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# ASIA BOND MONITOR

FIRST QUARTER 2009

Asian Development Bank

The *Asia Bond Monitor* reviews recent developments in emerging East Asian local currency bond markets along with the outlook, risks, and policy options. The ABM covers the 10 Association of Southeast Asian Nations member countries plus the People's Republic of China; Hong Kong, China; and the Republic of Korea.

## Contents

|  |           |
|--|-----------|
| <b>Recent Bond Market Developments</b> | <b>2</b>  |
| Size and Composition                   | <b>5</b>  |
| Issuance                               | <b>10</b> |
| G3 Currency Issuance                   | <b>15</b> |
| Turnover                               | <b>19</b> |
| Bond Yields                            | <b>21</b> |
| Foreign Holdings                       | <b>25</b> |
| Debt Financing in 2009                 | <b>25</b> |
| Bond and Equity Market Returns         | <b>28</b> |
| Equity and Bond Markets                | <b>31</b> |
| Policy and Regulatory Developments     | <b>33</b> |
| <b>Market Summaries</b>                |           |
| People's Republic of China             | <b>36</b> |
| Hong Kong, China                       | <b>39</b> |
| Indonesia                              | <b>42</b> |
| Republic of Korea                      | <b>45</b> |
| Malaysia                               | <b>48</b> |
| Philippines                            | <b>53</b> |
| Singapore                              | <b>56</b> |
| Thailand                               | <b>59</b> |
| Viet Nam                               | <b>62</b> |

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## Emerging East Asian Local Currency Bond Markets: A Regional Update

### Highlights

#### Recent Bond Market Developments and Near-term Outlook

- The global economic outlook remains dim as continuing financial instability deepens the worldwide economic downturn.
- Financial deleveraging continues to exert downward pressure on asset prices—except government bonds—offsetting the effect of aggressive monetary easing and initial fiscal stimulus programs.
- Emerging East Asia's local currency (LCY) bonds outstanding grew nearly 15% in 2008, despite a sharp drop in the last quarter of 2008, as bond issuance by central banks and monetary authorities plummeted.
- In 2009, LCY bond issuance is expected to rise: (i) several governments may use LCY bonds to help finance stimulus packages; (ii) government LCY bond sales will likely hold up on demand for safe-haven assets; and (iii) companies increasingly turn to LCY markets for refinancing and raising new funds.
- Recent improvements in market conditions offer opportunities for both sovereigns and corporations to tap G3-currency bond markets—although price discovery will likely lead to higher risk premiums than those in recent years.
- Bond yield curves shifted downward in the last quarter of 2008 as interest rates were slashed and inflation eased; they edged up in mid-January in several markets on concerns over bond issuance plans for 2009.
- Market concerns over sustainability of rising fiscal deficits and government guarantees may raise risk premiums and impact sovereign ratings for some emerging East Asian economies.
- Companies face greater financing risks as borrowing costs remain elevated along with increased competition from government and government-guaranteed financial institutions.
- Risks of any abrupt withdrawal of funds from emerging markets may prove an additional complicating factor for new LCY bond issuance in emerging East Asia.
- Thus, with banks and financial institutions large holders of public debt, prudent debt management will become increasingly important in rebuilding and maintaining financial stability.

# Emerging East Asian Local Currency Bond Markets: A Regional Update

## Recent Bond Market Developments

### Global Market Developments

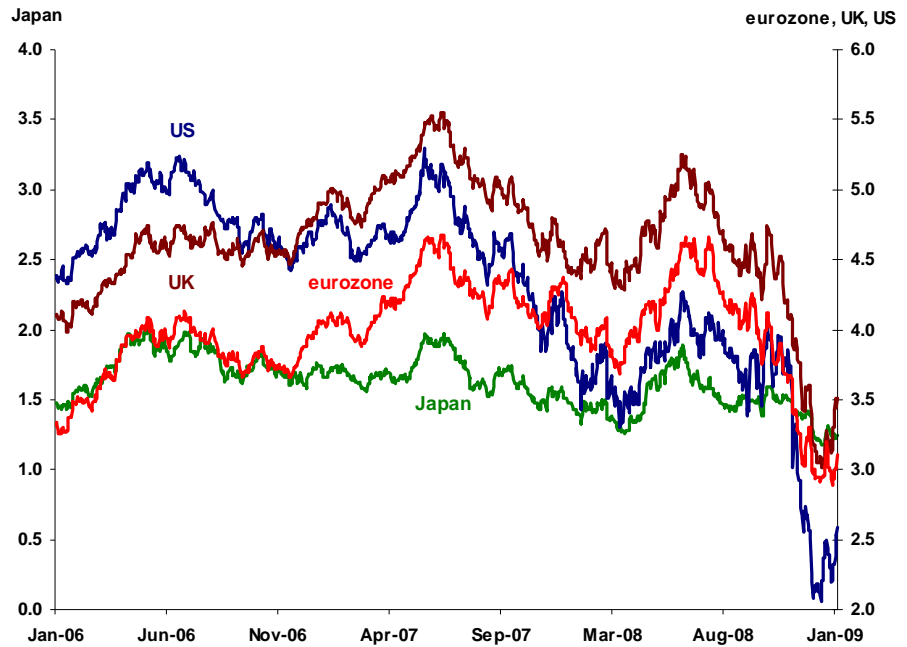
*The global economic outlook remains dim as the continuing financial crisis deepens the worldwide economic downturn.*

The impact of financial deleveraging continues to reverberate throughout the real economy, with banks reluctant to resume normal lending, credit conditions still stressed, and global trade volumes sharply down. Overall, economic activity worldwide is slowing at an alarming rate, accompanied by plummeting consumer and business confidence. The United States (US), eurozone, and Japanese economies are all in recession.

The slight improvement in financial markets toward the end of 2008 will be difficult to sustain as economic gloom spreads and corporate balance sheets suffer deep losses. The surfacing of newly troubled banks is raising fresh concerns. Money market rates have dropped from their peaks as central banks aggressively ease monetary conditions and governments offer continued support. But liquidity remains tight and risks remain high as companies and banks announce disappointing earnings.

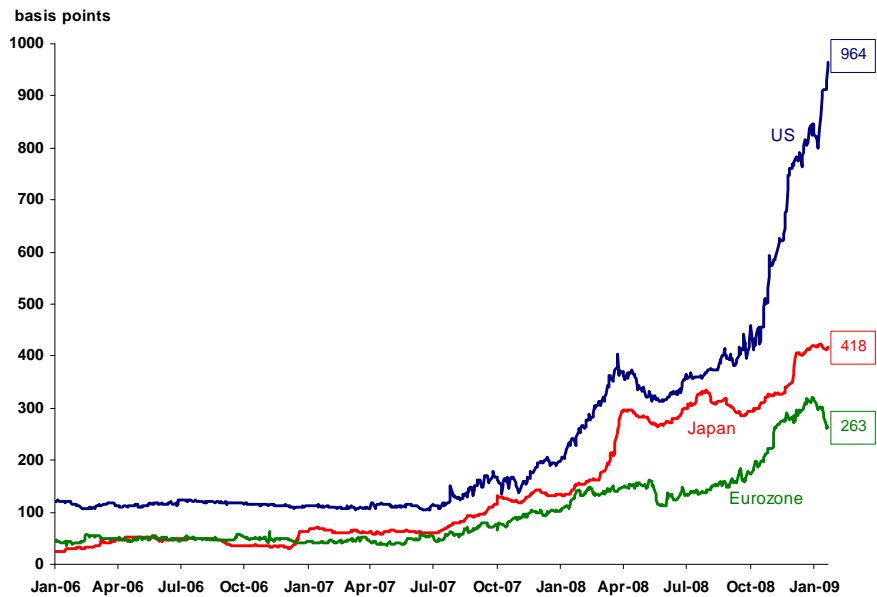
Government bond yields in mature markets have dropped sharply as industrialized nations aggressively slash interest rates and inflationary pressures dissipate (**Figure 1**). Corporate bond spreads have widened significantly and risk premiums on high yielding paper remain elevated (**Figure 2**).

**Figure 1: 10-year Government Bond Yields (% per annum)**



Source: Bloomberg LP.

**Figure 2: Corporate Bond Spreads (basis points)**



Note: Bond spreads refer to the difference between yields of 5-year bonds issued by BBB rated finance companies and yields of sovereign benchmark bonds of the same tenor.

Source: Bloomberg LP.

*Emerging economies have slowed sharply as financial deleveraging continues to exert downward pressure on asset prices—except government bonds—offsetting the effect of aggressive monetary easing and initial fiscal stimulus programs.*

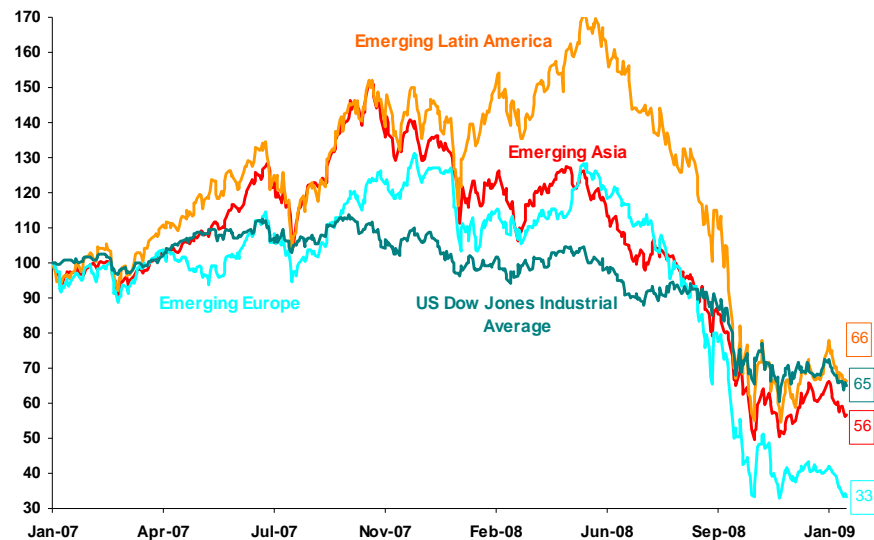
Emerging economies worldwide have slowed sharply as their asset markets remain under pressure, the external environment weakens, capital outflows continue, and global investors remain focused on home market deleveraging (**Figure 3**).

In emerging East Asia,<sup>1</sup> authorities have taken steps to expand liquidity in financial markets. Many have introduced a slew of fiscal stimulus packages to stabilize economic activity. The sharp fall in oil and commodity prices has eased inflationary pressures and allowed governments some monetary and fiscal breathing space. Nevertheless, if global financial stress is prolonged or intensifies, the effect of tighter domestic credit on overall economic activity will be substantial for emerging East Asia—where firms still rely more on banks than bond markets for funding.

Emerging East Asia's local currency (LCY) bond markets held up relatively well in the last quarter of 2008, driven by growth in the region's largest market—the People's Republic of China (PRC). But even excluding the PRC, there was moderate growth in LCY markets despite global market uncertainty and a cutback in government bond issuance in some of the region's markets. With global markets seized up, many emerging East Asian companies and banks looked to local bond markets for refinancing and new funds.

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<sup>1</sup> In this report, emerging East Asia includes People's Republic of China (PRC); Hong Kong, China; Indonesia; Republic of Korea (Korea); Malaysia; Philippines; Singapore; Thailand; and Viet Nam.

**Figure 3: MSCI Indexes (January 2007=100)**

Note: Emerging Asia includes People's Republic of China (PRC); India; Indonesia; Republic of Korea (Korea); Malaysia; Pakistan; Philippines; Taipei, China; and Thailand. Sources: Morgan Stanley Capital International (MSCI) Barra and Bloomberg LP.

## Size and Composition

*Growth in emerging East Asia's local currency (LCY) bonds outstanding fell sharply the last quarter of 2008 as bond issuance by central banks and monetary authorities plummeted—the result of a reversal in capital flows that negated the need for any sterilization.*

The value of LCY bonds outstanding in the region reached an estimated USD3.69 trillion at the end of 2008, up 2.7% (LCY base) from USD3.65 trillion at end of the third quarter. It was USD3.41 trillion at end-2007 (Table 1).

**Table 1: Size and Composition of Emerging East Asian LCY Bond Markets**

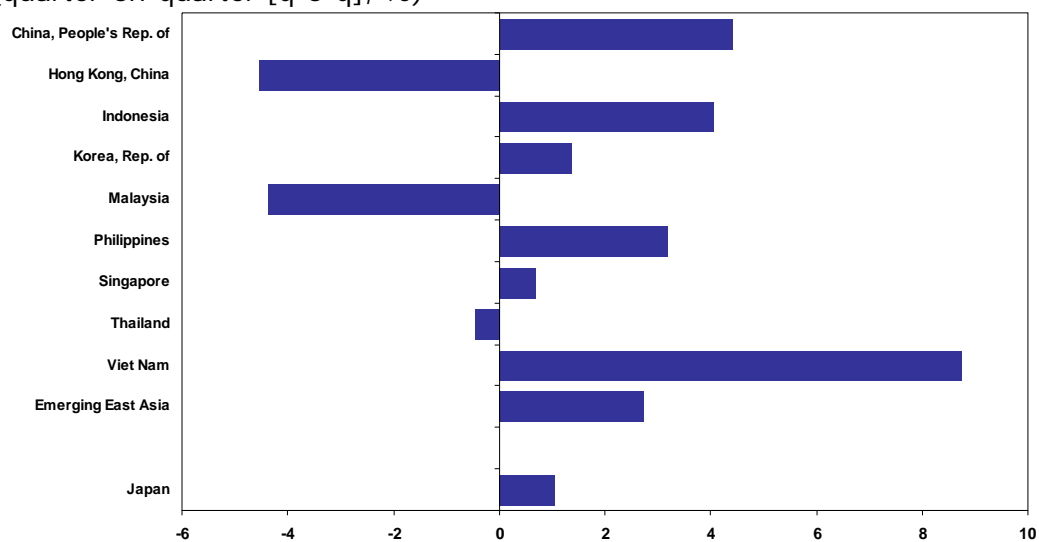
|                                 | 2007                    |         | 3Q08                    |         | 4Q08                    |         | Growth Rate (LCY-base %) |       |        | Growth Rate (USD-base %) |        |        |
|---------------------------------|-------------------------|---------|-------------------------|---------|-------------------------|---------|--------------------------|-------|--------|--------------------------|--------|--------|
|                                 | Amount<br>(USD billion) | % share | Amount<br>(USD billion) | % share | Amount<br>(USD billion) | % share | 3Q08                     | 4Q08  |        | 3Q08                     | 4Q08   |        |
|                                 |                         |         |                         |         |                         |         | Y-o-Y                    | Q-o-Q | Y-o-Y  | Y-o-Y                    | Q-o-Q  | Y-o-Y  |
| <b>China, People's Rep. of</b>  |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 1,690                   | 100.0   | 2,114                   | 100.0   | 2,213                   | 100.0   | 26.0                     | 4.4   | 22.5   | 381                      | 4.7    | 31.0   |
| Government                      | 1,533                   | 90.7    | 1,901                   | 90.0    | 1,957                   | 88.4    | 24.0                     | 2.6   | 19.4   | 360                      | 3.0    | 27.7   |
| Corporate                       | 157                     | 9.3     | 212                     | 10.0    | 256                     | 11.6    | 46.5                     | 20.2  | 52.8   | 60.7                     | 20.6   | 63.4   |
| <b>Hong Kong, China</b>         |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 98                      | 100.0   | 92                      | 100.0   | 88                      | 100.0   | (5.2)                    | (4.5) | (10.5) | (52)                     | (4.4)  | (9.9)  |
| Government                      | 18                      | 17.9    | 19                      | 20.2    | 20                      | 23.0    | 6.9                      | 8.7   | 15.4   | 70                       | 8.9    | 16.1   |
| Corporate                       | 80                      | 82.1    | 74                      | 79.8    | 68                      | 77.0    | (7.9)                    | (7.9) | (16.1) | (79)                     | (7.7)  | (15.6) |
| <b>Indonesia</b>                |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 85                      | 100.0   | 77                      | 100.0   | 68                      | 100.0   | (9.7)                    | 4.1   | (4.3)  | (142)                    | (11.9) | (20.6) |
| Government                      | 77                      | 90.1    | 69                      | 89.4    | 61                      | 90.5    | (10.3)                   | 5.3   | (3.9)  | (148)                    | (10.8) | (20.3) |
| Corporate                       | 8                       | 9.9     | 8                       | 10.6    | 6                       | 9.5     | (3.9)                    | (6.3) | (7.7)  | (87)                     | (20.6) | (23.4) |
| <b>Korea, Rep. of</b>           |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 1,027                   | 100.0   | 850                     | 100.0   | 817                     | 100.0   | 7.6                      | 1.4   | 7.0    | (177)                    | (3.9)  | (20.5) |
| Government                      | 498                     | 48.5    | 387                     | 45.5    | 368                     | 45.1    | (0.7)                    | 0.6   | (0.4)  | (240)                    | (4.7)  | (26.0) |
| Corporate                       | 529                     | 51.5    | 464                     | 54.5    | 448                     | 54.9    | 15.6                     | 2.0   | 14.1   | (115)                    | (3.3)  | (15.2) |
| <b>Malaysia</b>                 |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 164                     | 100.0   | 172                     | 100.0   | 163                     | 100.0   | 13.4                     | (4.4) | 4.0    | 122                      | (4.9)  | (0.6)  |
| Government                      | 95                      | 57.8    | 96                      | 55.8    | 89                      | 54.5    | 2.3                      | (6.7) | (1.9)  | 12                       | (7.2)  | (6.3)  |
| Corporate                       | 69                      | 42.2    | 76                      | 44.2    | 74                      | 45.5    | 31.4                     | (1.4) | 12.0   | 30.1                     | (1.9)  | 7.1    |
| <b>Philippines</b>              |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 60                      | 100.0   | 58                      | 100.0   | 59                      | 100.0   | 10.5                     | 3.2   | 13.2   | 56                       | 2.5    | (1.5)  |
| Government                      | 56                      | 92.9    | 53                      | 91.5    | 53                      | 90.3    | 7.8                      | 1.8   | 10.0   | 30                       | 1.1    | (4.3)  |
| Corporate                       | 4                       | 7.1     | 5                       | 8.5     | 6                       | 9.7     | 50.2                     | 17.9  | 54.4   | 436                      | 17.1   | 34.4   |
| <b>Singapore</b>                |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 122                     | 100.0   | 128                     | 100.0   | 129                     | 100.0   | 12.7                     | 0.7   | 5.5    | 166                      | 0.6    | 5.7    |
| Government                      | 68                      | 56.0    | 71                      | 55.3    | 73                      | 56.6    | 5.0                      | 3.0   | 6.6    | 86                       | 2.8    | 6.8    |
| Corporate                       | 54                      | 44.0    | 57                      | 44.7    | 56                      | 43.4    | 24.1                     | (2.1) | 4.1    | 284                      | (2.2)  | 4.3    |
| <b>Thailand</b>                 |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 158                     | 100.0   | 147                     | 100.0   | 143                     | 100.0   | 11.1                     | (0.4) | 5.5    | 46                       | (3.1)  | (9.9)  |
| Government                      | 127                     | 80.1    | 119                     | 81.1    | 114                     | 80.1    | 13.8                     | (1.7) | 5.5    | 7.1                      | (4.3)  | (9.9)  |
| Corporate                       | 32                      | 19.9    | 28                      | 18.9    | 28                      | 19.9    | 0.8                      | 4.9   | 5.6    | (50)                     | 2.1    | (9.9)  |
| <b>Viet Nam</b>                 |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 9.9                     | 100.0   | 12.5                    | 100.0   | 129                     | 100.0   | 36.1                     | 8.8   | 42.8   | 319                      | 3.3    | 30.8   |
| Government                      | 9.6                     | 96.6    | 12.0                    | 95.8    | 124                     | 96.0    | 33.9                     | 9.0   | 41.9   | 298                      | 3.5    | 30.0   |
| Corporate                       | 0.3                     | 3.4     | 0.5                     | 4.2     | 0.5                     | 4.0     | 113.8                    | 2.3   | 69.4   | 107.1                    | (2.9)  | 55.2   |
| <b>Total Emerging East Asia</b> |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 3,414                   | 100.0   | 3,650                   | 100.0   | 3,692                   | 100.0   | 17.6                     | 2.7   | 14.9   | 134                      | 1.2    | 8.2    |
| Government                      | 2,480                   | 72.7    | 2,726                   | 74.7    | 2,749                   | 74.4    | 16.8                     | 2.0   | 13.8   | 167                      | 0.9    | 10.8   |
| Corporate                       | 933                     | 27.3    | 924                     | 25.3    | 944                     | 25.6    | 20.3                     | 5.1   | 18.0   | 49                       | 2.1    | 1.1    |
| <b>Less PRC:</b>                |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 1,724                   | 100.0   | 1,536                   | 100.0   | 1,479                   | 100.0   | 7.4                      | 0.4   | 5.1    | (89)                     | (3.7)  | (14.2) |
| Government                      | 947                     | 54.9    | 825                     | 53.7    | 792                     | 53.5    | 2.3                      | 0.3   | 2.0    | (121)                    | (4.0)  | (16.4) |
| Corporate                       | 777                     | 45.1    | 712                     | 46.3    | 687                     | 46.5    | 13.9                     | 0.4   | 8.8    | (49)                     | (3.4)  | (11.5) |
| <b>Japan</b>                    |                         |         |                         |         |                         |         |                          |       |        |                          |        |        |
| <b>Total</b>                    | 7,647                   | 100.0   | 8,120                   | 100.0   | 9,597                   | 100.0   | 1.7                      | 1.1   | 1.9    | 70                       | 18.2   | 25.5   |
| Government                      | 6,874                   | 89.9    | 7,292                   | 89.8    | 8,640                   | 90.0    | 1.6                      | 1.3   | 2.1    | 69                       | 18.5   | 25.7   |
| Corporate                       | 773                     | 10.1    | 827                     | 10.2    | 957                     | 10.0    | 2.5                      | (1.1) | 0.6    | 79                       | 15.7   | 23.8   |

Notes:

1. Data for each market are as follows: Hong Kong, China—corporate bonds outstanding to Sep-08; 4Q08 data based on *AsianBondsOnline* estimates. Indonesia—Sertifikat Bank Indonesia (SBI) portion of government bonds outstanding to Nov-08, carried over to 4Q08. Philippines—government bonds outstanding to Nov-08, carried over to 4Q08. Singapore—corporate bonds outstanding for 3Q08 and 4Q08 data based on *AsianBondsOnline* estimates. Thailand—government and corporate bonds outstanding Nov-08, carried over to 4Q08. Japan—government and corporate bonds outstanding to Nov-08, carried over to 4Q08
2. Calculated using data from national sources.
3. Corporate bonds include issues by financial institutions.
4. Bloomberg LP end-of-period LCY/USD rates are used.
5. For LCY-base, total emerging East Asia growth figures based on end-Dec 2008 currency exchange rates and do not include currency effects.

Sources: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange and Bank Indonesia); Republic of Korea (Bank of Korea and *KoreaBondWeb*); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury and Bloomberg LP.); Singapore (Monetary Authority of Singapore and Bloomberg LP); Thailand (Bank of Thailand); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

**Figure 4: Growth of Emerging East Asian LCY Bond Markets in 4Q 2008**  
(quarter-on-quarter [q-o-q], %)



Notes:

1. Calculated using data from national sources.
2. Growth rates are calculated from LCY base and do not include currency effects.
3. Total emerging East Asia growth data based on end-Dec 2008 currency exchange rates and do not include currency effects.

Sources: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange and Bank Indonesia); Republic of Korea (Bank of Korea and *KoreaBondWeb*); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury and Bloomberg LP); Singapore (Monetary Authority of Singapore and Bloomberg LP); Thailand (Bank of Thailand); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

Year-on-year (y-o-y) and without taking into account currency effects (LCY base), emerging East Asia's LCY bonds grew 14.9% in 2008, driven mainly by growth in the first half of the year.

Viet Nam's bond market posted the fastest growth in the last quarter of 2008 (8.8% quarter-on-quarter [q-o-q]), followed by the PRC (4.4%), Indonesia (4.1%), Philippines (3.2%) and Republic of Korea (Korea) (1.4%). Hong Kong, China; Malaysia; and Thailand declined 4.5%, 4.4%, and 0.4% respectively (**Figure 4**).

The ratio of LCY bonds outstanding to GDP in emerging East Asia stood at 54% at end-2008, down from 54.9% in the third quarter (**Table 2**). The ratio was 56.9% at end-2007.

The PRC local currency bond market continues to dominate the region and accounts for most of emerging East Asia's LCY bond market growth.

The PRC accounts for about 60% of total bonds outstanding in emerging East Asia. In contrast, PRC



**Table 2: Size and Composition of Emerging East Asian LCY Bond Markets (% of GDP)**

|                                 | 2007  | 3Q08  | 2008  |
|---------------------------------|-------|-------|-------|
| <b>China, People's Rep. of</b>  |       |       |       |
| <b>Total</b>                    | 47.9  | 49.9  | 52.4  |
| Government                      | 43.5  | 44.9  | 46.4  |
| Corporate                       | 4.4   | 5.0   | 6.1   |
| <b>Hong Kong, China</b>         |       |       |       |
| <b>Total</b>                    | 47.3  | 42.3  | 39.4  |
| Government                      | 8.5   | 8.6   | 9.1   |
| Corporate                       | 38.8  | 33.8  | 30.4  |
| <b>Indonesia</b>                |       |       |       |
| <b>Total</b>                    | 20.2  | 15.5  | 13.6  |
| Government                      | 18.2  | 13.9  | 12.3  |
| Corporate                       | 2.0   | 1.6   | 1.3   |
| <b>Korea, Rep. of</b>           |       |       |       |
| <b>Total</b>                    | 106.6 | 106.8 | 85.7  |
| Government                      | 51.7  | 48.6  | 38.6  |
| Corporate                       | 54.9  | 58.2  | 47.0  |
| <b>Malaysia</b>                 |       |       |       |
| <b>Total</b>                    | 84.6  | 79.8  | 76.0  |
| Government                      | 48.9  | 44.6  | 41.4  |
| Corporate                       | 35.8  | 35.2  | 34.6  |
| <b>Philippines</b>              |       |       |       |
| <b>Total</b>                    | 37.1  | 37.3  | 34.2  |
| Government                      | 34.5  | 34.1  | 30.9  |
| Corporate                       | 2.6   | 3.2   | 3.3   |
| <b>Singapore</b>                |       |       |       |
| <b>Total</b>                    | 72.0  | 71.8  | 66.8  |
| Government                      | 40.3  | 39.8  | 37.8  |
| Corporate                       | 31.7  | 32.1  | 29.0  |
| <b>Thailand</b>                 |       |       |       |
| <b>Total</b>                    | 55.2  | 54.3  | 52.4  |
| Government                      | 44.2  | 44.0  | 41.9  |
| Corporate                       | 11.0  | 10.3  | 10.4  |
| <b>Viet Nam</b>                 |       |       |       |
| <b>Total</b>                    | 13.8  | 15.1  | 14.2  |
| Government                      | 13.4  | 14.5  | 13.7  |
| Corporate                       | 0.5   | 0.6   | 0.6   |
| <b>Total Emerging East Asia</b> |       |       |       |
| <b>Total</b>                    | 56.9  | 54.9  | 54.0  |
| Government                      | 41.3  | 41.0  | 40.2  |
| Corporate                       | 15.6  | 13.9  | 13.8  |
| <b>Japan</b>                    |       |       |       |
| <b>Total</b>                    | 165.7 | 168.3 | 198.1 |
| Government                      | 149.0 | 151.2 | 178.4 |
| Corporate                       | 16.8  | 17.2  | 19.8  |

Note: 2008 GDP is from *World Economic Outlook Database*, October 2008, International Monetary Fund. Other GDP data from CEIC.

Sources: People's Republic of China (*ChinaBond*), Hong Kong, China (Hong Kong Monetary Authority), Indonesia (Indonesia Stock Exchange and Bank Indonesia), Republic of Korea (Bank of Korea and *KoreaBondWeb*), Malaysia (Bank Negara Malaysia), Philippines (Bureau of the Treasury and Bloomberg LP), Singapore (Monetary Authority of Singapore and Bloomberg LP), Thailand (Bank of Thailand), Viet Nam (Bloomberg LP).

stock markets account for roughly 23% of market capitalization of emerging East Asia as of end-2008, down from 32% at end-2007. Excluding PRC growth in outstanding bonds, emerging East Asian bond markets expanded just 5.1% y-o-y in 2008 (LCY basis—excluding currency effects).

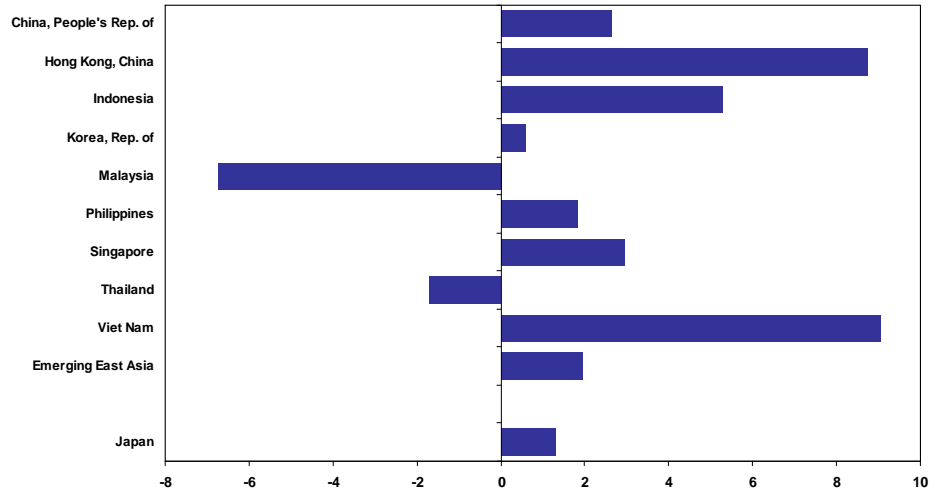
*Government bonds continued to dominate the market in 2008; however, unfavorable market conditions during the last quarter led to a slowdown in government bond issuance.*

Emerging East Asia's LCY government bond markets—defined to include the liabilities of central banks and monetary authorities—grew 2% (LCY basis) to USD2.75 trillion in the last quarter of 2008 from USD2.73 trillion in the third quarter (**Figure 5**). Lower government issuance in the fourth quarter was mainly due to (i) lower bond issuance by central banks in most economies as net capital outflows halted any need for sterilization compared with net capital inflows in the first half of the year, and (ii) some governments postponed or cancelled planned bond sales as investors kept away from volatile global and regional capital markets.

*Corporate bond market growth slowed as risk premiums spiked and credit conditions remained stressed.*

As credit conditions tightened and access to global funds dried up, companies and banks in the region looked to local markets for refinancing and raising new funds. The corporate bond market for emerging East Asia grew 5.1% in the last quarter of 2008, driven by growth in the PRC, Philippines, Thailand, Viet Nam, and Korea. Corporate bond markets in Hong Kong, China; Indonesia; Singapore; and Malaysia contracted (**Figure 6**).

**Figure 5: Growth of Emerging East Asian LCY Government Bond Markets in 4Q 2008 (q-o-q, %)**

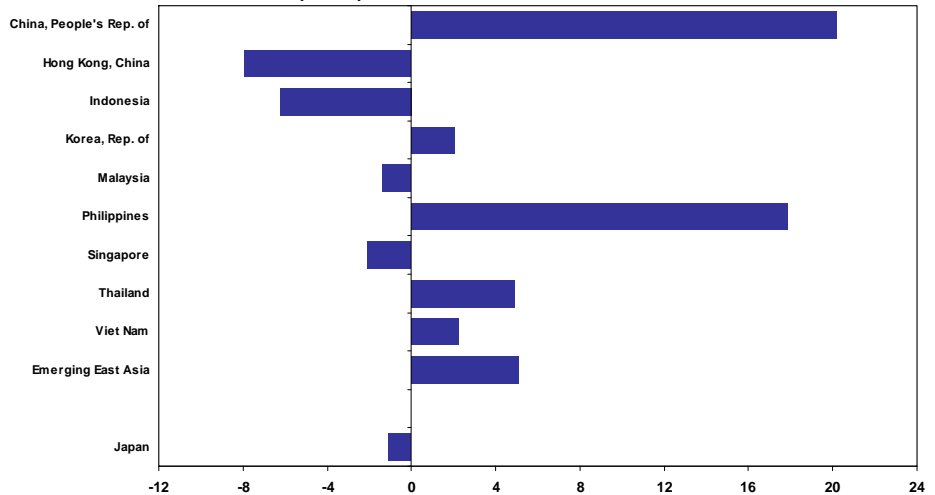


Notes:

1. Calculated using data from national sources.
2. Growth rates are calculated from LCY base and do not include currency effects.
3. Total emerging East Asia growth data based on end-Dec 2008 currency exchange rates and do not include currency effects.

Sources: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange and Bank Indonesia); Republic of Korea (Bank of Korea and *KoreaBondWeb*); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury and Bloomberg LP); Singapore (Monetary Authority of Singapore and Bloomberg LP); Thailand (Bank of Thailand); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

**Figure 6: Growth of Emerging East Asian LCY Corporate Bond Markets in 4Q 2008 (q-o-q, %)**



Notes:

1. Calculated using data from national sources.
2. Corporate bonds include issues by financial institutions.
3. Growth rates are calculated from LCY base and do not include currency effects.
4. Total emerging East Asia growth data based on end-Dec 2008 currency exchange rates and do not include currency effects.

Sources: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange and Bank Indonesia); Republic of Korea (Bank of Korea and *KoreaBondWeb*); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury and Bloomberg LP); Singapore (Monetary Authority of Singapore and Bloomberg LP); Thailand (Bank of Thailand); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

## Issuance

*Total LCY bond issuance in emerging East Asia was down 15.1% q-o-q the last 3 months of 2008, largely due to a sharp drop by central banks and monetary authorities.*

Government LCY bond issuance declined 20% q-o-q in the last quarter of 2008 (USD base—including currency effect) (**Table 3**). Excluding issuance by central banks and monetary authorities, government issuance actually rose 5.8% q-o-q during the period (**Table 3a**). This is despite the fact that some governments put off auctions in the last quarter due to weak demand and volatile market conditions, or—in the case of Indonesia—cancelled all debt auctions. The rise was largely due to increased issuance from PRC (22%), Singapore (7%) and Vietnam (64%). Government issuance fell sharply, however, in Korea (-14%), Philippines (-58%), and Thailand (-63%). Government bond issuance in Indonesia was negligible during the third quarter with none during the fourth.

Issuance by central banks and monetary authorities in the last quarter fell 30% q-o-q as net capital inflows shifted to net capital outflows, quashing the need for sterilization. Central bank issuance in PRC, Malaysia, Korea, Indonesia, and Thailand fell by about 62% 54%, 34%, 18%, and 13% respectively q-o-q. The Hong Kong Monetary Authority still actively issued in the final quarter of 2008, increasing issuance q-o-q 125%. HKMA's increased supply of Exchange Fund paper was primarily aimed at boosting liquidity and easing money market stress.

Total LCY bond issuance in emerging East Asia declined 59% y-o-y in the fourth quarter (LCY base - excluding currency effects). Government bonds fell 63% y-o-y. Excluding the PRC, total LCY bond issuance declined by just 6%, while government issuance was flat.

Table 3: LCY-denominated Bond Issuance (Gross)

|                                 | LCY billion |         | USD billion |         | Growth rate (LCY-base %) |        | Growth rate (USD-base %) |        |
|---------------------------------|-------------|---------|-------------|---------|--------------------------|--------|--------------------------|--------|
|                                 | 4Q08        | % share | 4Q08        | % share | 4Q08                     |        | 4Q08                     |        |
|                                 |             |         |             |         | q-o-q                    | y-o-y  | q-o-q                    | y-o-y  |
| <b>China, People's Rep. of</b>  |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    | 1,332       | 100.0   | 195         | 100.0   | (23.7)                   | (76.3) | (23.5)                   | (74.7) |
| Government                      | 955         | 71.7    | 140         | 71.7    | (34.6)                   | (81.5) | (34.4)                   | (80.2) |
| Corporate                       | 377         | 28.3    | 55          | 28.3    | 31.8                     | (19.8) | 32.2                     | (14.3) |
| <b>Hong Kong, China</b>         |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    | 382         | 100.0   | 49          | 100.0   | 94.1                     | 16.2   | 94.5                     | 17.0   |
| Government                      | 356         | 93.1    | 46          | 93.1    | 124.0                    | 28.6   | 124.5                    | 29.4   |
| Corporate                       | 26          | 6.9     | 3           | 6.9     | (30.7)                   | (49.4) | (30.6)                   | (49.1) |
| <b>Indonesia</b>                |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    | 384,774     | 100.0   | 34          | 100.0   | (4.5)                    | (49.5) | (19.1)                   | (58.1) |
| Government                      | 379,774     | 98.7    | 34          | 98.7    | (5.5)                    | (50.0) | (20.0)                   | (58.5) |
| Corporate                       | 5,000       | 1.3     | 0.4         | 1.3     | 376.2                    | 80.1   | 303.2                    | 49.4   |
| <b>Korea, Rep. of</b>           |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    | 57,003      | 100.0   | 45          | 100.0   | (22.9)                   | (19.9) | (27.0)                   | (40.5) |
| Government                      | 48,348      | 84.8    | 38          | 84.8    | (22.4)                   | (17.7) | (26.5)                   | (38.9) |
| Corporate                       | 8,655       | 15.2    | 7           | 15.2    | (25.6)                   | (30.0) | (29.5)                   | (48.0) |
| <b>Malaysia</b>                 |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    | 52          | 100.0   | 15          | 100.0   | (37.0)                   | (35.4) | (37.3)                   | (38.3) |
| Government                      | 38          | 72.2    | 11          | 72.2    | (39.7)                   | (17.4) | (40.0)                   | (21.1) |
| Corporate                       | 15          | 27.8    | 4           | 27.8    | (28.6)                   | (58.8) | (29.0)                   | (60.6) |
| <b>Philippines</b>              |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    | 106         | 100.0   | 2           | 100.0   | (53.7)                   | (32.9) | (54.0)                   | (41.6) |
| Government                      | 88          | 82.4    | 2           | 82.4    | (58.0)                   | (34.6) | (58.3)                   | (43.1) |
| Corporate                       | 19          | 17.6    | 0.4         | 17.6    | (11.2)                   | (23.7) | (11.8)                   | (33.6) |
| <b>Singapore</b>                |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    | 33          | 100.0   | 23          | 100.0   | (15.0)                   | (3.8)  | (15.2)                   | (3.7)  |
| Government                      | 33          | 99.3    | 23          | 99.3    | 7.5                      | 1.5    | 7.4                      | 1.7    |
| Corporate                       | 0.2         | 0.7     | 0.2         | 0.7     | (97.4)                   | (89.2) | (97.4)                   | (89.2) |
| <b>Thailand</b>                 |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    | 2,805       | 100.0   | 81          | 100.0   | (13.3)                   | 71.3   | (15.6)                   | 46.3   |
| Government                      | 2,518       | 89.8    | 72          | 89.8    | (14.3)                   | 93.2   | (16.5)                   | 64.9   |
| Corporate                       | 288         | 10.2    | 8           | 10.2    | (4.1)                    | (13.9) | (6.6)                    | (26.5) |
| <b>Viet Nam</b>                 |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    | 20,281      | 100.0   | 1.2         | 100.0   | 67.0                     | (20.3) | 58.6                     | (27.0) |
| Government                      | 20,081      | 99.0    | 1.1         | 99.0    | 72.5                     | (17.2) | 63.8                     | (24.2) |
| Corporate                       | 200         | 1.0     | 0.01        | 1.0     | (60.0)                   | (83.3) | (62.0)                   | (84.7) |
| <b>Total Emerging East Asia</b> |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    |             |         | 446         | 100.0   | (15.1)                   | (59.0) | (16.9)                   | (58.6) |
| Government                      | ...         | ...     | 367         | 82.3    | (18.1)                   | (62.6) | (20.1)                   | (62.2) |
| Corporate                       | ...         | ...     | 79          | 17.7    | 2.6                      | (26.5) | 1.7                      | (27.3) |
| <b>Less PRC:</b>                |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    |             |         | 251         | 100.0   | (6.9)                    | (5.5)  | (11.0)                   | (18.6) |
| Government                      | ...         | ...     | 227         | 90.5    | (3.2)                    | 0.1    | (7.7)                    | (14.0) |
| Corporate                       | ...         | ...     | 24          | 9.5     | (32.2)                   | (38.5) | (33.7)                   | (46.3) |
| <b>Japan</b>                    |             |         |             |         |                          |        |                          |        |
| <b>Total</b>                    | 33,744      | 100.0   | 372         | 100.0   | (10.2)                   | (21.1) | 5.1                      | (2.8)  |
| Government                      | 31,603      | 93.7    | 348         | 93.7    | (4.8)                    | (17.2) | 11.3                     | 2.0    |
| Corporate                       | 2,141       | 6.3     | 24          | 6.3     | (50.8)                   | (53.5) | (42.4)                   | (42.7) |

Notes:

1. Data for each market are as follows: Hong Kong, China—corporate bond issuance to Sep-08, 4Q08 data based on *AsianBondsOnline* estimates; Korea—corporate bond issuance to Nov-08, 4Q08 data based on *AsianBondsOnline* estimates; Thailand—government and corporate bond issuance to Nov-08, 4Q08 data based on *AsianBondsOnline* estimates; Japan—government and corporate bond issuance to Nov-08, 4Q08 data based on *AsianBondsOnline* estimates

2. Calculated using data from national sources.

3. Corporate bonds include issues by financial institutions.

4. Bloomberg LP end-of-period LCY/USD rates are used.

5. For LCY-base, total emerging East Asia growth figures based on end-Dec 2008 currency exchange rates and do not include currency effects.

Sources: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bloomberg LP); Republic of Korea (Bank of Korea); Malaysia (Bloomberg LP); Philippines (Bloomberg LP); Singapore (Bloomberg LP); Thailand (Bank of Thailand); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

This sharp difference between fourth quarter y-o-y numbers for emerging East Asia as a whole—and excluding the PRC—can be explained in large part by the fact that PRC authorities issued CNY1,600 billion (USD235 billion) in the latter part of 2007. This issuance was for funding its sovereign wealth fund—thus the comparative base was exceptionally high.

Fourth quarter 2008 corporate LCY bond issuance for emerging East Asia rose 2.6% q-o-q in (LCY terms—excluding currency adjustment)—and 1.7% (in USD terms—including currency adjustment) driven by an upturn in debt sales by local companies in the PRC. This trend continued into January 2009, with new issues launched by a number of PRC corporates, an example being two issues by the Ministry of Railways, offering a CNY15 billion 5-year bond and a CNY5 billion 10-year bond. Overall, however, corporate debt issuance in the region fell 27% y-o-y in 2008 in LCY terms.

***Comparing gross issuance with net issuance and net amortization illustrates the wide variance between LCY bond markets across emerging East Asia.***

The significance of issuance data for gross issuance can be better understood when compared with (i) the stock of debt outstanding for each country; (ii) net issuance for each economy—defined as the y-o-y change in each market's debt stock; and (iii) net amortization (actual debt repayments).

Gross issuance in the fourth quarter was 12% of total bonds outstanding as of end-2008. The ratio of gross issuance/total bonds outstanding, however, varied immensely from market to market—ranging from a high of 57% in Thailand to a low of 4% in the Philippines. The ratio of government issuance to government bonds outstanding varied far more—ranging from a high of 226% in Hong Kong, China to a low of 4% in the Philippines. Other economies with a high ratio of fourth quarter government issuance to bonds outstanding included Indonesia (55%) and Thailand (64%) (**Table 4**).

**Table 3a: Decomposition of 4Q08 LCY Gross Bond Issuance Growth**  
(q-o-q, %)

|                                 | Central Bank /<br>Monetary Authority | Government<br>(excluding central bank) |
|---------------------------------|--------------------------------------|--|
| China, People's Rep. of         | (62.1)                               | 22.3                                   |
| Hong Kong, China                | 124.5                                | ...                                    |
| Indonesia                       | (17.5)                               | ...                                    |
| Korea, Rep. of                  | (34.0)                               | (13.7)                                 |
| Malaysia                        | (53.8)                               | 0.8                                    |
| Philippines                     | ...                                  | (58.3)                                 |
| Singapore                       | ...                                  | 7.4                                    |
| Thailand                        | (13.0)                               | (62.8)                                 |
| Viet Nam                        | ...                                  | 63.8                                   |
| <b>Total Emerging East Asia</b> | <b>(30.0)</b>                        | <b>5.8</b>                             |

Note: USD-base amounts are computed using Bloomberg LP end-of-period LCY/USD rates, reflecting currency effects.

Source: *AsianBondsOnline* calculations.

Corporate issuance as a percentage of bonds outstanding in the fourth quarter was much more subdued—ranging from highs of 29% in Thailand and 22% in the PRC to lows of 1.5% in Korea and 0.3% in Singapore. Corporate bonds, however, are a relatively small proportion of total LCY bonds outstanding in most emerging East Asian countries. Only in Korea and Hong Kong, China, do corporate bonds outstanding exceed government debt outstanding. If the PRC is excluded, the ratio of gross issuance to bonds outstanding rises to 17%, and the ratio of government issuance to government bonds outstanding rises to 29%.

Of the total gross issuance of USD446 billion for emerging East Asia in the last quarter of 2008, USD403 billion was used to pay off existing debt in the form of net amortization. Net issuance—net of amortization—was a mere USD43 billion. And this was more or less evenly divided between government bonds and corporate sector bonds. Net issuance was largest for the PRC, at USD100 billion, and negligible or negative for most other countries.

**Table 4: Market Size and Issuance for Emerging East Asian LCY Bond Markets**

|                                 | 3Q08                            | 4Q08                            | 4Q08                         | 4Q08                         | 4Q08                       | 4Q08                           |
|---------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|----------------------------|--------------------------------|
|                                 | Bonds Outstanding (USD billion) | Bonds Outstanding (USD billion) | Gross Issuance (USD billion) | Gross Iss./ Bonds Outst. (%) | Net Issuance (USD billion) | Net Amortization (USD billion) |
| <b>China, People's Rep. of</b>  |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | 2,114                           | 2,213                           | 195                          | 8.8                          | 100                        | 95                             |
| Government                      | 1,901                           | 1,957                           | 140                          | 7.1                          | 56                         | 84                             |
| Corporate                       | 212                             | 256                             | 55                           | 21.6                         | 44                         | 12                             |
| <b>Hong Kong, China</b>         |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | 92                              | 88                              | 49                           | 55.8                         | (4)                        | 53                             |
| Government                      | 19                              | 20                              | 46                           | 225.6                        | 2                          | 44                             |
| Corporate                       | 74                              | 68                              | 3                            | 5.0                          | (6)                        | 9                              |
| <b>Indonesia</b>                |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | 77                              | 68                              | 34                           | 50.2                         | (9)                        | 43                             |
| Government                      | 69                              | 61                              | 34                           | 54.8                         | (7)                        | 41                             |
| Corporate                       | 8.1                             | 6.4                             | 0.4                          | 6.8                          | (2)                        | 2                              |
| <b>Korea, Rep. of</b>           |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | 850                             | 817                             | 45                           | 5.5                          | (34)                       | 79                             |
| Government                      | 387                             | 368                             | 38                           | 10.4                         | (18)                       | 57                             |
| Corporate                       | 464                             | 448                             | 7                            | 1.5                          | (15)                       | 22                             |
| <b>Malaysia</b>                 |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | 172                             | 163                             | 15                           | 9.3                          | (8)                        | 24                             |
| Government                      | 96                              | 89                              | 11                           | 12.3                         | (7)                        | 18                             |
| Corporate                       | 76                              | 74                              | 4                            | 5.7                          | (1)                        | 6                              |
| <b>Philippines</b>              |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | 58                              | 59                              | 2                            | 3.8                          | 1                          | 1                              |
| Government                      | 53                              | 53                              | 2                            | 3.5                          | 1                          | 1                              |
| Corporate                       | 5                               | 5.7                             | 0.4                          | 6.9                          | 1                          | (0)                            |
| <b>Singapore</b>                |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | 128                             | 129                             | 23                           | 17.9                         | 1                          | 22                             |
| Government                      | 71                              | 73                              | 23                           | 31.4                         | 2                          | 21                             |
| Corporate                       | 57                              | 56                              | 0.2                          | 0.3                          | (1)                        | 1                              |
| <b>Thailand</b>                 |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | 147                             | 143                             | 81                           | 56.7                         | (4)                        | 85                             |
| Government                      | 119                             | 114                             | 72                           | 63.5                         | (5)                        | 78                             |
| Corporate                       | 28                              | 28                              | 8                            | 29.1                         | 1                          | 8                              |
| <b>Viet Nam</b>                 |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | 12.5                            | 12.9                            | 1.2                          | 9.0                          | 0.4                        | 0.8                            |
| Government                      | 12.0                            | 12.4                            | 1.1                          | 9.3                          | 0.4                        | 0.7                            |
| Corporate                       | 0.5                             | 0.5                             | 0.01                         | 2.2                          | (0.02)                     | 0.03                           |
| <b>Total Emerging East Asia</b> |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | <b>3,650</b>                    | <b>3,692</b>                    | <b>446</b>                   | <b>12.1</b>                  | <b>43</b>                  | <b>403</b>                     |
| Government                      | <b>2,726</b>                    | <b>2,749</b>                    | <b>367</b>                   | <b>13.4</b>                  | <b>23</b>                  | <b>344</b>                     |
| Corporate                       | <b>924</b>                      | <b>944</b>                      | <b>79</b>                    | <b>8.4</b>                   | <b>20</b>                  | <b>59</b>                      |
| <b>Less PRC:</b>                |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | 1,536                           | 1,479                           | 251                          | 17.0                         | (57)                       | 308                            |
| Government                      | 825                             | 792                             | 227                          | 28.7                         | (33)                       | 260                            |
| Corporate                       | 712                             | 687                             | 24                           | 3.5                          | (24)                       | 48                             |
| <b>Japan</b>                    |                                 |                                 |                              |                              |                            |                                |
| <b>Total</b>                    | 8,120                           | 9,597                           | 372                          | 3.9                          | 1,478                      | (1,106)                        |
| Government                      | 7,292                           | 8,640                           | 348                          | 4.0                          | 1,348                      | (1,000)                        |
| Corporate                       | 827                             | 957                             | 24                           | 2.5                          | 130                        | (106)                          |

Sources: People's Republic of China (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange, Bank Indonesia and Bloomberg LP); Republic of Korea (Bank of Korea and *KoreaBondWeb*); Malaysia (Bank Negara Malaysia and Bloomberg LP); Philippines (Bureau of the Treasury and Bloomberg LP); Singapore (Monetary Authority of Singapore and Bloomberg LP); Thailand (Bank of Thailand); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

*In 2009, LCY bond issuance is expected to rise: (i) several governments use LCY bonds to help finance stimulus packages; (ii) government LCY bond sales will likely hold up on demand for safe-haven assets; and (iii) companies increasingly turn to LCY markets for refinancing and raising new funds.*

Government bond issuance—excluding issuance by central bank and monetary authorities—is expected to rise in the current year as many authorities in the region seek funds to finance their fiscal stimulus packages and plug their rising fiscal deficits. The result of government debt sales and auctions so far this year shows that demand for safe-haven securities is intact as investors keep away from high-yielding assets. Domestic companies are also likely to look at local markets to raise fresh funds (or for refinancing) as corporate bond spreads in major global markets remain at high levels. Borrowing in local markets also allows companies to eliminate foreign exchange risk on their balance sheets.

### G3 Currency<sup>2</sup> Issuance

*Recent improvements in market conditions offer opportunities for both sovereigns and corporations to tap G3-currency bond markets—although price discovery will likely lead to higher risk premiums than those in recent years.*

In early January this year, improvement in market conditions opened a window of opportunity for emerging market borrowers to tap the global market for funds. The Philippine government and Korean financial institutions made an early foray into the G3-denominated debt market (**Table 5**). The Philippines issued USD1.5 billion in sovereign bonds, while the Export-Import Bank of Korea (KEXIM) and the Korea Development Bank (KDB) issued two USD2 billion bonds. News reports suggest from USD9–12 billion bonds are in the near-term pipeline, including a possible USD5–6 billion issue from Korea,

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<sup>2</sup> G3 currencies include the US dollar, euro, and yen.



Table 5: G3 Currency Bonds Issuance

| Issued in 2008                    |               |            | Issued / Pipeline for 2009        |                      |            |
|-----------------------------------|---------------|------------|-----------------------------------|----------------------|------------|
| Issuer                            | Size USDm     | Issue Date | Issuer                            | Size USDm            | Issue Date |
| <b>Rep. of Korea, Total</b>       | <b>7,715</b>  |            | <b>Rep. of Korea , Total</b>      | <b>9,500 -10,500</b> |            |
| of which: Policy Banks            |               |            | <i>In Pipeline</i>                |                      |            |
|                                   |               |            | <b>Korea Sovereign</b>            | <b>5,000 - 6,000</b> |            |
| KDB JPY15 Bn 3.22% 2018           | 144           | 19-May-08  | <b>POSCO</b>                      | <b>500</b>           |            |
| KDB FRNs 2011                     | 150           | 19-Feb-08  | <i>Issued</i>                     |                      |            |
| KDB 5.3% 2011                     | 1,000         | 10-Jan-08  | KEXIM 8.125% 2014                 | 2,000                | 20-Jan-09  |
| KDB JPY13 Bn 2.43% 2010           | 119           | 07-Aug-08  | KDB 8.0% 2014                     | 2,000                | 23-Jan-09  |
| KDB JPY19 Bn FRNs 2010            | 174           | 07-Aug-08  | <b>Note: Issued in SGD</b>        |                      |            |
| KEXIM EUR 750 Mn 5.75% 2013       | 1,158         | 15-May-08  | KEXIM SGD 200 6.10% 2010          | 135                  | 15-Jan-09  |
| KEXIM JPY15 Bn 3.24% 2018         | 143           | 06-Jun-08  | KDB SGD 300 M 5.68%               | 202                  | 16-Jan-09  |
| KEXIM FRNs 2009                   | 145           | 14-Aug-08  |                                   |                      |            |
| KEXIM FRNs 2014                   | 100           | 06-May-08  |                                   |                      |            |
| IBK FRNs 2013                     | 200           | 03-Apr-08  |                                   |                      |            |
|                                   | <b>3,333</b>  |            |                                   |                      |            |
| <b>People's Republic of China</b> | <b>600</b>    |            | <b>People's Republic of China</b> |                      |            |
|                                   |               |            | <i>No Immediate Pipeline</i>      |                      |            |
| <b>Hong Kong, China</b>           | <b>2,975</b>  |            | <b>Hong Kong, China</b>           |                      |            |
|                                   |               |            | <i>No Immediate Pipeline</i>      |                      |            |
| <b>Philippines</b>                | <b>850</b>    |            | <b>Philippines</b>                |                      |            |
| of which:                         |               |            | of which:                         |                      |            |
|                                   |               |            | <i>Issued</i>                     |                      |            |
| Philippines 6.375% 2032           | 500           | 29-Jan-08  | Philippines 8.375% 2019           | 1,500                | 07-Jan-09  |
| SM Investments 6.75% 2013         | 350           | 10-Jul-08  |                                   |                      |            |
| <b>Indonesia</b>                  | <b>4,450</b>  |            | <b>Indonesia Sovereign</b>        | <b>2,000 - 4,000</b> |            |
| of which:                         |               |            | <i>In Pipeline</i>                |                      |            |
| Excelcomindo 7.125% 2013          | 250           | 02-Jun-08  |                                   |                      |            |
| Indonesia 7.750% 2038             | 1,000         | 10-Jan-08  |                                   |                      |            |
| Indonesia 6.875% 2018             | 1,000         | 10-Jan-08  |                                   |                      |            |
| Indonesia 7.750% 2038             | 1,000         | 17-Jun-08  |                                   |                      |            |
| Indonesia 6.875% 2018             | 900           | 17-Jun-08  |                                   |                      |            |
| Indonesia 6.750% 2014             | 300           | 17-Jun-08  |                                   |                      |            |
| <b>Malaysia</b>                   | <b>250</b>    |            | <b>Malaysia</b>                   |                      |            |
|                                   |               |            | <i>In Pipeline</i>                | <b>1,000</b>         |            |
|                                   |               |            | Malaysia Sovereign                |                      |            |
| <b>Thailand</b>                   | <b>674</b>    |            | <b>Thailand</b>                   |                      |            |
|                                   |               |            | <i>No Immediate Pipeline</i>      |                      |            |
| <b>Singapore</b>                  | <b>100</b>    |            | <b>Singapore</b>                  |                      |            |
|                                   |               |            | <i>No Immediate Pipeline</i>      |                      |            |
| <b>Grand Total - Issued</b>       | <b>17,613</b> |            |                                   | <b>14,000-17,000</b> |            |

Sources: Compilation from newspaper and wire reports.

USD2–4 billion from Indonesia, and USD500 million from the Pohang Iron and Steel Company (POSCO), the Korean steel maker.

However, borrowing costs for G3 currency-denominated sovereigns and corporates have remained elevated since mid-2008 (**Figure 7**). This implies that borrowers must pay higher risk premiums than during the era of cheap credit and high growth. Investors are also increasingly differentiating between sovereigns, with wider spreads on lower-rated sovereigns like Indonesia and the Philippines than those with investment-grade ratings. This is also true between sovereign and corporate paper. These trends have been paralleled in the credit default swap (CDS) market over the past month, with CDS spreads widening in early January, after tightening in the last few months of 2008. Indonesian spreads remain at especially high levels (**Figure 8**).

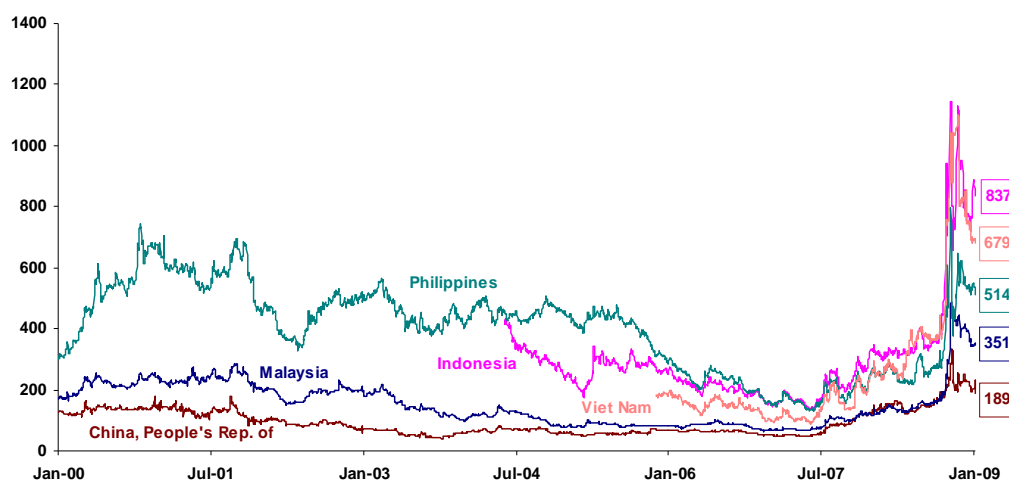
It is important to note, however, that the G3 currency market in Asia is small, often having difficulty in raising more than USD30 billion in any given year. Thus, if all pipeline deals were to be consummated (a total of USD17 billion), that would equal slightly more than half what one would expect for all of 2009. By comparison, gross issuance for the LCY market in emerging East Asia in the first three quarters of 2008 equaled USD1.8 trillion. In the final quarter, a slow issuance quarter by any standard, gross LCY issuance was worth USD446 billion and US2.2 trillion for all of 2008. Thus, a modest year in the LCY market in emerging East Asia would range somewhere between USD2–3 trillion, compared with USD25–30 billion for G3 currency issuance. Emerging East Asia's G3 currency market issuance is unlikely to be above 1% of the LCY market.

The contribution of the G3 issuance market to the overall Asian debt market may be marginal, but it is important nevertheless for specific issuers. For example, the recent Philippine USD issue helped relieve pressure on the Philippine peso bond market, and also provided USD funds that could be used to service USD-denominated debt. With the success of the dollar issue—and recent hints from central bank officials that further USD borrowing may occur later

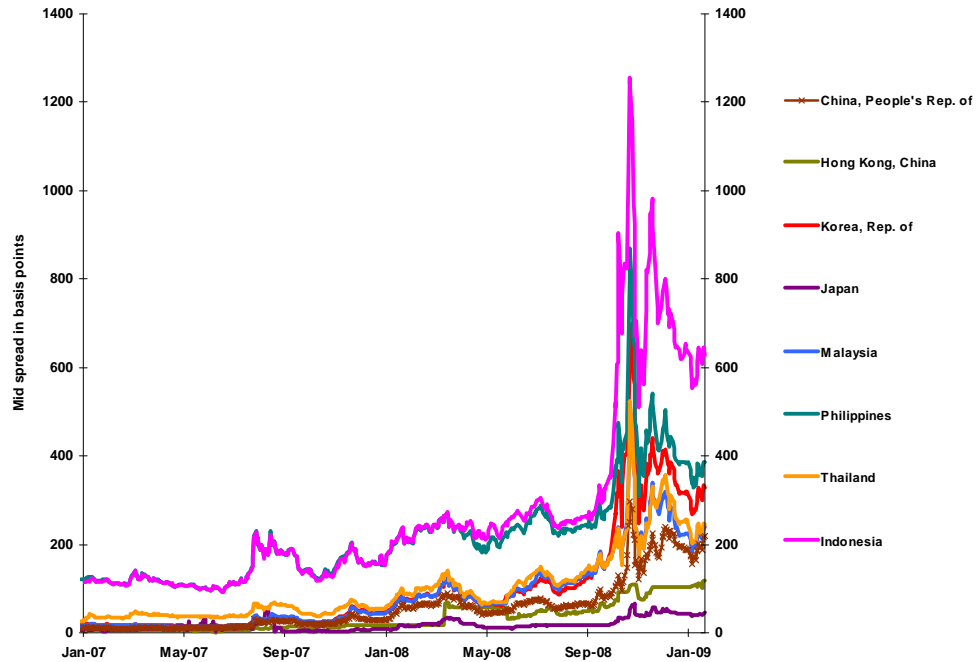
in the year, the government is in a better position to offer peso issues on the domestic market—as well as proceed with its frequent programs for switching near-dated maturities into longer-dated maturities. The KDB and KEXIM issues also demonstrate that Korean corporates and banks can access the global market and provide price guidance for other issuers. Further government issues or blue chips like POSCO will go a long way toward making it possible for commercial banks and other lower-rated corporations to return to the market.

Greater G3 currency issuance also aids in price discovery for LCY issues and complements local market development. It allows foreign investors to familiarize themselves with local names and their underlying credit quality. This is evident in the growth of foreign investors participating in Indonesian, Malaysian, and Philippine LCY bond markets. Investors, once more comfortable with the credit risk of local issuers, will then be more willing to take on the associated foreign exchange risk. And that is the final goal of the LCY market: to create an environment where both foreign and domestic investors are comfortable with both the credit risk and the foreign exchange risk of a particular bond. But, under current economic and volatile financial market conditions, this process could take time.

**Figure 7: JP Morgan EMBI Sovereign Stripped Spreads (basis points)**



Note: In US dollars and based on sovereign bonds.  
Source: Bloomberg LP.

**Figure 8: Credit Default Swap Spreads—Senior 5-year**

Source: Thomson Datastream.

## Turnover

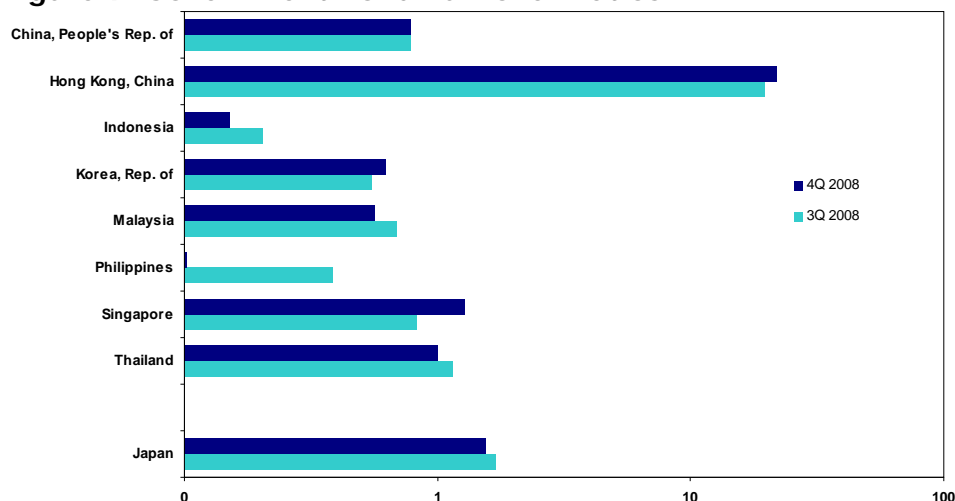
*As a measure of market liquidity, turnover remained decidedly mixed across emerging East Asia's LCY bond markets during the final quarter of 2008.*

Turnover in government bonds was generally higher than corporate bonds, except in the PRC. Turnover ratios for government bonds rose in Hong Kong, China; Korea; and Singapore, but remained below one for five government LCY bond markets, reflecting the drop in trading volumes in the most liquid segment of the markets (**Figure 9**).

Turnover ratios for LCY corporate bonds were below 0.3 times total bonds outstanding, except in the PRC. This reflects tight credit conditions, adverseness to trading higher risk instruments, and concerns over overall liquidity in this market segment. Corporate bond turnover rose in Indonesia,

Korea, and Malaysia. But in general liquidity in the corporate bond markets remains low, with lower rated papers more difficult to transact (**Figure 10**).

**Figure 9: Government Bond Turnover Ratios<sup>1</sup>**

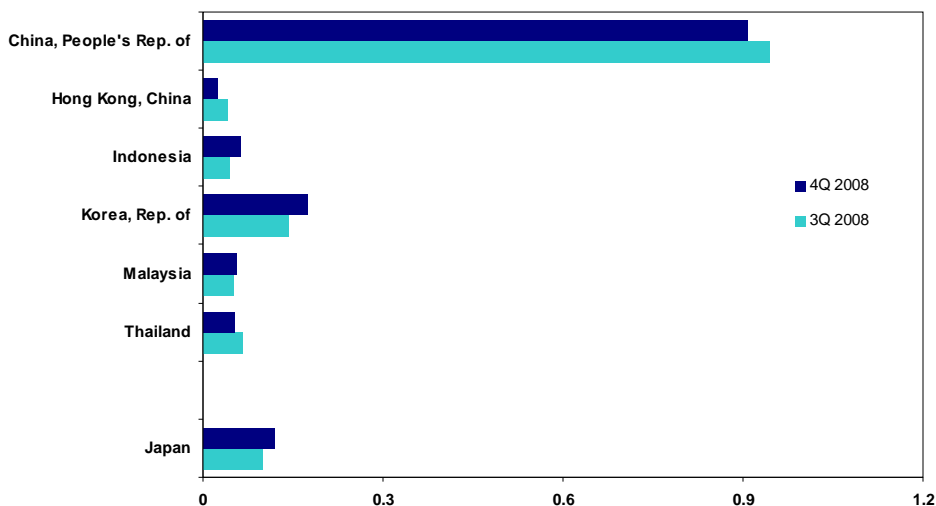


<sup>1</sup> Calculated as LCY trading volume (sales amount only) divided by average LCY value of outstanding bonds during each 3-month period.

<sup>2</sup> Philippine government bond turnover to Nov-08.

Sources: PRC (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange); Korea (*KoreaBondWeb* and Bank of Korea); Malaysia (Bank Negara Malaysia); Philippines (Bureau of the Treasury); Singapore (Monetary Authority of Singapore and Singapore Government Securities); Thailand (Thai Bond Market Association and Bank of Thailand) and Japan (Japan Securities Dealers Association).

**Figure 10: Corporate Bond Turnover Ratios<sup>1</sup>**



<sup>1</sup> Calculated as LCY trading volume (sales amount only) divided by average LCY value of outstanding bonds during each 3-month period.

Sources: PRC (*ChinaBond*); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Indonesia Stock Exchange); Korea (*KoreaBondWeb*); Malaysia (Bank Negara Malaysia); Thailand (Thai Bond Market Association and Bank of Thailand) and Japan (Japan Securities Dealers Association).

## Bond Yields

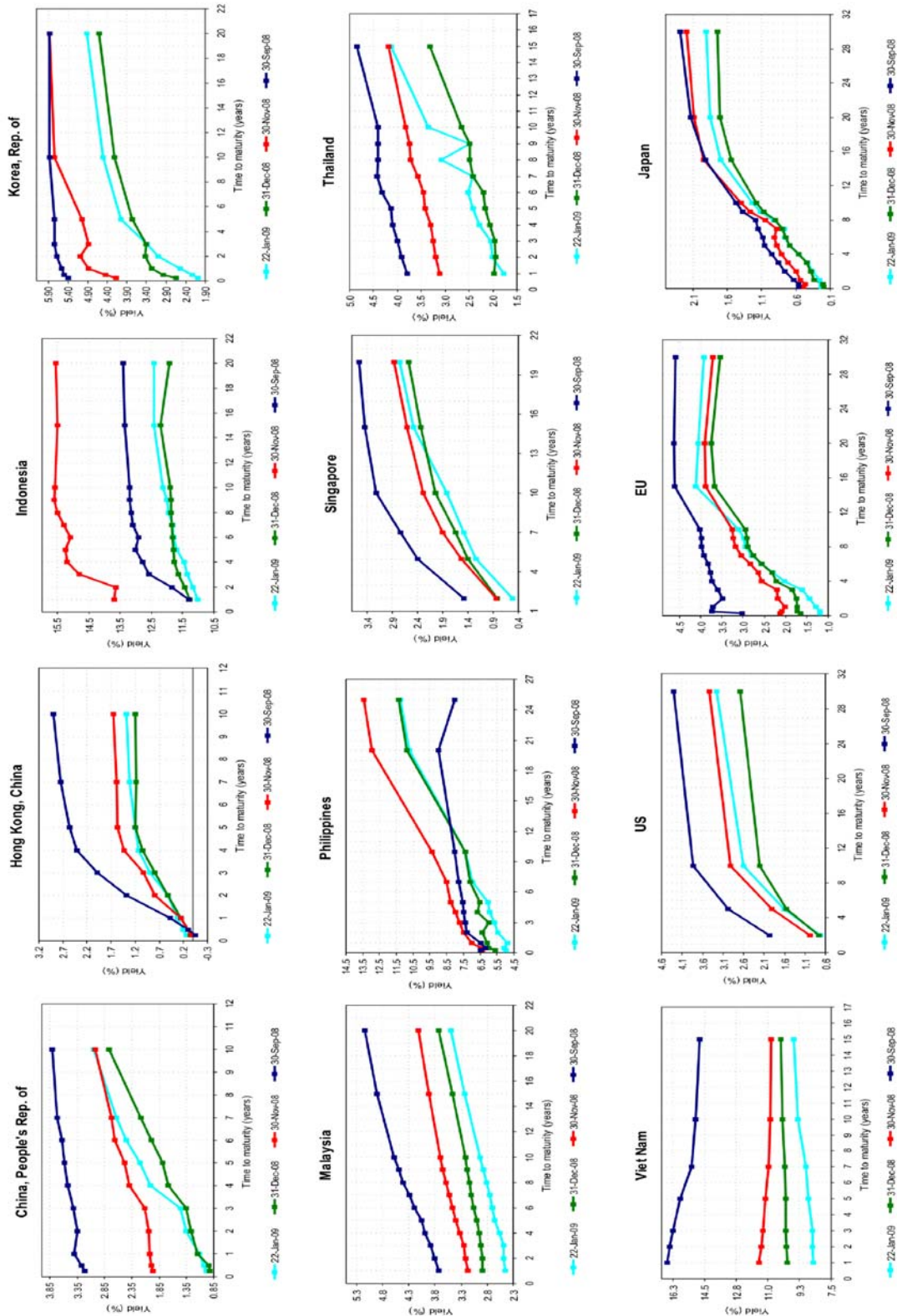
*Bond yield curves shifted downward in the last quarter of 2008 as interest rates were slashed and inflation eased; they edged up in several markets in mid-January over concerns about the impact of economic stimulus programs on bond issuance plans of Asian governments in 2009.*

The movement of Asian benchmark bond yield curves since the end of September 2008 tells a distinct story (**Figure 11**). Yields fell from late September through end-December in most emerging East Asian markets, then widened again in mid-January—reflecting market concern about the continued financial deleveraging, as well as concern about the economic stimulus programs of Asian governments in 2009 as mentioned above.

(i) In October, many banks and financial intermediaries faced heavy write-offs as a result of the international credit crisis—which halted interbank lending, creating a state of deep financial distress. Concerns that the credit contraction would generate a severe economic slowdown throughout Asia—and globally—savaged consumer and investor confidence. This, in turn, led to a flight to quality as investors shunned riskier assets for government bonds—or other high investment-grade assets—resulting in a downward shift in most government bond yield curves in the region.

The downward trend continued into November and December as central banks and monetary authorities sharply reduced policy rates (**Figure 12**) following the decline in inflation (**Figure 13**), the result of plummeting prices for energy and other key commodities. Coordinated policy rate cuts by major central banks in late October were accompanied by the simultaneous announcement of the US Federal Reserve's USD30 billion currency swap facilities for Brazil, Korea, Mexico, and Singapore (available through 30 April 2009).

Figure 11: Benchmark Yield Curves—LCY Bonds



Source: Based on data from Bloomberg LP.

By the end of November, government bond yield curves for the PRC; Hong Kong, China; Korea; and Thailand shifted to levels below January 2008.

The principal exceptions to this trend were Indonesia and the Philippines. In November, Indonesia's yield curve shifted upward well above its end-September level and only in December began to shift downward. The Philippine curve also shifted upward in November before shifting downward in December. But it steepened while doing so, and finished December with its long-end well above September levels.

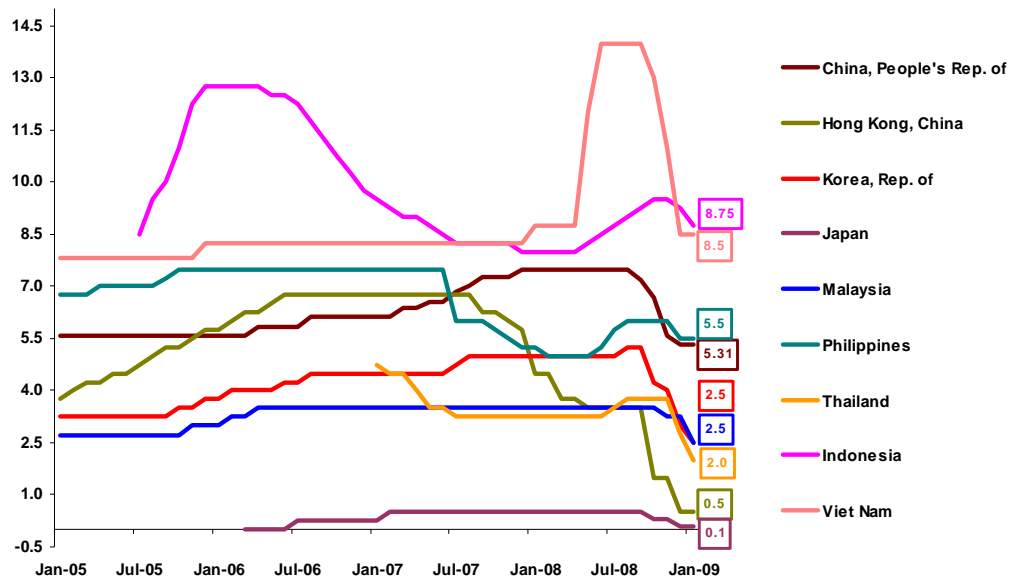
The underlying reason for these yield curve movements was persistently strong inflationary pressures, resulting in inflation rates that bucked the downward trend of other markets in the region.

The Korean yield curve—at its long end—was delayed in following the overall yield curve trend. The short end of the Korean yield curve steepened downward at the end of November, but the long end stayed fairly close to where it was in September. Only in December did the entire Korean curve shift downward. In Singapore and Viet Nam, curves did just the opposite. They moved strongly downward in October and November from their end-September positions, but then moved further downward by a smaller amount at the end of December.

(ii) Emerging East Asian government bond yield curves generally widened in January 2009, following widening government yields curves in the US, Europe, and Japan—driven primarily by concern over financial system stability in the US and Europe, as well as the expectation of higher issuance this year by governments and government-backed financial institutions. The two notable exceptions in the region are Malaysia and Viet Nam, where government yield curves continued to tighten in January; and in the Philippines, where the yield curve steepened downward at the shorter end of the curve—and remained mostly unchanged relative to end-December yields in the middle to longer part of the curve.

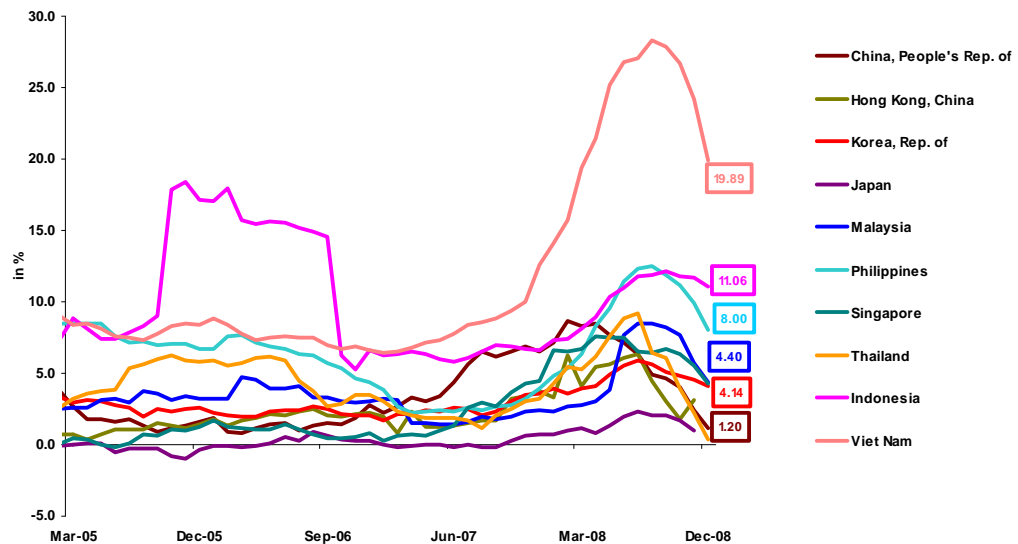


Figure 12: Policy Rates



Sources: Bloomberg LP except for Viet Nam (State Bank of Viet Nam).

Figure 13: Inflation Rates



Source: Bloomberg LP.

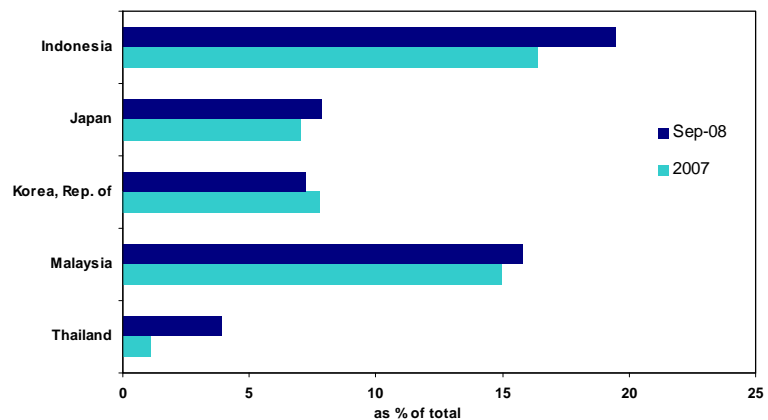
In Singapore, Indonesia, and Korea, government bond yield curves steepened as shorter-term yields fell relative to end-December, and longer yields rose. The PRC government bond yield curve widened for maturities above 3 years, while the yield curve in Hong Kong, China widened, but only by very small amounts. Thailand's government benchmark curve also widened for some specific maturities under 9 years, but widened significantly at the longer end of the curve.

## Foreign Holdings

*Foreign holdings of LCY bonds continued to rise or remain stable through September 2008.*

While foreign investors undoubtedly are concerned about recent developments in emerging East Asian LCY bond markets, they still increased exposure in these markets—at least through September 2008 (**Figure 14**). The only market showing a drop in foreign investment was Korea. Confidence in regional LCY bond markets reflected the growing strength of emerging East Asian bonds as an asset class and continued market reforms at national and regional levels.

**Figure 14: Foreign Holdings of LCY Government Bonds**



Sources: National Sources.

## Debt Financing in 2009

*Many economies in the region will likely introduce larger stimulus packages and boost government bond issuance, as declining inflation and lower yields add fiscal breathing space.*

Except for Singapore and Hong Kong, China, fiscal balances in emerging East Asian economies are expected to be in deficit in 2009—and in many cases exceed deficits reached in 2008 (**Figure 15**). Along with aggressive interest rate cuts by central banks and monetary authorities, governments have

unveiled large fiscal stimulus packages to pump prime their economies. Malaysia and PRC have announced that they are likely to raise bond sales in the LCY debt markets to finance rising fiscal deficits.

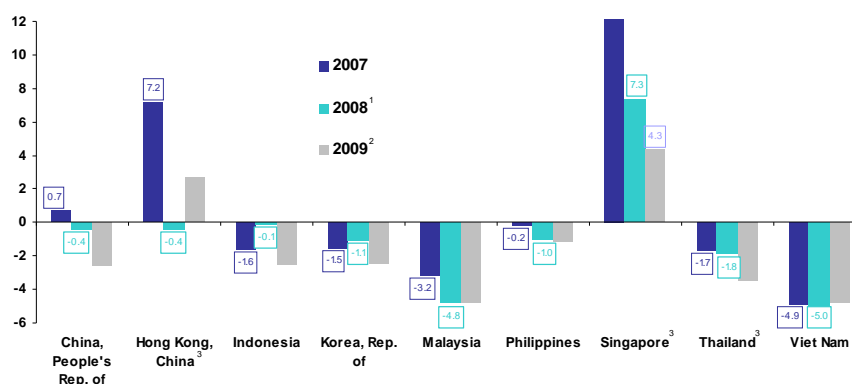
This provides an opportunity for governments in emerging East Asia to issue benchmark long-dated securities instead of shorter-dated paper. It allows for market consolidation, particularly for those that remain fragmented. These measures will help add depth and improve liquidity while better managing government debt. In fact, some governments have substantially reduced issuance at the longer end of their yield curves to minimize coupon payments in the current market. This has been a viable strategy, because of the reduction in spending, especially for subsidy programs for oil and other key commodities. Now governments have the chance to return to longer-dated debt to finance their respective stimulus packages.

***Market concerns over the sustainability of rising fiscal deficits and government guarantees may raise risk premiums and impact ratings for some emerging East Asian economies.***

There are rising concerns, however, over increasing fiscal deficits, government guarantees and implications over fiscal sustainability.

Lower bond yields provide governments with fiscal space to raise funds from LCY bond markets. Prospects for LCY bond sales have improved in 2009. Indonesia sold LCY government bonds in mid-January for the first time since October, while Malaysia issued the equivalent of about USD1 billion—for a 5-year tenor—and at an average yield of 2.6 %, the lowest in a decade.

However, bond yields in global and several regional markets have edged higher since early January on concerns over the health of the financial sector, particularly banking. Risks of increased supply and a rise in yields could cause difficulties in deficit financing for some of the region's more cash-strapped governments, with implications for medium and long-term macroeconomic management.

**Figure 15: Fiscal Balance (% of GDP)****Notes:**

1. Data for PRC are World Bank estimates; Data for Hong Kong, China; Korea; Malaysia; and Singapore are from national budgets. Data for Philippines; Thailand; and Viet Nam are government estimates; Data for Indonesia is actual deficit.

2. Budget except for Indonesia; Philippines; Thailand (government estimates); and China, People's Rep of (World Bank estimates);

3. Fiscal year 2008—2009 data for PRC cover central and local governments.

Sources: *Asian Development Outlook* (various issues), Asian Development Bank; International Monetary Fund Article IV, International Monetary Fund; National sources; China Quarterly Update (Dec 2008) and *East Asia Pacific Update* (Dec 2008), World Bank.

***Companies face greater financing risks as borrowing costs remain elevated along with increased competition from government and government-guaranteed financial institutions.***

More corporate issuance will provide a more balanced funding base than reliance on bank or equity finance. However, companies will face multiple refinancing risks in 2009 as they navigate through a combination of rising borrowing costs and increased competition from governments and government-backed financial institutions for access to still fickle capital markets. This could be an especially difficult issue for companies that had become used to issuing new equity, especially during 2005–2007, a period of cheap credit and high growth.

Privately-owned companies in the region will be particularly at risk. In many markets, government-backed companies remain dominant players in key sectors and state guarantees or implicit sovereign support will provide these firms easier access to funds than private companies.

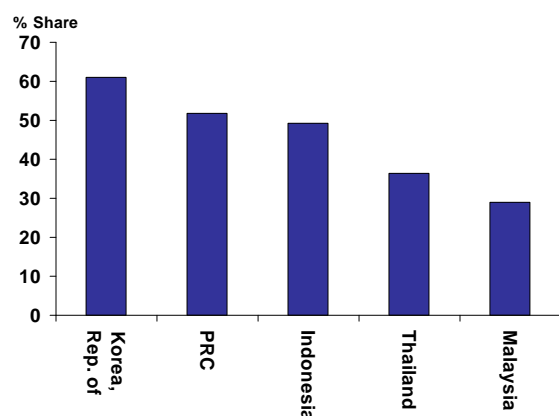
Governments in the region are creating special guarantee or liquidity support programs for financially-stretched companies, including small and

medium enterprises (SME), but such help may be selective for certain key sectors.

***Risks of any abrupt withdrawal of funds from emerging markets may prove an additional complicating factor for new LCY bond issuance in emerging East Asia.***

Capital outflows from emerging markets have accelerated as write-downs at major global financial institutions accumulate—along with continued deleveraging and heightened risk aversion. The need to repair balance sheets and rebuild capital bases of the financial institutions is likely to constrict fund availability to emerging markets and put downward pressure on regional asset markets, exchange rates, foreign exchange reserves and raise funding costs in external markets.

**Figure 16: Bank/Financial Institution Holdings of LCY Government Bonds—(%)**



Note: Data is for Sep-08 (Korea and Malaysia), Nov-08 (Thailand), Dec-08 (PRC and Indonesia).

Source: *AsianBondsOnline* calculations.

***With banks and financial institutions large holders of public debt, prudent debt management will become increasingly important in rebuilding and maintaining financial stability.***

Traditionally, banks and financial institutions have been major buyers (and holders) of emerging East Asian government debt (**Figure 16**), with financial intermediation dependent on banks. Thus, prudent public debt management is one of the key challenges facing policymakers throughout the region.

While designing fiscal stimulus programs, governments should keep in mind their public debt position and impact of debt repayments on medium and long-term fiscal management. Investor concerns are being reflected in credit default swap spreads of governments that lack fiscal space and face balance of payments difficulties.

## Bond and Equity Market Returns

***LCY bond returns in 2008 were lackluster compared with previous years, but far superior to stock market returns.***

Emerging East Asian LCY bond returns fell in 2008 as investors reduced exposure to high risk assets

(Table 6). But bond returns fell far less than equity markets (Table 7). Medium to high yield sectors of the market—that often serve as an alternative to equity investment—remain relatively underdeveloped in most emerging East Asian LCY markets.

The ABF Pan Asian Bond Index gained a mere 4.1% in 2008 against 8.0% in 2007. This compares with an even smaller 0.97% increase (on a USD unhedged basis) for HSBC's ALBI index. The ALBI contains some highly-rated corporate issues and the losses on these securities accounts for the lower portfolio returns in the ALBI. The ABF indexes contain only government debt and government-guaranteed debt obligations.

**Table 6: iBoxx ABF Index Family Returns**

| Market                  | Modified Duration (years) | 2007 Returns (%)          |                                 | 2008 Returns (%)          |                                 |
|-------------------------|---------------------------|---------------------------|---------------------------------|---------------------------|---------------------------------|
|                         |                           | Local Currency Bond Index | USD Unhedged Total Return Index | Local Currency Bond Index | USD Unhedged Total Return Index |
| China, People's Rep. of | 4.12                      | (2.12)                    | 4.54                            | 11.91                     | 18.71                           |
| Hong Kong, China        | 3.64                      | 5.91                      | 5.61                            | 10.22                     | 10.85                           |
| Indonesia               | 4.42                      | 9.84                      | 5.51                            | 3.22                      | (12.30)                         |
| Korea, Republic of      | 3.64                      | 2.36                      | 1.73                            | 11.46                     | (18.20)                         |
| Malaysia                | 4.98                      | 3.05                      | 9.37                            | 7.58                      | 2.89                            |
| Philippines             | 3.66                      | 6.21                      | 23.41                           | 1.63                      | (12.55)                         |
| Singapore               | 5.32                      | 5.05                      | 11.46                           | 6.75                      | 6.80                            |
| Thailand                | 5.55                      | 6.66                      | 13.44                           | 16.88                     | 13.72                           |
| Pan-Asian Index         | 4.35                      | ...                       | 8.03                            | ...                       | 4.14                            |
| HSBC ALBI               | 6.03                      | ...                       | 7.85                            | ...                       | 0.97                            |
| US Govt 1–10 years      | 3.87                      | ...                       | 8.59                            | ...                       | 10.95                           |

Notes:

1. Market bond indexes are from iBoxx ABF Index Family. 2008 returns as of 31 December.
2. Annual return is computed using natural logarithm of end year index value/beginning year index value.
3. Duration is as at 31 December 2008.

Sources: *AsianBondsOnline*, Bloomberg LP/EFFAS for US Government Bond Index.

Foreign investors also repatriated a portion of their portfolios away from emerging markets—one factor in the depreciation of many regional currencies against the US dollar (Table 7). Nonetheless, PRC bonds delivered the highest returns at 18.7% (on a USD unhedged basis), followed by Thailand (13.7%); Hong Kong, China (10.9%); and Singapore (6.8%). Returns on Malaysian bonds were much lower at 2.9%. Bond returns in Korea, Philippines, and Indonesia fell by 18.2%, 12.6%, and 12.3%, respectively.

**Table 7: Appreciation (Depreciation) of Emerging East Asian Currencies (%)**

| Currency | Against USD |        |        |        |        |
|----------|-------------|--------|--------|--------|--------|
|          | 2007        | 2008   | 3Q08   |        | 4Q08   |
|          | y-o-y       | y-o-y  | y-o-y  | q-o-q  | q-o-q  |
| CNY      | 6.7         | 6.7    | 9.2    | 0.1    | 0.3    |
| HKD      | (0.3)       | 0.6    | 0.0    | 0.4    | 0.2    |
| IDR      | (4.3)       | (18.7) | (5.1)  | (3.9)  | (16.6) |
| KRW      | (0.6)       | (29.7) | (26.7) | (13.1) | (5.4)  |
| MYR      | 6.5         | (4.5)  | (1.0)  | (5.2)  | (0.5)  |
| PHP      | 17.3        | (13.9) | (4.5)  | (4.8)  | (0.7)  |
| SGD      | 6.5         | 0.1    | 3.4    | (5.3)  | (0.1)  |
| THB      | 19.6        | (15.8) | (6.0)  | (1.1)  | (2.7)  |
| VND      | 0.2         | (8.8)  | (3.1)  | 1.4    | (5.2)  |
| JPY      | 6.3         | 20.8   | 7.8    | 0.0    | 15.7   |

Note: Appreciation (depreciation) is equal to the natural logarithm of "end-of-period rate/start-of-period rate."

Source: Bloomberg LP.

**Table 8: MSCI Index Returns**

| Market                         | 2007 Returns (%)     |           | 2008 Returns (%)     |           |
|--------------------------------|----------------------|-----------|----------------------|-----------|
|                                | Local Currency terms | USD terms | Local Currency terms | USD terms |
| China, People's Rep. of        | 63.52                | 63.10     | (52.23)              | (51.94)   |
| Hong Kong, China               | 37.83                | 37.48     | (53.16)              | (52.88)   |
| Indonesia                      | 57.50                | 50.81     | (50.76)              | (57.57)   |
| Korea, Republic of             | 30.80                | 29.95     | (40.62)              | (55.87)   |
| Malaysia                       | 32.68                | 41.55     | (40.77)              | (43.39)   |
| Philippines                    | 16.26                | 38.04     | (46.77)              | (53.79)   |
| Singapore                      | 16.25                | 23.91     | (49.50)              | (49.55)   |
| Thailand                       | 31.33                | 40.94     | (48.72)              | (50.34)   |
| <b>Far East ex-Japan Index</b> | 32.39                | 33.38     | (48.14)              | (51.96)   |
| <b>MSCI USA</b>                | ...                  | 4.09      | ...                  | (38.58)   |

Notes:

1. Market indexes are from MSCI country indexes. 2008 returns as of 31 December 2008.
2. Far East ex-Japan Index includes PRC; Hong Kong, China; Indonesia; Korea; Malaysia; Philippines; Singapore; Taipei, China; and Thailand.

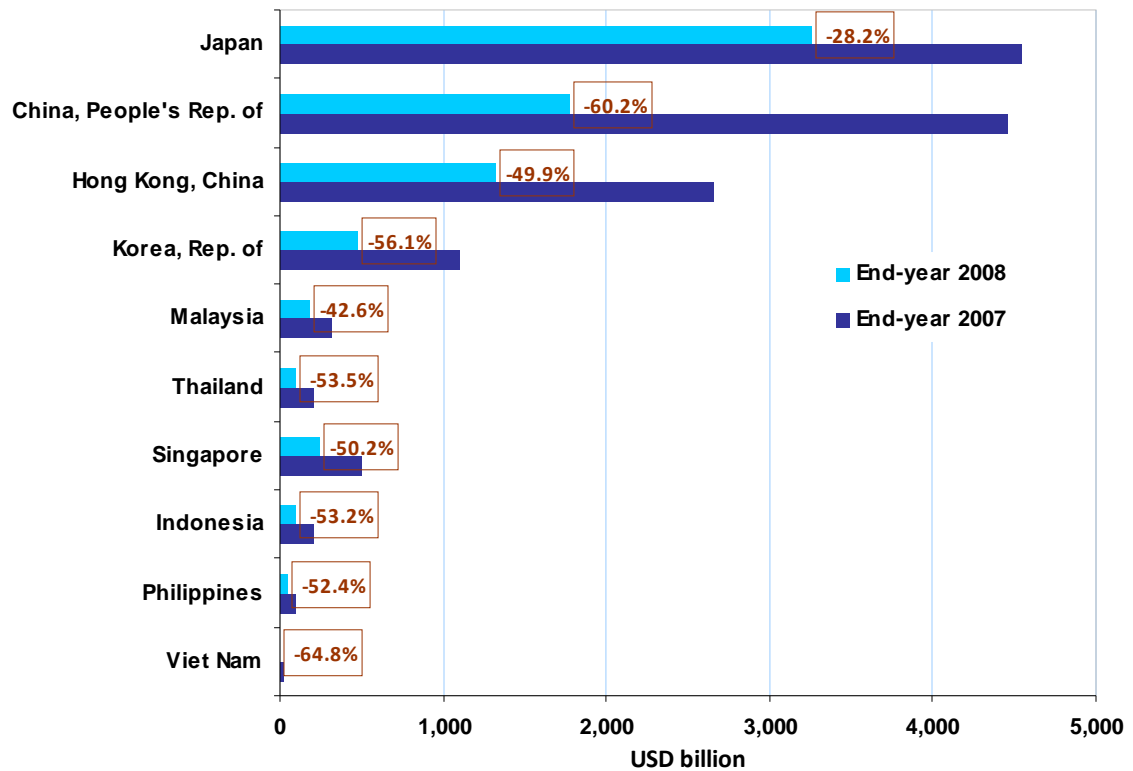
Source: *AsianBondsOnline*, Bloomberg LP.

These lackluster returns, however, are far superior to the losses tallied in most emerging East Asian equity markets (**Table 8**). The MSCI Far East ex-Japan Index for 2008 reported a 52.0% end-of-year loss. The largest losses were reported in Indonesia (57.6%) and Korea (55.9%), with the Philippines a close third (53.8%). Singapore and Malaysia incurred the smallest losses in the MSCI index of 49.6% and 43.4%, respectively.

## Equity And Bond Markets

One way to assess the inter-relationship between emerging East Asian equity and bond markets is to compare 2007 and 2008 year-end values of equity market capitalization (**Figure 17**)—which fell about 47% for East Asian equity markets—with bonds outstanding at the end of each year.

**Figure 17: The Decline in Equity Market Capitalization in Emerging East Asia**



Note: Values refer to year-on-year % change in equity market capitalization.

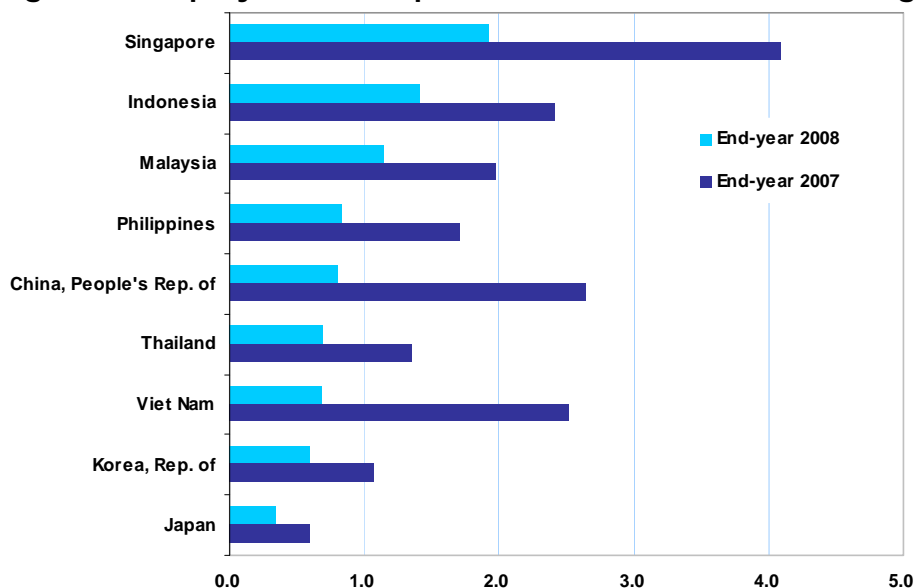
Source: Bloomberg LP.

The ratio of equity market capitalization to bonds outstanding at both end-year 2007 and 2008 illustrates this well (**Figure 18**). Singapore ranks highest at both year-end 2007 and year-end 2008, with a ratio of slightly above 4 and slightly under 2 at the end of 2007 and 2008, respectively. Local corporate issuance is modest compared with its reliance on Singapore's equity market. However, Singapore does not have the largest ratio of equity market capitalization to bonds outstanding in emerging East Asia. Hong Kong, China has ratios of



27 and 15 for end year 2007 and end year 2008, respectively. The ratios for the remaining equity and bond markets are more comparable. After Singapore, PRC, Viet Nam, and Indonesia had the highest ratios of equity market capitalization/bonds outstanding at the end of 2007.

**Figure 18: Equity Market Capitalization to Bonds Outstanding**



Sources: Bloomberg LP, *AsianBondsOnline* calculations.

Interestingly, Indonesia stayed next to Singapore with the second highest ratio, while the PRC and Viet Nam migrated to the middle of the list. While Indonesia's market capitalization fell by 53%, its stock of LCY debt outstanding also fell by 20%, due to the cessation of treasury bond issuance in the last quarter of 2008, and a rapid reduction of Sertifikat Bank Indonesia (SBI) issuance since the middle of 2008, along with a drop in corporate bond issuance. Korea's stock of outstanding LCY debt fell as well, although the decline was driven by a sharp drop in Monetary Stabilization Bond issuance by the Bank of Korea and a somewhat smaller decline of corporate debt than in Indonesia.

## Policy and Regulatory Developments

*In recent months, regulatory changes have focused mainly on near-term measures to enhance domestic or foreign liquidity in financial markets across the region.*

### People's Republic of China

The China Banking Regulatory Commission (CBRC) and People's Bank of China (PBOC) are considering allowing qualified foreign-funded financial institutions with legal person status to issue CNY-denominated bonds either on the mainland or in Hong Kong, China—provided certain core capital adequacy ratio requirements are met and that they have reported three consecutive years of profit. The State Council also announced a measure that would allow locally-listed banks to buy and sell bonds issued on the country's stock exchanges—on a pilot basis—with the ultimate goal of creating a unified bond market system. The CBRC announced in the first week of January 2009 that foreign banks may trade and underwrite corporate bonds in the country's interbank market. Previously, foreign banks were only allowed to trade government bonds, central bank bills, and bonds issued by financial institutions.

### Hong Kong, China

On 21 January, the Hong Kong Exchanges and Clearing and Shanghai Stock Exchange announced a Closer Cooperation Agreement, which is expected to result in the launching of the first A-share Exchange Traded Fund (ETF) product by the end of the year. The Agreement commits the two exchanges to work together toward better serving the domestic and international funding needs of PRC companies and contributing to a less volatile stock market in both the PRC and Hong Kong, China. The agreement should contribute toward development of a wider range of securities to be traded on both exchanges—including ETFs, Callable Bull/Bear Contracts, derivative warrants (DWs), and derivatives like futures and options based on A shares.

**Indonesia**

In early December, Bank Indonesia announced restrictions on the purchase of foreign currencies involving structured products—to help balance the demand and supply of US dollars in the foreign exchange market, and also to minimize foreign exchange purchases for speculation. In mid-November, the central bank also limited the purchase of foreign currencies in amounts above USD100,000 to market participants.

**Republic of Korea**

In November, the Bank of Korea (BOK) announced plans to purchase government bonds to help stabilize the debt market and increase its state bond holdings for repurchase agreement transactions. This was the first time the BOK purchased treasury bonds for market stabilization purposes in over a year. By December, the BOK decided to inject KRW5 trillion in liquidity into the bond market stabilization fund (KRW10 trillion), which it would initiate through the purchase of finance debentures and corporate bonds, as well as through repurchase transactions. Korea Development Bank will also contribute KRW2 trillion to the fund.

**Malaysia**

On 1 December, Bursa Malaysia launched Bursa Trade Securities trading platform, an integrated trading system which allows greater accessibility for local and international investors. On 4 December, Bursa Malaysia allowed the listing of Islamic *sukuk* or debt securities denominated in MYR and foreign currency issued by local and international entities.

**Philippines**

Bangko Sentral ng Pilipinas (BSP) approved the third phase of reforms for its foreign exchange regulatory framework on 15 January. These measures include the liberalization/streamlining of rules on foreign borrowings of private banks for relending purposes and registration of inward foreign portfolio investments. It also involves reforms/provisions intended to improve monitoring of foreign exchange

flows and formalize/clarify existing practices.

The BSP also approved additional guidelines on 31 October for the reclassification of financial assets permitted under the Amendments to International Accounting Standards (IAS) 39 and International Financial Reporting Standards (IFRS). Aside from this asset reclassification, the monetary board has also eased cover requirements for foreign currency deposit units and has opened a US dollar repurchase agreement to augment the market's dollar liquidity.

### **Singapore**

The Monetary Authority of Singapore (MAS) launched its first Islamic bond, totalling SGD200 million, on 19 January. The Federal Reserve and MAS established a swap facility to provide liquidity up to USD30 billion through April 2009.

## Market Summaries

### People's Republic of China—4Q08 Update

#### Yield Movements

In its end-December monetary policy committee meeting, the People's Bank of China (PBOC) reaffirmed a “moderately loose” monetary policy (as inflation pressure declined) to ensure banking system liquidity sufficient to reinvigorate the slowing economy. Headline inflation slowed to 1.2% in December, and since November the PBOC has cut its lending and deposit benchmark rates twice—leaving both rates 1.35 percentage points lower, at 5.31% and 2.25% respectively.

With ample liquidity in the system and a bullish bond market, the government bond yield curve tightened further (**Figure 1**) in the last quarter of 2008. Cash-flush banks were motivated to buy bonds, particularly short-dated notes, as they secured safe investment for their extra funds. With liquidity support at the short-end, the yield spread between two- and ten-year government bonds widened to 170 basis points by 22 January 2009, resulting in a steeper yield curve.

#### Size and Composition

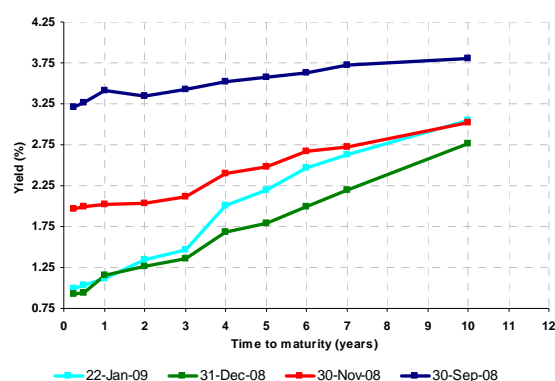
As of December 2008, the value of local currency (LCY) bonds reached CNY15.1 trillion, up 1.1% month-on-month (m-o-m). Corporate bonds grew 8.9% m-o-m, much stronger than government bonds (0.2%). A 1.8% m-o-m decline in PBOC bills and bonds is also

noteworthy, and due to the central bank's sharp reduction of issuance of new three-month and one-year bills. In early November, the PBOC announced a revision in issuance frequency from weekly to biweekly to tie up less funds and flood the money market with cash.

The growth of corporate bonds is due to the continued issuance of commercial bank bonds (CNY14.2 billion), state-owned corporate bonds (CNY43.0 billion), and non-financial enterprise medium-term notes (CNY56.2 billion) on the interbank market.

Commercial banks remain the most active bond investors, holding more than half of total outstanding government bonds (**Figure 2**). The China Banking and Regulatory Commission (CBRC) reports that as of end-2008 total bank assets stood at CNY62.4 trillion, up 18.6% year-on-year (y-o-y).

**Figure 1: Government Bond Yield Movements**



Source: Bloomberg LP.

### Size and Composition of Local Currency Bond Market

|                    | Amount |        |        |        |        |        |        |        | Growth rate (%) |       |        |       |        |       |        |  |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|-------|--------|-------|--------|-------|--------|--|
|                    | Sep-08 |        | Oct-08 |        | Nov-08 |        | Dec-08 |        | Sep-08          |       | Oct-08 |       | Nov-08 |       | Dec-08 |  |
|                    | CNY bn | USD bn | CNY bn | USD bn | CNY bn | USD bn | CNY bn | USD bn | y-o-y           | q-o-q | m-o-m  | m-o-m | y-o-y  | q-o-q | m-o-m  |  |
| <b>Total</b>       | 14,470 | 2,114  | 14,838 | 2,169  | 14,942 | 2,183  | 15,107 | 2,213  | 26.0            | 5.3   | 2.5    | 0.7   | 22.5   | 4.4   | 1.1    |  |
| <b>Government</b>  | 13,015 | 1,901  | 13,290 | 1,943  | 13,337 | 1,949  | 13,359 | 1,957  | 24.0            | 4.4   | 2.1    | 0.3   | 19.4   | 2.6   | 0.2    |  |
| Treasury bonds     | 4,779  | 698    | 4,826  | 706    | 4,872  | 712    | 4,875  | 714    | 27.5            | 0.6   | 1.0    | 1.0   | 4.8    | 2.0   | 0.1    |  |
| Central bank bonds | 4,811  | 703    | 4,992  | 730    | 4,900  | 716    | 4,812  | 705    | 17.8            | 9.2   | 3.8    | (1.8) | 31.5   | 0.0   | (1.8)  |  |
| Policy bank bonds  | 3,426  | 500    | 3,473  | 508    | 3,564  | 521    | 3,672  | 538    | 28.6            | 3.4   | 1.4    | 2.6   | 27.6   | 7.2   | 3.0    |  |
| <b>Corporate</b>   | 1,454  | 212    | 1,548  | 226    | 1,605  | 235    | 1,748  | 256    | 46.5            | 14.4  | 6.4    | 3.7   | 52.8   | 20.2  | 8.9    |  |

| Policy bank bonds                      | Amount |        |        |        |        |        |        |        | Growth rate (%) |       |        |       |        |       |        |  |
|--|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|-------|--------|-------|--------|-------|--------|--|
|  | Sep-08 |        | Oct-08 |        | Nov-08 |        | Dec-08 |        | Sep-08          |       | Oct-08 |       | Nov-08 |       | Dec-08 |  |
|  | CNY bn | USD bn | CNY bn | USD bn | CNY bn | USD bn | CNY bn | USD bn | y-o-y           | q-o-q | m-o-m  | m-o-m | y-o-y  | q-o-q | m-o-m  |  |
| China Development Bank                 | 2,560  | 374    | 2,584  | 378    | 2,641  | 386    | 2,706  | 397    | 23.8            | 1.5   | 0.9    | 2.2   | 23.5   | 5.7   | 2.5    |  |
| Export-Import Bank of China            | 270    | 39     | 270    | 40     | 293    | 43     | 316    | 46     | 37.6            | 28.4  | 0.0    | 8.4   | 43.3   | 16.8  | 7.8    |  |
| Agricultural Development Bank of China | 596    | 87     | 619    | 90     | 630    | 92     | 650    | 95     | 49.5            | 2.7   | 3.8    | 1.8   | 39.3   | 9.0   | 3.2    |  |

Notes:

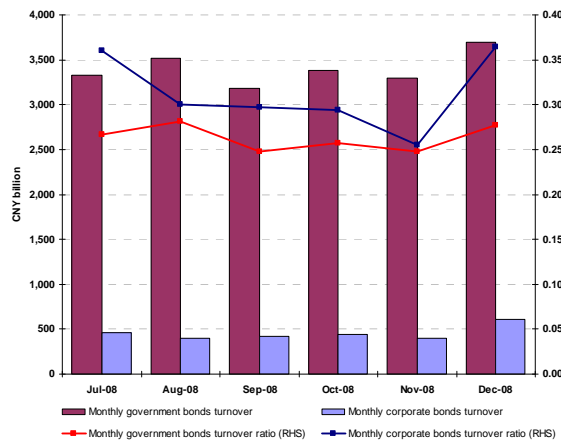
1. Calculated using data from national sources.
2. Bloomberg end-of-period LCY/USD rate.
3. Growth rates are calculated from LCY base and do not include currency effects.

Sources: *ChinaBond*, Bloomberg LP.

### Turnover

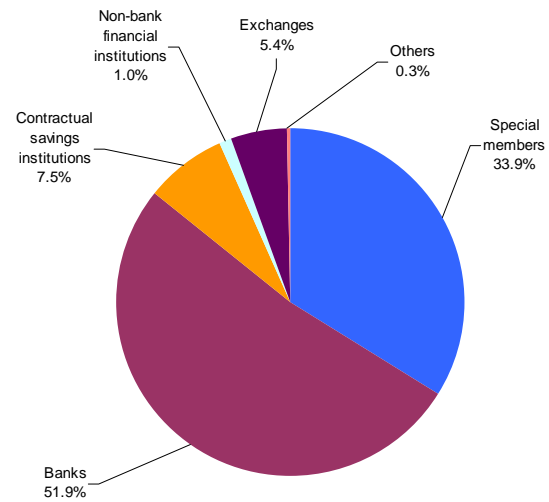
Up to December 2008, the cumulative turnover of spot bills and bond trading on the interbank market was CNY41 trillion, up 146% year-on-year. Bills and bond turnover stood at CNY4.3 trillion in December, up 16.2% from November. Turnover ratios were up 0.28 in government bonds and 0.36 in corporate bonds (Figure 3).

**Figure 3: Bond Trading Volume and Turnover Ratio**



Source: *ChinaBond*

**Figure 2: LCY Government Bonds Investor Profile (December 2008)**



Source: *ChinaBond*

## Policy, Institutional and Regulatory Developments

As the PRC's economic growth slows amid the global financial crisis, the government—with the PBOC playing a critical role—has shifted its bias toward fiscal and monetary easing. At the December Central Economic Work Conference policy makers vowed, through a series of financial and tax stimulus plans, to address mounting difficulties in sustaining growth. The State Council announced a CNY4 trillion (USD586 billion) spending package, shifting fiscal policy to help the economy ride out the global credit crisis. To fund portions of the fiscal package the Ministry of Finance plans to issue long-term treasury bonds over the next two years. To ensure adequate liquidity in the financial system and to strengthen domestic capital markets, PRC monetary authorities are looking into several pilot programs:

### **Liberalized bond issuance rules**

The CBRC and PBOC are considering allowing qualified foreign-funded financial institutions with legal person status to issue CNY-denominated bonds either in the mainland or in Hong Kong, China. Qualified foreign-funded banks can take advantage of the facility provided they meet certain core capital adequacy ratio requirements and have reported three consecutive years of profitable operation.

In early December, the State Council announced a measure that would allow domestically listed banks to buy and sell bonds issued on the country's stock exchanges on a pilot basis. The PBOC barred domestic banks from trading bonds on the exchanges in 1997 and established a separate interbank bond market that year on concern funds might be used to buy stocks. With this breakthrough,

the China Securities Regulatory Commission now aims to set up a unified bond market system that would allow convenient cross-market transactions.

The CBRC in the first week of January this year announced that foreign banks may trade and underwrite corporate bonds in the country's interbank market. Previously, foreign banks were only allowed to trade government bonds, central bank bills, bonds issued by financial institutions, and some derivative instruments on the local bond market.

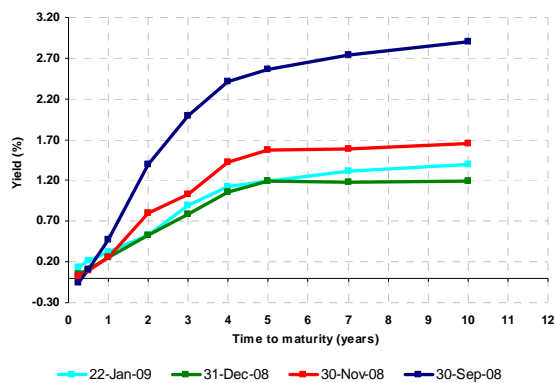
## Hong Kong, China—4Q08 Update

### Yield Movements

Hong Kong, China's capital and money markets continued to be hurt by the global financial crisis in the last quarter of 2008. There has been ongoing tension in the local interbank market, with offsetting measures taken by the Hong Kong Monetary Authority (HKMA). Market participants continued to de-leverage and reduce their exposure to riskier financial assets—with authorized financial institutions still flocking to the safe haven of Exchange Fund Bills and Notes (EFBN).

The EFBN yield curve has significantly tightened at the long end as inflationary pressure cools and the substantial downturn of the local economy necessitates expansionary monetary and fiscal policy. With the yield spread between two- and ten-year Exchange Fund paper narrowing to 66 basis points by end-December, the EFBN yield curve flattened (**Figure 1**).

**Figure 1: Government Bond Yield Movements**



Source: Bloomberg LP.

### Size and Composition

As of end-December 2008, the value of EFBNs reached HKD158 billion, up 8.7% quarter-on-quarter (q-o-q) and 15.4% (y-o-y). The uptick resulted after the HKMA increased supply of Exchange Fund paper, primarily to boost liquidity and ease money-market stress. Exchange Fund bills are discount-window eligible securities held mainly by banks seeking to meet liquidity ratio requirements. The short-dated paper also enables authorized banks to obtain intraday liquidity from the HKMA through repurchase agreements. Corporate bonds declined 1.1% (q-o-q) and also declined 7.9% (y-o-y) as of the end of the third quarter 2008. New issuance of short- to medium-term floating and fixed rate corporate paper was down 41.6% q-o-q. Against the backdrop of the Securities and Futures Commission's (SFC) investigation into issues concerning the distribution of certain investment products, activity in the securitization sector remained at a standstill. Heightened credit risk also resulted in higher cost of insuring against default, and banks' lending to the corporate sector was curtailed.

### Turnover

EFBN trading volume rose 16% q-o-q to HKD3.3 trillion in the fourth quarter of 2008. As mentioned earlier, the demand for short-dated Exchange Fund paper for liquidity management purposes was still high. The government bond turnover ratio correspondingly increased to 7.06 in December 2008, from 6.81 in September (**Figure 2**). The secondary market for EFBNs is liquid, with daily turnover for bills and notes averaging HKD48 billion and HKD5 billion respectively.



## Size and Composition of Local Currency Bond Market

|                             | Amount |        |        |        |        |        | Growth rate (%) |       |        |       |
|-----------------------------|--------|--------|--------|--------|--------|--------|-----------------|-------|--------|-------|
|                             | Dec-07 |        | Sep-08 |        | Dec-08 |        | Sep-08          |       | Dec-08 |       |
|                             | HKD bn | USD bn | HKD bn | USD bn | HKD bn | USD bn | y-o-y           | q-o-q | y-o-y  | q-o-q |
| <b>Total</b>                | 764    | 98     | 717    | 92     | ...    | ...    | (5.2)           | (0.8) | ...    | ...   |
| Exchange Fund bills & notes | 137    | 18     | 145    | 19     | 158    | 20     | 6.9             | 0.5   | 15.4   | 8.7   |
| Corporate                   | 628    | 80     | 572    | 74     | ...    | ...    | (7.9)           | (1.1) | ...    | ...   |

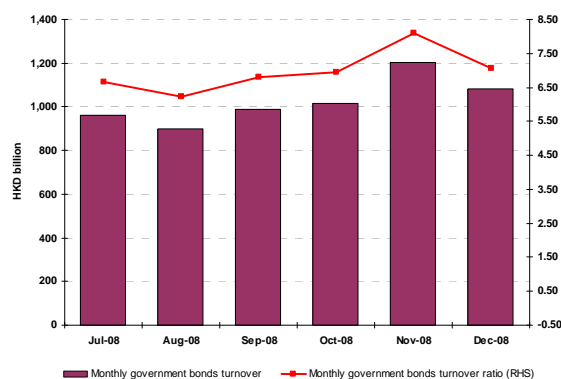
Notes:

1. Calculated using data from national sources.
2. Bloomberg end-of-period LCY/USD rate.
3. Growth rates are calculated from LCY base and do not include currency effects.
4. ... = updated data not available or not applicable.

Sources: Hong Kong Monetary Authority, Bloomberg LP.

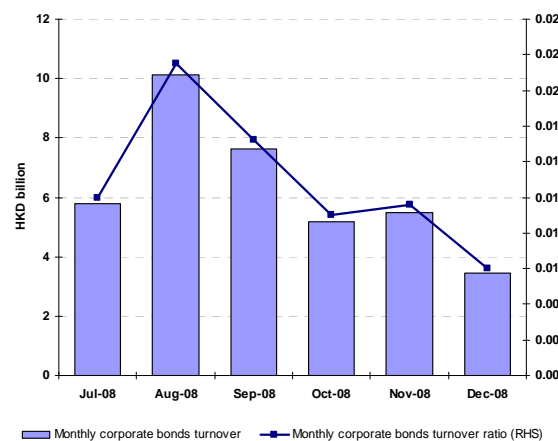
In corporate bonds, the December 2008 turnover ratio declined to 0.006, from 0.013 in September. Secondary trading in the corporate bond market has dropped since the start of the financial crisis, with average monthly turnover estimated at HKD5 billion in the last quarter 2008 (**Figure 3**).

**Figure 2: Government Bond Trading Volume and Turnover Ratio**



Source: Hong Kong Monetary Authority.

**Figure 3: Corporate Bond Trading Volume and Turnover Ratio**



Source: Hong Kong Monetary Authority.

## Policy, Institutional and Regulatory Developments

Government authorities say a larger-than-estimated budget deficit is likely for the period 2008–2009 as the economy slows markedly, reflecting declining tax revenue, stamp duties, and land premiums. To cushion the domestic economy, a fiscal stimulus package will support accelerated spending on public works and infrastructure, which is expected to increase the fiscal deficit to around 2% of gross

domestic product (GDP), from the previous budget projection of 0.4%.

### **Promoting small and medium enterprise (SME) credit facilities**

The expansion of government guarantees to bank lending to SMEs and the provision of short-term loans to business owners to meet their operational and investment needs can also help corporations vulnerable to the credit crunch.

### **Strengthening the existing regulatory regime and investor protection framework**

In early January 2009, the SFC issued revised advertising guidelines for marketing materials for investment funds. The SFC will maintain active surveillance of marketing materials to ensure compliance and will take action to ensure investors' interests are safeguarded in the event of compliance failure.

### **Closer cooperation between Hong Kong Exchanges and Clearing and the Shanghai Stock Exchange**

On 21 January 2009, Hong Kong Exchanges and Clearing (HKEx) and the Shanghai Stock Exchange announced the Closer Cooperation Agreement, which is expected to result in the launching of the first genuine A-share Exchange Traded Fund (ETF) product by end-2009. The agreement commits the two exchanges to work more closely to better serve the domestic and international fund-raising needs of PRC companies and contribute to a less volatile stock markets in the PRC and Hong Kong, China. The agreement should also contribute to the development of a wider range of securities to be traded on both exchanges,

including ETFs, callable bull/bear contracts and derivative warrants, as well as derivatives such as futures and options based on A-shares.

### **Improving secondary bond market liquidity**

In December 2008, the HKMA enhanced market liquidity with the launch of "E-BOND", which uses Bloomberg as an electronic trading platform to increase price transparency and liquidity in EFB/EFN trading. Bloomberg E-Bond offers a multi-dealer "Request for Quote" (RFQ) and anonymous quotation bulletin board, along with "Straight-Through-Processing" features and real-time market activity displays. The RFQ module enables market-makers to request market quotes from multiple counter-parties and allows effective handling of multiple transactions at any given time in an active market.

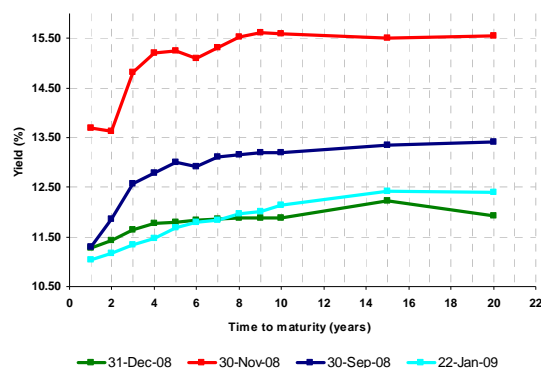
## Indonesia—4Q08 Update

### Yield Movements

Indonesian bond yields overall have moved downward since the end of 3Q08, but have frequently retraced their steps, confusing investors and the market. The yield curve shifted dramatically upward in October and November on the back of much reduced domestic liquidity as the rupiah depreciated against the USD, before falling again in December as easing inflationary pressures led Bank Indonesia to cut its BI rate 25 basis points on 4 December and 50 basis points in early January and again in February. This trend, however, was again reversed in mid-January when yields for US treasuries and many Asian government bonds, including Indonesia, again widened out on concern that government bond issuance was rising almost everywhere to fund economic stimulus programs in 2009.

It now appears that the continued decline of inflation rates worldwide, and the increased scope this provides for further monetary easing, may trump concern about additional financing for economic stimulus. Inflation fell to 11.7% in November, 11.1% in December, and 9.2% in January. Thus, with the BI rate still high at 8.25%, the BI's Monetary Policy Committee is seen as having more than enough room to cut rates again when it meets on 4 March. As of 22 January, bond yields from the middle to the long end of the yield curve steepened compared to their end-December levels (**Figure 1**).

**Figure 1: Benchmark Yield Curve—LCY Government Bonds**



Source: Bloomberg LP.

### Size and Composition

Outstanding government bonds as of November had grown 3.0% m-o-m (in IDR terms), mainly because of a 22% increase in Sertifikat Bank Indonesia (SBI) issuance as treasury bonds fell 1.3% from October levels. The Finance Ministry in October cancelled all scheduled local currency government bond issuance for the rest of 2008 amid volatile market conditions. Thus, only Bank Indonesia issued in the last quarter of 2008, and then in the form of its short-term SBIs. Although SBI auctions were held weekly, most fell short of the central bank's target.

The stock of government bonds is expected to have declined further in December due to the continued cancellation of new issues. But the Ministry of Finance resumed issuing treasury bonds in early 2009, with its first auction on 13 January generating IDR5.95 trillion. As of end-December, outstanding treasury bonds were down 1.6% from November. SBI data for December is not yet available.

## Size and Composition of Local Currency Bond Market

|                          | Amount  |        |         |        |         |        |         |        | Growth rate (%) |        |        |       |        |       |        |  |
|--------------------------|---------|--------|---------|--------|---------|--------|---------|--------|-----------------|--------|--------|-------|--------|-------|--------|--|
|                          | Sep-08  |        | Oct-08  |        | Nov-08  |        | Dec-08  |        | Sep-08          |        | Oct-08 |       | Nov-08 |       | Dec-08 |  |
|                          | IDR bn  | USD bn | IDR bn  | USD bn | IDR bn  | USD bn | IDR bn  | USD bn | y-o-y           | q-o-q  | m-o-m  | m-o-m | y-o-y  | q-o-q | m-o-m  |  |
| <b>Total</b>             | 736,560 | 77     | 752,939 | 69     | 775,667 | 65     | ...     | ...    | (9.7)           | (3.9)  | 2.2    | 3.0   | ...    | ...   | ...    |  |
| Government               | 658,669 | 69     | 679,274 | 63     | 702,232 | 58     | ...     | ...    | (10.3)          | (3.7)  | 3.1    | 3.4   | ...    | ...   | ...    |  |
| Central government bonds | 541,700 | 56     | 541,700 | 50     | 534,455 | 44     | 525,695 | 46     | 15.7            | 4.4    | 0.0    | (1.3) | 11.0   | (3.0) | (1.6)  |  |
| Central bank bonds       | 116,969 | 12     | 137,574 | 13     | 167,777 | 14     | ...     | ...    | (56.1)          | (29.2) | 17.6   | 22.0  | ...    | ...   | ...    |  |
| Corporate                | 77,890  | 8      | 73,665  | 7      | 73,435  | 6      | 73,010  | 6      | (3.9)           | (5.6)  | (5.4)  | (0.3) | (7.7)  | (6.3) | (0.6)  |  |

Notes:

1. Calculated using data from national sources.
2. Bloomberg end-of-period LCY/USD rates are used.
3. Growth rates are calculated from LCY base and do not include currency effects.
4. ... = updated data not available or not applicable.

Sources: Bank Indonesia, Indonesia Stock Exchange, and Bloomberg LP.

A USD1 billion global Islamic bond scheduled in November was delayed due to unfavorable market conditions. But this may come through this year as Indonesia taps the international capital market for its funding needs.

The stock of corporate bonds hardly changed in December from November as companies held back planned issuance.

### Turnover

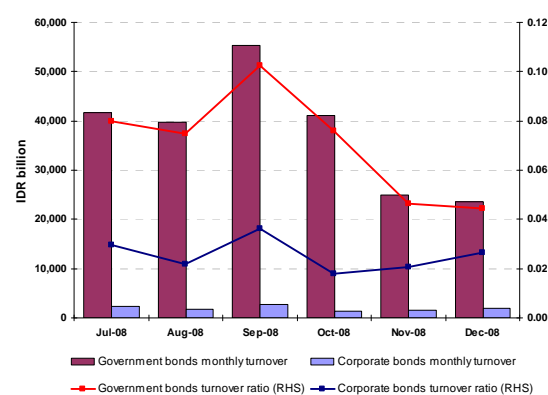
The monthly government bond turnover ratio dropped to 0.04 in December, its lowest level in recent years, as turnover value fell significantly to IDR23.5 trillion. The corporate turnover ratio rose slightly in recent months, although to a still low level of 0.03; investors in corporate bonds generally hold them until maturity (**Figure 2**).

### Investor Profile

Banks held nearly 50% (or IDR259 trillion) of government bonds as of December, while foreign holders came in second at 16.9%. (**Figure 3**)

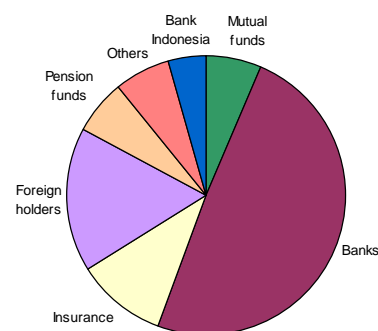
Foreign holdings of government bonds fell in December to IDR87.6 trillion, from IDR105.5 trillion in September, as investor appetite

**Figure 2: Monthly Bond Trading Volume and Turnover Ratio**



Source: Indonesia Stock Exchange

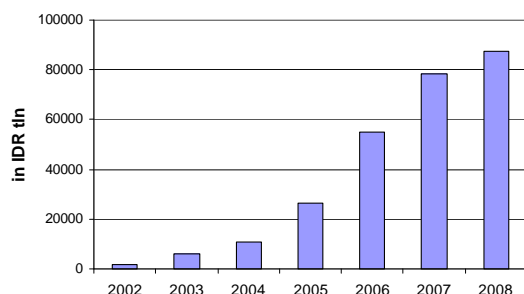
**Figure 3: LCY Government Bonds Investor Profile (as of December 2008)**



Source: Debt Management Office.

waned amid growing aversion to emerging markets in the global financial crisis. It should be noted, however, that bonds held by foreigners have otherwise grown consistently from just IDR1.9 trillion in 2002 (**Figure 4**).

**Figure 4: Foreign Holdings in Government Bonds (as of December 2008)**



Source: Debt Management Office.

## Rating Changes

|                          | Moody's | S&P    | Fitch  |
|--------------------------|---------|--------|--------|
| Sovereign FCY LT ratings | Ba3     | BB-    | BB     |
| Outlook                  | stable  | stable | stable |

Standard & Poor's in November affirmed Indonesia's "BB-" long term foreign currency rating and "BB+" long term local currency rating, with a stable outlook.

In January, Fitch affirmed Indonesia's long-term foreign and local currency rating at "BB", with a stable outlook.

## Policy, Institutional and Regulatory Developments

### Regulation of foreign exchange purchases

- In mid-November, Bank Indonesia limited the purchase of foreign currencies above USD100,000 to those who can provide information to justify

transactions. This new regulation is expected to help balance the demand and supply of USD in the foreign exchange market and minimize foreign exchange purchases for speculative purposes.

- In early December, Bank Indonesia also banned the purchase of dollars with structured products (a product combining assets and a derivative of foreign exchange in rupiah).

### Fiscal stimulus for 2009

For 2009, the government had originally announced an IDR50 trillion stimulus package to help the economy grow and keep the unemployment rate flat. Of that, IDR38 trillion was to be sourced from the remainder of the 2008 state budget, and IDR12 trillion from the 2009 budget. However, the government has recently reduced the size of its stimulus program to IDR27 trillion, citing 2009 budgetary constraints.

The 2009 budget deficit is forecast at 2.5% of GDP (about IDR132 trillion), from 1% previously—and compared with 0.1% of GDP for 2008—with the government expected to raise spending to stimulate growth.

## Republic of Korea—4Q08 Update

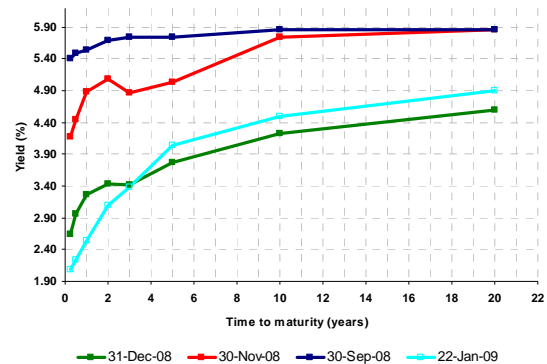
### Yield Movements

The Republic of Korea's bond yields fell significantly in December, from September, as confidence grew in the effectiveness of the government's fiscal stimulus measures as well as the dramatic decline in inflationary pressures. Bond yields were down across all tenors at end-December, with a slight steepening from the 10-year maturity to the long-end of the curve.

The Bank of Korea (BOK) has continued to loosen its monetary policy and slashed its BOK base rate in November (4%, -25 basis points) and December (3%, -100 basis points) to limit the effects of the global crisis on the economy in general and on the Korean won in particular. The KRW had declined 35% y-o-y against the USD at the end of December. The BOK further lowered its benchmark rate in January 2009 to 2.5%, its lowest level to date, vowing to focus monetary policy on supporting the economy and improving access to credit.

As inflation has tapered off in recent months, the continued slump in exports and weak domestic demand has signaled a recession in 2009. The economy shrank 3.4% y-o-y in the 4Q2008, prompting the government and BOK to expand their economic stimulus program. The implied expansion of the government's borrowing program in 2009 saw bond yields move modestly higher in the early weeks of the year. As of 22 January, bond yields were higher from the 3-year maturity to the higher end of the curve.

**Figure 1: Benchmark Yield Curve—LCY Government Bonds**



Source: Bloomberg LP.

### Size and Composition

Government bonds outstanding as of December were up 1.5% m-o-m (in KRW terms). The stock of central government bonds—national housing bonds, treasury bonds, and Seoul Metropolitan Subway Bonds—grew a negligible 0.7%. Central bank bonds (composed of Monetary Stabilization Bonds) and Industrial Finance Debentures grew 2.5% and 3.4% m-o-m in December, respectively. On a y-o-y basis, total government bonds outstanding were down 0.4%, reflecting a 16% drop in the stock of Monetary Stabilization Bonds to KRW127 trillion at end-December.

Corporate bonds outstanding grew 1% m-o-m in December, and were up 14.1% to KRW565 trillion y-o-y. In the last quarter of 2008, some financial institutions rushed to raise capital by issuing subordinated bonds to bring their capital adequacy ratios (CAR) up to an acceptable level. Banks' CAR ratios have been sliding due to lower earnings as well as rising non-performing loans.

Government-owned banks have also been turning toward the G3 currency bond market to improve funding, especially for the export-related activities of their customers. In January, the Export-Import Bank of Korea raised USD2 billion through a five-year note, followed shortly after by the Korea

Development Bank (KDB) with a USD2 billion five-year bond. News reports suggest the country will come to market for as much as USD5–6 billion in coming months.

### Size and Composition of Local Currency Bond Market

|                               | Amount    |        |           |        |           |        |           |        | Growth Rate (%) |       |        |       |        |       |        |  |
|-------------------------------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------------|-------|--------|-------|--------|-------|--------|--|
|                               | Sep-08    |        | Oct-08    |        | Nov-08    |        | Dec-08    |        | Sep-08          |       | Oct-08 |       | Nov-08 |       | Dec-08 |  |
|                               | KRW bn    | USD bn | KRW bn    | USD bn | KRW bn    | USD bn | KRW bn    | USD bn | y-o-y           | q-o-q | m-o-m  | m-o-m | y-o-y  | q-o-q | m-o-m  |  |
| <b>Total</b>                  | 1,014,649 | 850    | 1,009,460 | 750    | 1,015,600 | 691    | 1,028,672 | 817    | 7.6             | 0.1   | (0.5)  | 0.6   | 7.0    | 1.4   | 1.3    |  |
| Government                    | 461,401   | 387    | 455,497   | 338    | 457,355   | 311    | 464,097   | 368    | (0.7)           | (3.2) | (1.3)  | 0.4   | (0.4)  | 0.6   | 1.5    |  |
| Central government bonds      | 280,771   | 235    | 281,129   | 209    | 285,570   | 194    | 287,621   | 228    | 3.6             | (3.5) | 0.1    | 1.6   | 4.9    | 2.4   | 0.7    |  |
| Central bank bonds            | 133,970   | 112    | 127,750   | 95     | 123,880   | 84     | 126,937   | 101    | (11.4)          | (5.9) | (4.6)  | (3.0) | (15.6) | (5.2) | 2.5    |  |
| Industrial finance debentures | 46,659    | 39     | 46,618    | 35     | 47,905    | 33     | 49,538    | 39     | 10.1            | 7.6   | (0.1)  | 2.8   | 19.1   | 6.2   | 3.4    |  |
| Corporate                     | 553,249   | 464    | 553,963   | 411    | 558,245   | 380    | 564,576   | 448    | 15.6            | 3.0   | 0.9    | 0.8   | 14.1   | 2.0   | 1.1    |  |

Notes:

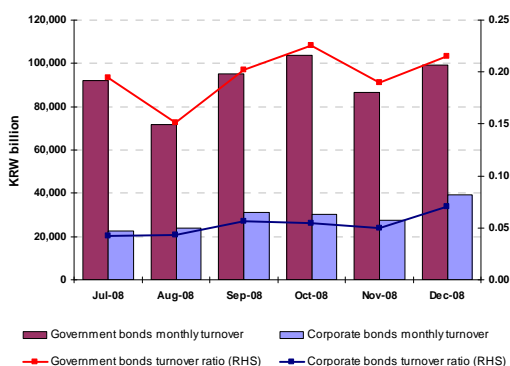
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Sources: Bank of Korea, *KoreaBondWeb*.

### Turnover

The government bond turnover ratio rose to 0.22 in December as monthly turnover rose to almost KRW100 trillion in recent months. The corporate turnover ratio rose to 0.07 in the same month, its highest in the last six months. Corporate trading volume hit almost KRW40 trillion in December (Figure 2).

**Figure 2: Monthly Bond Trading Volume and Turnover Ratio**

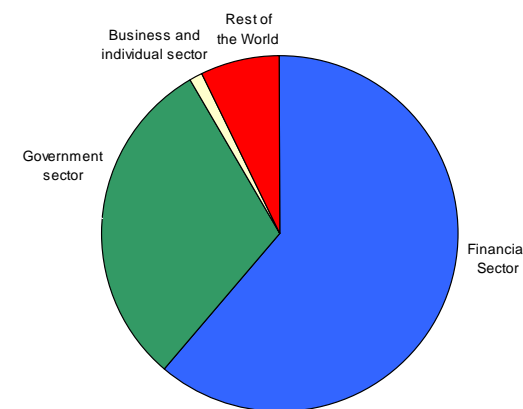


Source: Bank of Korea, *KoreaBondWeb*.

### Investor Profile

The financial sector held more than half of government bonds as of September 2008, at KRW200 trillion. Foreign investors held 7%, or KRW24 trillion, from 9% in June of last year.

**Figure 3: LCY Government Bonds Investor Profile (as of September 2008)**



Source: Bank of Korea.

## Rating Changes

|                          | Moody's | S&P    | Fitch    |
|--------------------------|---------|--------|----------|
| Sovereign FCY LT ratings | A2      | A      | A+       |
| Outlook                  | stable  | stable | negative |

### **Fitch lowers sovereign rating outlook to negative, downgrades Korean bank outlook**

In November, Fitch Ratings lowered its outlook for Korea's sovereign rating from stable to negative, reflecting the impact of the global financial crisis on its economy. It also downgraded its outlook on Korean banks to negative.

### **Moody's reviews 10 Korean banks**

Moody's Investors Service is also reviewing its ratings for Korean banks, and in January revised its ratings for 10 of them. The agency had previously assigned foreign currency ratings to these banks higher than its A2 sovereign rating for Korea. The 10 banks include Citibank Korea, Export-Import Bank of Korea, Hana Bank, Industrial Bank of Korea, Kookmin Bank, Korea Development Bank, National Agricultural Cooperative Federation, Shinhan Bank, Woori Bank, and Woori Finance Holdings. Moody's said the review will consider the appropriateness of the banks' foreign currency debt ratings vis-à-vis the Korean sovereign rating, given the banks' heavy dependence on government support to secure external funding during the financial crisis.

## Policy, Institutional and Regulatory Developments

### **BOK measures**

- The BOK purchased KRW1 trillion of bank and other special bonds (but not including treasury bonds) through an auction of repurchase agreements in November last year. The bank signed 63-day repurchase agreements at interest rates between 4.51% and 4.72%. It was the first time the BOK included bank bonds in its repo transactions.
- Also in November, the BOK announced plans to purchase government bonds to help stabilize the debt market and increase its state bond holdings for repurchase agreement transactions. This was the first time the BOK had purchased treasury bonds for market stabilization purposes in over a year.
- In December the BOK decided to inject KRW5 trillion into the KRW10 trillion bond market stabilization fund through the purchase of financial debentures and corporate bonds, as well as through BOK repo transactions, involving treasury bonds, and corporate bonds from banks and other financial firms. Korea Development Bank will also contribute KRW2 trillion to the fund.
- Finally, BOK in January auctioned USD to local banks to help them cope with liquidity problems as part of a USD30 billion currency swap agreement with the US Federal Reserve. The BOK has so far tapped USD16.35 billion since its announcement in October of last year.



**Fiscal stimulus package for 2009**

- The government's 2009 budget features spending and tax cuts amounting to about KRW33 trillion won. Tax cuts are estimated at about KRW15 trillion.
- The government has earmarked KRW3.7 trillion from its annual budget for state-run financial services companies and corporations in an effort to frontload budget spending.
- In another effort at frontloading, the government will also provide 62.5% of its annual budget in the first half of 2009. It also plans to supply more than KRW50 trillion won to smaller firms this year through Korea Development Bank and Industrial Bank of Korea.
- Finally, the BOK will help local lenders in 2009 by increasing their capital base and injecting more liquidity into the banking system through open market operations, and by providing low-rate loans for small firms.
- The Financial Services Commission plans to set up a KRW20 trillion fund to help local banks increase capital bases and improve financial positions. The fund will be used to buy preferred stocks, subordinated bonds, and hybrid debt sold by lenders.

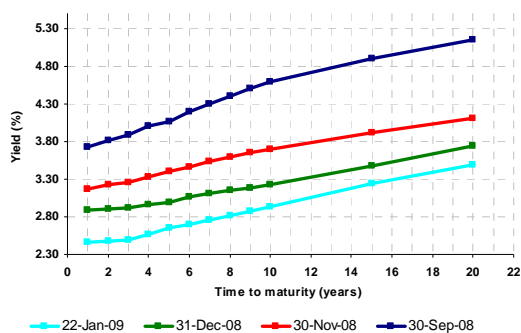
## Malaysia—4Q08 Update

### Yield Movements

Malaysian government yields fell across all tenors in November, from September, as the domestic economy slowed alongside the global economy. The Malaysian government shifted its focus to stimulating economic growth, with the Bank Negara Malaysia (BNM) lowering its policy rate to 3.25% on 24 November. GDP in 3Q08 expanded 4.7% y-o-y, from 6.7% in 2Q08. Inflation eased as the rise in food prices tapered. The government also lowered petrol prices in December. Inflation was down to 5.7% in November, and 4.4% in December, from the year's peak at 8.8% (July and September).

The BNM also lowered the statutory reserve requirement (SRR) for banks from 4% to 3.5% effective 1 December. This saw benchmark government bond yields at end-2008 fall below November levels as the market anticipated further rate cuts. The central bank delivered on 21 January, cutting its policy rate 75 basis points to 2.50%, and the SRR to 2%, pushing benchmark yields down further in January.

**Figure 1: Government Bond Yield Movements**



Source: Bloomberg LP.

### Size and Composition

Total LCY bonds outstanding for Malaysia at the end of 2008 rose to MYR565 billion, up 4% on an annual basis. Total government bonds outstanding were down 1.9% y-o-y.

Outstanding Central Government Bonds (Malaysian Treasury Bills, Malaysian Islamic Treasury Bills, Government Investment Issues, and Malaysian Government Securities) rose 4.3% in the fourth quarter (q-o-q) after the government increased development expenditure. Outstanding Central Bank Bonds (Bank Negara Monetary Notes and Sukuk Bank Negara Malaysia issues) during the fourth quarter fell 43% (q-o-q). Central Bank Bond issues have tenors of less than six months (typically 28-day to 63-day bills and notes).

Corporate bonds outstanding at year-end 2008 were up 12% (y-o-y), but down 1.4% q-o-q in the fourth quarter as investor and issuer sentiment worsened.

Social security institutions are the largest holders of Malaysian Government Securities (at 45%) mainly because the Employees Provident Fund is required to invest 30% of its assets in government securities (**Figure 2**). Financial institutions held 29%, while foreign holders accounted for 16% of total Malaysian government bonds. Holdings by foreigners, facing no restrictions on holding government securities, have grown since 2005 (**Figure 3**).

### Size and Composition of Local Currency Bond Market

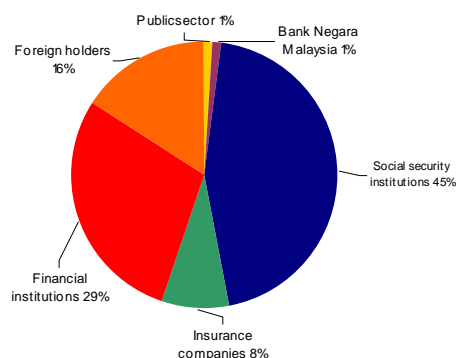
|                          | Amount |        |        |        |        |        |        |        | Growth Rate (%) |       |        |       |        |       |        |  |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|-------|--------|-------|--------|-------|--------|--|
|                          | Sep-08 |        | Oct-08 |        | Nov-08 |        | Dec-08 |        | Sep-08          |       | Oct-08 |       | Nov-08 |       | Dec-08 |  |
|                          | MYR bn | USD bn | MYR bn | USD bn | MYR bn | USD bn | MYR bn | USD bn | y-o-y           | q-o-q | m-o-m  | m-o-m | y-o-y  | q-o-q | m-o-m  |  |
| <b>Total</b>             | 591    | 172    | 582    | 164    | 570    | 157    | 565    | 163    | 13.4            | -4.1  | -1.5   | -2.1  | 4.0    | -4.4  | -0.8   |  |
| Government               | 330    | 96     | 328    | 92     | 315    | 87     | 308    | 89     | 2.3             | -8.0  | -0.7   | -3.9  | -1.9   | -6.7  | -2.3   |  |
| Central government bonds | 244    | 71     | 254    | 72     | 260    | 72     | 254    | 73     | 6.1             | -0.5  | 4.3    | 2.4   | 13.5   | 4.3   | -2.3   |  |
| Central bank bonds       | 75     | 22     | 66     | 19     | 44     | 12     | 42     | 12     | 5.5             | -21.7 | -12.1  | -33.3 | -38.6  | -43.4 | -3.4   |  |
| Others                   | 11     | 3      | 8      | 2      | 11     | 3      | 11     | 3      | -48.6           | -37.7 | -32.4  | 43.1  | -46.7  | -2.0  | 1.4    |  |
| Corporate                | 261    | 76     | 254    | 72     | 255    | 70     | 257    | 74     | 31.4            | 1.4   | -2.5   | 0.1   | 12.0   | -1.4  | 1.0    |  |

Notes:

1. Calculated using data from national sources.
2. Bloomberg end-of-period LCY/USD rate.
3. Growth rates are calculated from LCY base and do not include currency effects.
4. Others refer to debt securities issued by both Cagamas Berhad and Khazanah Nasional Berhad.

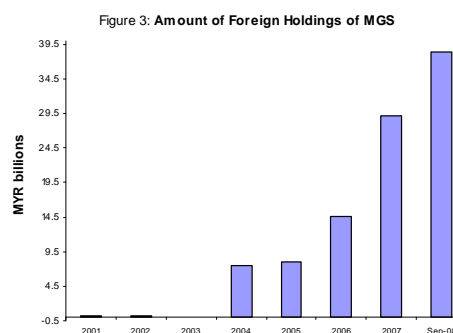
Sources: Bank Negara Malaysia, FAST, Bloomberg LP.

**Figure 2: LCY Government Bonds Investor Profile (September 2008)**



Source: Bank Negara Malaysia

**Figure 3: Foreign Holdings of MGS**



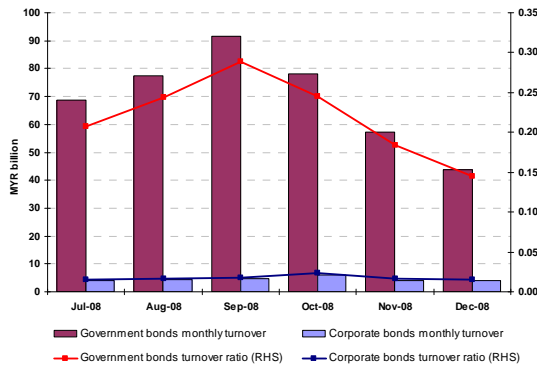
Source: Bank Negara Malaysia

### Turnover

November and December trading volumes were MYR57.4 billion and MYR43.63 billion, down from MYR91.54 billion in September. Turnover ratios for October, November, and December were 0.245, 0.184 and 0.145, respectively.

Monthly corporate bond turnover fell in November to MYR4.2 billion, from MYR6.2 billion in October. In December bond trading volume was MYR4.01 billion. The Corporate bond turnover ratio fell from 0.023 in October to 0.016 in November and 0.015 in December.

**Figure 4: Bond Trading Volume and Turnover Ratio**



Source: Bank Negara Malaysia

### Rating Changes

|                          | Moody's | S&P    | Fitch  |
|--------------------------|---------|--------|--------|
| Sovereign FCY LT ratings | A3      | A-     | A-     |
| Outlook                  | stable  | stable | stable |

Fitch Ratings in November lowered Malaysia's sovereign foreign currency (FCY) rating outlook to stable from positive on the likely impact of lower oil and commodity prices. The three major rating agencies have Malaysia's foreign currency outlook at stable. On 1 February, Fitch lowered Malaysia's long-term local currency outlook to negative from stable due to its high fiscal deficit and large public debt.

### Policy, Institutional and Regulatory Developments

#### Stimulus packages

The Finance Ministry in November announced its first stimulus measure, a MYR7 billion Economic Stabilization Plan, with measures to boost private consumption and investment. In January, the Prime Minister ordered the preparation of a second stimulus package for

2009. The government will fund the packages through:

- Issuance of more bonds in the domestic market, with BNM planning 27 government bond sales this year. Issuance will be comprised of notes maturing in 3-, 5-, 10- and 20-years. The government is also planning to issue its first FCY denominated bonds since 2002. The government may raise its budget deficit target for 2009 due to the second stimulus package (the budget deficit was 4.8% of GDP in 2008).
- Savings derived from cuts in the fuel subsidy (the national oil company will contribute funding via taxes, royalties, and dividends to the government).

#### The Micro-Enterprise Fund

In November, the BNM announced the launch of a MYR200 million Micro Enterprise Fund to provide larger amounts of financing for enterprises with viable businesses. The funds will be channeled through the existing *Pembiayaan Mikro* scheme under which viable businesses can obtain micro financing up to MYR50,000 for working capital or for capital expenditure. Micro financing under this scheme requires no collateral, minimal documentation, and provides quick approval and disbursement. It is offered at more than 2,600 branches and affiliates/agents of the participating financial institutions. It is up to the participating financial institutions to determine the interest or profit rate to be charged as well as the credit approval process.

On 23 January, BNM established a MYR2 billion SME Guarantee Scheme (SAGS). SAGS would allow small and medium enterprises to obtain

financing of up to MYR500,000 for up to 5 years.

**Bursa Malaysia launches new securities trading platform; allows listing of *sukuk* and debt securities**

- On 1 December, Bursa Malaysia launched the Bursa Trade Securities trading platform, an integrated trading system allowing greater accessibility for local and international investors.
- On 4 December, Bursa Malaysia allowed the listing of *sukuk* or debt securities denominated in MYR and FCY issued by local and international entities.

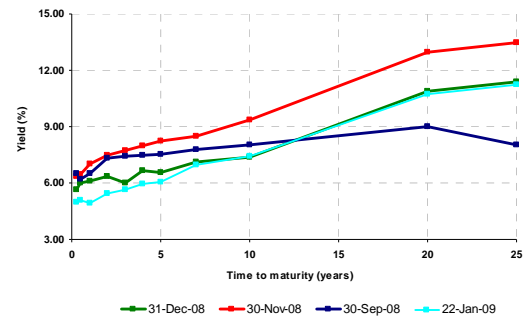
## Philippines—4Q08 Update

### Yield Movements

The long end of the yield curve has remained well above end-September 2008 levels, although the whole curve has shifted downward from even higher levels at the end of November. Yields have are below end-September levels only at the shorter end of the curve, resulting in an overall steepening. As elsewhere in the region, inflation is easing and reached 8.0% in December, the lowest level in nine months, as oil prices continued to slide. The Bangko Sentral ng Pilipinas (BSP) cut its policy rate from 6.0% to 5.5% on 19 December, double the rate cut expected by the market, citing easing inflation and a need to counter fallout from the looming global recession. This improvement in the inflation outlook occurs alongside a reduced growth outlook for 2009: GDP is seen expanding 4–5%, in contrast to contractions in some of its East Asian neighbors.

The outlook for LCY yields has also been helped by the success of the government's recent \$1.5 billion Eurobond issue, which will help reduce the total volume of government peso bond issues in 2009. But the total effect of these developments—falling inflation and renewed access to the USD bond market—has been to stabilize yields at roughly their end-2008 levels.

**Figure 1: Government Bond Yield Movements**



Source: Bloomberg LP.

### Size and Composition

Government bonds outstanding at end-November 2008 amounted to PHP2.5 trillion, a 1.0% increase from end-October. The Bureau of the Treasury (BTr) rejected October auctions for treasury bonds and 91-day treasury bills as more risk averse investors, wary of a slowing global economy, demanded higher yields than the BTr was willing to accept. Auctions in November and December, however, were somewhat more successful as investor confidence recovered modestly. The government auctioned new 5- and 7-year benchmark bonds from January 19–22 to be exchanged for existing shorter-term issues as part of the government's domestic debt consolidation program. It issued PHP66.5 billion of debt due in 2014 with a coupon of 6.25% and PHP78 billion of bonds maturing in 2016 with a coupon of 7%, for a total of PHP144.5 billion.

Corporate bonds outstanding at the end of November were up 0.5% m-o-m to PHP241 billion and 12.9% m-o-m in December at PHP272 billion. Philippine companies relied on the domestic bond market to raise capital as

borrowing costs have increased elsewhere and global credit conditions have tightened.

### Size and Composition of Local Currency Bond Markets

|                | Amount |        |        |        |        |        |        |        | Growth Rate (%) |       |        |        |        |       |       |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|-------|--------|--------|--------|-------|-------|
|                | Sep-08 |        | Oct-08 |        | Nov-08 |        | Dec-08 |        | Sep-08          |       | Oct-08 | Nov-08 | Dec-08 |       |       |
|                | PHP bn | USD bn | PHP bn | USD bn | PHP bn | USD bn | PHP bn | USD bn | y-o-y           | q-o-q | m-o-m  | m-o-m  | y-o-y  | q-o-q | m-o-m |
| <b>Total</b>   | 2,706  | 58     | 2,725  | 56     | 2,751  | 56     | ...    | ...    | 10.5            | 3.3   | 0.7    | 0.9    | ...    | ...   | ...   |
| Government     | 2,476  | 53     | 2,486  | 51     | 2,510  | 51     | ...    | ...    | 7.8             | 2.7   | 0.4    | 1.0    | ...    | ...   | ...   |
| Treasury bonds | 2,420  | 51     | 2,430  | 50     | 2,455  | 50     | ...    | ...    | 7.6             | 2.8   | 0.4    | 1.0    | ...    | ...   | ...   |
| Others         | 56     | 1      | 56     | 1      | 56     | 1      | 66     | 1      | 15.8            | 0.0   | 0.0    | 0.0    | 37.4   | 18.6  | 18.6  |
| Corporate      | 231    | 5      | 240    | 5      | 241    | 5      | 272    | 6      | 50.2            | 10.1  | 3.9    | 0.5    | 54.4   | 17.9  | 12.9  |

Notes:

1. Calculated using data from national sources.
2. Bloomberg end-of-period LCY/USD rates.
3. Growth rates are calculated from LCY base and do not include currency effects.
4. ... = updated data not available or not applicable.

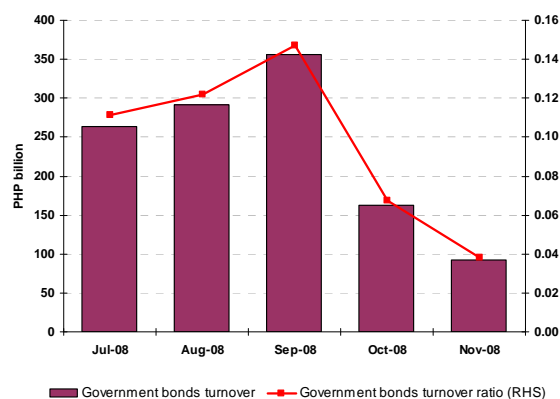
Sources: Bureau of the Treasury, Bloomberg L

### Turnover

Government bond turnover was down 43.6% m-o-m to 0.04 at end-November 2008. Philippine government bonds have become less liquid amid greater risk aversion in the gloomy economic environment.

Data for corporate bond turnover is not available.

**Figure 2: Monthly Bond Trading Volume and Turnover Ratio**



Source: Bureau of the Treasury

### Rating Changes

|                          | Moody's  | S&P    | Fitch  |
|--------------------------|----------|--------|--------|
| Sovereign FCY LT ratings | B1       | BB-    | BB     |
| Outlook                  | positive | stable | stable |

In early January, Fitch Ratings retained its stable outlook for the Philippines, showing its confidence in the Philippines' ability to weather the global slowdown.

### Policy, Institutional and Regulatory Developments

#### BSP relaxes FCDU rule on asset cover

BSP approved an adjustment in the items eligible as asset cover for the calculation of the 100% requirement which would allow lenders to forego deducting net unrealized losses in the calculation of the asset cover requirement of their foreign currency deposit units (FCDU).

**BSP issues guidelines on reclassification of financial assets**

At the end of October the BSP approved additional guidelines on the reclassification of financial assets permitted by amendments to International Accounting Standards and International Financial Reporting Standards. Aside from the asset reclassification, the monetary board has also eased cover requirements for foreign currency deposit units and has opened a US dollar repurchase agreement to augment the market's dollar liquidity.

**BSP reduces reserve requirement, increases rediscounting budget**

The BSP in early November also approved the reduction of the regular reserve requirement on bank deposits and deposit substitutes by two percentage points. It also increased the BSP budget for the peso rediscounting facility from PHP20 billion to PHP40 billion. The two measures are aimed at ensuring the proper functioning of the interbank market and guarding against liquidity or credit tightness arising from the global rise in risk aversion.

**Monetary board approves third phase of reforms, issues "Manual of Regulations on Foreign Exchange Transactions"**

The Monetary Board on 15 January approved the third phase of reforms in the foreign exchange regulatory framework. These measures include the liberalization/streamlining of rules on foreign borrowings of private banks for relending purposes and registration of inward foreign portfolio investments. They also involve reforms/provisions intended to improve monitoring of foreign exchange flows and formalize/clarify existing practices.

**Stimulus Package**

The government plans a P330 billion economic stimulus plan. It hopes to reach the higher end of growth targets for the year by upgrading infrastructure and capital stock as well as expanding social protection. According to the National Economic Development Authority, the plan involves spending 60–80% of the productive portion of the 2009 budget in the first half of 2009, focusing on the infrastructure sector. The government is also proposing to increase the allocation for conditional cash transfers for poor households and to improve health facilities. Several programs for Overseas Filipino Workers (OFWs) are also included in the stimulus plan, including redeployment to emerging foreign labor markets, development of new market niches, and a "payback package" for OFWs retrenched due to the global financial crisis.



## Singapore—4Q08 Update

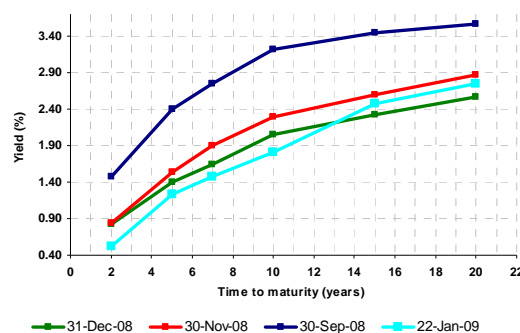
### Yield Movements

Amid a deteriorating growth environment and aggressive interest rate cuts in the global markets, the Singapore government yield curve flattened in December, especially at the short end of the curve.

In October, the Monetary Authority of Singapore (MAS) eased monetary policy and shifted its stance to a zero percent appreciation of the SGD nominal exchange rate policy band. The government estimates fourth quarter GDP contracted 3.7% y-o-y, reflecting in large part the continuous decline in non-oil domestic exports (down 17.5% in November and 20.8% in December). Inflationary pressure continues to ease, with the December consumer price index at 4.3%, from 5.5% in November.

The Ministry of Trade and Industry has revised its 2009 GDP forecast downwards to -5% to -2%, from an earlier estimate of -2% to 1%, due to a faster and steeper decline in the global economy and spillover from a weak 4Q08. It estimates inflation at between -1% and 0% in 2009. On 22 January, the government announced that the budget deficit for the fiscal year 2009 will be 6% of GDP. Yields fell in January from December levels, except for the 15-year (up 14 basis points) and 20-year (up 18 basis points).

**Figure 1: Government Bond Yield Movements**



Source: Bloomberg LP.

### Size and Composition

As of December 2008, the value of total LCY bonds reached SGD185 billion, up 5.5% y-o-y. Total government bonds outstanding were SGD105 billion in December, up 3% q-o-q. In October, the government re-opened a 5-year Singapore Government Securities (SGS) worth SGD4 billion, while issuing a new 364-day Treasury bill of SGD2.8 billion. Aside from these 2 notable fourth-quarter issues, government issuance is mostly confined to 3-month treasury bills. The Finance Ministry in November said banks have been able to obtain funding in the interbank market despite the ongoing global credit crisis, and that borrowing costs have started to ease.

Outstanding corporate bonds amounted to SGD80 billion in December, falling 2.1% q-o-q. The equity market still dwarfs the corporate bond market as a source of funding. Other forms of investment have also grown in popularity, such as exchange traded funds.

## Size and Composition of Local Currency Bond Market

|                | Amount |        |        |        |        |        |        |        | Growth Rate (%) |       |        |       |        |       |        |  |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|-------|--------|-------|--------|-------|--------|--|
|                | Sep-08 |        | Oct-08 |        | Nov-08 |        | Dec-08 |        | Sep-08          |       | Oct-08 |       | Nov-08 |       | Dec-08 |  |
|                | SGD bn | USD bn | SGD bn | USD bn | SGD bn | USD bn | SGD bn | USD bn | y-o-y           | q-o-q | m-o-m  | m-o-m | y-o-y  | q-o-q | m-o-m  |  |
| <b>Total</b>   | 184    | 128    | 182    | 123    | 184    | 121    | 185    | 129    | 12.7            | -2.7  | -0.7   | 0.7   | 5.5    | 0.7   | 0.7    |  |
| Government     | 102    | 71     | 101    | 68     | 104    | 69     | 105    | 73     | 5.0             | -5.9  | -0.6   | 2.9   | 6.6    | 3.0   | 0.7    |  |
| Treasury bonds | 102    | 71     | 101    | 68     | 104    | 69     | 105    | 73     | 5.0             | -5.9  | -0.6   | 2.9   | 6.6    | 3.0   | 0.7    |  |
| Corporate      | 82     | 57     | 81     | 55     | 80     | 53     | 80     | 56     | 24.1            | 1.7   | -0.8   | -1.9  | 4.1    | -2.1  | 0.6    |  |

Notes:

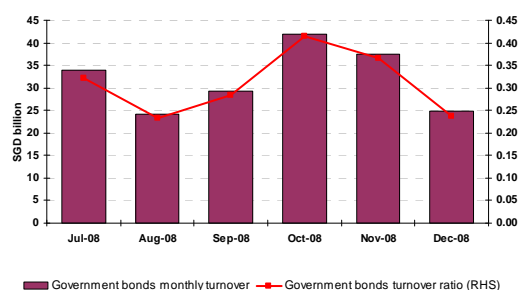
1. Government bonds calculated using data from national sources. Corporate bonds are based on AsianBondsOnline analysts' estimates.
2. Bloomberg end-of-period LCY/USD rate.
3. Growth rates calculated from LCY base, do not include currency effects.

Sources: SGS, Bloomberg LP.

## Turnover

Government bond trading volume was SGD37.4 billion in November and SGD24.8 billion in December, from October's SGD42 billion. The monthly Singapore government bond turnover ratio fell to 0.37 in November and 0.24 in December (**Figure 2**).

**Figure 2: Bond Trading Volume and Turnover Ratio**



Source: Monetary Authority of Singapore

## Policy, Institutional and Regulatory Developments

### Development of SGD-sovereign-rated *sukuks* to promote growth of Islamic finance

The MAS in November 2008 announced it was in the final stages of setting up a *sukuk* issuance facility to provide *shari'a*-compliant regulatory assets to financial institutions. *Sukuks* issued by the facility will be given equal regulatory treatment as Singapore Government Securities (SGS) and returns will be tied to the risk-free yield of SGS of equivalent tenors. The facility will be open to all *shari'a*-compliant financial institutions. Issuance will be on a reverse enquiry basis where the size and the time of issuance will be according to the needs of the financial institutions. On 19 January, Singapore launched its first Islamic bond program, worth SGD200 million.

### Monetary Authority of Singapore and US Federal Reserve Swap Facility

The US Federal Reserve and MAS established a swap facility to provide liquidity of up to USD30 billion through April 2009.

**Government to provide SGD2.3 billion in loan support to businesses**

The government has enhanced its business financing program by providing an additional SGD2.3 billion in loans to help local firms maintain access to credit. The measures took effect on 1 December 2008, and will be valid for one year subject to further extension.

- SGD5.8 billion to stimulate bank lending
- SGD2.5 billion in grants and tax incentives to help firms
- SGD2.6 billion to support families; and
- SGD4.4 billion on infrastructure, education and health.

**Enhancement of Financial Sector Development Fund (FSDF) Training Incentives**

Through December 2010 the MAS has enhanced training incentives funded by the FSDF to encourage the financial industry to continue investing in training during the economic downturn.

- For financial institutions that send their staff for training, the funding support for training fees is increased from 50% to 70% under the Financial Training Scheme.
- For training programs accredited under the Financial Industry Competency Standards (FICS), a higher grant support of 80% will be provided.
- For individuals who pay for their own training, MAS will provide 80% grant support when they attend and complete FICS accredited programs.

**Finance Ministry announces resilience package**

In its new budget the Finance Ministry also included a SGD20.5 billion resilience package to save jobs and boost businesses, including:

- SGD5.1 billion for training and other measures to save jobs

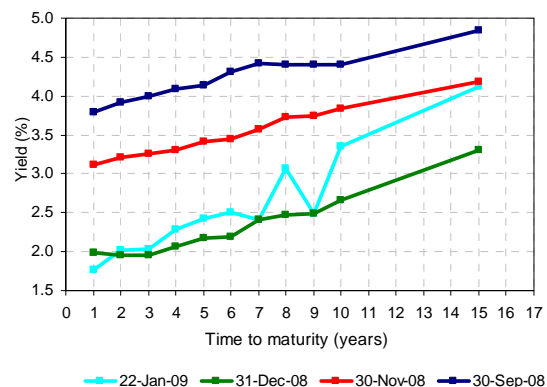
## Thailand—4Q08 Update

### Yield Movements

The Monetary Policy Committee of Thailand reduced its one-day repurchase rate by 1 percentage point to 2.75% on 3 December, 2008, its largest-ever cut. This largely reflected the decline of consumer price inflation to 0.4% in December, from 6% or higher earlier in 2008.

In response, Thai government bond yields dropped sharply in December from levels in September 2008. The yield on the benchmark ten-year bond was down 174 basis points to 2.7% by 31 December, from September levels. The yield on the two-year note was down 197 basis points to 1.9%, reflecting expectations the Bank of Thailand (BOT) would cut its policy rate by another 1% in 2009, as investors sought safe haven in government bonds. As of 22 January, the Thai curve widened somewhat for specific maturities under nine years, but widened out most at the longer end of the curve.

**Figure 1: Benchmark Yield Curve—LCY Government Bonds**



Source: Bloomberg LP.

### Size and Composition

The outstanding stock of government bonds rose 13.8% y-o-y in the third quarter of 2008. November 2008 preliminary figures showed 0.03% growth compared to the previous month. Central government bonds retained a dominant share of total bonds outstanding (49% in November) as the central government continued to issue 91- and 182-day Treasury bills and 10- and 20-year government bonds.

The Public Debt and Management Office (PDMO) announced that the government would issue THB435 billion worth of government bonds in the fiscal year 2009, which started November 2008. Issue proceeds will be used to help cover a projected budget deficit of THB250 billion and debt restructuring of THB202 billion.

Corporate bonds outstanding grew 0.8% y-o-y in the third quarter of 2008 while November preliminary figures showed a modest 2.6% growth m-o-m. Corporate issues still face difficulty as the economic downturn has encouraged investors to shift investments to less risky assets.

### Size and Composition of Local Currency Bond Markets

|  | Amount |        |        |        |        |        | Growth Rate (%) |       |        |       |        |
|--|--------|--------|--------|--------|--------|--------|-----------------|-------|--------|-------|--------|
|  | Sep-08 |        | Oct-08 |        | Nov-08 |        | Sep-08          |       | Oct-08 |       | Nov-08 |
|  | THB bn | USD bn | THB bn | USD bn | THB bn | USD bn | y-o-y           | q-o-q | m-o-m  | m-o-m |        |
| <b>Total</b>                           | 4,973  | 147    | 4,925  | 141    | 4,951  | 140    | 11.1            | (1.1) | (1.0)  | 0.5   |        |
| Government                             | 4,033  | 119    | 3,963  | 113    | 3,965  | 112    | 13.8            | (0.5) | (1.7)  | 0.03  |        |
| Treasury bonds                         | 1,988  | 59     | 1,952  | 56     | 1,947  | 55     | 8.4             | 0.2   | (1.8)  | (0.3) |        |
| Central bank bonds                     | 1,534  | 45     | 1,512  | 43     | 1,518  | 43     | 23.5            | (3.5) | (1.4)  | 0.4   |        |
| State enterprise bonds and other bonds | 511    | 15     | 499    | 14     | 500    | 14     | 9.0             | 6.2   | (2.3)  | 0.1   |        |
| Corporate                              | 940    | 28     | 962    | 27     | 986    | 28     | 0.8             | (3.3) | 2.3    | 2.6   |        |

Notes:

1. Calculated using data from national sources.
2. Bloomberg end-of-period LCY/USD rates.
3. Growth rates are calculated from LCY base and do not include currency effects.

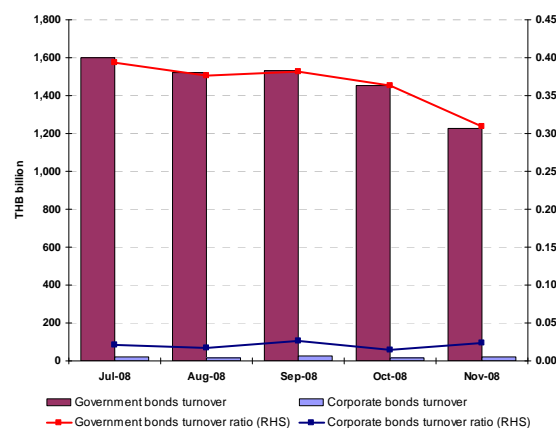
Sources: Bank of Thailand, Bloomberg LP.

### Turnover

Monthly government bond market turnover fell to a marginal .31 in November, from .38 at the end of September 2008. The market focused on trading BOT bonds and maturities longer than 10 years.

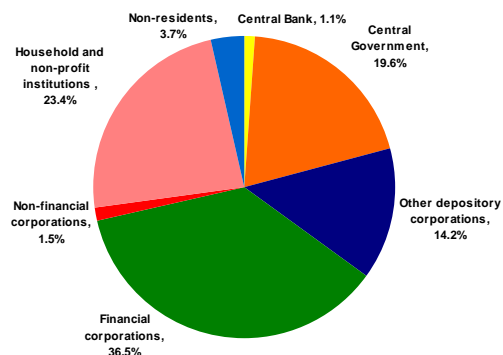
Monthly corporate bond turnover remained thinly traded, falling to 0.02 in November from 0.03 in September 2008. Slowing corporate bond issuance as well as credit concerns have reduced the incentive for investors to actively trade or switch their portfolios. In November 2008, the market emphasized trading in short-to medium-term corporate bonds up to 5 years maturity.

**Figure 2: Monthly Bond Trading Volume and Turnover Ratio**



Source: Bank of Thailand.

**Figure 3: LCY Government Bonds Investor Profile (as of November 2008)**



Source: Bank of Thailand.

### Investor Profile

Financial corporations are holders of more than one-third of total government bonds outstanding (36.5%), while the central government and household and nonprofit institutions hold close to 20%.

Foreign investors have only a minimal presence in the Thai LCY bond market, holding 3.7% of total government bonds outstanding at end-November, up slightly from around 1% in 2007.

## Rating Changes

|                          | Moody's  | S&P      | Fitch    | R&I      |
|--------------------------|----------|----------|----------|----------|
| Sovereign FCY LT ratings | Baa1     | BBB+     | BBB+     | BBB+     |
| Outlook                  | negative | negative | negative | negative |

In December, Moody's Investors Service, Standard & Poor's, Fitch Ratings and Rating and Investment Information, Inc. cut Thailand's rating outlook from stable to negative due to heightened domestic political risk.

## Policy, Institutional and Regulatory Developments

### **Additional THB110 billion bonds planned**

The PDMO plans to issue government bonds worth THB110 billion from January to March 2009, about THB80 billion of the total earmarked to finance the budget deficit.

The government projects a fiscal 2009 budget deficit of 3.5% of nominal 2009 GDP, from 1.8% of 2008 GDP in fiscal 2008.

The office would also issue savings bonds and promissory notes.

### **BOT to fine tune banking system**

The BOT, in a bid to encourage economic growth in 2009, plans to announce a credit-risk management system to help banks provide loans more freely.

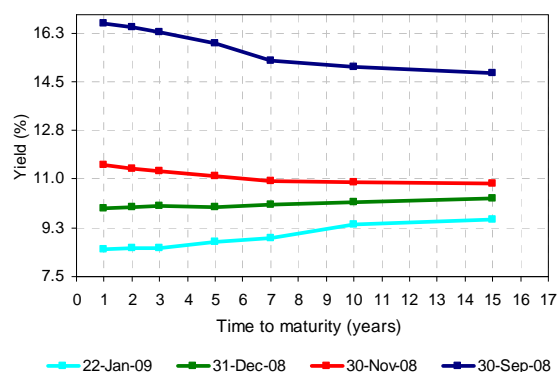
## Viet Nam—4Q08 Update

### Yield Movements

Viet Nam government bond yields plummeted in December 2008 after the State Bank of Viet Nam (SBV) lowered interest rates five times since October 2008. Reversing rate hikes in the first half of 2008, the SBV in December reduced its basic interest rate from 14% to 8.5%; refinancing rate from 15% to 9.5%; and its discount rate from 13% to 7.5%. Inflation has come down dramatically in recent months—with the government continuing to control the prices of basic commodities—from this year's high of 28.3% in August to 19.9% in December 2008.

Interest in bonds has grown as investors have sought safety during the economic slowdown, resulting in bond yields dropping further in January 2009 from the high levels of September. The yield on the benchmark ten-year bond was down 565 basis points at 9.4% as of 22 January, while the yield on the two-year note was down 791 basis points at 8.5%.

**Figure 1: Benchmark Yield Curve—LCY Government Bonds**



Source: Bloomberg LP.

### Size and Composition

The volume of government bonds outstanding continued reached VND217 trillion (USD12.4 billion) as of end-December, up 41.9% y-o-y. On a monthly basis, volume was up 0.3% in December from November. To date, the Viet Nam Development Bank (VDB) has issued VND10.9 trillion (USD623.7 million) worth of bonds since September 2008, close to the Viet Nam Treasury Bill total of VND10.4 trillion (USD594.5 million) of bonds.

The government has given the go ahead to the Viet Nam Shipbuilding Industry Group (VINASHIN) to issue VND3 trillion (USD171.6 million) of local bonds and, for the first time, international bonds worth USD400 million, to raise capital for its main projects.

The volume of corporate bonds outstanding was up 69.4% y-o-y as of December 2008, amounting to VND9.03 trillion (USD517 million). Recent monthly growth figures, however, have been much lower. The 2.3% growth rate for corporate bonds outstanding in December 2008 was mainly attributable to the Highway Investment and Development Corporation's issuance of VND200 billion (USD11.4 million) bonds. Corporate issuers have cut back on new issues in recent months because of unfavorable market conditions.

## Size and Composition of Local Currency Bond Markets

|   | Amount    |        |           |        |           |        |           |        | Growth Rate (%) |       |        |       |        |       |        |  |
|---|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------------|-------|--------|-------|--------|-------|--------|--|
|   | Sep-08    |        | Oct-08    |        | Nov-08    |        | Dec-08    |        | Sep-08          |       | Oct-08 |       | Nov-08 |       | Dec-08 |  |
|   | VND bn    | USD bn | VND bn    | USD bn | VND bn    | USD bn | VND bn    | USD bn | y-o-y           | q-o-q | m-o-m  | m-o-m | y-o-y  | q-o-q | m-o-m  |  |
| <b>Total</b>  | 207,862.7 | 12.5   | 216,079.6 | 12.8   | 225,312.6 | 13.3   | 226,060.6 | 12.9   | 36.1            | 3.7   | 4.0    | 4.3   | 42.8   | 8.8   | 0.3    |  |
| Government  | 199,031.2 | 12.0   | 207,248.1 | 12.3   | 216,481.1 | 12.8   | 217,029.1 | 12.4   | 33.9            | 2.5   | 4.1    | 4.5   | 41.9   | 9.0   | 0.3    |  |
| Treasury bonds  | 95,461.7  | 5.8    | 97,528.6  | 5.8    | 104,311.6 | 6.1    | 104,631.6 | 6.0    | 56.6            | 9.2   | 2.2    | 7.0   | 33.6   | 9.6   | 0.3    |  |
| Central bank bonds  | 20,300.0  | 1.2    | 20,300.0  | 1.2    | 20,300.0  | 1.2    | 20,300.0  | 1.2    | 0.0             | -14.4 | 0.0    | 0.0   | 493.6  | 0.0   | 0.0    |  |
| Viet Nam Development Bank bonds, State-owned enterprise bonds and other bonds | 83,269.5  | 5.0    | 89,419.5  | 5.3    | 91,869.5  | 5.4    | 92,097.5  | 5.3    | -5.0            | 0.3   | 7.4    | 2.7   | 29.2   | 10.6  | 0.2    |  |
| Corporate   | 8,831.5   | 0.5    | 8,831.5   | 0.5    | 8,831.5   | 0.5    | 9,031.5   | 0.5    | 113.8           | 39.5  | 0.0    | 0.0   | 69.4   | 2.3   | 2.3    |  |

Notes:

1. Bloomberg end-of-period LCY/USD rates.
2. Growth rates are calculated from LCY base and do not include currency effects.

Sources: Bloomberg LP.

## Policy, Institutional and Regulatory Developments

### USD1 billion economic stimulus package

Viet Nam's Prime Minister has ordered the Ministry of Finance, Ministry of Planning and Investment, and the SBV to work together in managing and allocating the planned USD1 billion economic stimulus package. VND17 trillion (USD972.5 million) will be allocated to subsidize 4% of company loans and enhance small business lending access. A large part of this package will be financed through issuance of government bonds.

The government is considering a bigger package that may provide an additional USD5 billion in the coming months.

### Ministry of Finance to amend bond market regulation

The Viet Nam Ministry of Finance plans to amend rules on the issuance of government bonds, guaranteed bonds, and local government bonds. Moreover, the corporate bond issue roadmap is expected to be released in 2010 to help create a more attractive

investment channel for both foreign and domestic investors.

### Viet Nam Bond Trade Association to be established

Bond traders plan to set up the Viet Nam Bond Trade Association. The Bank for Investment and Development of Viet Nam and the International Finance Company will play a major role in the operation of the association, and ensure that it operates according to transparent and international standards.

### SBV issues seven measures to strengthen economy

The SBV has released guidelines for strengthening the credit market—for the purpose of cushioning the economy against the worst effects of the global financial crisis. Some of the more important of these measures are: strict monitoring of the impact of the international economic downturn on the domestic economy, money market and the banking system reforms; creating a better risk/return relationship on bank loans, and increasing credit availability for creditworthy borrowers.



## Asia Bond Monitor First Quarter 2009

The Asia Bond Monitor (ABM) reviews recent developments in East Asian local currency bond markets along with the outlook, risks, and policy options. The ABM covers the 10 Association of Southeast Asian Nations member countries plus the People's Republic of China; Hong Kong, China; and the Republic of Korea.

## About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two thirds of the world's poor. Nearly 877 million people in the region live on \$1.25 or less a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

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