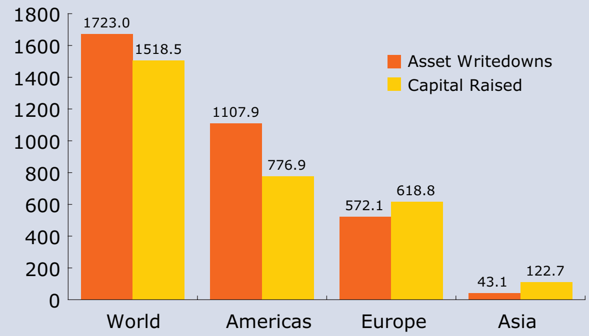
Fiscal and external positions are sound in most emerging East Asian economies.

Fiscal stimuli have created budgetary deficits across the region, but most of them remain manageable and should not overburden debt service schedules **(Table 5)**. Public sector debt as a percent of GDP remains low in emerging East Asia. While expected to fall in 2009, double-digit current account deficits as a percent of GDP in Cambodia, Lao PDR and Viet Nam should be assessed carefully. In these countries, foreign exchange reserves can cover only 3 to 4 months of imports, which are about the generally agreed minimum levels. In addition, Viet Nam is the only country in the region whose foreign exchange reserves are falling in recent months. Yet the level of external debt in these three countries remains manageable, and most of external debt in Lao PDR and Viet Nam is to multilateral and official lenders and is on concession terms.

The region's financial systems emerged from the global crisis intact.

The region's banks escaped the massive write-downs generated by the global financial crisis. Since the subprime debacle began, a mere 2.5% ($43.1 billion) of total asset writedowns of the global banking system stemmed from Asia. Asian banks also raised $123 billion, more than twice the amount of its write-downs, to strengthen their capital positions **(Figure 33)**. This new capital should be sufficient as a buffer against future potential losses. The financial system across emerging East Asia has adequate liquidity, as seen by low ratios of foreign liabilities to foreign assets and loans to deposits (see Table 5). Given its open financial sector, the high ratio of foreign liabilities to foreign assets in Korea, for example, is comparable to or even lower than similar OECD countries, such as Australia (above 300% in July 2009). Loan to deposit ratios in Korea and Viet Nam had fallen steadily from their mid-2008 highs (141% and 110%, respectively). Yet Viet Nam's loan to deposit ratio has been rising from 98% in early 2009, due to its expansionary monetary policy.

Figure 33. Writedowns and Capital Raised by Major Banks since 3Q2007
($ billion, as of 4 December 2009)



Source: Bloomberg.

Table 5: Assessment of Vulnerability (%)

	Inflation (latest available)	**Fiscal Balance/ GDP** (2009)[1]	**Public Sector Debt/ GDP**[2] (latest)[3]	**Current Acct./ GDP** (latest available)	**External Debt/ GDP**[4] (1Q09)[5]	**Short-Term External Debt/ Reserves** (2Q09)[6]	**Foreign Reserves** (number of months of imports)[7]	**Foreign Liabilities/ Foreign Assets**[8] (latest available)	**Loans/ Deposits of Banks**[9] (latest available)
Brunei Darussalam	2.1 (May09)	15.7	—	46.1 (2008)	5.5	64.9	5.0 (Sep09)	6.9 (Aug09)	66.5 (Aug09)
Cambodia	–2.9 (Aug09)	–3.2	—	–12.3 (2008)	16.5	4.8	4.7 (Sep09)	73.5 (Aug09)	85.0 (Aug09)
China, People's Rep. of	–0.5 (Oct09)	–3.1	17.7	6.6 (H109)	3.6	5.7	29.1 (Sep09)	25.7 (Aug09)	73.8 (Aug09)
Hong Kong, China	2.2 (Oct09)	–3.9	2.4	11.8 (Q209)	164.6	50.0	8.5 (Oct09)	62.7 (Jul09)	47.1 (Jul09)
Indonesia	2.4 (Nov09)	–2.6	33.2	1.2 (Q309)	18.3	48.8	8.0 (Nov09)	55.4 (Aug09)	77.7 (Aug09)
Korea, Republic of	2.4 (Nov09)	–2.1	33.0	4.8 (Q309)	27.5	60.3	10.0 (Oct09)	219.5 (Jun09)	131.0 (Jun09)
Lao PDR	–0.1 (Oct09)	–7.8	57.2	–17.3 (2008)	42.8	38.0	2.8 (Dec08)	46.8 (Dec08)	48.8 (Dec08)
Malaysia	–1.5 (Oct09)	–7.4	48.6	17.8 (Q209)	27.6	21.1	9.5 (Oct09)	124.2 (Apr09)	74.9 (Sep09)
Myanmar	3.3 (Jun09)	—	—	9.2 (2007)	9.2	44.0	4.7 (Jun07)	—	40.1 (May09)
Philippines	1.6 (Oct09)	3.2	63.8	5.2 (Q209)	36.8	35.1	10.6 (Oct09)	47.3 (Aug09)	78.3 (Sep09)
Singapore	–0.8 (Nov09)	–3.5	102.4	13.0 (Q309)	248.0	67.7	9.2 (Oct09)	81.5 (Aug09)	79.6 (Aug09)
Taipei,China	–1.6 (Nov09)	–4.0	31.6	8.6 (Q309)	14.3	10.1	25.2 (Nov09)	49.8 (Sep09)	60.8 (Sep09)
Thailand	1.9 (Nov09)	–4.0	45.6	5.6 (Q309)	11.8	9.5	12.1 (Oct09)	59.5 (Aug09)	95.2 (Aug09)
Viet Nam	4.4 (Nov09)	–7.0	47.5	–11.8 (2008)	25.3	25.8	3.4 (Aug09)	75.0 (Jul09)	102.7 (Jul09)

GDP = gross domestic product, — = not available.

[1]Budget deficit estimates in 2009 budgets of respective countries, except for Brunei Darussalam, Cambodia, and Lao People's Democratic Republic (International Monetary Fund [IMF] projections); People's Republic of China, Indonesia, and Thailand (Asian Development Outlook 2009 Update); Hong Kong, China (June 2009 projection of the Hong Kong Monetary Authority); and Philippines and Viet Nam (revised government targets). Data for Brunei Darussalam refer to primary budget balance; for Cambodia; People's Republic of China; Singapore; and Taipei,China, this refers to general government balance; for Lao People's Democratic Republic (Lao PDR), this covers overall balance (including grants); for Malaysia, it covers federal government balance; for Republic of Korea, the balance includes social security funds; and for Viet Nam, this refers to the state budget balance. Data for Hong Kong, China; Lao PDR; Singapore; and Thailand are on a fiscal year basis. [2]Data for Indonesia; Republic of Korea; and Taipei,China cover central government debt; for Malaysia, this covers federal government debt; and for the Philippines, this covers national government debt. [3]Data for Hong Kong, China and Thailand as of Sep 2009; for Republic of Korea, Malaysia, Philippines, and Singapore as of Jun 2009; for People's Republic of China and Indonesia as of end-2008. Nominal GDP ($) figures for 2009 are annualized from latest actual quarterly data. Data for Lao PDR and Viet Nam are 2009 estimates from International Monetary Fund (IMF) Article IV Consultation reports. [4]Total external debt includes cross-border loans from the Bank for International Settlements (BIS) reporting banks and BIS reporting banks to nonbanks, total multilateral loans, total official trade credits, and international debt securities as defined in the Joint External Debt Hub. [5]Data are as of 1Q09, with GDP figures annualized from latest actual quarterly data, except for GDP figures for Brunei Darussalam, Cambodia, Lao PDR, and Myanmar, which are full year 2009 estimates from the World Economic Outlook October 2009. [6]Short-term external debt includes loans and credits due, and debt securities due within a year as defined in the Joint External Debt Hub. Total reserves data for Brunei Darussalam as of 1Q09, Lao PDR as of 1Q08, and for Myanmar, as of 2Q07. [7]Refers to reserves minus gold over a 12-month moving average of imports (cif). Period appearing refers to the month when latest data on reserves are available. However, for imports, the month when the latest data is available may be earlier, the same, or later than the period indicated. [8]Indicator covers foreign liabilities and assets of banking institutions, deposit money banks, and other depository corporations of each country. [9]Covers loans to the private sector and non-financial institutions; and deposits (demand, time, savings, foreign currency, bond, and money market instruments-whenever available) of banking institutions, deposit money banks, and other depository corporations of each country. For Malaysia, this ratio covers total loans excluding loans sold to Danaharta and total deposits of the banking system.

Source: CEIC; national sources; *Asian Development Outlook 2009 Update* (September 09), Asian Development Bank; Joint External Debt Hub, BIS-IMF-OECD-WB; *International Financial Statistics, Direction of Trade Statistics, World Economic Outlook* (October 09)*, and Article IV Consultations,* International Monetary Fund; and *OECD Economic Outlook* (various issues), Organization for Economic Co-operation and Development.

A. Prudential indicators

Emerging East Asia's banking systems weathered the financial storm well, showing strong profits, ample capital cushions, and improved prudential oversight.

Emerging East Asia's banks maintain strong capital cushions with risk-weighted capital adequacy ratios well above 10% **(Table 6)**. Bank profitability is mixed, but has been largely unaffected by the financial crisis. As the region's economies recover, bank profitability is expected to improve as demand for loans increases **(Tables 7, 8)**. Surprisingly, despite the economic slowdown, nonperforming loans have not risen substantially **(Table 9)**. The region's banks have also sufficiently provided for nonperforming loans **(Table 10)**. Moody's upgraded the sovereign ratings for long-term

Table 6: Risk-Weighted Capital Adequacy Ratios
(% of risk-weighted assets)

Economy	2000–2004 Average	2004	2005	2006	2007	2008	2009[1]
China, People's Rep. of	-2.3[2]	–4.7	2.5	4.9	8.4	12.0	—
Hong Kong, China	16.1	15.4	14.8	14.9	13.4	14.7	16.5
Indonesia	18.7	19.4	19.3	21.3	19.3	16.8	17.8
Korea, Republic of	10.7	11.3	12.4	12.3	12.0	12.7	14.3
Malaysia	13.4	14.3	13.6	13.1	12.8	12.2	14.0
Philippines	17.0	18.7	17.7	18.5	15.9	15.7	15.5
Singapore	17.7	16.2	15.8	15.4	13.5	14.7	16.5
Taipei,China	10.5	10.7	10.3	10.1	10.6	10.8	11.1
Thailand	13.2	13.0	14.2	14.5	15.4	14.1	16.4

— = not available.
[1]Data for Indonesia, Malaysia, Singapore, and Thailand as of Sep 2009; for Hong Kong, China; Republic of Korea; and Taipei, China as of Jun 2009; and for Philippines as of Mar 2009. [2]Average of 2000 and 2002–2004 figures. Figure for 2000 is ratio for state commercial banks.

Source: National sources and *Global Financial Stability Report October 2009*, International Monetary Fund.

Table 7: Rate of Return on Commercial Bank Assets (% per annum)

Economy	2000–2004 Average	2004	2005	2006	2007	2008	2009[1]
China, People's Rep. of	0.2	0.5	0.6	0.9	0.9	1.0	—
Hong Kong, China[2]	1.2	1.7	1.7	1.7	1.9	1.8	1.6
Indonesia	2.2	3.5	2.6	2.6	2.8	2.3	2.6
Korea, Republic of	0.4	0.9	1.2	1.1	1.1	0.5	—
Malaysia	1.3	1.4	1.4	1.3	1.5	1.5	—
Philippines	0.8	1.0	1.1	1.3	1.4	0.8	0.9
Singapore	1.1	1.2	1.2	1.4	1.3	1.0	1.1
Taipei,China	0.3	0.6	0.3	–0.4	0.1	–0.1	0.2
Thailand	0.7	1.3	1.3	0.8	0.2	1.0	0.9

— = not available.
[1]Data for Indonesia, Singapore, and Thailand as of Sep 2009; and for Hong Kong, China; Philippines; and Taipei,China as of Jun 2009. [2]Used net interest margin of retail banks. Year-to-date annualized.

Source: National sources and *Global Financial Stability Report October 2009,* International Monetary Fund.

Table 8: Rate of Return on Commercial Bank Equity (% per annum)

Economy	2000–2004 Average	2004	2005	2006	2007	2008	2009[1]
China, People's Rep. of[2]	—	13.7	15.1	14.9	16.7	17.1	—
Hong Kong, China[3]	14.9	17.2	16.7	16.7	21.3	12.6	—
Indonesia	18.5	34.5	32.3	33.2	28.5	24.6	17.4
Korea, Republic of	7.2	18.0	20.3	15.6	16.2	9.0	—
Malaysia	16.3	16.3	16.8	16.2	19.7	18.5	—
Philippines	5.9	7.6	9.5	11.5	11.8	7.2	8.7
Singapore	9.6	11.6	11.2	13.7	12.9	10.7	11.0
Taipei,China	4.1	8.8	4.4	–7.3	2.6	–0.7	3.3
Thailand	13.3	19.4	16.5	10.2	2.8	12.2	9.9

— = not available.
[1]Data for Singapore and Thailand as of Sep 2009; for the Philippines and Taipei,China as of Jun 2009; and for Indonesia as of Apr 2009. [2]Total banking industry, except for 2006, which refers only to four listed state-owned banks. [3]Covers only locally-incorporated banks.

Source: National sources and *Global Financial Stability Report October 2009*, International Monetary Fund.

Table 9: Nonperforming Loans (% of commercial bank loans)

Economy	2000–2004 Average	2004	2005	2006	2007	2008[1]	2009[2]
China, People's Rep. of	21.0	13.2	8.6	7.1	6.2	2.5	1.7
Hong Kong, China[3]	4.0	1.6	1.4	1.1	0.9	1.2	1.5
Indonesia	10.2	4.5	7.6	6.1	4.1	3.2	3.8
Korea, Republic of	3.1	2.0	1.3	0.9	0.7	1.2	1.6
Malaysia[3]	8.9	6.8	5.6	4.8	3.2	2.2	2.1
Philippines[3]	14.8	12.7	8.5	5.7	4.4	3.5	3.5
Singapore	5.3	5.0	3.8	2.8	1.5	1.4	—
Taipei,China	5.2	2.8	2.2	2.1	1.8	1.5	1.5
Thailand[3]	13.5	10.9	8.3	7.5	7.3	5.3	5.3

— = not available.
[1]Data for Singapore as of Sep 2008. [2]Data for People's Republic of China, Indonesia, Malaysia, and Thailand as of Sep 2009; for Philippines as of Aug 2009; and for Hong Kong, China; Republic of Korea; and Taipei,China as of Jun 2009. [3]Reported nonperforming loans (NPLs) are gross classified loans of retail banks.

Source: National sources and *Global Financial Stability Report October 2009,* International Monetary Fund.

Table 10: Bank Provisions to Nonperforming Loans (%)[1]

	2000	2008	2009
China, People's Rep. of[2]	—	116.4	134.3
Indonesia[3]	—	96.9	101.8
Korea, Republic of	59.5	146.3	124.4
Malaysia[4]	57.2	88.9	89.7
Philippines	43.7	86.0	86.7
Singapore	—	109.1	91.0
Taipei,China	24.1	76.6	78.0
Thailand	—	97.9	95.1
Memo			
Japan[5]	—	25.5	—
United States	146.4	74.9	66.5

— = not available.

[1]Data for People's Republic of China; Republic of Korea; Philippines; Taipei,China as of Jun 2009; Indonesia, Malaysia, Singapore, and Thailand as of Sep 2009; United States as of Mar 2009. [2]Major commercial banks. Break in 2008; data cover all commercial banks. [3]Values for Indonesia are write-off reserve on earning assets to classified earning assets ratio. [4]Values refer to general, specific, and interest-in-suspense provisions. [5]For the end of the fiscal year (i.e., March of the following calendar year) coverage of nonperforming loans by provisions for all banks.

Source: *Global Financial Stability Report* and *International Financial Statistics*, International Monetary Fund; and national sources.

foreign currency bonds to Ba2 in September for Indonesia, and to Ba3 in July for the Philippines. The rest of the region's sovereign credit ratings remain unchanged **(Figures 34a, 34b, 34c, 34d).**

Figure 34a: S&P Sovereign Ratings—ASEAN-4 and Viet Nam (long-term foreign currency)

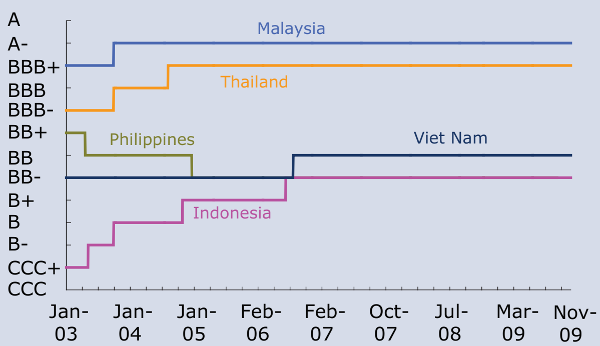


Figure 34c: Moody's Sovereign Ratings—ASEAN-4 and Viet Nam (long-term foreign currency)

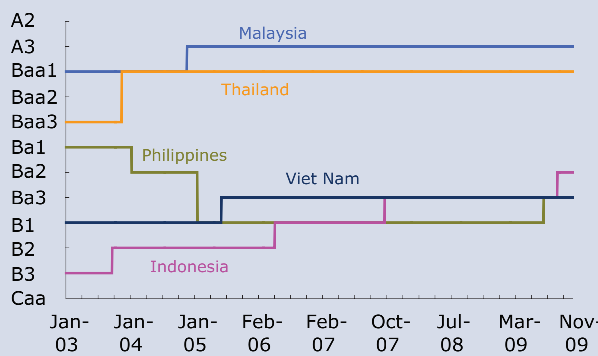


Figure 34b: S&P Sovereign Ratings—NIEs and the PRC (long-term foreign currency)

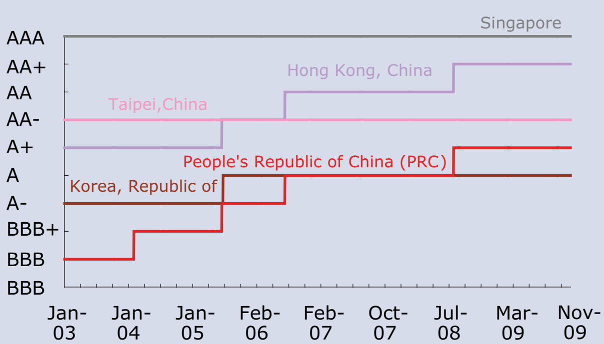
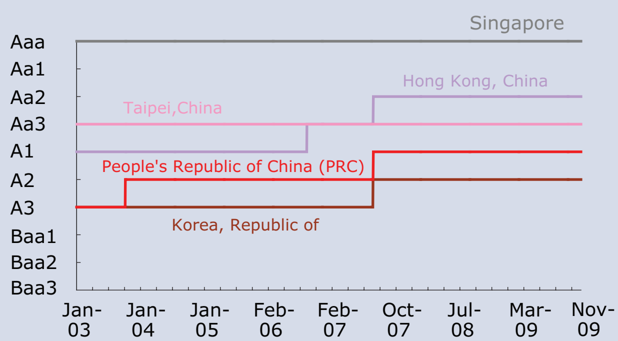


Figure 34d: Moody's Sovereign Ratings—NIEs and the PRC (long-term foreign currency)



NIEs = newly industrialized economies.

Source: Bloomberg.

Figure 35a: Bank Lending Growth[1]—NIEs
(%, y-o-y)

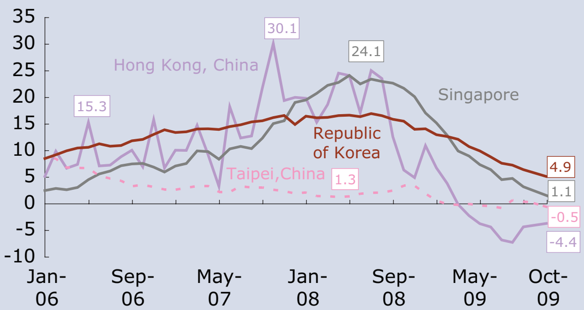
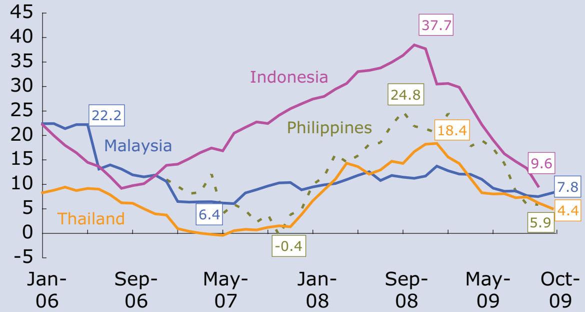


Figure 35b: Bank Lending Growth[1]—ASEAN-4
(%, y-o-y)



NIEs = newly industrialized economies, y-o-y = year-on-year.
[1]Data for Hong Kong, China refers to authorized institutions' loans and advances; Republic of Korea to commercial and specialized bank loans; Singapore to domestic banking unit loans and advances; and Taipei,China to domestic bank loans and advances. Data for Indonesia refers to commercial bank loans; Malaysia to commercial bank loans and advances; Philippines to commercial and universal bank loans net of RRP's, starting in 2007; and Thailand to commercial bank loans. Data for Philippines and Indonesia as of Sep 2009.

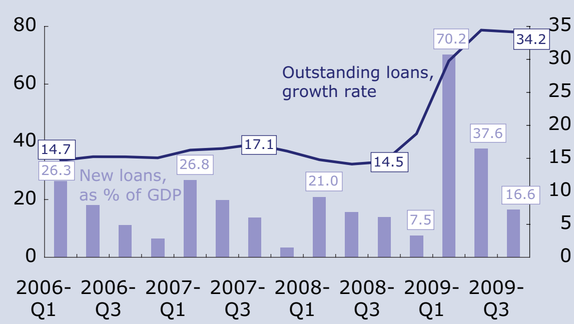
Source: OREI staff calculations using data from CEIC, Bank of Korea, and Bangko Sentral ng Pilipinas websites.

b. Activity Indicators

With financial markets continuing to stabilize, lending growth has begun to pick up, while banks are investing more in securities.

Following the financial crisis and economic slowdown, loan growth in the region moderates, especially in the NIEs as the banks became much more cautious in lending. However, the slowdown in bank lending looks to have reached the bottom and is likely to pick up again as the general economic condition recovers **(Figures 35a, 35b)**. PRC was an exception as its loan growth in 2009 was well above the previous year **(Figure 36)**. This has raised concerns that some lending may have been used for speculative purposes. However, the regulators are monitoring the situation and have taken some administrative measures. The expansionary monetary policies in other ASEAN+3 economies have fueled lending to real estates **(Figure 37)**. Authorities need to keep a careful watch to ensure a real estate bubble does not emerge. The economic recovery in 2010 is expected to increase lending as potential borrowers are more optimistic about business prospects and banks are less worried about potential defaults. Banks in the region have also invested more in securities, as indicated by the increasing share of securities investment in total bank assets **(Table 11)**.

Figure 36: Bank Lending—People's Republic of China



GDP = gross domestic product.

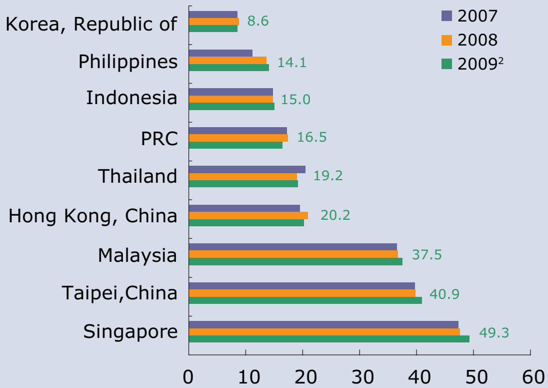
Source: OREI staff calculations based on data from CEIC.

c. Market Indicators

In most markets, financial share prices have slowly recovered relative to overall market indexes.

Financial share prices in the region fell sharply as the crisis unfolded. However, as fears of a financial

Figure 37: Real Estate Loans[1]—ASEAN-4, NIEs, and the PRC (percent of total loans)



PRC = People's Republic of China.
[1]Data for Hong Kong, China includes loans to building, construction, property development, and investment of all authorized institutions; for Indonesia, property loans of commercial and rural banks; for Republic of Korea, real estate, renting, and leasing loans of commercial and specialized banks; for Malaysia, sum of loans for purchase of residential and non-residential property, and for purchase of fixed assets other than land and building, of the banking system; for the Philippines, banking system loans for real estate, renting, and business activities; for Singapore, business loans for building and construction, and housing and bridging loans for consumers of domestic banking units; for Taipei,China, real estate loans of all banks; and for Thailand, loans for real estate activities, renting and business, and loans for land, for provisions of dwelling, and for purchase of real estate for others by commercial banks. [2]Data for Hong Kong, China; Malaysia; Singapore; Taipei,China; and Thailand are as of Sep 2009; for Indonesia as of Aug 2009; and for China, People's Republic of; Korea, Republic of; and Philippines, as of Jun 2009.

Source: OREI staff calculations using data from People's Bank of China, Hong Kong Monetary Authority, Bank Indonesia, Bank Negara Malaysia, Bangko Sentral ng Pilipinas (Philippines), Monetary Authority of Singapore, Bank of Thailand, and CEIC.

meltdown waned, financial share prices have regained most of their value and in some cases exceeded previous levels **(Figures 38a, 38b)**. The Philippines financial sector was an exception with financial share prices trending downward relative to the overall stock market index. The region's banking system has learned the lessons from 1997/98 financial crisis well and was better prepared to handle the effects of the financial crisis this time around. As a result, the stock market valuation of the region's banking system was able to rebound quickly.

Table 11: Securities Investment to Total Bank Assets of Commercial Banks (%)

Economy	2000–2004 Average	2004	2005	2006	2007	2008	2009[1]
Hong Kong, China	16.9	19.2	19.6	20.2	17.7	17.8	22.2
Indonesia	16.5	19.3	17.3	23.6	26.5	18.9	19.0
Korea, Republic of	23.2	20.8	22.1	20.2	18.6	16.5	17.5
Malaysia	12.7	10.6	9.6	9.3	11.9	14.6	16.1
Philippines[2]	23.8	32.6	30.1	23.7	21.2	23.9	28.1
Singapore	16.9	17.1	16.5	15.9	15.8	14.8	17.1
Taipei,China	13.6	14.2	12.1	12.0	11.9	11.7	11.9
Thailand	15.2	16.0	16.0	15.8	15.9	13.7	15.5

— = not available.
[1]Data for Hong Kong, China; Indonesia; Malaysia; Singapore; Taipei,China; and Thailand as of Sep 2009; for Philippines as of Aug 2009; and for Republic of Korea as of Jun 2009. [2]Financial assets (net of allowance for credit losses) as a ratio of total assets of commercial bank.

Source: OREI staff calculations using data from national sources and CEIC.

Figure 38a: Ratio of Financial Stock Price Index to Overall Stock Market Index—NIEs and the PRC (January 2006 = 100)

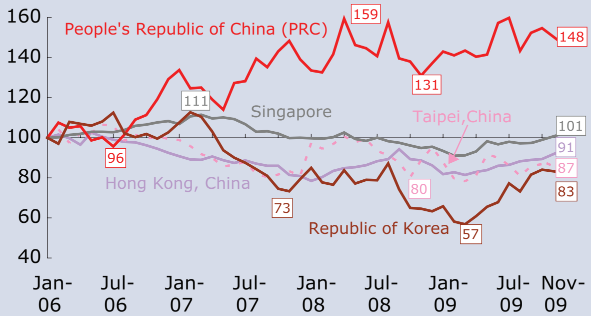
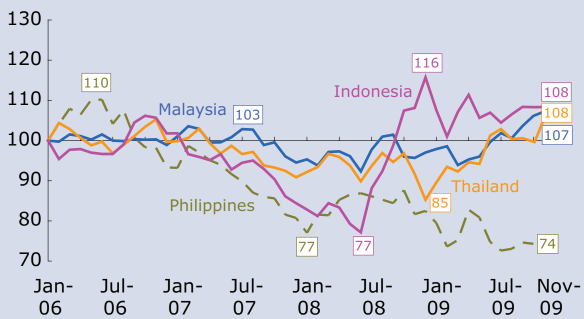


Figure 38b: Ratio of Financial Stock Price Index to Overall Stock Market Index—ASEAN-4 (January 2006 = 100)



NIEs = newly industrialized economies.

Source: OREI staff calculations using Reuters data.

Economic Outlook for 2010, Risks, and Policy Issues

External Economic Environment

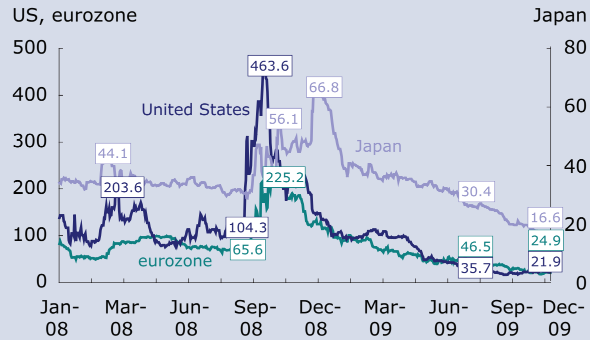
Large and timely liquidity support, unprecedented monetary easing and substantial fiscal stimulus have helped advanced economies begin to emerge from the worst economic downturn since the Second World War.

The International Monetary Fund (IMF) forecasts that advanced economies will grow by 1.3% in 2010 after contracting 3.4% this year. This is far more upbeat than previous forecasts. The wide-ranging expansionary fiscal and monetary measures taken by authorities worldwide appears to have succeeded in calming the financial storm and staving off what commentators feared might become another Great Depression. As financial systems continue to stabilize and stimulus effects become visible across economies, economic growth in advanced economies is expected to return. Confidence has gradually returned to Europe's financial system as rescue efforts and deposit guarantees shore up banks. However, eurozone economies are still suffering from the continued effects of deleveraging as bank lending remains lower and credit conditions tighter than before the 2008 third quarter credit squeeze. The Japanese economy is also recovering modestly, yet reemerging deflation threatens its growth prospects.

Global financial markets have stabilized, credit has eased, and public confidence in the financial system is gradually returning.

While there are continued worries over the global banking system's exposure to certain asset classes, much of the previous uncertainty over systemic stability has been lifted. The financial sector has been stabilized and investors have regained risk appetite. The TED spread, which measures the difference between interest rates of interbank loans and Treasury bills, has returned to normal after reaching historic highs in September 2008, an indication that confidence has returned to the banking system **(Figure 39)**. At the same time, bond yield curves have steepened, signaling that markets believe a recovery can be expected in the coming months **(Figures 40a, 40b)**. Credit default swaps—which show the cost of insuring against corporate default—have also dropped substantially, indicating that the risk of corporate defaults has declined **(Figure 41)**. Emerging market sovereign risks are falling as indicated by narrowing sovereign bond spreads **(Figure 42)**. In addition, major stock markets have rallied strongly, supporting the view that investor confidence in financial markets is returning **(Figure 43)**.

Figure 39: TED Spreads[1]–G3



[1]Difference between the 3-month LIBOR (London Interbank Offered Rate) and 3-month government debt (e.g. Treasury bills).

Source: OREI staff calculations based on data from Bloomberg and Datastream.

Figure 40a: 10-Year Government Bond Yields (% per annum)

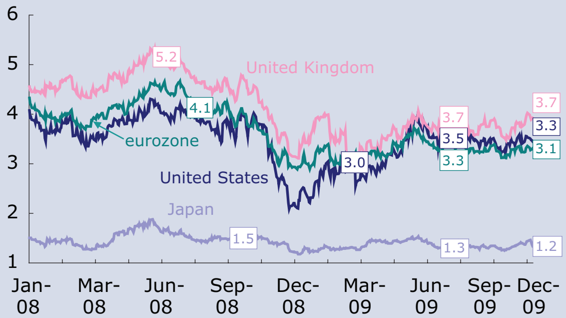
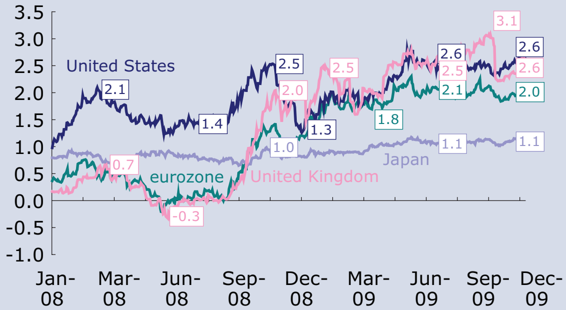
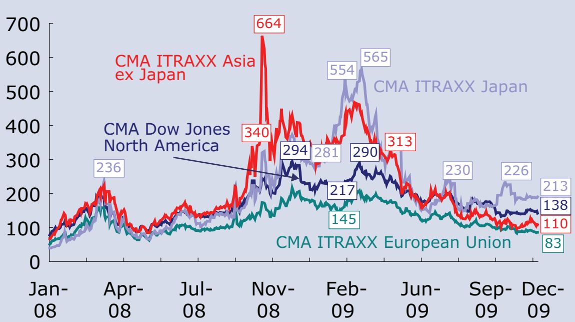


Figure 40b: 10-year and 2-year Government Bond Yield Spreads (% per annum)



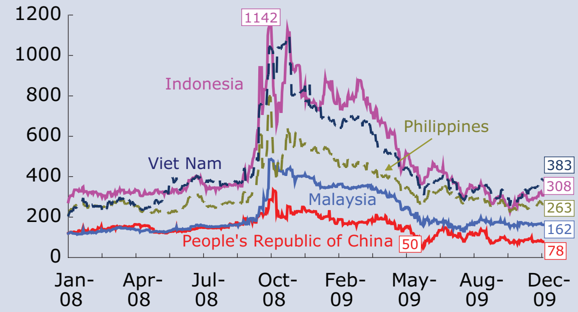
Source: Datastream.

Figure 41: Credit Default Swap Indexes (investment grade, senior 5-year)



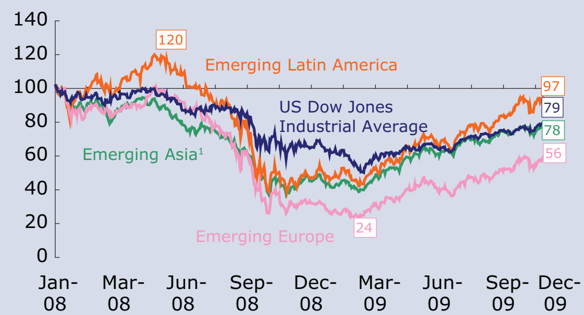
Source: Datastream.

Figure 42: JPMorgan EMBI Sovereign Stripped Spreads (basis points)



Source: Bloomberg.

Figure 43: MSCI Indexes (2 Jan 2008 = 100)



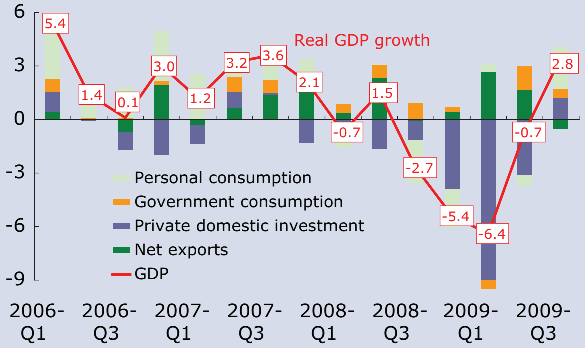
[1]Includes China, People's Republic of; India; Indonesia; Korea, Republic of; Malaysia; Pakistan; Philippines; Taipei,China; and Thailand.

Source: Morgan Stanley Capital International (MSCI) Barra and Datastream.

Leading indicators suggest the US economy will continue its recovery into 2010.

The US economy grew by 2.8% (quarter-on-quarter, seasonally adjusted annualized rate) in the third quarter of 2009, marking an end to four consecutive quarters of negative growth **(Figure 44)**. The recovery can be partly attributed to the aggressive fiscal and monetary policies taken to stimulate the economy. In addition, it will get an additional boost as the weaker US dollar helps increase exports. The US economy is forecast to grow by 2.0% in 2010. The decline in housing starts has stabilized and existing home

Figure 44: Contributions to Growth—US
(seasonally adjusted, annualized, q-o-q, % change)

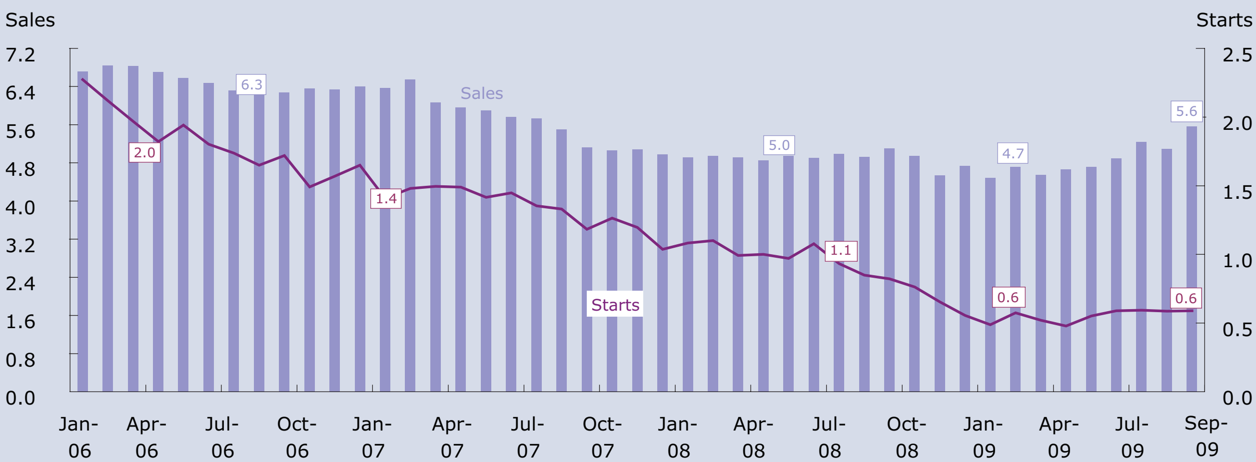


GDP = gross domestic product, q-o-q = quarter-on-quarter.
GDP figure for 2009Q3 is second estimate.

Source: US Bureau of Economic Analysis.

sales have been moving away from their crisis lows **(Figure 45)**. Unemployment remains high, but the rate of job losses has been gradually declining since its January 2009 peak **(Figure 46)**. There is fear, however, that the continued loss of jobs could pose a threat to recovery as the lack of job creation suggests that consumer spending power will remain weak. Although business confidence has improved markedly, consumer confidence remains low **(Figure 47)**. The third quarter also marked the 6th consecutive quarter of declining inventories, which suggests that industrial production should pick up soon given the very low inventory levels. Although the economic outlook for the US is far more upbeat, indicators suggest the recovery will be fragile, as substantial concerns remain over the size of the fiscal deficit and health of the financial system.

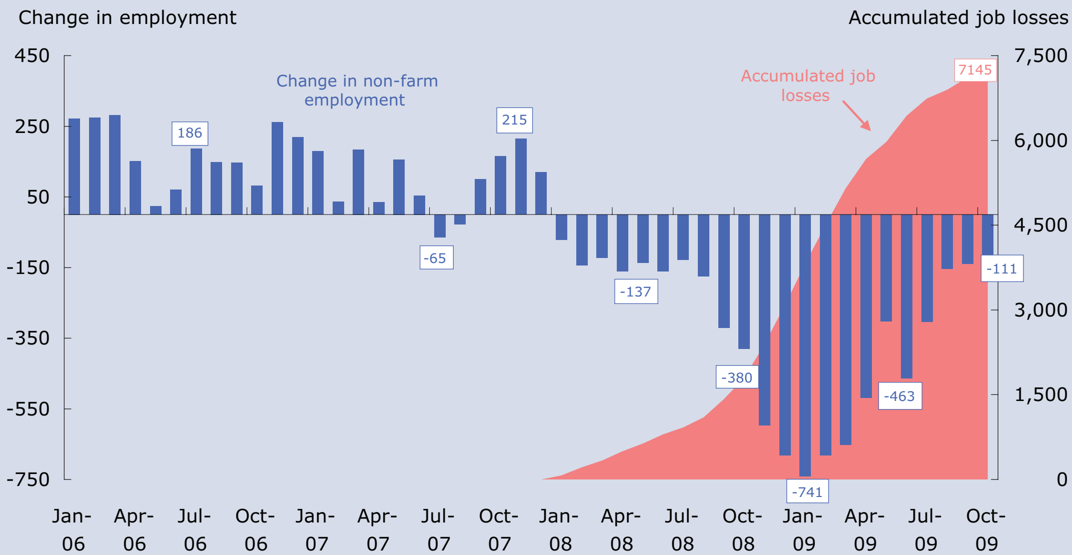
Figure 45: Private Housing Starts[1] and Existing Home Sales[2]—US
(million units)



US = United States.
[1]Seasonally adjusted levels. [2]Seasonally adjusted and annualized.

Source: CEIC.

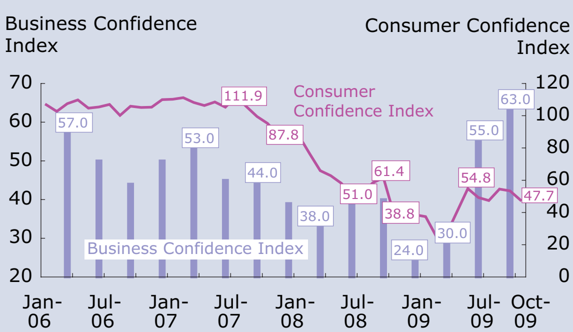
Figure 46: Change in Non-Farm Employment and Accumulated Job Losses[1]
(in thousands)



[1]Accumulated job losses since December 2007. Figures for October 2009 are preliminary.

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

Figure 47: US Business and Consumer Confidence Indexes



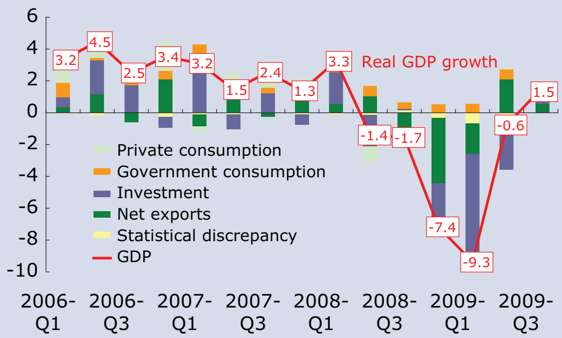
US = United States.
Note: Consumer confidence (1985 = 100). A business confidence index above 50 means there are more positive than negative responses. Consumer confidence index is monthly; business confidence index is quarterly.

Source: Datastream.

The eurozone is also entering a recovery phase with financial markets stabilizing, exports rising, and consumer sentiment improving.

The eurozone has begun its recovery with a third quarter GDP growth of 1.5% (q-o-q, seasonally adjusted annualized rate) compared with a 0.6% contraction in the second quarter **(Figure 48)**. The smaller fiscal stimulus in Europe meant that government consumption did not contribute as much to growth as in the US. However, there are signs that the recovery may be taking root. In the third quarter, exports stopped its downward trend **(Figure 49)**. The recent strengthening of the euro against the US dollar, however, may dampen demand for Europe's exports in the months ahead. Other leading indicators, however, suggest that the economy may be on the path toward recovery. The economic sentiment indicator moved well above its March 2009 low **(Figure 50)** while consumer and business confidence have also edged upward. Meanwhile, retail sales have shown signs of

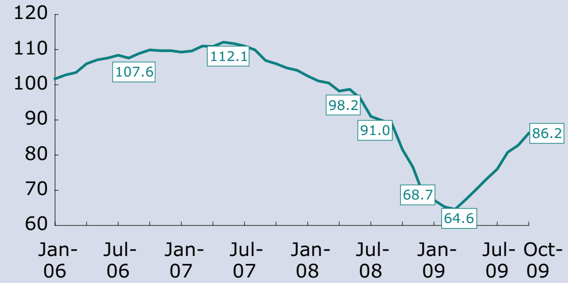
Figure 48: Contributions to Growth[1]—eurozone (seasonally adjusted, annualized, q-o-q, % change)



GDP = gross domestic product, q-o-q = quarter-on-quarter.
[1]2009Q3 figure is Eurostat first estimate.

Source: Eurostat website.

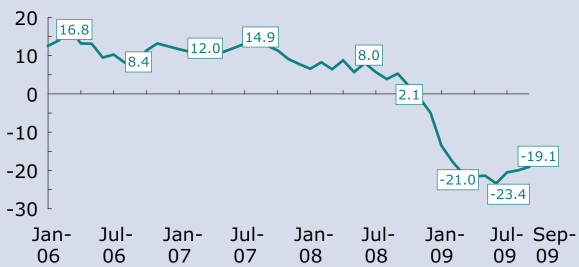
Figure 50: Economic Sentiment Indicator[1]—eurozone[2]



[1]The economic sentiment indicator is a composite index of business and consumer confidence indicators based on surveys of economic assessments and expectations in the eurozone. [2]eurozone refers to Euro Area 16: Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain.

Source: Datastream.

Figure 49: Export Growth[1]—eurozone[2] (y-o-y, % change)



[1]Year-on-year (y-o-y) growth of 3-month moving averages of export values. [2]Refers to Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain.

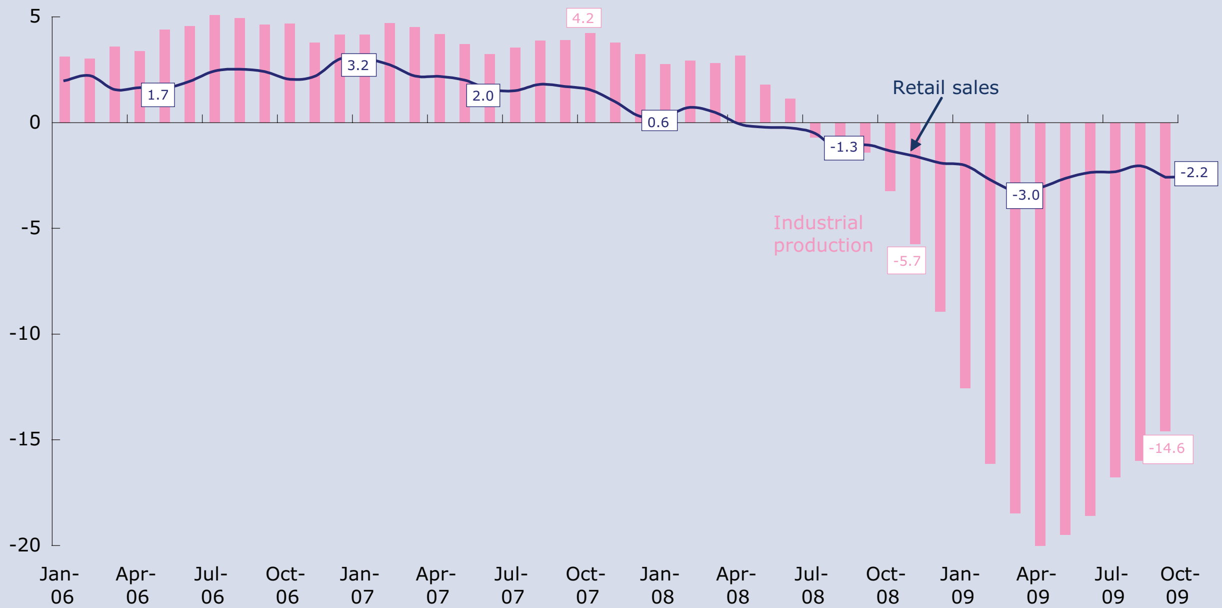
Source: OREI staff calculations based on Datastream data.

improvement and the pace of decline in industrial production has moderated **(Figure 51)**. As a result, growth is expected to return to eurozone economies in 2010, but the recovery is expected to be anemic with GDP growth expected to rise by 0.8%.

After a steep downturn, the Japanese economy is expected to post a modest recovery in 2010.

The Japanese economy expanded by 1.3% (q-o-q, seasonally adjusted annualized rate) in the third quarter of 2009, down from 2.7% (q-o-q, seasonally adjusted annualized rate) growth in the second quarter. Growth in consumption and net exports contributed to growth **(Figure 52)**. Leading indicators—such as industrial production—which has risen since March 2009 on a monthly basis, suggest that growth will continue through at least the end of the year **(Figure 53)**. While an improvement in exports is welcome, its sustainability is uncertain as the strengthening Japanese yen is expected to hurt the competitiveness of Japanese exports **(Figure 54)**. There are other concerns suggesting the Japanese recovery will remain weak. Although declining, unemployment remained high—at 5.1%—in October 2009. This will contribute to continued weakness in private consumption. Private investment has continued to fall and is likely to remain weak as corporate profits are falling and business sentiment, though improving in the past few months, remains depressed **(Figure 55)**. The new government on 8 December announced an $81 billion stimulus package that will help shore

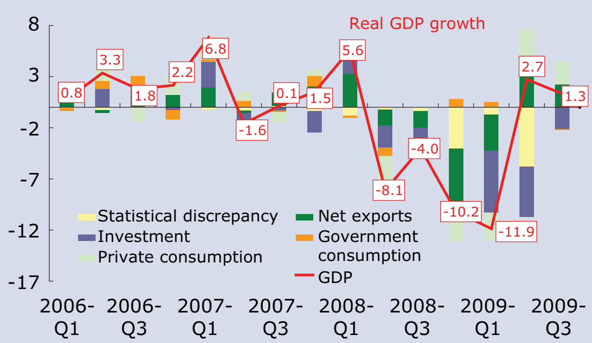
Figure 51: Retail Sales and Industrial Production[1]—eurozone



[1]Working-day adjusted, year-on-year growth rate of 3-month moving averages.

Source: OREI staff calculations based on CEIC data.

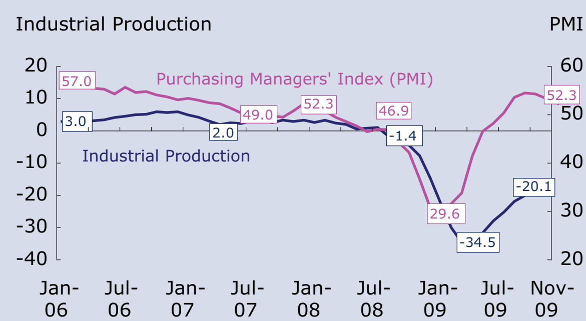
Figure 52: Contributions to Growth[1]—Japan
(seasonally adjusted, annualized, q-o-q, % change)



GDP = gross domestic product, q-o-q= quarter-on-quarter.
[1]2009Q3 figures are second preliminary estimates.

Source: Cabinet Office, Government of Japan.

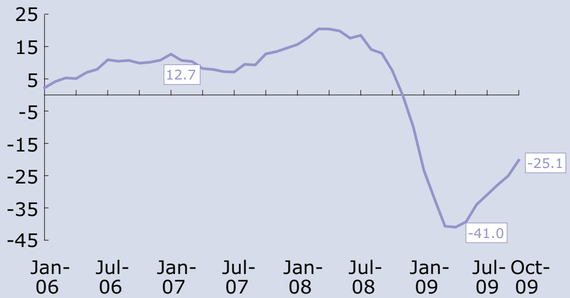
Figure 53: Industrial Production[1] and Purchasing Managers' Index[2]—Japan



[1]Year-on-year growth of 3-month moving averages. [2]Refers to Manufacturing PMI; seasonally adjusted series.

Source: Bloomberg and OREI staff calculations based on data from CEIC.

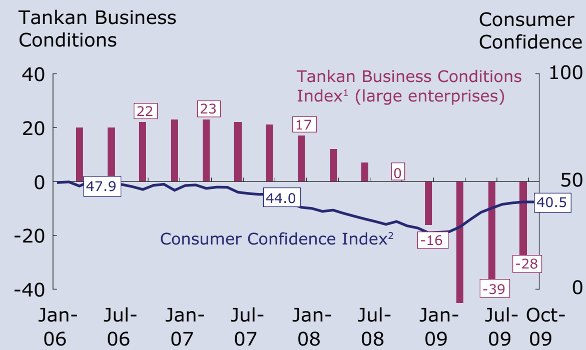
Figure 54: Export Growth[1]—Japan
($ value, y-o-y, %)



[1]3-month moving average of merchandise exports.

Source: OREI staff calculations based on CEIC data.

Figure 55: Business and Consumer Sentiment Indexes—Japan



[1]Quarterly survey. A positive figure indicates that there are higher percentage of companies that report favorable business conditions from those that say conditions are unfavorable. [2]Monthly survey. A figure above 50 indicates positive consumer sentiment, while a number below 50 indicates negative consumer sentiment.

Source: Datastream.

up the economy's fragile recovery, which will also further strain state finances. The economy is forecast to grow 1.2% in 2010.

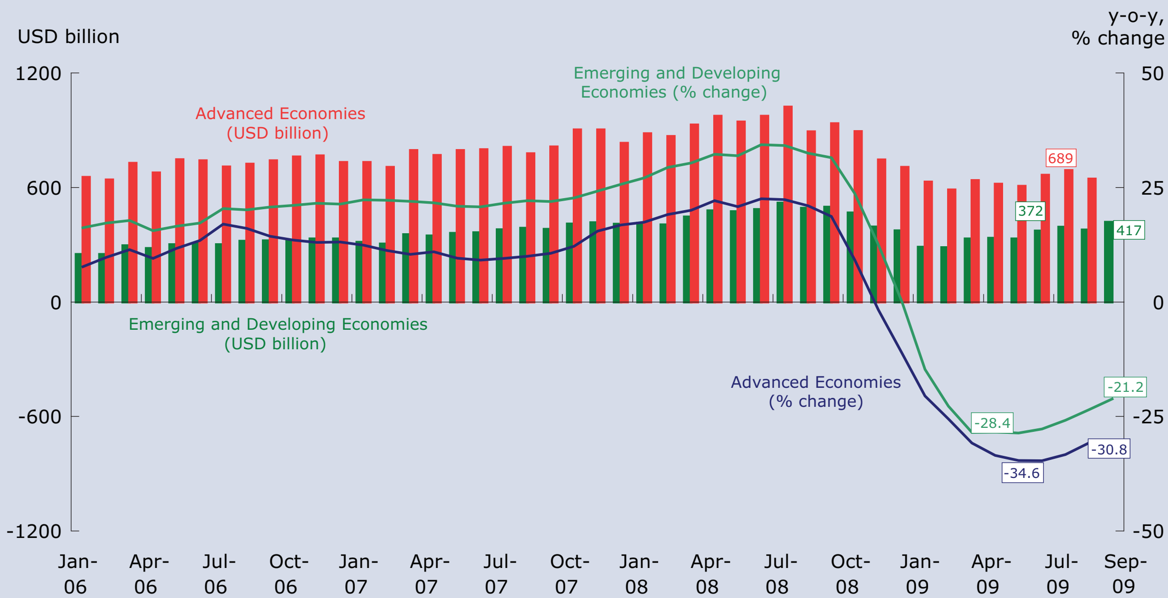
With recovery now in sight, world trade is slowly picking up after a sharp drop in late 2008 and early 2009.

Trade was the channel that transmitted the crisis shock to Asia. Falling demand in advanced economies hurt the region, especially those economies heavily trade dependent. There are indications, however, that the decline in imports in advanced economies has bottomed out **(Figure 56)**. The global downturn seriously reduced demand for high-tech products, but it appears to have reached its trough, with the pace of decline in sales of computer equipment and software in major developed countries moderating in the third quarter of 2009 **(Figure 57)**. Also, in recent months new orders for information technology products in developed countries have risen **(Figure 58)**. The release of Microsoft's new Windows operating system in October is expected to give an additional boost to the IT sector as consumers upgrade their computer systems. With the recession in advanced economies ending, demand for exports should recover, providing a welcome boost to export-oriented economies. World trade volume is expected to grow by 5.6% in 2010 compared with a decline of 9.7% in 2009. However, as the global recovery is expected to be weak, the volume of global trade is unlikely to return quickly to previous levels.

Despite the recent rise in oil and commodity prices in response to the recovery in global demand, inflation has shown little sign of resurgence.

Crude oil prices have been increasing as the world economy begins to recover. Additional factors such as production cuts by the Organization of the Petroleum Exporting Countries (OPEC), oil-inventory adjustments, and a weaker US dollar also contributed to the higher oil price. However, futures prices suggest that oil prices are expected to rise only slightly in 2010—to about $85 per barrel **(Figure 59)**. Part of the reason is that spare capacity in OPEC is forecasted to increase in 2010, helping to moderate the price increase **(Figure 60)**. Prices of other commodities have also been picking up after a huge decline in early 2009 on the back of stronger demand **(Figure 61)**. However, as the world recovery remains weak, prices of other commodities are expected to rise only marginally. And these rising commodity prices are unlikely to put much upward pressure on inflation in major developed countries, as there remains substantial excess capacity. So far in 2009, inflation has been low or negative in developed countries and is expected to continue the trend in 2010.

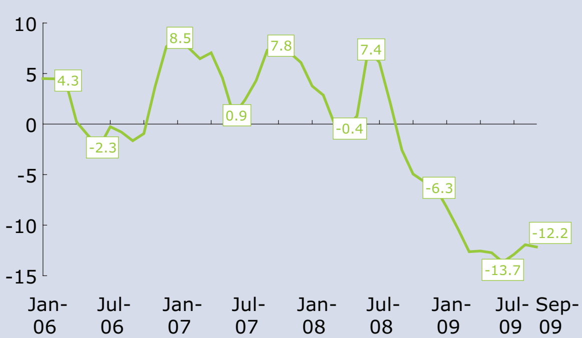
Figure 56: Imports—Advanced Economies; Emerging and Developing Economies
(USD billion, % change)[1]



[1]Year-on-year (y-o-y) growth rates of 3-month moving averages.

Source: *International Financial Statistics*, International Monetary Fund

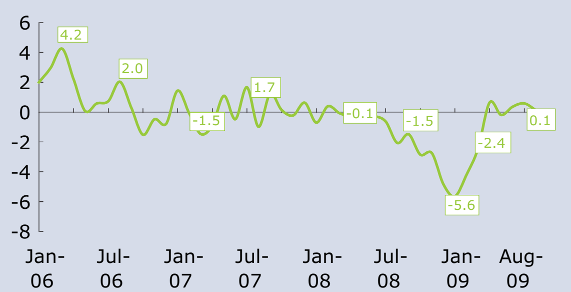
Figure 57: Computer and Software Sales[1]—G3[2]
(y-o-y, % change)



[1]3-month moving average of year-on-year (y-o-y) growth in sales values. [2]eurozone, Japan, and the United States.

Source: Datastream and Eurostat.

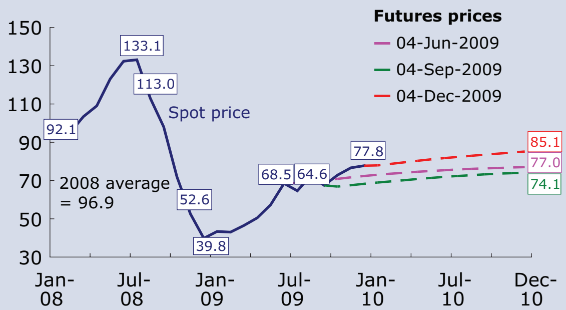
Figure 58: New Information Technology Orders[1]—G3[2] (% change)



[1]Seasonally adjusted, 3-month moving average, month-on-month. [2]eurozone, Japan, and the United States (US).

Source: OREI staff calculations based on national sources.

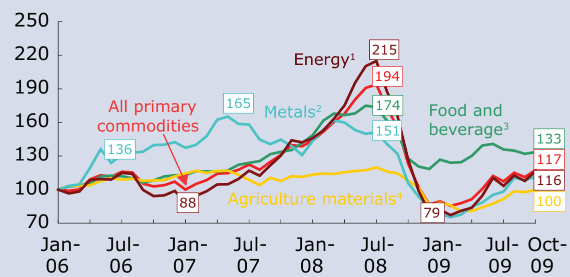
Figure 59: Brent Spot[1] and Futures Prices
(USD per barrel)



[1]Monthly average of daily spot prices.

Source: Datastream.

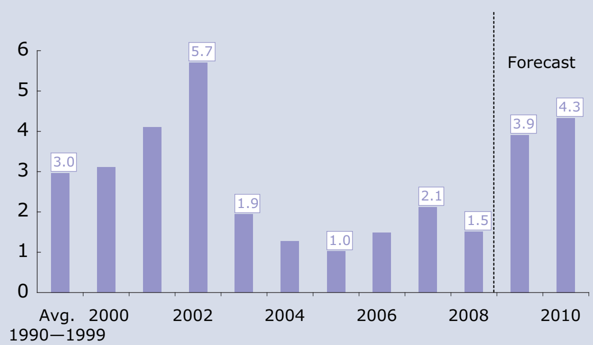
Figure 61: Primary Commodity Price Indexes
(Jan 2006 = 100)



[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 *IMF Primary Commodity Prices*, International Monetary Fund.

Figure 60: OPEC Spare Capacity
(barrels per day, million)



OPEC = Organization of the Petroleum Exporting Countries.

Source: *Short-Term Energy and Summer Fuels Outlook* (Nov 2009), US Energy Information Administration.

Regional Economic Outlook for 2010

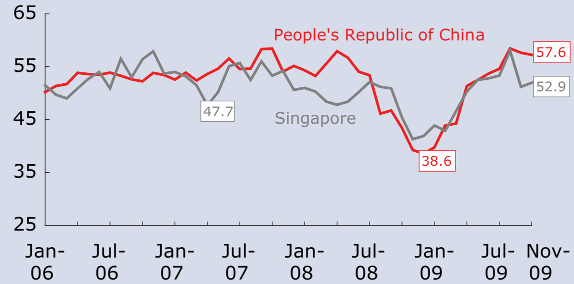
The improved external environment and swift policy responses helped emerging East Asian economies to weather the crisis—early indicators show the region amid a V-shaped recovery, with economic growth in 2010 expected to be slightly above 2008 levels.

Leading indicators, such as purchasing managers' indexes, indicate strong activity in the coming months **(Figure 62)**. The inventory cycle has started to reverse and is expected to contribute to GDP growth in the coming quarters, after subtracting from it in the past two quarters **(Figure 63)**. Given the improving external environment, and strong growth in the PRC, aggregate GDP growth in emerging East Asia is forecast to rebound strongly to 6.8% in 2010 from 4.2% in 2009 **(Table 12)**.

Despite the overall trend, the pace of recovery in emerging East Asia varies widely across countries.

There are huge contrasts, however, across the region. The PRC, while hurt by the global crisis, has managed to maintain growth momentum, suffering only a mild slowdown. The NIEs—and the more export-oriented ASEAN economies—have seen a greater crisis impact with growth dropping quickly during the crisis **(Figure 64a)**. But they are poised for a quicker recovery as well. The less open ASEAN economies were much less affected by the downturn and have kept growth performance steadier **(Figure 64b)**. But in 2010, they are not expected to post a major rebound in growth either.

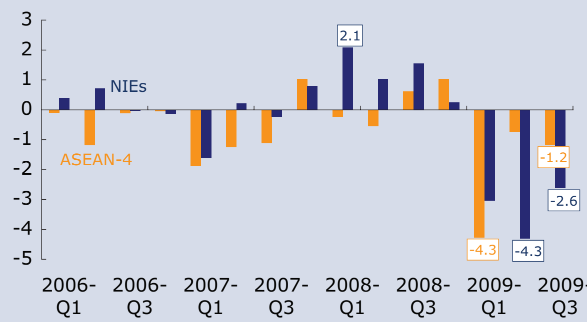
Figure 62: Manufacturing Purchasing Managers' Indexes (PMI)[1]— Selected Economies



[1]Seasonally adjusted, refers to manufacturing output PMI.

Source: Datastream.

Figure 63: Contribution of Changes in Inventories to GDP Growth—ASEAN-4 and NIEs (y-o-y,%, percentage points)



ASEAN-4 = Indonesia, Malaysia, Philippines, and Thailand; NIEs = Hong Kong, China; Korea, Rep. of; Singapore; and Taipei,China; y-o-y = year-on-year.

Source: OREI staff calculations based on CEIC data.

Table 12: Annual GDP Growth Rates (%, y-o-y)

	2000–2007 Average	2004	2005	2006	2007	2008	2009H1	2009Q3	ADB Forecasts	
									2009	2010
Developing Asia[1]	**7.5**	**7.9**	**8.1**	**8.9**	**9.5**	**6.1**	**—**	**—**	**4.5**	**6.6**
Emerging East Asia[2,3]	**7.6**	**8.0**	**7.8**	**8.8**	**9.7**	**6.1**	**2.1**	**5.0**	**4.2**	**6.8**
ASEAN[2,3]	**5.4**	**6.5**	**5.7**	**6.0**	**6.4**	**4.2**	**-1.1**	**1.2**	**0.6**	**4.5**
Brunei Darussalam	2.3	0.5	0.4	4.4	0.6	-1.9	—	—	-1.2	2.3
Cambodia	9.5	10.3	13.3	10.8	10.2	6.7	—	—	-1.5	3.5
Indonesia[4]	5.0	5.0	5.7	5.5	6.3	6.1	4.2	4.2	4.3	5.4
Lao PDR	6.7	7.0	6.8	8.7	7.8	7.2	—	—	5.5	5.7
Malaysia[5]	5.6	6.8	5.3	5.8	6.2	4.6	-5.1	-1.2	-2.5	4.5
Myanmar[6]	12.9	13.6	13.6	13.1	11.9	—	—	—	—	—
Philippines[7]	5.1	6.4	5.0	5.3	7.1	3.8	0.7	0.8	1.0	3.3
Thailand	5.1	6.3	4.6	5.1	4.9	2.5	-6.0	-2.8	-3.0	3.5
Viet Nam	7.6	7.8	8.5	8.2	8.4	6.2	3.9	5.8	5.0	6.5
Newly Industrialized Economies[2]	**5.0**	**6.0**	**4.8**	**5.7**	**5.7**	**1.8**	**-5.4**	**-0.1**	**-1.3**	**4.2**
Hong Kong, China	5.3	8.5	7.1	7.0	6.4	2.4	-5.7	-2.4	-3.0	3.5
Korea, Rep. of	5.2	4.6	4.0	5.2	5.1	2.2	-3.2	0.9	0.2	4.6
Singapore	6.0	9.3	7.3	8.4	7.8	1.1	-6.4	0.6	-2.0	4.5
Taipei,China	4.4	6.2	4.7	5.4	6.0	0.7	-9.9	-1.3	-3.0	3.5
China, People's Rep. of	10.1	10.1	10.4	11.6	13.0	9.0	7.0	8.9	8.2	8.9
Japan	1.7	2.7	1.9	2.0	2.4	-1.2	-7.4	-5.1	-5.8	1.2
US	2.9	3.6	3.1	2.7	2.1	0.4	-3.6	-2.5	-2.4	2.0
eurozone	2.1	2.1	1.7	3.0	2.7	0.6	-5.5	-3.9	-4.3	0.8

FY = fiscal year, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, US = United States, y-o-y= year-on-year.
— = not available.
[1]Developing Asia refers to the 44 developing member countries (DMCs) of the Asian Development Bank. [2]Aggregates are weighted according to gross national income levels (atlas method, current $) from the World Bank's World Development Indicators. [3]Excludes Myanmar for all years as weights are unavailable. Quarterly figures exclude Brunei Darussalam, Cambodia, Lao PDR, and Myanmar for which quarterly data is not available. [4]GDP growth rates from 1999–2000 are based on 1993 prices, while growth rates from 2001 onward are based on 2000 prices. [5]Growth rates from 1999–2000 are based on 1987 prices, while growth rates from 2001 onward are based on 2000 prices. [6]For FY April–March. [7]Figures for 2004–2006 are not linked to the GDP figures prior to 2003 due to National Statistics Office revisions of sectoral estimates.

Source: ADB, Eurostat website (eurozone), Economic and Social Research Institute (Japan), Bureau of Economic Analysis (US), and CEIC.

Figure 64a: Gross Domestic Product—Selected Economies (y-o-y growth, %)

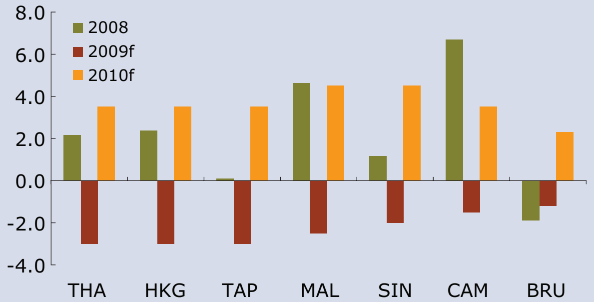
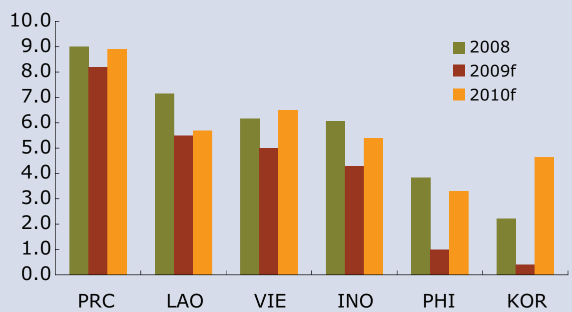


Figure 64b: Gross Domestic Product—Selected Economies (y-o-y growth, %)



BRU = Brunei Darussalam, CAM = Cambodia, PRC = People's Republic of China, HKG = Hong Kong, China, INO = Indonesia, KOR = Republic of Korea, LAO = Lao People's Democratic Republic, MAL = Malaysia, PHI = Philippines, SIN = Singapore, TAP = Taipei,China, THA = Thailand, VIE = Viet Nam, f = forecasts, y-o-y = year-on-year.

Source: Asian Development Bank.

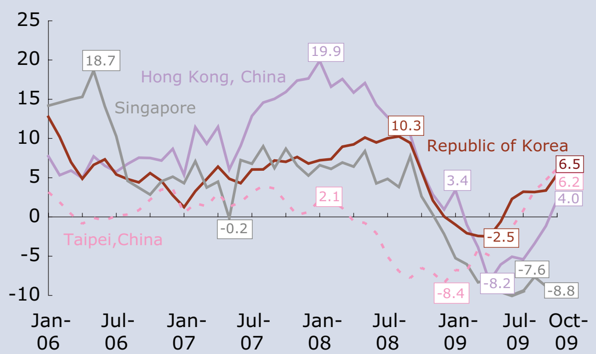
Economic growth in the People's Republic of China is expected to accelerate to 8.9% in 2010, supported by massive fiscal stimulus and a quicker-than-expected global turnaround.

While fiscal stimulus has boosted both public and private investment, private investors have remained cautious and are waiting to see if external demand is recovering. The slump in global trade has badly affected exports. However, the pace of contraction has been slowing since May 2009. Industrial production has picked up in recent months, suggesting the recovery is continuing. It is clear that fiscal stimulus has succeeded in restoring domestic demand and in keeping economic growth strong. Furthermore, fiscal stimulus was complemented by a very aggressive monetary stance, which flooded the banking system with liquidity. Broad money (M2) rose 29.4% in the year to October. Authorities will continue fiscal stimulus and maintain an "appropriately" accommodative monetary stance into 2010, which are expected to contribute to the robust growth next year.

The NIEs—badly battered by plummeting global demand—are expected to return to growth in 2010 due to the improving external environment and government stimulus.

The precipitous export decline appears to be over for the NIEs as the export decline reached bottom and has turned the corner toward recovery. Leading indicators such as industrial production have moved back into positive growth and retail sales are improving **(Figure 65)**. Stronger external and domestic demand is expected to drive Korea's GDP to a 4.6% growth rate in 2010. Similarly, the Singapore economy is expected to recover in 2010, growing 4.5%, supported by the global upturn and domestic fiscal stimulus. After an initial sharp contraction, Hong Kong, China's economy is recovering on the back of faster growth in the PRC and fiscal stimulus measures. As a result, Hong Kong, China is expected to show modest growth of 3.5% in 2010. Similarly, Taipei,China, helped

Figure 65: Retail Sales Growth[1]—NIEs (y-o-y, %)



[1]3-month moving average.

Source: OREI staff calculations based on CEIC data.

by PRC's robust growth, is expected to rebound strongly in 2010, growing by 3.5%.

The four middle-income ASEAN-4 economies—supported by fiscal stimulus and better export demand—should improve substantially in 2010.

All of the ASEAN-4 economies were pummeled by the precipitous drop in external demand, but in terms of overall economic impact, Thailand and Malaysia were hurt the most. With the global economy slowly recovering, both economies are expected to return to growth in 2010, with Malaysia's GDP growing by 4.5% and Thailand's up by 3.5%. Indonesia and the Philippines—less reliant on exports—fared better in 2009. Indonesia's robust growth is expected to continue in 2010, with GDP growth rising to 5.4%. Healthy remittances and government spending are expected to support the Philippine economy which is forecasted to grow by 3.3% in 2010.

The remaining ASEAN countries should also see economic growth return to 2008 levels as the global economic environment improves and export demand rises.

Viet Nam's economy is recovering after bottoming out in the first quarter of 2009. Driven by stronger investment and policy stimuli, GDP growth is forecast to increase by 6.5% in 2010, up from the 5.0% expansion expected in 2009. Cambodia's economy was badly hit by a sharper-than-expected decline in garment exports, construction, and tourism. Growth is, however, projected to recover in 2010 to 3.5% as the recovery in the global economy stimulates demand for garments and an increase in tourism. Economic growth in the Lao Peoples Democratic Republic (Lao PDR) eased in 2009 to 5.5% due to weaker mining activity and construction. However, government spending on infrastructure for the Southeast Asian Games has helped offset some of that decline. Growth is expected to improve in 2010 to 5.7% as the world commodity prices recover. In Brunei Darussalam, which relies heavily on exports of oil and natural gas, growth is expected to contract by 1.2% this year due to lower world demand. GDP is expected to recover in 2010, growing 2.3% fueled by higher global energy demand and petroleum prices.

Despite the improving growth outlook, inflationary pressures should remain subdued in the short-term due to weak demand and a significant negative output gap.

Inflationary pressures appear to be well under control for the moment. While recently showing slight increases, inflation is still expected to remain subdued as economies operate with excess capacity. There exist significant negative output gaps in many economies in the region, as they operate below their potential levels **(Box 1)**. However, the risk of returning inflationary pressure is higher in Viet Nam due to a larger credit growth in 2009. In the medium term, inflation could pick up in line with the general global economic recovery and higher commodity prices.

Current account surpluses are expected to narrow for most emerging East Asian economies, while capital and financial account balances are likely to improve on accelerating capital inflows.

The current account is expected to remain in surplus in 2010—albeit smaller—for most economies in the region, and close to balance in Indonesia, Philippines, and Thailand. After the massive capital outflows during the second half of 2008, financial accounts have been turning positive again in 2009. The financial account balances are expected to rise further in 2010 as investors' risk appetite returns and capital begins to flow once more to the region. Foreign exchange reserves are expected to continue to rise in 2010, as regional authorities may intervene in foreign exchange markets to curb currency appreciation.

Risks to the Outlook

Major downside risks to the outlook include (i) a short-lived recovery in developed economies, (ii) policy errors such as premature policy tightening, (iii) a slower-than-expected pick up in private demand, and (iv) destabilizing capital flows.

While the outlook has brightened and risks are more balanced than they have been for some time, Dubai's debt crisis in late November was a reminder of the bumps on the road to recovery. These existing and emerging problems could hamper and even derail the recovery in emerging East Asia.

The current improvement in external demand for emerging East Asia could falter if the recovery in developed economies turns out to be short-lived.

With the effects of stimulus measures and restocking fading gradually, the real economy and financial sector in developed economies could weaken again. The deleveraging cycle is still in its early years, and if households in developed countries, particularly the US, save more-than-expected to repair their balance sheets, then weaker consumer demand will delay recovery in these economies. Investment demand might not pick up as quickly as desired, as the economic outlook remains uncertain, and skittish financial institutions are unwilling to extend credit to the private sector. Unemployment continues to worsen, with the danger that higher unemployment may become entrenched, which would further dampen economic activity. Hidden, weak asset classes could implode major global banks, which could strain the financial systems again, re-igniting financial stress, particularly with banks struggling to repair balance sheets and recapitalize. In addition, the slide of the US dollar has gained pace in recent months, depressing demand from the US. In the meantime, the effect on exports to Europe caused by an appreciating euro may be offset by a weaker eurozone economy.

Policy errors—such as premature or unduly delayed exits from expansionary policies—could harm emerging East Asia's growth prospects.

As the region continues to recover, there is a dilemma facing policy makers as to when to start reining in stimulus and what the exit strategy should look like. The recovery could falter if policy makers tighten too early, but tightening too late may lead to higher inflation and unsustainable fiscal deficits in the coming years. Timing is critical, yet the consensus is that policy tightening should wait until the recovery is on a firm footing, or the output gap is closed. However, it is difficult to measure the output gap, which may also be smaller than thought, as potential output may have decreased due to the damage done by the global economic crisis (see Box 1). This would mean inflationary risks in the medium term might be higher than currently expected. Policymakers are clearly aware of the danger of tightening too early, and there is also the risk that they would wait too long.

Private demand in ASEAN+3 may not rise sufficiently to sustain the recovery.

Large fiscal stimulus and inventory replenishing have jumpstarted the region's recovery. However, the growth effects of fiscal stimulus are diminishing, unless authorities continue to raise government expenditure and the inventory cycle does not last long. As external demand is expected to remain weak, private demand is important to sustain the region's recovery. Yet, job losses in the region could rise further, which would lower consumption; and smaller corporate earnings and tight credit could slow investment. Moreover, rising public expenditure may crowd out private spending as public services substitute for private spending and public investment competes with private firms for bank loans and other resources. More importantly, it takes time and political will to reform structural factors underlying weaker private demand in the region. Thus, private demand may not rise sufficiently to fill the gap left by gradually waning public support and weak external demand.

A resurgence of volatile capital flows could destabilize growth prospects.

There is ample global liquidity again, as central banks in major economies keep interest rates close to zero and adopt unconventional monetary policy measures to stabilize financial systems and to stimulate economies. Risk appetite is returning, as evident by rising share prices across the world and a falling US dollar against the region's currencies. Interest rate differentials between emerging economies in the region and major developed countries are higher than before the crisis. Faster recovery and higher growth in the region should attract more capital inflows, and limited exchange rate flexibility in the region could also encourage increased capital inflows speculating on anticipated appreciation. Yet capital flows could destabilize the real economy, posing major challenges for macroeconomic managers. The links between capital flows, credit expansion—lending booms with capital account liberalization—and adverse macroeconomic consequences are not new to emerging East Asia. Moreover, changes in risk sentiment might lead to sudden capital flow reversals.

Policy Issues

Emerging East Asia now faces the challenge of converting economic rebound to sustained recovery.

Monetary and fiscal stimulus has helped maintain growth within emerging East Asia. Yet, much needs to be done to ensure the recovery in emerging East Asia is solid. External demand will be fragile in the initial stages of recovery in advanced economies. Thus, within the region's capability, policies should remain accommodative to ensure a stronger foothold by strengthening domestic demand. At the same time, however, authorities should also plan workable exit strategies to unwind policy stimulus.

With the global recovery tentative, monetary policy should remain accommodative where feasible.

After taking into account country-specific limitations, monetary policy should remain accommodative in general to support domestic demand. With inflation low and economic activity gradually accelerating, emerging East Asian central banks should keep policy rates low. However, caution is needed. Some countries, most notably the PRC and Viet Nam, with credit and broad money growing about 30% in 2009, need to keep a watchful eye on monetary conditions. The return of large capital inflows could also pose a challenge, particularly in countries with limited exchange rate flexibility, and as a result, asset prices could surge. There is a growing consensus that monetary policy should "lean" against potential asset bubbles.

Fiscal stimulus must continue, where there is room, to bolster domestic demand.

Fiscal stimulus has clearly supported recovery in emerging East Asia. IMF simulations show that fiscal stimulus accounted from between 1 to 2 percentage points of GDP growth in the first half of 2009.[5] Some economies introduced additional relief measures to boost economic activity since early 2009. But fiscal stimulus only nudges economic growth over time, so authorities need to monitor its effects before making adjustments. In certain economies, there is room for additional fiscal stimulus. However, the stimulus announced thus far implies deficits that have driven bond yields a little higher in recent months. Relatively high interest rates could crowd out private investment, another crucial component to the recovery. Fiscal deficits need to be sustainable during the rebound and beyond. And spending must be done effectively and efficiently.

Stimulus exit strategies must be planned carefully—if done too soon, recovery may be at risk; if too late, fiscal deficits and monetary expansion could become unsustainable and inflationary.

Policymakers should be prepared to pull back on large government intervention to avoid policy distortions and keep a lid on inflationary pressures. Fiscal deficits have to remain large in the near term. But they need to be carefully managed to avoid impeding recovery. Too late, they could create unsustainable policy distortions, both fiscal and monetary. Too early, they could stunt recovery.

Managing capital flows must be done judiciously to ensure external volatility does not disrupt domestic financial markets.

There is no magic solution to effectively manage capital flows or excessive jumps in asset prices.[6] Every policy option has its merits and shortcomings. An appropriate policy package includes currency flexibility, a clear and stable monetary and fiscal policy, and enhanced regulatory and supervisory efforts to prevent asset bubbles. Authorities should also communicate clearly and effectively with market participants, which could affect policy outcomes. Each country will have its own optimum policy mix. And regional cooperation and coordination would also be crucial to manage capital flows.

Emerging East Asia must play a constructive role in reshaping the global economic architecture through its representation in global forums such as G20.

A global crisis requires a global solution. First, it needs to correct global imbalances, and second, it must realign the global financial architecture. Emerging East Asia can contribute by supporting the shift toward greater domestic and regional demand as a source of growth. There remains the challenge of fine-tuning the global reserve system, which needs to better reflect the reality of value. Tightening financial oversight over imprudent market practices is a clarion call, and plugging the gaps of existing financial rules and regulations is essential. Emerging East Asia should work collaboratively to make sure its views are core to the debate.

It is time to take regional cooperation to the next level, in trade, finance, and economic surveillance.

Promoting intraregional trade is critical to sustain emerging Asia's recovery when external demand is low. Regional cooperation can help build intraregional trade, enhanced productivity, and financial stability. For example, a single region-wide free trade agreement may help mitigate the harmful "noodle bowl" effects of different or competing tariffs, standards, and rules, and will also encourage participation from low-income countries and reduce trade-related business costs, particularly for small and medium enterprises. The Chiang-Mai Initiative Multilateralization (CMIM) can be the foundation for a cooperative surveillance and liquidity support mechanism to defend against future financial crises. Strengthening regional surveillance in East Asia is critical to operationalize

[5]IMF. 2009. *Regional Economic Outlook Asia and Pacific*. Washington, DC.

[6]ADB. 2007. Policy Options for Managing Capital Inflows in Emerging East Asia. *Asia Economic Monitor.* Manila.

the CMIM and should complement those undertaken by multilateral organizations **(see *Regional Surveillance for Economic Stability*, page 51)**.

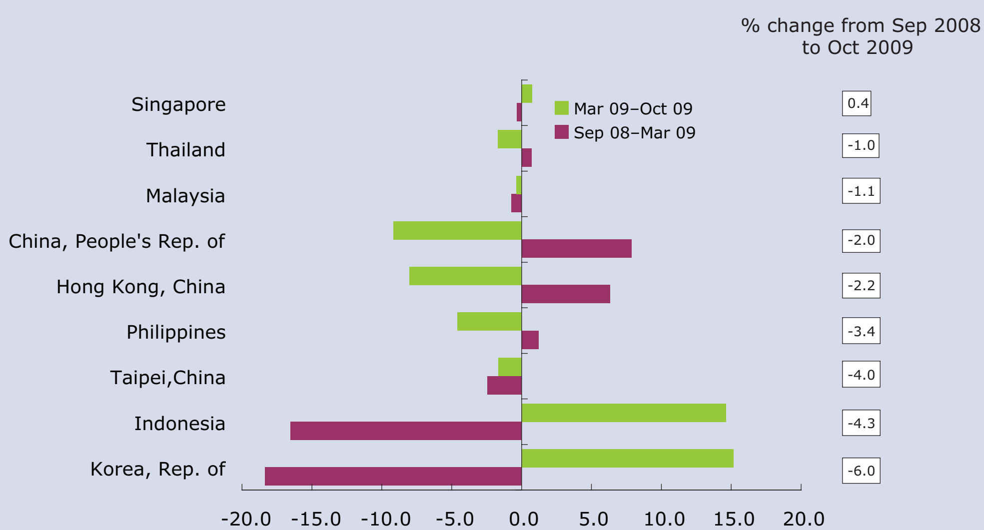
Specifically, better policy coordination on exchange rates will help increase intraregional trade, boost cross-border investment, and promote regional demand.

The region's currencies are under growing appreciation pressures—the result of a faster economic turnaround. In both nominal and real terms, several currencies have gained significant value against their trading partners since March this year, while some others have effectively depreciated as they have tracked US dollar movements **(Figures 66a, 66b)**. Some emerging East Asian central banks have intervened in foreign exchange markets to prevent their currencies from rising too fast—evident from rising foreign exchange reserves. A coordinated regional exchange rate strategy should be explored. Aside from contributing to better macroeconomic management, coordination would bolster intraregional trade and lessen the fear of losing export competitiveness between neighbors. This also supports the process of shifting sources of economic growth toward greater domestic and regional demand.

Rebalancing sources of growth toward greater domestic and regional demand is key to sustaining emerging East Asia's long-term economic prospects.

While the export-led model has contributed to emerging East Asia's impressive growth record over the past few decades, rebalancing in advanced economies makes clear that emerging East Asia can no longer rely on external demand as its primary driver of economic growth. Stronger domestic demand must fill the gap. To do this, authorities should continue deeper, more comprehensive structural reforms while further developing finance.[7] This requires a carefully designed recipe of policy measures. Given the diverse nature and underlying structure of current account positions across emerging East Asia, the

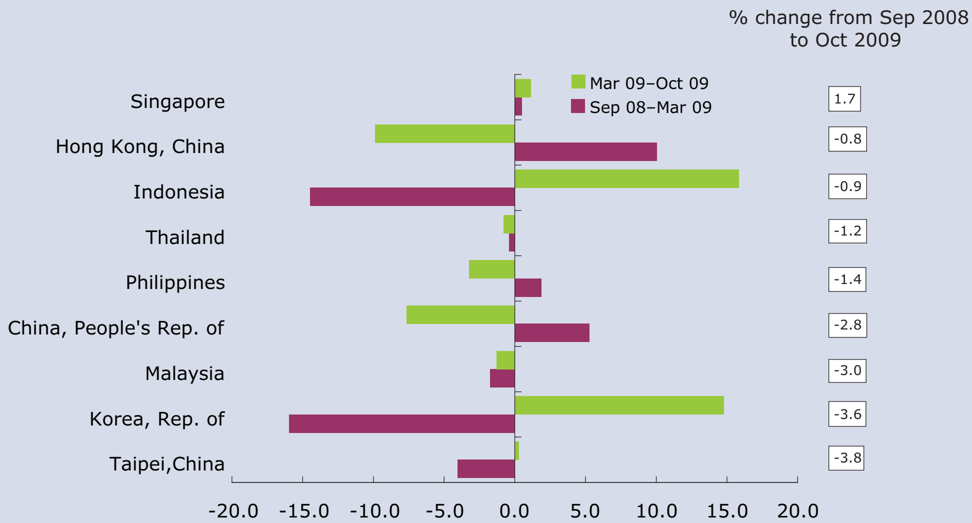
Figure 66a: Change in Nominal Effective Exchange Rate (%)



Source: OREI staff calculations using data from Bank for International Settlements.

[7]ADB. 2009. *Asian Development Outlook 2009*. Manila.

Figure 66b: Change in Real Effective Exchange Rate[1] (%)



[1]Consumer price index (CPI)-based.

Source: OREI staff calculations using data from Bank for International Settlements.

optimal policy mix for rebalancing will necessarily vary by country. It could involve demand-side policies that encourage households to spend more and companies to invest more, as well as supply-side policies that promote small and medium enterprises and service industries catering to domestic demand. Strengthening the foundations of finance could relax borrowing constraints, particularly on households and smaller companies, and facilitate a more efficient allocation of economic resources.

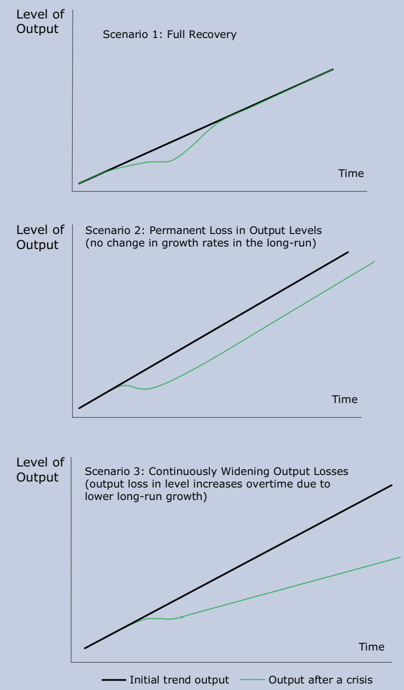
Box 1: Output Gaps and Post-Crisis Policies: What's the Connection?

Recessions and financial crises tend to affect not only the current output but also the longer-term potential output. Estimates of potential output and the implied output gap are important for understanding where a country is in its economic cycle and in guiding policymakers in constructing macroeconomic stabilization measures. It is plain to see how an economic crisis hurts output level and output growth in the short term. However, the magnitude and duration of a crisis—particularly one as deep as the 2008/09 crisis—can make the impact on potential output highly uncertain. As the global economy slowly emerges from recession, knowing an economy's potential output and implied output gap is critical for timing exits from crisis responses and in formulating appropriate policies for the recovery process.

The short-term effect of the crisis on output is often obvious; but little is known about the impact of a crisis on medium-term output performance. Financial crises lead to immediate losses in output through a drop in economic activity, or more specifically, for example, a reduction in investment and a rise in unemployment. However, there is great uncertainty about the effect of a crisis beyond the short-term. Recent studies[1] offer insights into what happens to output and output growth following crises. The findings suggest that output tends to remain depressed for an extended period following financial crises. Careful review of output performance in crisis-affected countries shows that the impact on output is often permanent, although growth tends to eventually return to pre-crisis trend rates.

Depending on the nature of an economic downturn and subsequent policy response, a crisis can alter the trajectory of output in different ways. The pattern of crisis-induced recessions and the subsequent recoveries can be illustrated in three ways **(Figure B1.1)**: (a) a temporary drop in output, (b) a permanent output loss, and (c) a persistently increasing output loss. The first implies that output returns to its pre-crisis trend level and output loss is only temporary. In this case, output growth will have to rise higher than the pre-crisis trend rate during the recovery phase. In the second scenario, the level of output has been permanently lowered compared with the pre-crisis path,

Figure B1.1: Possible Impacts of a Crisis on Output



although output growth recovers to its pre-crisis trend rate. The crisis triggers a shift downward in the path of trend output and the output loss is permanent. It is important to note that in both scenarios, gross domestic product (GDP) growth will still follow a V-shaped recovery. On the other hand, the third scenario implies that output growth never recovers to its pre-crisis trend rate. In this case, the output loss will increase over time, even after the crisis dissipates.

Information on potential output—and the implied output gap—is thus important in building a post-crisis policy framework. Typically, potential output refers to the level of output that is consistent with the maximum sustainable

[1]Several studies have examined the medium-term behavior of output in crisis-affected countries and found that financial crises tend to cause substantial and persistent output losses, although there are significant variations across economies. Some stylized facts about crisis-driven recessions have emerged from these studies: (a) financial crises, especially those involving banking crises, tend to have a negative and persistent effect on potential output [see (i) V. Cerra and S. Saxena. 2005. Did Output Recover from the Asian Crisis? *IMF Staff Papers.* 52(1). pp. 1–23; (ii) D. Furceri and A. Mourougane. 2009. The Effect of Financial Crises on Potential Output: New Empirical Evidence from OECD countries. *OECD Economics Department Working Papers.* No. 699; and (iii) A. Abiad et al. 2009. What's the Damage? Medium-term Output Dynamics After Banking Crises. *IMF Working Paper*]; (b) following financial crises, output does not return to its original trend path on average over the medium-term, although growth rates tend to eventually return to the pre-crisis rates for most economies; (c) the depressed output path tends to result from long-lasting reductions of roughly equal proportion to the employment rate, the capital-to-labor ratio, and total factor productivity (see Abiad et al., 2009); (d) initial conditions and policy responses have a strong influence on the size of the output loss.

Box 1 continued

employment or "the maximum sustainable level of output."[2] The deviation of actual output from its potential is the output gap. It is frequently used to indicate where an economy is in its economic cycle and how deep the crisis effect has been. However, the concept of potential output is illusive. By definition, potential output—the maximum sustainable level of output—is not directly observable. Therefore, measuring potential output is fraught with difficulties even in normal times. A crisis increases the uncertainty surrounding the estimation even more.

There is a noticeable drop in trend output in the wake of the current crisis, yet its impact on potential output growth appears smaller on average than during the 1997/98 Asian financial crisis. A variety of methodologies exist for estimating potential output. And country specific factors and methodological differences can lead to large variations in estimates of the crisis impact on potential output. A relatively simple way of estimating potential output growth (or trend output growth) uses the Hodrick-Prescott (HP) filter **(Table B1)**.[3] The potential output for the current crisis period has been estimated using ADB forecasts for 2009–2010 economic growth. The estimated results suggest a noticeable drop in potential output growth in the wake of both 1997/98 and 2008/09 crises. During the 2008/09 crisis,

[2]F. Mishkin. 2007. Estimating Potential Output. Speech at the Conference on Price Measurement for Monetary Policy. Federal Reserve Bank of Dallas. Texas. 24 May.

[3]The Hodrick-Prescott filter is a statistical tool used to obtain a smoothed non-linear representation of a time series. Robert J. Hodrick and Edward C. Prescott first applied this smoothing method to economics, especially in real business cycle theory in 1982.

Table B1: Potential Output Growth Rates[1] (%)

	1985Q1–1989Q4	1990Q1–1994Q4	1995Q1–1997Q2	1997Q3–1999Q4	1997/1998 crisis reduction in potential growth	2000Q1–2004Q4	2005Q1–2007Q4	2008Q1–2009Q2	2008/2009 crisis reduction in potential growth
	(1)	(2)	(3)	(4)	(5)=(3)-(4)	(6)	(7)	(8)	(9)=(7)-(8)
China, People's Republic of	9.6	10.7	10.2	8.5	**1.7**	9.4	10.8	9.7	1.1
Hong Kong, China	7.4	5.3	3.0	1.7	**1.3**	4.0	5.1	2.7	2.4
Indonesia	7.2	8.1	4.1	0.4	**3.7**	3.5	5.7	5.5	0.2
Korea, Republic of	9.3	7.8	5.5	4.3	**1.3**	5.0	3.9	2.5	1.4
Malaysia	5.9	9.6	6.9	3.8	**3.0**	4.9	5.0	3.3	1.8
Philippines	1.8	2.9	3.8	3.4	**0.4**	4.5	5.1	4.1	1.0
Singapore	7.1	9.2	7.5	5.1	**2.4**	5.1	5.6	2.6	3.0
Taipei,China	9.0	7.4	6.3	5.0	**1.4**	3.9	3.4	1.2	2.2
Thailand	9.2	9.1	3.5	0.5	**3.0**	4.3	4.4	2.3	2.1
Memo									
Europe[2]	2.9	1.9	2.3	2.7	**-0.5**	2.2	1.5	0.2	1.3
Japan	4.9	2.5	1.0	0.6	**0.5**	1.3	1.1	-0.5	1.6
United States	3.5	2.6	3.7	3.9	**-0.2**	2.9	2.0	0.8	1.2

[1]Each period uses average year-on-year growth rates. [2]Includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom.

Source: OREI staff calculations estimated using HP filter method. Gross domestic product (GDP) data series have been constructed for the period from 1980Q1 to 2010Q4 to estimate the HP filtered trend growth. GDP data from 1980Q1 to 2009Q2 was sourced from Oxford Economics. Figures from 2009Q3 to 2010Q4 are derived based on the quarterly pattern of Oxford Economics forecasts using the annual GDP growth rate forecasts from the Asian Development Outlook Update 2009. Data available upon request.

Hong Kong, China; Singapore; and Taipei,China show the largest drop in potential output growth in emerging East Asia. This may be due to their large dependence on exports and capital flows. Possibly because the crisis originated elsewhere, most of the rest of the region was relatively less affected than in 1997/98.

Although output gaps associated with the current crisis are not as large as those from the 1997/98 Asian financial crisis, the more open economies seem to have been hit harder reflecting the global nature of the current crisis. Large, negative output gaps tend to follow crises **(Figure B1.2)**. During the current crisis, Hong Kong, China; Singapore; and Taipei,China suffered large negative output gaps. Their openness—with their financial markets closely tied to the global market—made these economies subject to a sharp contraction in external demand and a reversal in capital flows in the wake of the crisis. The Republic of Korea, Malaysia, and Thailand followed closely as a group after the small newly industrialized economies (NIEs). While significantly affected by the global crisis, their economies have managed to recover rapidly on the back of strong economic fundamentals and relatively sound external positions. The People's Republic of China (PRC), Indonesia, and the Philippines seem relatively less affected. The current output gaps are not as wide as those following the 1997/98 crisis for most of emerging East Asia. Indeed, the negative output gap is much more visible in Europe, Japan, and the United States.

Careful monitoring of output gaps is important to avoid the risk of a mistimed exit from policy stimulus. The level of GDP relative to its potential has important implications for inflationary pressures on an economy. As such, monetary policy decisions factor in the output gap such as in the Taylor rule[4] or in an inflation-targeting framework. The size and sign of the output gap also provide a good indicator of an economy's cyclical position, which is an important element in estimating the "structural fiscal balance." Conceptually, the structural fiscal balance is a non-cyclical component of the fiscal balance and an important gauge for assessing fiscal stance. The swift policy responses this time around have been moderately successful—as GDP growth was generally higher in the second quarter of 2009 compared with the first quarter. However, fiscal policy has to be consolidated and monetary policy tightened in due course, otherwise the recovery can be snuffed out by inflationary pressures. Output gaps can be a useful guide in timing an exit strategy. For the majority of the region's economies, the forecast-adjusted simple HP-filtered estimates suggest that output gaps remain negative. Although a declining trend is detected, a negative output gap suggests that talk of any exit strategy remains premature. The exceptions are in the PRC and Indonesia, where output gaps are becoming positive.

[4]Taylor's rule—taking its name from John Taylor, who proposed the rule in 1993—is designed to provide "policy recommendations" for central bankers in setting of short-term interest rates as economic conditions change. The goal is to achieve economic stabilization while maintaining long-term price stability. Taylor's rule states that the "real" short-term interest rate (that is, the interest rate adjusted for inflation) should be determined according to three factors: (1) where actual inflation is relative to the targeted central bank level, (2) how far economic activity is above or below its "full employment" level, and (3) what level of the short-term interest rate is consistent with full employment (see "What is Taylor's Rule and What Does It Say About Federal Reserve Monetary Policy?" Federal Reserve Bank of San Francisco).

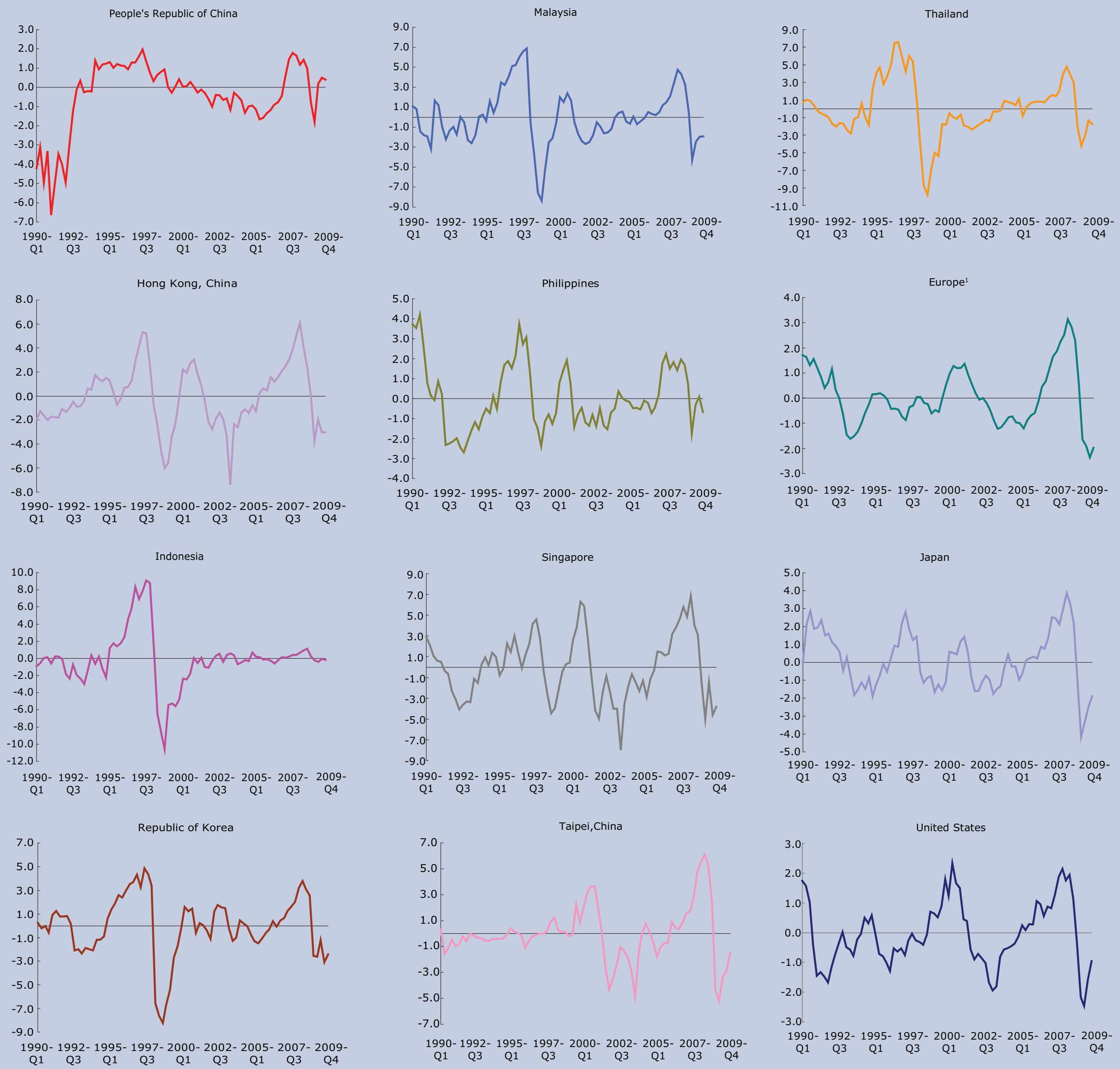
Well-implemented structural reforms and corporate restructuring can enhance productivity, eventually lifting potential output even higher than its original path. *A priori*, the impact of a crisis on potential output is uncertain; hence it is important to investigate the sources of the decline in output following a crisis. Although it is very difficult to determine the path of potential output in the event of a crisis, identifying the sources of the output loss—for example, a temporary drop in the investment rate or a decline in productivity—has important implications for the output gap and the appropriate policy responses. If the output loss is largely associated with the output gap—a temporary deviation from potential output—stabilization policies would be sufficient. However, if the loss is induced from a change in potential output, the appropriate policy response would require more fundamental reforms that can address the underlying structural problems.[5]

Emerging East Asia's policy-makers could institute more structural measures to counter the permanent effects of the crisis on output. The estimated results using the forecast-adjusted simple HP filter suggest a sharp drop in potential output as a result of the crisis. This means the crisis could

[5]V. Cerra and S. Saxena. 2005. Did Output Recover from the Asian Crisis? *IMF Staff Papers.* 52(1). pp. 1–23.

Box 1 continued

Figure B1.2: Output Gap (% of actual output)



[1]Includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom.

Source: OREI staff calculations estimated using HP filter method. Gross domestic product (GDP) data series have been constructed for the period from 1980Q1 to 2010Q4 to estimate the HP filtered trend growth. GDP data from 1980Q1 to 2009Q2 was sourced from Oxford Economics. Figures from 2009Q3 to 2010Q4 are derived based on the quarterly pattern of Oxford Economics forecasts using the annual GDP growth rate forecasts from the Asian Development Outlook Update 2009. Data available upon request.

lead to either the second or third scenario, rather than the first—with only a temporary drop in output. This makes further structural reforms a priority. A major policy consideration is how to lift potential output to minimize medium-term output losses while sustaining recovery momentum. Economies that seized the opportunity the 1997/98 crisis provided for more comprehensive reforms were seen to grow faster and achieved higher potential output even after the crisis. Necessary structural reforms are country-specific, while many structural policies are medium-term in nature (for example, competition policy, labor market reform, financial development, and research and development).

Regional Surveillance for Economic Stability[8]

Regional Surveillance for Economic Stability

The rapid spread of the 1997/98 Asian financial crisis across much of emerging East Asia brought home the need for greater regional economic cooperation.

Following the 1997/98 Asian financial crisis, East Asia launched several initiatives to move regional cooperation forward, particularly for early detection and management of financial and macroeconomic vulnerabilities, to ensure economic stability. Three key initiatives were undertaken by the finance ministers of ASEAN+3[9] to promote regional financial cooperation:

- Introduction of a regional economic review and policy dialogue process (ASEAN+3 ERPD);
- Establishment of a regional reserve pooling arrangement, the Chiang Mai Initiative (CMI); and
- Development of local-currency bond markets through the Asian Bond Markets Initiative (ABMI).

The ASEAN+3 ERPD and the CMI were both launched by the ASEAN+3 Finance Ministers in May 2000, while the ABMI was launched 3 years later. All three are inter-related and were designed to address weaknesses behind the Asian financial crisis and to either prevent a recurrence or better manage future crisis effects.

The creation of ASEAN+3 and the major initiatives undertaken since the crisis were done with an eye on future crisis prevention and management to ensure economic stability.

In this special section on regional surveillance in East Asia, we focus on the ASEAN+3 ERPD and CMI and how each has developed, interacted, and will likely evolve in the future.[10]

The analysis addresses the following questions:

(i) What is surveillance?

(ii) Why "regional" surveillance?

(iii) How is regional surveillance currently carried out in East Asia?

(iv) How should an effective regional surveillance mechanism be designed?

(v) How should regional surveillance in East Asia be strengthened?, and

(vi) What role has ADB played—and what is its future role—as regional surveillance deepens?

What is Surveillance?

"Surveillance" is often used in the context of economic monitoring; there is no universally agreed definition.

The first modern era example of surveillance of the international monetary system occurred in

[8]Parts of this section draw upon a background paper prepared by Shinji Takagi of Osaka University.

[9]ASEAN+3 comprises the 10 members of the Association of South-east Asian Nations (Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Sin-gapore, Thailand, and Viet Nam) plus the People's Republic of China, Japan, and Republic of Korea.

[10]Although the development of local currency bond markets reduces crisis risk by minimizing double (currency and maturity) mismatch problems related to international borrowing, its objectives are multi-faceted and long term in nature.

the analytical work of the League of Nations. The word "surveillance", however, appeared for the first time in the internal documents of the International Monetary Fund (IMF) in the early 1970s. Surveillance became part of the lexicon of international economics in connection with the Second Amendment of the IMF Articles of Agreement, which came into force in 1978. Article IV establishes obligations for the IMF to "oversee the international monetary system in order to ensure its effective operation" and to "oversee the compliance of each member with its obligations" specified therein (Section 3[a]) as well as to "exercise firm surveillance over the exchange rate policies of its members" (Section 3[b]). The Surveillance Decision of 1977, superseded by the subsequent Surveillance Decision of 2007, held that the surveillance of exchange rate policies encompasses all macroeconomic and macro-critical structural policies that may influence the member country's exchange rate or balance of payments ("external stability" in the language of the 2007 Decision). The definition of surveillance offered by Crow and Thygesen (1999) is more specific: "analysis of, scrutiny over, and advice concerning, countries' economic situations, policies, and prospects."

To make surveillance effective, however, defining its underlying purpose is far more important than precise semantics.

A 1999 study[11] lists the following possible purposes of surveillance: (i) policy advice, (ii) policy coordination and cooperation, (iii) information gathering and dissemination, (iv) technical assistance, and (v) identification of vulnerabilities.

These principles are part and parcel of surveillance activities in East Asia.

In IMF terminology, it has been customary to use "bilateral" and "multilateral" for the two broad categories of surveillance activities.

Bilateral surveillance refers to surveillance over policies of individual countries. Within the IMF, it is typically conducted through periodic Article IV consultations with all member countries. Multilateral surveillance refers to the surveillance of economic links and policy spillovers between countries, taking into account international or regional economic and market developments. It can complement bilateral surveillance by bringing into the analysis global and cross-country perspectives. Within the IMF, multilateral surveillance is most visibly apparent through publication of the semiannual *World Economic Outlook* and *Global Financial Stability Report*. Multilateral surveillance was in fact first developed at the Organisation for Economic Co-operation and Development (OECD) in the 1970s, at a time when the IMF was preoccupied almost exclusively with bilateral surveillance.

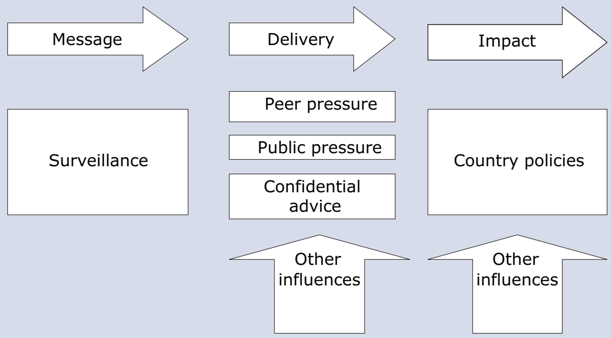
Still, "regional" surveillance is a fairly new concept that is increasingly gaining in importance.

The term "regional surveillance" now appears in various IMF documents. For example, in summarizing the Executive Board review of surveillance in 2008, the IMF's official statement states that one of its core activities is "to monitor global, regional, and national economies through bilateral, regional, and multilateral surveillance."[12] The IMF's area departments are currently producing regional economic outlooks twice a year as part of their regional surveillance activities. In this definition, regional surveillance covers a geographically defined group of countries or a regional monetary union, while multilateral surveillance applies to the world economy as a whole. But, in the context of East Asia, this is

[11]J. Crow, R. Arriazu and N. Thygesen. 1999. *External Evaluation of IMF Surveillance, Report by a Group of Independent Experts.* Washington DC: International Monetary Fund.

[12]International Monetary Fund. 2008. IMF Executive Board Reviews the Fund's Surveillance. *Public Information Notice* No. 08/133. 11 October. http://www.imf.org/external/np/sec/pa/2008/pn08133.htm

Figure 67: The Results Chain of Surveillance



not the only sense in which the term regional surveillance can be used. Regional surveillance could also mean surveillance conducted by a regional body, whether it is bilateral, multilateral, or even "regional".

The process of surveillance can be better understood when viewed as a results chain of three stages.

A surveillance mechanism produces results in three stages **(Figure 67)**. In the first stage, it produces a message—for example, a particular country's vulnerability to crisis or the need for a particular country to make policy adjustments. In the second stage, this message is relayed to the relevant audience using one or more of three available channels: (i) peer review or peer pressure involving high-level government officials, (ii) public pressure through the markets or the general public (elected officials or the electorate itself in a democracy), and (iii) quiet persuasion through a confidential advisor to the government. Although the IMF has traditionally relied on supplying confidential advice, it has increasingly been utilizing public pressure by publishing surveillance documents more frequently. In contrast, OECD surveillance has relied more on peer pressure by structuring surveillance as a peer review process (Thygesen 2008).[13] Finally, in the third stage, the message affects policymaking and leads to appropriate policy adjustments. This framework can be useful in guiding the design of an effective surveillance mechanism for East Asia (see page 56).

Why "Regional" Surveillance?

Surveillance assumes an added dimension as the region's economic integration continues to deepen.

As economic integration deepens, East Asia is faced with an increasing need for a cooperative mechanism to identify vulnerabilities and help prevent crises from occurring. It will also need a more effective framework of regional policy dialogue and cooperation to deal with policy spillovers, both to mitigate political tensions and to find scope for collective action. Surveillance is the foundation upon which such cooperative schemes can be built.

Regional surveillance can help fill existing gaps in the IMF's overall surveillance mechanism.

Although the IMF has started to do some regional surveillance, it is clear that its main focus remains on global and national perspectives. Gaps remain, however, and strengthening regional surveillance is needed to complement bilateral and multilateral efforts. In this context, a regional surveillance mechanism implemented by an independent regional surveillance unit can add value through its evaluation mechanism. That is, there could be benefits from shifting from a "top-down" to a "bottom-up" approach to regional surveillance, with a regional institution playing the central role. This would ensure that there are stronger channels of communication that run not just "top-down" from global analysis to national and regional policymakers, but also bottom up by

[13] N. Thygesen. 2008. Comparative Aspects of Peer Reviews: OECD, IMF and the European Union. In *Shaping Policy Reform and Peer Review in Southeast Asia*: *Integrating Economies Amid Diversity*. Paris: Organisation for Economic Co-operation and Development.

drawing on national and regional monitoring in global surveillance and dialogue processes.

Regional surveillance by an objective regional institution should create a more effective crisis prevention mechanism.

Such a regional set-up would be distinct from the organizational structure of IMF surveillance, in which its Board of Executive Directors is the primary audience. In fact, peer pressure within a regional organizational structure is where regional surveillance potentially has the greatest advantage over IMF surveillance. The IMF is a global organization with 185 member countries represented by 24 resident Executive Directors. By necessity, not all Executive Directors represent their own countries, and their non-ministerial status limits their effectiveness as a peer pressure group or for national policymaking. Retaining the existing institutional setup and reporting channels for regional surveillance will preserve one of the greatest advantages of having an independent surveillance mechanism for East Asia.

Effective economic governance requires surveillance at the national, regional, and global level.

In an increasingly globalized world, surveillance really needs to be done at three distinct levels—national, regional, and global. Global forums can identify issues that can lead to systemic failure; regional dialogue can forge common policies to ward off contagion; while national surveillance identifies specific vulnerabilities to individual economies. Taken together, this can become an effective three-tiered filtering mechanism for identifying emerging policy issues. Moreover, should an emerging vulnerability slip through one filter, there is a good chance it will be spotted at one of the remaining two surveillance levels.

Most importantly, an effective regional surveillance mechanism can help bring East Asian policy dialogue—and cooperation in general—to the next level.

Ultimately, effective regional surveillance opens the door to greater regional policy coordination. An objective surveillance mechanism can identify emerging economic vulnerabilities and suggest ways of overcoming them. This is true whether in consolidating bilateral trade issues, coordinating monetary and fiscal responses to regional or global trends, or in establishing entirely new coordination efforts—for example, in constructing a regional exchange rate monitoring system. The bottom line is that good surveillance deepens the dialogue process, allows for a collegial approach to problem resolution, and acts as the foundation for building viable regional institutions.

With the multilateralization of the Chiang Mai Initiative, the need for effective regional surveillance in East Asia has taken on a more immediate, yet evolving, purpose.

Prior to its multilateralization, the CMI—lacking a dedicated surveillance mechanism—required that financing beyond 20% of the bilateral swap facility be available only to a country under an IMF-supported program. The new expanded, multilateral CMI requires that an effective surveillance mechanism be put in place. This allows the CMI to rely more on its own assessment to make lending decisions—including both the amount and any conditionality—without creating moral hazard or the concern that the problems leading to balance of payments difficulties may be fundamental in nature. Once the new regional surveillance unit is fully operational, it is likely that the percentage of the swap facility that requires an IMF-supported program will be reviewed.

How is regional surveillance currently carried out in East Asia?

Regional surveillance is not new to East Asia; immediately after the Asian financial crisis, the ASEAN Surveillance Process was established.

Established in the second half of 1998, the ASEAN Surveillance Process (ASP) was designed to strengthen policy dialogue and policymaking capacity over monetary, fiscal, and financial stability issues through information exchange, peer review, and policy recommendations. It brought ASEAN finance ministers together twice a year in a new forum for strengthening dialogue. The ASEAN Surveillance Coordinating Unit (ASCU) was established within the ASEAN Secretariat (ASEC) to coordinate the surveillance process. The ASCU, with input from respective national units, prepares semiannual ASEAN Surveillance Reports, which analyze recent global and national developments, identify emerging vulnerabilities, and raise relevant policy issues for consideration at ASEAN Finance Ministers meetings. A key feature of the ASP has been the use of peer review and peer pressure to elicit desirable policy changes across member countries. Nevertheless, there remains room for improvement, and the effectiveness of the process could be increased, for instance, by improving the timeliness and quality of data provided.[14]

Once ASEAN+3 came into being, the ASEAN+3 Economic Review and Policy Dialogue (ERPD) process was established in conjunction with the initial CMI reserve pooling arrangement.

The ASEAN+3 ERPD was introduced, along with the CMI in May 2002, as a regional financing arrangement to supplement existing international facilities. It was designed to assist in the prevention and management of financial crises, through the early detection of vulnerabilities and the swift implementation of remedial policy measures. The mechanism eases information sharing, promotes dialogue among policymakers, and fosters collaboration on financial, monetary, and fiscal issues of common interest. The ASEAN+3 ERPD process (i) assesses global, regional, and national economic conditions; (ii) monitors regional capital flows and currency markets; (iii) analyzes macroeconomic and financial risks; (iv) looks at how to strengthen banking and financial system conditions; and (v) gives East Asia a unified voice in the reform of the international financial system. Steps have been taken to strengthen cooperation in these areas, including the establishment of expert groups.

Economic surveillance through the ASEAN+3 ERPD is carried out in two stages:

- ***The first stage is conducted at the ASEAN+3 Finance and Central Bank Deputies' Meeting (AFDM+3) held bi-annually in April and November***. The AFDM+3 is an unofficial forum that lasts a day and a half. The ASEAN+3 ERPD session, which typically lasts about half a day, begins with presentations on the global and regional economic outlook by the IMF and ADB.[15] Outside experts are also invited to participate and discuss emerging or urgent issues as the need arises. Surveillance reports are prepared by participating countries following predetermined templates. All surveillance reports and the minutes of discussions are kept confidential.

- ***The second stage of the review is conducted at the ASEAN+3 Finance Ministers' Meeting (AFMM+3) held once a year on the sidelines of the ADB Annual Meeting***. This stage of the review focuses more on issues related to policy. The ADB President takes part in these discussions and discusses regional economic developments and policy issues with the ministers.

[14] W. Manupipatpong. 2002. The ASEAN Surveillance Process and the East Asian Monetary Fund. *ASEAN Economic Bulletin*.

[15] Representatives from the IMF were invited to the AFDM+3 beginning November 2005.

The AFDM+3 surveillance stage includes a peer review, allowing participating countries the opportunity to exchange views and discuss corrective policies.

In practice, however, the deputies typically refrain from assessing the economic developments and policies of other countries and in recommending policy adjustments. As such, the ASEAN+3 ERPD largely remains a mechanism for exchanging information on economic developments and policies (Murase, 2007; Kawai and Houser, 2008; Jung, 2008).[16] The lack of a permanent secretariat has further limited its usefulness at this stage.

How should an effective regional surveillance mechanism be designed?

At least five principles can help guide the design of an effective regional surveillance mechanism for East Asia.

Following the framework presented in Figure 67, at least five principles can help guide the design of an effective regional surveillance mechanism for East Asia. The first three deal with ensuring a high-quality message (the first stage of surveillance), while the last two principles deal with getting the message across and making its impact more effective (the second and third stages).

The purpose of surveillance needs to be clearly defined.

Unless the purpose of surveillance is clearly defined, no focused message can be produced from any surveillance mechanism. Among the possible objectives of surveillance, "policy coordination and cooperation and identification of vulnerabilities" appear most relevant for East Asia. There is no need to duplicate efforts of other institutions in providing policy advice, information gathering and dissemination, or technical assistance. The overriding goal should be to analyze policy interdependence and spillovers, with a view to identifying crisis vulnerabilities and the scope for collective action. The focus should be on providing the regional equivalent of IMF multilateral surveillance. This should include the due diligence of assessing a potential borrowing country's capacity to pay, as well as defining the conditions that should be attached to any credit line from the multilateralized CMI.

Require an independent unit to conduct regional surveillance in close coordination with other multilateral and regional institutions.

The organizational structure of East Asia's regional surveillance mechanism should encourage coordination with other multilateral and regional organizations that conduct surveillance. At the multilateral level, the institution needs to work most closely with the IMF, while ensuring complementarity and avoiding duplication. At the regional level, it will likely continue to work closely with ADB, which has supported the evolving surveillance process since the Asian financial crisis through the ASEAN+3 ERPD, technical assistance, and training programs. It is best to have a single organizational unit in charge of all surveillance activities, as has been proposed at the AFMM+3 in Bali in May 2009. A single individual should also be made ultimately accountable for all surveillance outputs at the technical level. Given the small membership of the organization and the focus on one or two specific purposes, it should be easy to achieve a compact organizational structure that satisfies these principles.

Use objective indicators as data for analysis.

Model-based economic analysis allows an independent surveillance mechanism or unit to take a position on politically sensitive but critical

[16](i) T. Murase. 2007. Economic Surveillance in East Asia and Prospective Issues. *The Kyoto Economic Review* 76(1). pp 67–101. (ii) M. Kawai and C. Houser. 2008. Evolving ASEAN+3 ERPD: Towards Peer Reviews or Due Diligence? In *Shaping Policy Reform and Peer Review in Southeast Asia: Integrating Economies amid Diversity.* Paris: Organisation for Economic Co-operation and Development; and (iii) J-Y. Jung. 2008. Regional Financial Cooperation in Asia: Challenges and Path to Development. In *Regional Financial Integration in Asia: Present and Future*. BIS Papers No 42. Basel: Bank for International Settlements.

issues and put them on the table for discussion. This is especially true when surveillance is used to identify crisis vulnerability. To aid the process, it is important to develop an analytical framework to assess critical macroeconomic or financial issues. For instance, the IMF uses a Behavioral Equilibrium Exchange Rate model to assess the level of exchange rates and to provide policy advice. Also, this model-based approach has been used in bilateral surveillance to overcome resistance by area departments to sensitive but critical issues of exchange rates. Similarly, a country's vulnerability to impending crisis is certainly a sensitive issue, and this is where an objective approach that allows for independent verification can be extremely useful. The use of an early warning system (EWS) to signal crisis vulnerabilities is one such approach—ADB has developed an EWS for use by developing member countries.

Design the governance structure to ensure independence.

Independence ensures candor and impartiality in surveillance, especially when the identification of crisis vulnerability is involved. There must be both the right incentive and protection to encourage the staff of the independent surveillance unit to be candid in raising issues that authorities may find uncomfortable discussing openly.

Direct contact with senior policymakers is essential.

Regional surveillance must aim to reach senior policymakers directly by using periodic forums of finance ministers and central bank governors, or better still, heads of state or governments. It is in such forums that the impact of peer pressure can be maximized. There is no reason to create a resident executive board of mid-level officials for an East Asian surveillance unit when appropriate forums for dialogue already exist.

How should regional surveillance in East Asia be strengthened?

An effective regional surveillance system in East Asia is essential for the successful establishment of a multilateralized CMI.

Surveillance is a necessary component of any mutual financial assistance facility. Unconditional financing when there is a need for policy correction could create moral hazard, both for potential borrowers and for international investors, even when it does not adversely affect the prospect of timely repayment. It is only through surveillance that the appropriate combination of financing and adjustment can be identified in a lending program. At the AFMM+3 held in Istanbul in May 2005, finance ministers agreed to integrate the ASEAN+3 ERPD with the CMI as part of efforts to transform the CMI into a centrally-administered facility—independent from the IMF for surveillance and policymaking decisions. Follow-up agreements to explore ways to further strengthen surveillance capacity were adopted subsequently **(Table 13)**.

Multilateralization requires that monitoring and surveillance be enhanced and expanded.

In a multilateral setting, monitoring and surveillance need to be enhanced to include national policies as well as regional and global issues that can affect external stability and borrowing countries' capacity to meet repayment conditions of lending countries. This requires enhancing the scope and methodology of existing assessments, and improving the institutional mechanism for surveillance. The recent decision by AFMM+3 to establish an independent surveillance unit within East Asia recognizes that these existing processes need to be further strengthened.[17]

[17]Details of the CMI and its multilateralization are provided in Box 3 of the July 2009 issue of the *Asia Economic Monitor.*

Table 13: Key Agreements by AFMM+3 on Surveillance

	Date	Place	Key Decisions and Agreements Relating to Surveillance
1st	30 Apr 1999	Manila	• No statement issued
2nd	6 May 2000	Chiang Mai	• Strengthen policy dialogues and regional co-operation activities in, among others, the areas of capital flow monitoring, self-help and support mechanisms, and international financial reforms • Use the ASEAN+3 framework to facilitate the exchange of consistent and timely data and information on capital flows • Strengthen the existing co-operative frameworks among monetary authorities through the CMI
3rd	25 Sep 2000	Prague	• No statement issued
4th	9 May 2001	Honolulu	• Update the capital flow situation in each member country and exchange data on capital flows bilaterally among members on a voluntary basis • Review the current main principles of the bilateral swap arrangement under the CMI in the next three years • Establish a study group to examine ways of enhancing the effectiveness of their economic reviews and policy dialogues • Continue to exchange views on the early warning systems (EWS) and work towards developing appropriate EWS models for East Asia
5th	10 May 2002	Shanghai	• No significant decision or agreement
6th	7 Aug 2003	Makati	• Strengthen the current peer review process by implementing the recommendations made by the ASEAN+3 Study Group to Examine Ways of Enhancing the Effectiveness of Economic Reviews and Policy Dialogue • Intensify efforts to develop regional bond markets through the Asian Bond Markets Initiative (ABMI)
7th	15 May 2004	Jeju	• Undertake further review of the CMI (known as the "second phase of the CMI review") to explore ways of enhancing its effectiveness
8th	4 May 2005	Istanbul	• Take measures to enhance effectiveness of CMI through: (i) integration and enhancement of ASEAN+3 economic surveillance into the CMI framework; (ii) clear definition of the swap activation process and the adoption of a collective decision-making mechanism (as a first step of multilateralization); (iii) a significant increase in the size of swaps; and (iv) improvement of the drawdown mechanism (the size of swaps to be withdrawn without the IMF-supported programme to be increased from the current 10% to 20%)
9th	4 May 2006	Hyderabad	• Successfully complete the strengthening of the regional liquidity support network initiated in Jeju in May 2004 • Adopt the collective decision-making procedure for CMI swap activation • Launch the Group of Experts (GOE) and the Technical Working Group on Economic and Financial Monitoring (ETWG) to explore ways of further strengthening surveillance capacity in East Asia
10th	5 May 2007	Kyoto	• Agreement in principle on a self-managed reserve pooling arrangement governed by a single contractual agreement as an appropriate form of CMI multilateralization • Agreement to explore ways to link the ERPD, the GOE and the ETWG to strengthen surveillance • Task the deputies to carry out further in-depth studies on the key elements of CMI multilateralization including surveillance, reserve eligibility, commitment size, borrowing quota, and activation mechanism.
11th	4 May 2008	Madrid	• Agreement that CMI Multilateralization will be underpinned by rigorous principles to govern its key aspects, including economic surveillance • Agreement to implement measures to strengthen the ERPD, such as increasing the frequency of the dialogues and developing a standardized format for the provision of necessary information and data • Agreement to explore the role of international financial institutions in providing useful information when necessary as reference
12th	3 May 2009	Bali	• Agreement on the governing mechanisms and implementation plan for the CMI multilateralization (CMIM) • Agreement to establish an independent regional surveillance unit • Task the ASEAN Secretariat and the ADB to work out an interim surveillance agreement

Source: M. Kawai and C. Houser. 2008. Evolving ASEAN+3 ERPD: Towards Peer Reviews or Due Diligence? In *Shaping Policy Reform and Peer Review in Southeast Asia: Integrating Economies amid Diversity.* Paris: Organisation for Economic Co-operation and Development, and Joint Ministerial Statements of ASEAN+3 Finance Ministers' Meetings. May 2008–May 2009. http://www.aseansec.org.

For the ASEAN+3 ERPD to grow stronger, it will need enhanced capacity to conduct surveillance and an appropriate institutional mechanism for carrying it out.

- ***The ASEAN+3 ERPD process must move away from its current focus on information exchange to include stronger peer review and due diligence***. Peer review will allow ASEAN+3 countries to identify domestic policies that can impinge on regional economic stability, as well as enable them to persuade poorly-performing countries to take corrective policy measures. ASEAN+3 can use peer review not only to conduct country-by-country examinations, but also to assess cross-country thematic issues or broader issues of regional cooperation.[18] Due diligence, on the other hand, will be necessary to guide the activation of the CMI in times of crisis. Due diligence involves an assessment of a potential borrowing country's ability to pay, in order to determine whether assistance should be extended, and what conditions should be attached to this assistance. At present, due diligence for the CMI is linked to the IMF's Article IV surveillance and program conditions; enhancing the ASEAN+3 ERPD's due diligence function will enable the CMI to be more flexible in managing credit lines at the sole judgment of participating countries.

- ***The institutional mechanism for conducting regional surveillance is being strengthened with the decision to establish an independent surveillance unit responsible for analyzing economic developments, potential risks and policy options, and overseeing the operations of the multilateralized CMI.*** The AFMM+3 held in Bali in May 2009 agreed to establish an independent regional surveillance unit to monitor and analyze regional economies and support decision-making relating to the implementation of the multilateralized CMI. While the formal unit is being set up, the AFMM+3 has asked the ASEC and ADB to set up an interim surveillance arrangement based on the existing surveillance process. The interim surveillance arrangement is already in force.

[18]OECD. 2007. Fostering Regional Integration: Peer Review in South-east Asia. OECD Policy Brief.

Efforts to strengthen regional surveillance in East Asia must avoid duplication and maximize complementarities.

The ASEAN+3 independent regional surveillance unit is expected to help strengthen due diligence for the multilateralized CMI. It is not intended as a substitute for existing surveillance activities provided by other multilateral or regional institutions. If surveillance is meant to deliver "policy advice", "information gathering and dissemination", or "technical assistance" as its primary objective, then there already exists a number of competing institutions. Furthermore, there is no reason to expect that the new independent surveillance unit will have any comparative advantage in producing surveillance reports. To duplicate efforts at other multilateral and regional institutions would not be an efficient way of using the world's scarce public resources. In particular, the IMF produces high-quality bilateral and multilateral surveillance outputs using resources no other institution can realistically match. East Asian policymakers are well aware of this. The existing ASEAN+3 ERPD and as well as the ASP are designed to receive considerable technical surveillance inputs from the IMF and ADB, both invited to present their analyses at high-level meetings. There is no reason to believe that the new surveillance unit will be designed to operate any differently.

Avoiding duplication, however, does not mean that the new surveillance unit should shy away from analyzing global and national economic developments as well.

As the custodian of the pooled reserves and arranger of financial packages under the multilateralized CMI, the independent surveillance unit must understand the economic policy challenges each country faces, and the global environment in which they operate. Indeed, it must be in a position to make judgments based on its own assessment, both during normal periods and in times of crisis. Although the need is clear during crises—as it has to undertake due diligence—it must also have the technical expertise to form its own judgment of crisis vulnerability, identify regional policy spillovers, and suggest the scope for collective action during times of relative calm. While it should draw upon the outputs of the IMF and other multilateral organizations, these should enhance rather than substitute for its own assessment.

Regional surveillance can add value by identifying and focusing on issues pivotal to East Asia's financial stability.

The 1997/98 Asian financial crisis brought to the fore the threat of regional contagion based on similarities between several countries' financial vulnerabilities. The 2008/09 global financial crisis brought contagion to a new, worldwide level. East Asia was surely affected, but its regional vulnerability was less pronounced. Individual economies suffered to varying degrees based on size and their dependence on external rather than domestic demand. Regional surveillance can thus add value by focusing on those areas that define the region in terms of economic integration—issues related to trade, investment, and finance, including capital flows. For example, the regional surveillance unit may well assume the role of promoting the development of local currency bond markets under the Asian Bond Markets Initiative (ABMI). Currently, ADB performs this role informally on behalf of ASEAN+3 by producing the quarterly *Asia Bond Monitor* and related market analyses. This ADB function may need to be transferred to the new surveillance unit if policy cooperation in the financial area becomes one of its mandates.

What role has ADB played—and what is its future role—as regional surveillance deepens?

ADB's support for regional surveillance dates back to 1998, following the creation of the ASEAN Surveillance Process.

In the Terms of Understanding on the Establishment of the ASEAN Surveillance Process (4 October 1998), ASEAN finance ministers specifically requested ADB to take the lead in providing training and capacity-building assistance to the ASEAN Secretariat (ASEC), particularly the ASEAN Surveillance Coordinating Unit (ASCU), and relevant staff in the finance ministries, central banks, and other relevant departments of ASEAN members. ADB responded by setting up the Regional Economic Monitoring Unit (REMU), which provided a range of short- and long-term training programs, conducted both in-house and externally. REMU's terms of reference (TOR) explicitly noted a role for contributing to the surveillance process through "monitoring of economic and sector policies, conditions of financial markets, and macroeconomic performance in a regional/subregional context." The TOR goes on to note that "regional/subregional economic monitoring complements existing models of national and global economic surveillance."

ADB's establishment of the Office of Regional Economic Integration (OREI) on 1 April 2005 significantly expanded its role in supporting surveillance activities.

Created to replace REMU with a stronger mandate, OREI's TOR builds on REMU's by refining three key responsibilities that extend its role on surveillance-related matters. These include (i) monitoring economic policies and financial architecture issues from a regional and subregional perspective and disseminating results to promote prudential economic management; (ii) strengthening the capacity for economic monitoring at the regional and subregional levels through provision of technical assistance and advisory services; and (iii) strengthening ADB's relations with other international financial institutions, as well as regional and subregional bodies, by providing monitoring inputs to various meetings and discussions. OREI's personnel and technical assistance resources were also increased to serve this expanded surveillance role.

ADB has been directly involved in supporting and contributing to the ASEAN+3 ERPD process.

A key contribution of REMU, and now OREI, is a Confidential Note, presented at the AFDM+3 meetings on Economic Prospects and Policy Issues for ASEAN+3. One by-product of this work is the *Asia Economic Monitor*, which OREI publishes twice a year and is also posted on the Asian Regional Integration Center (ARIC) website <aric.adb.org>. In November 2009, ADB collaborated with ASEC to produce the inaugural issue of a consolidated surveillance report, as part of the interim surveillance arrangement until the new formal unit is up and running. These economic and financial reports are used as background by ASEAN+3 governments in conducting regional economic and financial monitoring and peer review.

ADB has also provided technical assistance to strengthen the capacity of the ASEC in economic surveillance.

- ***Full-time international consultants were contracted under ADB technical assistance and based in-house at ASEC.*** With the support of these ADB consultants, the quality of the ASEAN Surveillance Reports has been improving. The next phase of the technical assistance is expected to start in early 2010. Although this phase will have a similar focus as previous ones, the unfolding financial crisis and global economic slowdown will require more resources to be devoted to the strengthening of ASEC's macroeconomic surveillance unit.

- ***Through several technical assistance projects, ADB also assisted in establishing National Surveillance Units in six ASEAN countries, which today operate with little or no assistance.*** These countries include both original (Indonesia, Philippines, Thailand) and new (Cambodia, Lao PDR, Viet Nam) ASEAN members. OREI has also supported establishment of the Surveillance Unit in the People's Republic of China and Brunei Darussalam, following the latter's accession to full membership in ADB in 2006.

- ***ADB's development and installation of early warning system (EWS) software in these countries contribute to the advance detection of emerging vulnerabilities***. Box 2 discusses EWS models in general and describes the EWS prototype and software developed at ADB.

Since 1999, ADB has been conducting training programs on regional economic and financial monitoring, with the aim of enhancing the capacity of ASEAN+3 countries in assessing macroeconomic and financial vulnerabilities.

To date, some 260 staff from ministries of finance and central banks of ASEAN countries and the PRC—as well as staff from the ASEAN Secretariat—have graduated from this course. The course covers a wide range of issues related to economic and financial monitoring, macroeconomic conditions, financial programming, and early warning systems. Effective development of technical expertise in regional economic and financial monitoring is particularly important in the preparation of national and regional economic surveillance reports. This course is also instrumental in the creation of a regional alumni community which, based on its collegial experience in Manila, can effectively communicate among themselves and exchange relevant information and views on key economic issues and policies.

How can ADB further contribute to a more effective regional surveillance mechanism for East Asia?

Apart from undertaking the interim surveillance arrangements jointly with ASEC, ADB has already been requested by ASEAN+3 to assist in establishing its new surveillance unit and to play a longer-term role in developing its expertise. Apart from the provision of support through technical assistance, ADB also has an active program of research on a range of issues relating to regional cooperation and integration—including economic and financial surveillance—that could be used. Both internal staff and external consultants contribute to OREI's research. The ability to do research helps allow OREI to respond to changing needs in a timely fashion, as well as remain at the cutting edge of developments relevant to surveillance in a rapidly changing world. The importance of this is perhaps best illustrated by the recent global financial turmoil. OREI plans to strengthen its research capacity in the future.

Conclusion

Regional surveillance has come a long way since the 1997/98 Asian financial crisis.

Regional surveillance to date has come via the regional economic review and policy dialogue process, or the ASEAN+3 ERPD. The ASEAN+3 ERPD has served the region well, and ADB has played its part in supporting the process. But the ASEAN+3 ERPD needs to evolve to meet changing circumstances and new demands.

The recent multilateralization of the CMI increases the urgency to strengthen and expand regional surveillance.

No longer can the surveillance mechanism serve only to detect vulnerabilities to avoid crises, or to help manage them should they occur. A multilateralized CMI also requires due diligence to assess requests for assistance. It is envisaged that a new, independent surveillance unit will serve this expanded role. Until this unit is fully operational however, ADB and ASEC are jointly working out an interim surveillance arrangement based on the existing surveillance process.

Any new regional surveillance mechanism should be designed to ensure that a high-quality message is generated and then delivered to maximize impact.

At least five principles can help guide the design of an effective regional surveillance mechanism for East Asia. First, the purpose of surveillance needs to be clearly defined so that the message is focused. Second, the organizational structure of the regional surveillance mechanism should encourage coordination with other multilateral and regional organizations that conduct surveillance. Third, it should use objective indicators as data for analysis, and methodologies that are objective and independently verifiable so that politically sensitive but critical issues can be addressed. Fourth, the governance structure should be designed to ensure independence and facilitate candor and impartiality in conducting surveillance. And finally, the reporting mechanism should allow the results of regional surveillance to reach senior policymakers or heads of state or governments so the impact of peer pressure can be maximized.

It is important that the work undertaken complements that of the IMF and other multilateral organizations.

As the IMF tends to focus on bilateral and multilateral surveillance, the need to strengthen regional surveillance conducted by a regional institution, not only remains, but is urgent. Although complementarities are important, avoiding duplication does not mean that the new surveillance unit, or any regional surveillance activity for that matter, should focus only on regional surveillance. The unit must be in a position to review and decide on applications for regional liquidity support based on its own assessment. Thus, while it should focus on strengthening the regional component of overall surveillance, with the capacity to offer a unique regional perspective, it will also have to be aware, based on its own assessment, of economic policy challenges in each country and the global environment in which it operates. When surveillance is undertaken by a regional institution that reports directly to key decision makers, the ability to exercise peer pressure in preventing crises grows. The reporting structure of the ASEAN+3 ERPD enables access to key decision makers represented by AFDM+3 and AFMM+3. As long as the new regional surveillance unit retains the existing institutional setup and reporting channels, it will preserve one of the greatest potential advantages of having its own surveillance mechanism.

ADB continues to expand its own capacity to support and assist regional surveillance in East Asia.

In addition to undertaking the interim surveillance arrangements jointly with ASEC, ADB has been requested by ASEAN+3 to assist with the establishment of the new surveillance unit and to play a longer-term role in developing its expertise. Apart from the provision of support through technical assistance, ADB also maintains an active program of research on a wide range of issues relating to regional cooperation and integration—including economic and financial surveillance.

Box 2: Spotting a Crisis Before It Happens

The large social and economic costs associated with financial crises have long sparked interest in finding ways to help define the probability of a crisis occurring so that preemptive measures can be taken to avert or at least mitigate crisis effects. These models for predicting financial crises are known as early warning systems (EWS). Simply put, an EWS monitors available data to signal when an economy becomes vulnerable to potential crises.

Kaminsky and Reinhart[1] have proposed a signaling model that can be used as the basis of an EWS. Their model first identifies historical crisis episodes and seeks leading indicators that could have forewarned of an imminent financial crisis, either banking- or currency-based. Identifying currency crisis episodes is relatively easy as historical exchange rate data is readily available. But identifying a banking crisis is more complex because many are not fully reflected in available data. A variety of macroeconomic and financial indicators are used to monitor various trends, such as the current account deficit and fiscal deficit, among others. With a large set of indicators, several will suggest deteriorating conditions at any one time. The challenge for an effective EWS is to find the right set of leading indicators whose composite value breaks a threshold when there is heightened probability of a crisis occurring. One approach is to choose a threshold value that minimizes the "noise-to-signal ratio" for each indicator. The noise-to-signal ratio measures how accurate the indicator is in predicting a crisis—the ratio of the probability of the indicator signaling a "false alarm" to the probability that the indicator signals a true crisis.

Once the threshold for each indicator is determined, a composite index of indicators can be created. The more indicators signaling a crisis, the greater the probability of a crisis occurring. Usually, indicators are also weighted in favor of those indicators that predict better. So indicators with low noise-to signal ratios carry greater weight. Once the composite index has been constructed, it can be used to provide a warning if the probability of a crisis exceeds a certain threshold.

Following the 1997/98 Asian financial crisis, the Asian Development Bank (ADB) developed an EWS in an attempt to warn against future crises. The Kaminsky-Reinhart model was adapted and improved into a prototype ADB EWS model to support regional surveillance in ASEAN+3[2] countries. The model was tested using 1970–1995 sample data to see how well it could have predicted the 1997/98 Asian financial crisis. The results show that there was heightened probability of a crisis in four of the six countries that experienced a currency crisis. The Thai example is illustrative **(Figure B2)**.

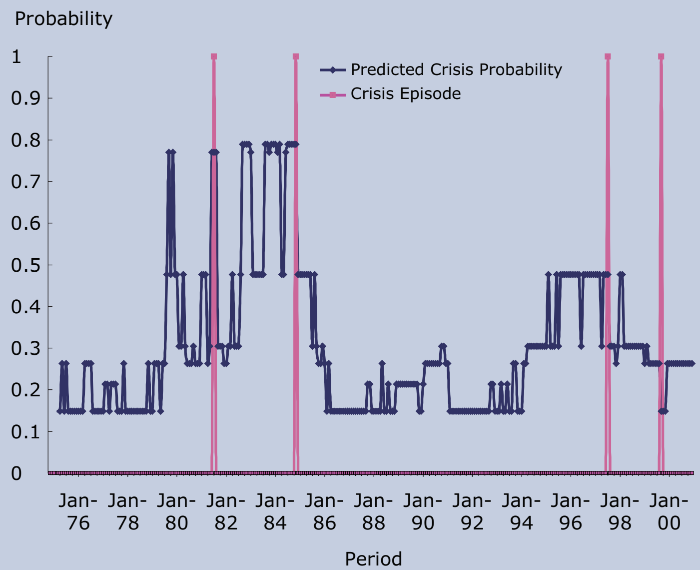
ADB developed a user-friendly software package—Vulnerability Indicators and Early Warning Systems, or VIEWS.[3] The program has been distributed to ASEAN+3 finance ministries and central banks as a tool to assist them in monitoring their economies. In addition, ADB has provided training

[1] G. L. Kaminsky and C. Reinhart. 1999. The Twin Crises: The Causes of Banking and Balance of Payments Problems. *American Economic Review.* 89(3). pp. 473–500.

[2] ASEAN, People's Republic of China, the Republic of Korea, and Japan.

[3] Asian Development Bank. 2005. *Early Warning Systems for Financial Crises: Applications to East Asia*. New York: Palgrave, Macmillan.

Figure B2: Predicted Crisis Probabilities in Thailand, 1970-1995 (in-sample) and 1996-2000 (out-of-sample)



to ASEAN+3 to better use and interpret the results from VIEWS software. ADB also maintains and regularly updates the large database of vulnerability indicators for ASEAN+3 economies.

While VIEWS has performed well thus far, a major concern is whether EWS models are as effective predicting future crises as they are predicting past ones. The structure of the economy is constantly evolving with new financial products and instruments being introduced regularly. Thus, what worked once may not work again in predicting future crises. Models must be constantly refined to ensure their predictive power is kept up-to-date.

Another constraint is that indicators used in EWS models tend to lag several months. Therefore, they may not be able to flash warning signals on time. One possible solution would be to rely more on real time market-related data. For example, option contracts on foreign exchange could be used as an indicator of the "tail risk" of the exchange rate. The drawback is that liquid options markets exist in only a few ASEAN+3 economies.

Finally, it is important to emphasize that EWS models are but one tool for diagnosing economic vulnerability. Further analysis is required once a warning signal is issued to evaluate the severity and probability of a crisis. So EWS results should be used as a complement to—not a substitute for—conventional policy analysis. An EWS model is a useful aid in improving economic monitoring. It must be complemented with other monitoring tools for it to function effectively.

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The Asia Economic Monitor is a semiannual review of emerging East Asia's growth and policy issues. It covers the 10 members of the Association of Southeast Asian Nations; People's Republic of China; Hong Kong, China; Republic of Korea; and Taipei,China. This issue includes a special section on regional surveillance in East Asia.

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