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

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Emerging East Asian Local Currency Bond Markets: A Regional Update

Highlights

- The external environment facing emerging East Asia remains challenging as the eurozone sovereign debt crisis lingers, while volatility in the financial markets reflects concerns over the sustainability of the economic recovery in the United States (US).¹
- The rally in US and emerging market equities witnessed in 1Q12 has consolidated somewhat since the beginning of April as markets turn their focus to challenges facing Spain, Portugal, and other peripheral economies in the eurozone.
- Growth in most emerging East Asian economies is expected to remain robust this year, driven by domestic demand and reconstruction activities, as Japan and Thailand recover from last year's natural disasters and supply disruptions. The expansion of government spending in several other emerging East Asian countries should also support domestic growth.
- The continuation of accommodative monetary policies by the US Federal Reserve and similar postures adopted in other developed economies have sent large volumes of capital into Asian equity and local currency (LCY) bond markets.
- The inflows to emerging East Asia's LCY bond markets—spurred by interest rate differentials and easy money conditions in mature markets are expected to exert downward pressure on domestic yields. This trend could accelerate in 2012 in anticipation of the appreciation of domestic currencies.
- Inflation may come under renewed pressure over the next several months on the back

- of rising energy prices. Monetary policy has remained neutral in most emerging East Asian markets, but authorities are closely monitoring the impact of rising energy prices on their respective inflation indices.
- Most government bond yield curves flattened significantly in 2011, particularly in Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; and Singapore.
- Government bond yield curves in most markets either continued to flatten or shifted downward in 1Q12. However, yield curves in some markets, most notably the People's Republic of China (PRC) and Thailand, have shifted upward since the beginning of the year.
- Total bonds outstanding in emerging East Asia's LCY bond market grew 7.0% year-on-year (y-o-y) in 4Q11, up from 5.7% growth in 3Q11. The government bond market grew a modest 2.5% y-o-y in 4Q11, while the corporate segment of the region's bond market grew at a much more robust rate of 17.1%, following 14.8% growth in 3Q11.
- Contractual savings institutions (CSIs)—
 pension funds, insurance companies, and
 social security institutions—have become an
 increasingly important investor class in the
 emerging East Asian bond market in recent
 years. In the PRC, Malaysia, and the Republic
 of Korea, CSI holdings of corporate bonds have
 become a key factor supporting corporate bond
 market growth.
- Foreign investors' interest in the region's LCY government bond market remains strong. The Republic of Korea, Malaysia, and Thailand experienced an increase in the share of foreign holdings of their respective LCY government bonds at end-December 2011 compared with

¹ Emerging East Asia comprises the People's Republic of China (PRC); Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.

end-December 2010. In the case of Indonesia, the share of foreign holdings leveled off at end-2011 after having risen sharply in recent years.

- G3 currency issuance in emerging East Asia fell 14.0% y-o-y in 2011 to US\$75 billion, although issuance in G3 currencies rebounded strongly in 1Q12.
- Downside risks to the outlook for emerging East Asia remain, including (i) a worsening external environment if the eurozone economies sink into a deeper recession, (ii) tighter monetary policies on the back of rising inflationary pressures, and (iii) volatile capital flows.
- Cross-border portfolio debt holdings in Asia remain low, although they have improved in recent years. Analysis shows a strong home bias among investors. Prior to the global financial crisis (GFC), investors had a clear

bias for investing in global markets vis-à-vis regional markets. However, after the GFC they remain indifferent between global and regional markets.

- A survey of 78 investors and analysis of secondary data through gravity models show that bond market conditions—namely return, risks, liquidity, and market infrastructure are important determinants of cross-border holdings.
- Increasing overall return remains the primary motivation of Asian investors. Cross-border investor holdings of debt assets respond positively to two components of portfolio returns: the return on assets and the return stemming from exchange rate gains.
- The survey's results show support for initiatives that focus on the development of local and regional financial markets, and encourage Asians to invest in each other's markets.

Introduction: Global and Regional Market Developments

The external environment facing emerging East Asia remains challenging as the eurozone sovereign debt crisis lingers and markets reflect concerns over the sustainability of the economic recovery in the United States (US).²

Massive liquidity injections in December and February into the European banking system from the European Central Bank (ECB), through its Long-Term Refinancing Operations (LTRO), helped ease pressure on short-term rollovers. These efforts, along with the resolution of the Greek debt

crisis and some signs of US economic recovery, soothed market sentiments in the first quarter of the year. However, the rally in risk assets in 1Q12 (Table A), with US equities and emerging market equities and bonds posting strong performances, appears to be moving into a consolidation phase as markets turn their focus to challenges in Spain, Portugal, and other peripheral economies in the eurozone.

While the second international bailout of Greece in March may have prevented a disorderly default and

Table A: Changes in Global Financial Conditions, 1 January to 15 March 2012

	2-Year Government Bond (bps)	10-Year Government Bond (bps)	5-Year Credit Default Swap Spread (bps)	Equity Index (%)	FX Rate (%)
Major Advanced Economies					
United States	12	40	-	11.5	-
United Kingdom	14	14	(33)	6.6	1.1
Japan	(2)	(2)	(34)	21.1	8.7
Germany	14	14	(29)	18.7	0.9
Emerging East Asia					
China, People's Rep. of	12	12	(36)	7.9	0.5
Hong Kong, China	(9)	(2)	(27)	15.8	(0.1)
Indonesia	(39)	(1)	(54)	5.7	1.2
Korea, Rep. of	15	16	(39)	3.2	(2.1)
Malaysia	17	(10)	(45)	15.1	(3.5)
Philippines	68	15	(18)	14.3	(1.8)
Singapore	(10)	12	(52)	11.9	(2.6)
Thailand	9	49	(0.02)	14.2	(2.6)
Viet Nam	(105)	(113)	-	25.7	(1.0)
Select European Markets					
Greece	4,179	(957)	26,799	10.3	0.9
Ireland	(341)	(146)	(110)	14.5	0.9
Italy	(302)	(192)	(123)	12.6	0.9
Portugal	(9)	36	172	1.8	0.9
Spain	(115)	(17)	23	(1.6)	0.9

 $^{{\}sf -}=$ not available, bps = basis points, FX = foreign exchange. Notes:

^{1.} For emerging East Asia, positive value for FX rate means depreciation of local currency against US dollar.

^{2.} For European markets, positive value for FX rate means appreciation of local currency against US dollar. Source: Bloomberg LP, CEIC, Institute of International Finance (IIF), and Thomson Reuters.

² Emerging East Asia comprises the People's Republic of China (PRC); Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.

reduced the risk of a liquidity crunch in the short-run, sovereign debt problems in other larger economies remain unresolved and will likely contribute to a new round of financial market instability. Thus, market participants have grown more cautious recently as they perceive that the short-term, liquidity-driven market recovery may have run its course, while severe fiscal austerity measures in Spain and Portugal could worsen growth prospects and impinge on debt sustainability.

Credit default swap (CDS) spreads in emerging East Asia (Figure A) and most countries in the eurozone (Figure B) fell at the start of 2012 as efforts to manage the eurozone debt crisis began showing promise. However, low investor demand for Spanish debt at its April auction renewed concerns and drove CDS spreads higher in the first half of the month.

Yields on government bonds in mature economies in the latter part of 2011 fell to their lowest levels in recent years and have continued to fluctuate in a relatively narrow range in early 2012 (Figure C).

Growth in emerging East Asia is expected to remain robust this year, driven by domestic demand and regional reconstruction activities, as Japan and Thailand recover from last year's natural disasters and supply disruptions. The expansion of government spending in several other emerging East Asian countries should also support domestic growth in the region. The ability of governments to increase expenditures in 2012 has been helped by decreases in local financial market volatility and lower emerging market sovereign bond spreads (Figure D). The JP Morgan Emerging Market Bond Index (EMBI) for stripped spreads has moved downward since the beginning of 2012 (Figure E).

While growth prospects for emerging East Asia remain robust, simmering uncertainties in the eurozone and weak external demand could dampen the investment outlook.

Inflationary pressures have moderated but could spike on the back of rising oil prices and/or volatile

commodity prices (Figure F). Monetary authorities in emerging East Asia have largely adopted a neutral stance as uncertainty deepens over global economic prospects and countries brace for the potential fallout from slowing external trade and the transmission of volatility through financial market channels.

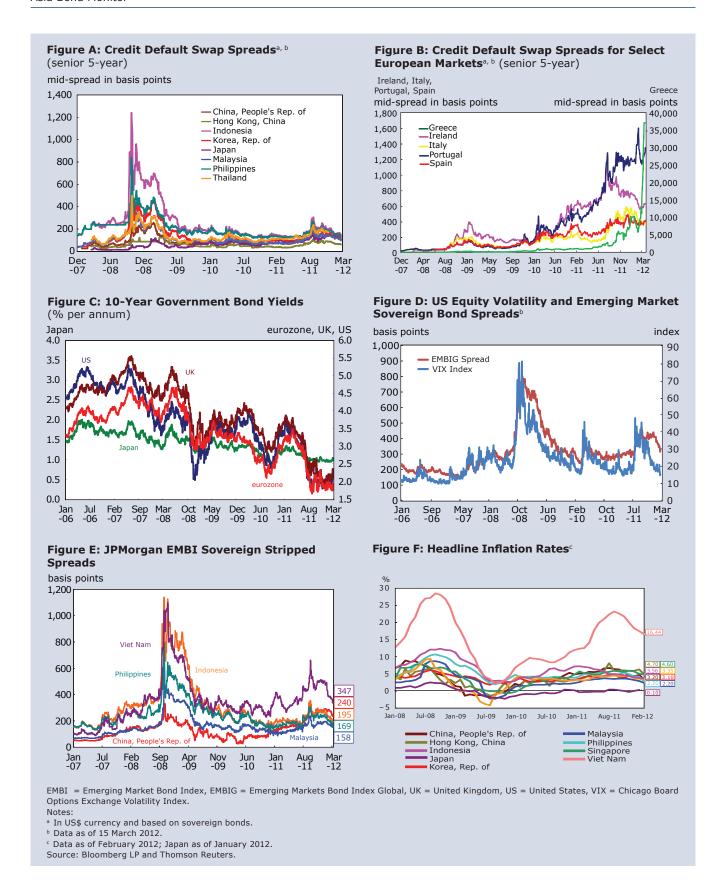
The continuation of accommodative monetary policies by the US Federal Reserve and similar postures adopted in other developed markets have sent large volumes of capital into Asian equity and local currency (LCY) bond markets. These policies have also led to strong demand for Asian G3 currency bonds.

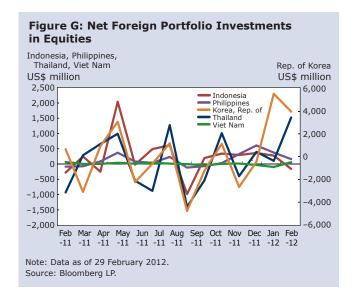
The renewal of portfolio inflows in 1Q12 reversed the trend of capital outflows, particularly from the region's equity markets, that emerged in late 2011 (Figure G). The most dramatic recoveries in equity flows have occurred in the Republic of Korea and Thailand. Indonesia was also a recipient of increased volumes of foreign portfolio investment prior to the anticipated upgrade of its sovereign credit rating to investment grade by Fitch Ratings (December) and Moody's Investors Service (January).

The inflows to emerging East Asia's LCY bond market—spurred by interest rate differentials and easy monetary conditions in mature markets—are expected to continue exerting downward pressure on domestic yields. This trend could accelerate in 2012 in anticipation of the appreciation of domestic currencies.

Total bonds outstanding in emerging East Asia's LCY bond market grew 7.0% year-on-year (y-o-y) in 4Q11, up from 5.7% growth in 3Q11. The government bond market grew a modest 2.5% y-o-y in 4Q11. Meanwhile, the corporate segment of the region's bond market grew a much more robust 17.1% y-o-y, led by Indonesia (28.0%), the PRC (26.0%), the Philippines (13.4%), and the Republic of Korea (12.1%).

At end-September 2011, emerging East Asia's share of the global LCY bond market stood at 8.1%,





up slightly from 8.0% at end-June and well above its 2.1% share at end-December 1996 **(Table B)**. The PRC and the Republic of Korea remained the two largest bond markets in the region, accounting for global shares of 4.8% and 1.7%, respectively. Meanwhile, the share of the global bond market of ASEAN-6 countries at end-September stood at 1.3%.

The risks to the region's LCY bond markets in 2012 include (i) a worsening external environment if the eurozone economies sink into a deeper recession, (ii) tighter monetary policies on the back of rising inflationary pressures, and (iii) volatile capital flows.

Table B: Bonds Outstanding in Major Markets (US\$ billion)

	Septemb	er 2011	19	96
Economy	LCY Bonds Outstanding	% of World Total	LCY Bonds Outstanding	% of World Total
United States	26,176	38.7	10,926	42.9
Japan	12,626	18.7	4,456	17.5
France	3,384	5.0	1,261	4.9
Germany	2,648	3.9	1,888	7.4
United Kingdom	1,745	2.6	678	2.7
Emerging East Asia	5,479	8.1	528	2.1
of which: PRC	3,247	4.8	62	0.2
Emerging East Asia excl. PRC	2,232	3.3	466	1.8
of which: Korea, Rep. of	1,179	1.7	283	1.1
of which: ASEAN-6	883	1.3	149	0.6
Indonesia	111	0.2	7	0.03
Malaysia	263	0.4	71	0.3
Philippines	75	0.1	28	0.1
Singapore	188	0.3	25	0.1
Thailand	229	0.3	18	0.1
Viet Nam	17	0.03	-	-
Memo Items:				
Australia	1,012	1.5	248	1.0
Brazil	1,368	2.0	299	1.2
PRC (excl. policy bank bonds)	2,216	3.3	-	-
India	649	1.0	81	0.3
Russian Federation	88	0.1	43	0.2
South Africa	179	0.3	82	0.3

^{- =} not available, ASEAN = Association of Southeast Asian Nations, LCY = local currency, PRC = People's Republic of China.

Source: Bank for International Settlements and AsianBondsOnline.

³ ASEAN-6 refers to the six largest economies of the Association of Southeast Asian Nations (ASEAN): Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam.

Bond Market Developments in the Fourth Quarter of 2011

Size and Composition

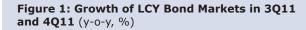
Total bonds outstanding in emerging East Asia's LCY bond market rose 7.0% y-o-y and 2.2% q-o-q to reach US\$5.7 trillion at the end of 4Q11, driven by strong growth in corporate bonds.⁴

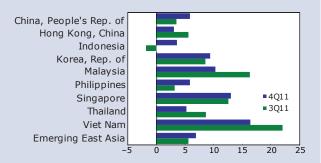
The year-on-year (y-o-y) growth rate for emerging East Asia's local currency (LCY) bond market rose to 7.0% in 4Q11 from 5.7% in 3Q11 (Figure 1). The government bond market grew by a modest 2.5% y-o-y in 4Q11, while the corporate segment of the region's bond market grew by a much more robust 17.1% (Table 1).

The region's most rapidly growing bond markets on a y-o-y basis were those of Viet Nam, Singapore, Malaysia, and the Republic of Korea, which grew 16.5%, 13.1%, 10.4%, and 9.5%, respectively. In the cases of Viet Nam, Singapore, and Malaysia, growth was mostly due to the rapid expansion of their respective government bond markets. On the other hand, the Republic of Korea's y-o-y growth rate owes most of its growth to the robust performance of its large corporate bond sector.

On a quarter-on-quarter (q-o-q) basis, the region's bond market growth leader in 4Q11 was the Philippines, which grew 3.5% on the back of a strong performance from both its government (3.1%) and corporate (6.5%) bond sectors. The only corporate bond markets to experience more rapid q-o-q growth in 4Q11 were those of Indonesia and the People's Republic of China (PRC), which expanded 9.2% and 8.7%, respectively.

The second, third, and fourth most rapidly growing LCY bond markets on a q-o-q basis in 4Q11 were those of the PRC (3.1%), the Republic of Korea





LCY = local currency, y-o-y = year-on-year. Notes:

- 1. Calculated using data from national sources.
- Growth rates are calculated from LCY base and do not include currency effects.
- 3. Emerging East Asia growth figure is based on end-December 2011 currency exchange rates and does not include currency effects.
- For Singapore, corporate bonds outstanding quarterly figures are based on
 AsianBondsOnline estimates.

Source: People's Republic of China (ChinaBond); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia and Indonesia Stock Exchange); the Republic of Korea (EDAILY BondWeb and The Bank of Korea); Malaysia (Bank Negara Malaysia); the Philippines (Bureau of the Treasury and Bloomberg LP); Singapore (Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP); Thailand (Bank of Thailand); and Viet Nam (Bloomberg LP).

(2.0%), and Indonesia (1.2%). In all three cases, growth was driven by expansion in the corporate bond market. In fact, the only government bond market in emerging East Asia to grow more rapidly than 1.0% q-o-q in 4Q11—besides the Philippines—was that of the PRC, which grew 1.3%.

Emerging East Asia's government bond market grew moderately in 4Q11 on both a y-o-y (2.5%) and q-o-q (0.8%) basis.

The regional government bond market's y-o-y growth rate of 2.5% in 4Q11 was only a marginal improvement over the 1.8% growth realized in 3Q11. The government bond markets reporting the most significant y-o-y growth were those of Viet Nam (19.9%), Singapore (16.0%), Malaysia (12.0%), and the Republic of Korea (6.0%). However, all four of these government bond markets reported either negligible or negative

⁴ Emerging East Asia comprises the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.

Table 1: Size and Composition of LCY Bond Markets

	4Q:	10	3Q1	1	4Q1	1	Grow	th Rate	(LCY-ba	se %)	Growth Rate (US\$-base %)			
	Amount		Amount		Amount		4Q	10	4Q	11	4Q	10	40	11
	(US\$.%	(US\$	%	(US\$.%			_					
	billion)	share	billion)	share	billion)	share	q-o-q	у-о-у	q-o-q	у-о-у	q-o-q	у-о-у	q-o-q	у-о-у
China, People's Rep. o										= 0				
Total	3,052	100.0	3,247	100.0	3,392	100.0	0.8	15.1	3.1	5.9	2.1	18.9	4.5	11.1
Government	2,408	78.9	2,474	76.2	2,540	74.9	0.02	10.3	1.3	0.5	1.3	14.0	2.7	5.5
Corporate	644	21.1	773	23.8	852	25.1	3.6	37.2	8.7	26.0	4.9	41.8	10.2	32.2
Hong Kong, China			.=-			400.0			(0.0)			40.	(0.5)	
Total	163	100.0	170	100.0	169	100.0	1.6	14.0	(0.9)	3.1	1.4	13.7	(0.6)	3.2
Government	87	53.3	90	52.8	91	53.7	0.8	25.5	0.9	3.9	0.6	25.2	1.1	4.0
Corporate	76	46.7	80	47.2	78	46.3	2.5	3.2	(2.8)	2.2	2.3	3.0	(2.6)	2.3
Indonesia							(4.5)				(= ·)		(4.6)	
Total	107	100.0	111	100.0	110	100.0	(4.2)	3.1	1.2	3.6	(5.1)	7.8	(1.0)	2.8
Government	94	88.0	96	86.3	93	85.2	(5.9)	0.3	(0.1)	0.3	(6.9)	4.9	(2.2)	(0.5)
Corporate	13	12.0	15	13.7	16	14.8	11.3	29.8	9.2	28.0	10.2	35.7	6.8	27.0
Korea, Rep. of														
Total	1,149	100.0	1,179	100.0	1,229	100.0	1.2	9.4	2.0	9.5	2.5	13.1	4.2	7.0
Government	492	42.8	501	42.5	510	41.5	(2.0)	7.2	(0.5)	6.0	(0.7)	10.8	1.7	3.5
Corporate	657	57.2	678	57.5	719	58.5	3.7	11.1	3.8	12.1	5.0	14.8	6.1	9.5
Malaysia														
Total	247	100.0	263	100.0	263	100.0	4.7	18.9	(0.7)	10.4	5.5	33.0	(0.1)	6.7
Government	145	59.0	158	60.1	158	59.8	5.7	28.5	(1.2)	12.0	6.5	43.7	(0.5)	8.3
Corporate	101	41.0	105	39.9	106	40.2	3.3	7.4	(0.05)	8.1	4.2	20.1	0.6	4.5
Philippines														
Total	73	100.0	75	100.0	77	100.0	0.9	10.0	3.5	5.9	1.0	15.9	3.4	5.8
Government	64	88.0	65	87.5	67	87.2	0.7	10.1	3.1	4.9	0.8	16.0	2.9	4.8
Corporate	9	12.0	9	12.5	10	12.8	2.6	9.3	6.5	13.4	2.7	15.2	6.3	13.3
Singapore														
Total	169	100.0	188	100.0	189	100.0	(0.6)	9.8	(0.2)	13.1	1.9	20.1	0.6	12.0
Government	103	60.9	116	61.9	118	62.5	3.3	7.0	0.8	16.0	5.9	17.1	1.6	14.8
Corporate	66	39.1	72	38.1	71	37.5	(6.2)	14.4	(1.9)	8.6	(3.8)	25.3	(1.1)	7.5
Thailand														
Total	225		229	100.0	225	100.0	2.7	14.4	(0.6)	5.3	3.7	27.0	(1.7)	0.3
Government	183	81.4	187	81.5	182	80.8	2.8	16.7	(1.4)	4.4	3.8	29.6	(2.5)	(0.5)
Corporate	42	18.6	43	18.5	43	19.2	2.2	5.3	3.1	9.1	3.1	16.9	1.9	3.9
Viet Nam														
Total	16	100.0	17	100.0	17	100.0	5.3	37.6	0.4	16.5	5.2	30.5	(0.6)	8.0
Government	14	88.4	15	90.9	15	90.9	1.4	33.5	0.4	19.9	1.4	26.5	(0.6)	11.1
Corporate	2	11.6	2	9.1	2	9.1	48.0	80.3	0.3	(8.7)	48.0	70.9	(0.7)	(15.4)
Emerging East Asia ((EEA)													
Total	5,200	100.0	5,479	100.0	5,671	100.0	1.0	13.5	2.2	7.0	2.2	18.1	3.5	9.1
Government	3,591	69.0	3,703	67.6	3,774	66.6	0.1	10.8	0.8	2.5	1.2	15.4	1.9	5.1
Corporate	1,610	31.0	1,776	32.4	1,897	33.4	3.2	20.1	5.2	17.1	4.4	24.7	6.8	17.9
EEA Less PRC														
Total	2,148	100.0	2,232	100.0	2,279	100.0	1.3	11.1	1.0	8.6	2.4	16.9	2.1	6.1
Government	1,183		1,229	55.0	1,234	54.1	0.1	11.8	(0.3)	6.8	1.0	18.3	0.4	4.3
Corporate	965	44.9	1,003	45.0	1,045	45.9	2.9	10.2	2.6	10.7	4.1	15.4	4.2	8.3
Japan														
Total	11,718	100.0	12,626	100.0	12,715	100.0	1.5	6.2	0.5	2.9	4.5	21.8	0.7	8.5
Government	10,606	90.5	11,467	90.8	11,560	90.9	1.6	6.8	0.6	3.3	4.7	22.5	0.8	9.0
Corporate	1,113	9.5	1,159	9.2	1,154	9.1	0.3	0.6	(0.6)	(1.6)	3.3	15.4	(0.4)	3.8

 $\label{eq:LCY} \mbox{LCY = local currency, q-o-q = quarter-on-quarter, y-o-y = year-on-year.}$

Notes:

^{1.} For Singapore, corporate bonds outstanding quarterly figures are based on *AsianBondsOnline* estimates.
2. Corporate bonds include issues by financial institutions.
3. Bloomberg LP end-of-period LCY-US\$ rates are used.

^{4.} For LCY base, emerging East Asia growth figures are based on end-December 2011 currency exchange rates and do not include currency effects.

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

q-o-q growth rates of 0.4%, 0.8%, -1.2%, and -0.5%, respectively. In Singapore's case, the y-o-y increase was mostly due to the introduction of bill issuance by the Monetary Authority of Singapore (MAS) beginning in April 2011. Malaysia had previously issued large volumes of government bonds in 2010 and the first quarter of 2011, but sharply reduced issuance thereafter.

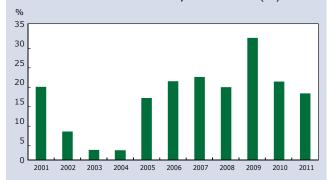
As mentioned above, the only government bond market to report significant q-o-q growth in 4Q11 was that of the Philippines at 3.1%. This was primarily a result of the Bureau of the Treasury's (BTr) issuance of PHP110 billion worth of 10- and 15-year Retail Treasury Bonds (RTBs) in October. In February, BTr sold a total of PHP179.8 billion of 15- and 20-year RTBs at coupon rates of 5.375% and 5.875%, respectively.

The y-o-y growth rate for emerging East Asia's government bond market in 4Q11 was the lowest in recent years (Figure 2a). This reflected a (i) 12.4% y-o-y decline in treasury and other types of central government issuance (-31.3% on a q-o-q basis), and (ii) 0.9% y-o-y decline in issuance by monetary authorities (-11.3% on a q-o-q basis). The decline in treasury bond issuance in most markets was the result of a reduction or termination of fiscal stimulus programs that had been in place since the global financial crisis of 2007-09. At the same time, most central banks and monetary authorities have been sharply curtailing the sterilization activities pursued in recent years.

At the end of 2011, the PRC government bond market was once again the largest in the region, amounting to US\$2.5 trillion. The PRC government bond market comprises three major components: (i) treasury bonds, (ii) central bank bonds, and (iii) policy bank bonds. These three components had values of US\$1.2 trillion, US\$338 billion, and US\$1.0 trillion, respectively, at the end of 2011. The most rapidly growing sector of the PRC government bond market in 4Q11 was the policy bank bond sector, which grew at a y-o-y rate of 25.5%. Treasury bonds grew at a rate of 10.8% y-o-y. Meanwhile, central bank bonds



Figure 2b: Emerging East Asian LCY Corporate Bond Market Annual Growth Rates, 2001–2011 (%)



LCY = local currency.

Notes:

1. Calculated using data from national sources.

2. Growth figures are based on end-December 2011 currency exchange rates and do not include currency effects.

People's Republic of China (ChinaBond); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia and Indonesia Stock Exchange); the Republic of Korea (EDAILY Bondweb and The Bank of Korea); Malaysia (Bank Negara Malaysia); the Philippines (Bureau of the Treasury and Bloomberg LP); Singapore (Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP); Thailand (Bank of Thailand); and Viet Nam (Bloomberg LP).

shrank 47.9% y-o-y, which explains the low 0.5% y-o-y growth rate for the PRC government bond market as a whole in 4Q11.

The corporate bond market in emerging East Asia expanded 17.1% y-o-y and 5.2% q-o-q in 4Q11, reflecting the acceleration of corporate bond issuance in most markets.

The y-o-y growth rate for emerging East Asia's corporate bond market rose to 17.1% y-o-y in 4011 from 14.8% in 3Q11, led by Indonesia (28.0%), the PRC (26.0%), the Philippines (13.4%), and the

Republic of Korea (12.1%). The 4Q11 outcome for the region's corporate bond market was robust on both a y-o-y and q-o-q basis, with corporate bonds expanding 5.2% q-o-q. The most rapidly growing markets on a y-o-y basis were also those that expanded the most—and in the same order—on a q-o-q basis: Indonesia (9.2%), the PRC (8.7%), the Philippines (6.5%), and the Republic of Korea (3.8%). The only markets to experience flat or negative q-o-q growth rates in their corporate bond sectors were Viet Nam (0.3%); Malaysia (-0.05%); Singapore (-1.9%); and Hong Kong, China (-2.8%). The region's corporate bond market growth rate fell from slightly higher levels in 2009 and 2010, but it remains much higher than it was in the middle of the last decade, which suggests that growth should remain robust over the next several years (Figure 2b).

The acceleration of the PRC corporate bond market's y-o-y growth rate from 20.0% in 3Q11 to 26.0% in 4Q11 was driven primarily by commercial bank bonds, medium-term notes (MTNs), and local corporate bonds, which grew at y-o-y rates of 51.6%, 45.9%, and 37.3%, respectively. Growth in state-owned enterprise (SOE) bonds, on the other hand, was flat at 1.7% y-o-y, while commercial paper and asset-backed securities declined 23.1% and 47.7%, respectively. The rapid growth of commercial bank bonds reflected the fact that most of these bonds are subordinated notes and will qualify as Tier II capital under Basel III capital requirements. Many local corporate bonds are being issued by commercial entities of local governments that are facing curtailed bank lending, while the issuance platform for MTNs continues to provide an efficient and easy-to-use source of finance for firms.

In the Republic of Korea, the most rapidly growing sector of the corporate bond market in 4Q11 was once again private sector corporate bonds, which grew 22.0% y-o-y and 6.5% q-o-q. Private sector corporate bonds totaled US\$306.8 billion at the end of 4Q11 and accounted for 42% of the total corporate bond market. Special public bonds grew 10.1% y-o-y and 2.6% q-o-q to reach US\$232.8 billion. Special public bonds comprise

issues from government-owned entities such as Korea Land and Housing, KEPCO, and Korea Highway. Finally, financial debentures, which amounted to US\$179.8 billion, grew by a marginal 1.0% y-o-y.

The pace of corporate issuance of LCY bonds continued to guicken in the early months of 2012, even in markets where corporate issuance declined or was flat in 4Q11, such as Malaysia and Singapore. Notable issues from Malaysian corporates in the first several months of 2012 tended to be sukuk (Islamic bonds). In January, toll expressway operator Projek Lebuhraya Utara Selatan (PLUS) Bhd. issued MYR30.6 billion (US\$ 9.7 billion) worth of multi-tranche Islamic MTNs, marking the world's largest sukuk issuance to date. The sukuk were issued in 23 tranches, with maturities ranging between 5 and 25 years, and coupons ranging between 3.90% and 5.75%. In addition, Sarawak Energy raised a total of MYR2.5 billion from the sale of *sukuk*, consisting of MYR1.2 billion worth of 10-year notes and MYR1.3 billion worth of 15year notes, with coupons of 4.50% and 4.85%, respectively. In February, telecommunications company Maxis Bhd. sold MYR2.45 billion worth of 10-year *sukuk* paying a coupon of 5.0%.

Issuance from Singapore in recent months has included a Development Bank of Singapore (DBS) 10-year fixed-rate subordinated note, with a coupon of 3.3%, and a growing number of perpetual bonds. In late February, commodities trader Olam International issued SGD275 million of perpetual bonds at a yield of 7.0%. In the first week of March, Singapore Post (SingPost) issued SGD350 million worth of perpetual bonds priced at 4.25%, while gaming conglomerate Genting Singapore Plc. priced (at par) SGD1.8 billion of perpetual bonds that pay a coupon of 5.125% per annum. The bonds are callable at par after 5.5 years and will pay 6.125% from the 10th year onward, without the benefit of a subsequent coupon rate reset.

While some of these recent issues pay coupons significantly higher than sovereign bonds with comparable maturities, one frequently observed

weakness of the emerging East Asian corporate bond market has been the absence of a significant high-yield segment in which small and medium-sized enterprises (SMEs) can issue bonds. Nevertheless, some high-yield (or at least moderately high-yield) bonds are beginning to appear in the market.

This has been the case in Hong Kong, China's CNH bond market. Most issuers in the CNH bond market have been blue chip issuers from the PRC or abroad, who have the ability to issue at very tight yields. On the other hand, investors are beginning to look beyond top-rated Chinese names in search of yields exceeding the 2%–3% range that has been typical in the CNH bond market to date. Several examples of high- and moderately high-yield bond issues in the CNH market last year include the following:

- (i) On 18 April, Big Will Investment Co., a special purpose vehicle of Guangzhou R&F Properties, issued a 3-year bond for CNH2.6 billion (US\$406 million) with a coupon of 7.0%.
- (ii) On 9 November, Lafarge Shui On Cement raised CNH1.5 billion from the issuance of 3-year commercial paper with a coupon of 9.0%.
- (iii) On 10 November, Tsinlien Group Company, an investment holding arm of the Tianjin government operating in Hong Kong, China, issued CNH1.3 billion of 5.75% guaranteed bonds due in 2014 via its wholly-owned unit, Victor Soar. The bonds were listed at the Singapore Exchange Securities Trading Limited.

Neither the Big Will, Lafarge Shui On Cement, nor Tianjin-Victor Soar CNH bonds were rated. However, the French-based Lafarge cement company guaranteed the Lafarge Shui On bond based on its ratings of Ba1 from Moody's and BB+ from S&P.

More recently, Ford Motor of the United States (US) issued a CNH1 billion 3-year bond with a coupon of 4.875%. Ford has ratings of Ba1 (positive)

from Moody's, BB+ (stable) from S&P, and BB+ (positive) from Fitch. Ford's financing will be the first in the CNH market from an entirely foreign company with a sub-investment grade rating.

The China Securities Regulatory Commission (CSRC) has announced that it will allow SMEs in the PRC to begin issuing high-yield bonds that can be traded on the stock exchanges of Shanghai and Shenzhen. The launch date for this new program, has yet to be announced.

Meanwhile, the Republic of Korea is setting up an SME bond trading platform that is expected to be launched in May.

Development of the region's corporate bond market over the next several years could be influenced to some extent by the tightening of bank lending standards in preparation for the implementation of Basel III capital regulations. Specifically, the tightening of lending standards and higher capital requirements and liquidity coverage ratios could possibly result in greater corporate bond issuance.

Finally, contractual savings institutions (CSIs)—pension funds, insurance companies, and social security institutions—are building their portfolios of corporate bonds as rapidly as they are building their portfolios of government bonds. Demand from this sector, discussed in more detail below, will likely continue to grow as CSIs seek enhanced yields and duration.

The Growing Role of Contractual Savings Institutions in Emerging East Asia's Bond Market

CSIs have become an increasingly important investor class in the emerging East Asian bond market in recent years, reflecting the ongoing maturation of the region's bond markets.

Government bonds held by CSIs. The rapid growth of government bonds held by insurance companies and other CSI investors over the last 5 years is shown in **Figure 3a**. The PRC and

the Republic of Korea have seen the most rapid overall growth in CSI holdings of their government bonds. In the Republic of Korea, the US\$ value of government bonds held by insurance companies and pension funds reached US\$114.3 billion at end-December of last year. In the PRC, the amount of treasury bonds and policy bank bonds held by insurance companies has been on a long-term rise since the 1997/98 Asian financial crisis, reaching US\$151 billion at the end of 2011.

Government bonds held by insurance companies and pension funds in Indonesia have increased at a more gradual pace in recent years. Holdings of Malaysian government bonds by Malaysian insurance companies and social security institutions also have grown moderately in recent years to reach US\$35.7 billion at end-September. Holdings of Thai government bonds (excluding central bank bonds and SOE bonds) by Thai insurance companies, pension funds, and social security institutions declined slightly at the end of 2011 to

Figure 3a: Trends in Holdings of Government **Bonds by CSI Investors** US\$ billion 160 140 120 100 80 60 40 20 Jun -10 Jun -11 Dec -11 Dec -10 People's Republic of China Malavsia Indonesia Thailand SGS-CPF (Non-tradable) Republic of Korea CSI = contractual savings institution. 1. Data for the People's Republic of China refer only to treasury bonds and policy bank bonds 2. Special issues of Singapore Government Securities (SGS) held by the Central Provident Fund (CPF) are non-tradable bonds and are not included in computation of bonds oustanding for Singapore. 3. Data for Thailand exclude central bank bonds and state-owned enterprise bonds 4. Data for Singapore as of December 2010; Malaysia as of September 2011. Sources: People's Republic of China (ChinaBond), Indonesia (Indonesia Debt Management Office), Republic of Korea (The Bank of Korea), Malaysia (Bank Negara Malaysia), Singapore (Central Provident Fund

Singapore Annual Reports), and Thailand (Bank of Thailand).

US\$36.9 billion from a high of US\$37.9 billion at end-September 2010.

Finally, Singapore Government Securities (SGS) held by Singapore's Central Provident Fund (CPF) at the end of 2010 amounted to SGD176 billion, or slightly less than US\$140 billion. The SGS issued to the CPF are non-tradable and *AsianBondsOnline* does not include them in its database on Singapore government debt.

The proportion of total government bonds outstanding held by CSIs varies a great deal from one market to another across the region. It is the lowest in the PRC, where the percentage of PRC government bonds held by insurance companies is only 6.9%. The percentage is highest in Thailand, where the share of government bonds (excluding central bank bonds and SOE bonds) held by insurance companies and contractual savings funds is 45% of the total. In between these two extremes is the Republic of Korea, where the percentage of government bonds held by insurance companies and pension funds is 25%, and Indonesia, where the percentage of treasury bonds held by insurance companies and pensions funds is 18%, with insurance companies accounting for 13% and pension funds holding 5%.

Corporate bonds held by CSIs. Investments by insurance companies and pension funds account for 32% of all bonds (excluding financial debentures) in the Republic of Korea's corporate bond market. CSI investors in the Republic of Korea increased their historically low holdings of financial debentures to 14% in 2011.

In Malaysia, a combination of insurance companies and the Employees Provident Fund held 46% of total corporate bonds at the end of 2010. Insurance companies held 33% of total corporate bonds outstanding, with life insurance companies holding the largest share at 30% and general insurance companies holding only 3%. The Employees Provident Fund held 13% of Malaysian corporate bonds at the end of 2010. In Thailand, a combination of insurance companies

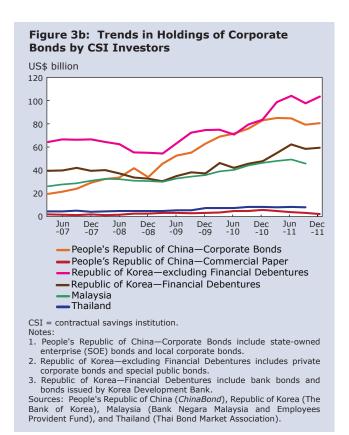
and contractual savings funds held around 20% of Thai corporate bonds at end-September. Contractual savings funds held 11% of the total and insurance companies held 9%.

In the PRC's corporate bond market, insurance companies held 21% of total corporate bonds, including MTNs, commercial paper, and commercial bank bonds. However, insurance companies held 57% of commercial bank bonds, of which the majority comprise subordinated bonds with longer maturities and higher yields than most other corporate bonds. Thus, they nicely satisfy the requirements of CSI investors.

Figure 3b provides a glimpse of investment trends in corporate bonds with regard to insurance companies, pension funds, and other CSIs over the last 5 years. The time series data for CSI holdings of PRC corporate bonds in Figure 3b does not include data on holdings of MTNs or commercial bank bonds as data on these CSI holdings have only been available since the end of 2010. **Table 2a** brings these additional data points together.

Holdings of all types of PRC corporate bonds by CSI investors had risen by the end of 4Q11 to an amount equivalent to US\$172.0 billion from US\$152.5 billion at end-September. Comparable data for holdings of corporate bonds by CSI investors in other emerging East Asian markets is presented in **Table 2b**.

Figure 4 compares the ratios of CSI holdings of corporate bonds to total corporate bonds with that of CSI holdings of government bonds to total government bonds in the four markets for which data are available. The share of CSI corporate bond holdings exceeds that for CSI holdings of government bonds in all markets except Thailand. Furthermore, the absolute value of corporate bonds held by CSI investors exceeds the absolute value of their holdings of government bonds in the PRC, Republic of Korea, and Malaysia. Only in Thailand is the absolute value of government bonds held by CSI investors greater than their holdings of corporate bonds.



Ratio of Bonds Outstanding to Gross Domestic Product

The ratio of LCY bonds outstanding to gross domestic product in emerging East Asia fell to 52.6% in 4Q11 from 53.1% in 3Q11.

The ratio of bonds outstanding to gross domestic product (GDP) in emerging East Asia fell to 52.4% in 4Q11 from 53.1% in 3Q11, and from 56.6% in 4Q10 (Table 3). The ratio of government bonds to GDP fell to 34.9% in 4Q11 from 35.9% in 3Q11, while the ratio of corporate bonds to GDP rose slightly to 17.5% in 4Q11 from 17.2% in 3Q11. The ratio of government bonds to GDP fell or remained unchanged in 4Q11 in all of the region's markets except the Philippines, where the ratio rose. Meanwhile, the ratio of government bonds to GDP remained unchanged at 47.0% in Singapore and 37.4% in Hong Kong, China. The ratio of corporate bonds to GDP, on the other hand, rose in most markets. The only markets to experience a

Table 2a: Total Corporate Bonds Held by Contractual Savings Institutions in the PRC (US\$ billion)

	4Q10	1Q11	2Q11	3Q11	4Q11
PRC Corporate Bonds Held by CSIs	138.4	142.6	160.3	152.5	172.0
Corporate Bonds	83.2	84.9	84.6	79.2	80.4
Commercial Paper	5.6	4.7	3.6	3.3	2.1
Medium-Term Notes	4.0	5.9	5.9	5.2	5.5
Commercial Bank Bonds	45.6	47.1	66.2	64.9	83.9
CSI Holdings as % of Total Corporate Bonds	22%	21%	22%	20%	21%
CSI Holdings of Commercial Bank Bonds as % of Total Commercial Bank Bonds	49%	49%	56%	55%	57%

CSIs = contractual savings institutions, PRC = People's Republic of China.

Source: ChinaBond.

Table 2b: Total Corporate Bonds Held by Contractual Savings Institutions in Other Emerging East Asian Markets (US\$ billion)

	2006	2007	2008	2009	2010	2011
Republic of Korea	99.4	106.0	87.8	111.7	131.4	162.8
Corporate Bonds	62.3	66.5	55.1	74.6	83.7	103.4
Financial Debentures	37.2	39.6	32.7	37.1	47.7	59.4
CSI Holdings as % of Total Corporate Bonds	15%	16%	16%	17%	18%	22%
Excluding Republic of Korea Financial Debentures	27%	31%	29%	29%	28%	32%
Malaysia	25.0	30.9	30.7	35.9	46.4	-
Insurance Companies	15.4	19.2	19.4	24.9	32.8	-
Employees Provident Fund	9.5	11.8	11.3	11.0	13.6	-
CSI Holdings as % of Total Corporate Bonds	46%	44%	40%	43%	46%	-
Thailand	4.3	4.0	4.7	7.3	8.3	-
Insurance Companies	1.6	1.6	2.2	2.7	3.6	-
Pension Funds	2.7	2.4	2.5	4.6	4.7	-
CSI Holdings as % of Total Corporate Bonds	28%	25%	22%	23%	22%	-

- = data not available, CSI = contractual savings institution.

Note: For the Republic of Korea, financial debentures include bonds issued by the Korea Development Bank.

Source: Republic of Korea (The Bank of Korea), Malaysia (Bank Negara Malaysia and Employees Provident Fund), and Thailand (Thai Bond Market Association).

decline in the ratio of corporate bonds to GDP were those of Hong Kong, China; Malaysia; Singapore; and Viet Nam.

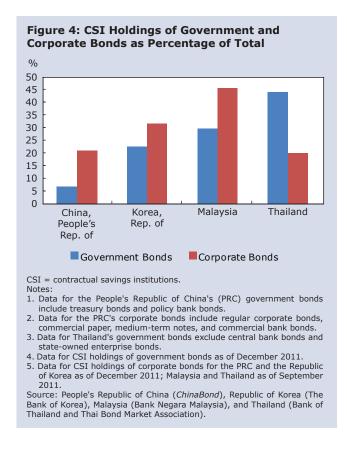
Issuance

LCY bond issuance in emerging East Asia totaled US\$3.4 trillion in 2011, a decline of 10.2% from 2010.

Government bond issuance shrunk by 14.8% in 2011 to US\$2.7 trillion, while corporate bond issuance rose 12.5% to US\$714 billion. Quarterly issuance was quite volatile during the year, whether measured by government (including SOE) and central bank issuance (Figure 5a), corporate issuance (Figure 5b), or total issuance (excluding the PRC and issuance by the PRC only) (Figure 5c). In almost all cases except central bank issuance, 4Q11 was the low point of issuance during the year. Central bank issuance in 4Q11 fell from its

3Q11 level, but was still slightly higher than it was during 2Q11.

Total LCY bond issuance in emerging East Asia in 4Q11 reached US\$783 billion, a 4.6% rise on a y-o-y basis, but a 7.9% decline on a q-o-q basis. The principal causes of this weak performance were substantial q-o-q declines in issuance by governments and central banks and monetary authorities. As mentioned above, issuance by central banks and monetary authorities has been declining since the middle of 2010 as these entities have retreated from the sterilization activities pursued in response to the 2007-09 financial crisis. Governments—and state agencies other than central banks—sharply reduced their issuance as well in 4Q11. Thus, issuance of treasuries and government agency bonds rose 8.8% q-o-q in 3Q11, but fell 31.3% in 4Q11. On a y-o-y basis, issuance of treasuries and government agency bonds rose 14.5% y-o-y in 3Q11, but fell 12.4%



in 4Q11. These outcomes contrast sharply with issuance by corporates in the region, which rose 43.6% y-o-y and 46.5% q-o-q (**Table 4**).

The three central banks or monetary authorities that reduced their issuance the most in 4Q11 on a q-o-q basis were those of Malaysia (-33.3%); Hong Kong, China (-27.3%); and the Republic of Korea (-12.0%). Interestingly, issuance by the People's Bank of China (PBOC) and Bank Indonesia (BI) rose on a q-o-q basis by 100.6% and 160.5%, respectively. Thus, both the PBOC and BI may have stepped up their sterilization activities in 4Q11, after a substantial reduction in issuance earlier in the year.

These two sets of figures contrast sharply with the y-o-y declines of issuance in 4Q11 by the PBOC (-18.2%) and BI (-66.6%). The rise in BI issuance in 4Q11 to US\$6 billion from US\$2 billion in 3Q11 was modest when taking into account issuance of US\$17 billion in 4Q10. In 2010, BI ceased issuing Sertifikat Bank Indonesia (SBI) on a weekly basis,

Table 3: Size and Composition of LCY Bond Markets (% of GDP)

	4Q10	3Q11	4Q11
China, People's Rep. of			
Total	50.2	46.0	45.3
Government	39.6	35.1	33.9
Corporate	10.6	11.0	11.4
Hong Kong, China			
Total	72.9	70.9	69.4
Government	38.9	37.4	37.4
Corporate	34.0	33.4	32.0
Indonesia			
Total	14.9	13.7	13.4
Government	13.1	11.8	11.4
Corporate	1.8	1.9	2.0
Korea, Rep. of			
Total	110.3	113.7	114.5
Government	47.2	48.2	47.5
Corporate	63.0	65.3	67.0
Malaysia			
Total	98.6	100.7	97.8
Government	58.2	60.5	58.5
Corporate	40.4	40.2	39.3
Philippines			
Total	35.5	34.4	34.8
Government	31.3	30.1	30.4
Corporate	4.3	4.3	4.5
Singapore			
Total	70.0	76.0	75.2
Government	42.7	47.0	47.0
Corporate	27.3	29.0	28.2
Thailand			
Total	66.8	67.0	67.5
Government	54.4	54.6	54.5
Corporate	12.4	12.4	13.0
Viet Nam			
Total	15.4	15.2	14.0
Government	13.6	13.8	12.7
Corporate	1.8	1.4	1.3
Emerging East Asia			
Total	56.6	53.1	52.4
Government	39.1	35.9	34.9
Corporate	17.5	17.2	17.5
Japan			
Total	185.9	191.5	192.9
Government	168.3	173.9	175.4
Corporate	17.7	17.6	17.5

GDP = gross domestic product, LCY = local currency. Notes:

1. Data for GDP is from CEIC.

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

^{2.} For Singapore, corporate bonds outstanding quarterly figures are based on *AsianBondsOnline* estimates.

Figure 5a: Government (including SOE) and Central Bank Bond Issuance, 1Q08-4Q11

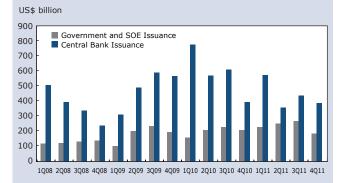


Figure 5b: Government (including SOE) and Corporate Bond Issuance, 1Q08-4Q11

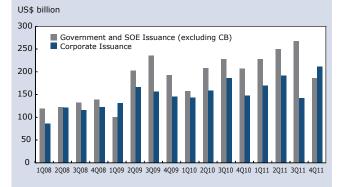
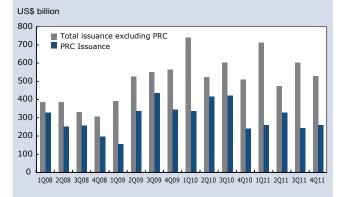


Figure 5c: Total LCY Bond Issuance, 1Q08-4Q11



CB = central bank, LCY = local currency, PRC = People's Republic of China, SOE = state-owned enterprise.

Note: In the PRC, government issuance (including SOE issuance) includes policy bank bonds, local government bonds, and savings bonds. Source: AsianBondsOnline.

instituted a required holding period of 1 month for SBIs (which has since been increased to 6 months). BI also abolished the 3- and 6-month maturities for SBI in February 2011, limiting issuance to the 9-month tenor. The y-o-y decline in BI issuance reflected the sharp reduction of SBI issuance over the last year, a measure taken in large part to discourage foreign investors from buying SBI as a means of speculating on movements in the Indonesian rupiah.

The 4Q11 trends for treasury and other government agency bonds are more complicated. While issuance of these bonds for the region as a whole fell sharply on both a q-o-q and y-o-y basis, issuance of these bonds actually rose by significant amounts on a y-o-y basis in Indonesia (141.4%); Malaysia (75.8%); the Republic of Korea (69.6%); and Hong Kong, China (22.2%). However, issuance in all of these markets declined on a q-o-q basis.

The sharp declines in Philippine government bond issuance in 4Q11 (-59.0% q-o-q and -40.8% y-o-y) stand in contrast to the fairly modest growth of Philippine government bonds outstanding (4.9% y-o-y and 3.1% q-o-q). The answer to this seeming contradiction lies in large government bond exchange transactions in 4Q10 and 3Q11; the Philippine BTr issued PHP323.0 billion of bonds in 3Q11 and PHP199.6 billion of bonds in 4Q10, resulting in the large y-o-y and q-o-q declines in issuance in 4Q11.

The overall decline of the region's government sector issuance in 4Q11 was offset to a large degree by exceptionally strong issuance from the corporate sector, which grew 46.5% q-o-q and 43.6% y-o-y. In general, issuance of PRC corporate bonds varies greatly from one quarter to the next. Among the larger corporate bond markets, the PRC corporate sector led the way with issuance growth of 102% q-o-q and 110% y-o-y. Much of the dramatic rise in PRC corporate issuance in 4Q11 was due to the extraordinarily large issuances of commercial bank bonds and MTNs, which totaled CNY182.9 billion and CNY259.8 billion, respectively. These represented

Table 4: LCY-Denominated Bond Issuance (gross)

	LCY (billion)		US\$ (billion)	Growti (LCY-ba		Growth (US\$-ba	
	4Q11	%	4Q11	%	4Q		4Q1	
China, People's Rep. of (PRC)		share		share	q-o-q	у-о-у	q-o-q	у-о-у
Total	1 610	100.0	257	100.0	4.7	2.1	6.1	7.2
	1,619	100.0 60.7	257 156	60.7				7.2
Government Central Bank	983 329	20.3	52	20.3	(20.2) 100.6	(23.3)	(19.2) 103.4	(19.5)
Treasury and Other Govt	654	40.4	104	40.4	(38.8)	(18.2) (25.7)	(38.0)	(14.1) (22.0)
Corporate Corporate	636	39.3	104	39.3	102.4	109.7	105.2	120.1
Hong Kong, China	030	33.3	101	33.3	102.4	105.7	103.2	120.1
Total	1,349	100.0	174	100.0	(27.3)	2.1	(27.1)	2.2
Government	1,297	96.1	167	96.1	(27.5)	1.9	(27.1)	2.0
Central Bank	1,292	95.7	166	95.7	(27.3)	1.9	(27.1)	2.0
Treasury and Other Govt	6	0.4	1	0.4	(65.6)	22.2	(65.5)	22.3
Corporate	52	3.9	7	3.9	(18.8)	6.4	(18.6)	6.5
Indonesia	32	3.5		3.3	(10.0)	0.7	(10.0)	0.5
Total	93,164	100.0	10	100.0	48.0	(48.0)	44.8	(48.4)
Government	77,191	82.9	9	82.9	35.1	(53.2)	32.2	(53.6)
Central Bank	51,641	55.4	6	55.4	160.5	(66.6)	155.0	(66.8)
Treasury and Other Govt	25,550	27.4	3	27.4	(31.5)	141.4	(33.0)	139.5
Corporate	15,973	17.1	2	17.1	174.5	12.5	168.6	11.6
Korea, Rep. of								
Total	161,842	100.0	140	100.0	7.0	26.4	9.4	23.5
Government	66,516	41.1	58	41.1	(9.7)	39.7	(7.7)	36.5
Central Bank	41,390	25.6	36	25.6	(12.0)	26.3	(10.1)	23.4
Treasury and Other Govt	25,126	15.5	22	15.5	(5.6)	69.6	(3.5)	65.7
Corporate	95,326	58.9	83	58.9	22.9	18.5	25.6	15.8
Malaysia								
Total	109	100.0	34	100.0	(27.0)	(8.5)	(26.5)	(11.5)
Government	86	78.8	27	78.8	(31.1)	(8.3)	(30.7)	(11.3)
Central Bank	66	60.4	21	60.4	(33.3)	(19.9)	(32.9)	(22.5)
Treasury and Other Govt	20	18.3	6	18.3	(22.7)	75.8	(22.2)	70.0
Corporate	23	21.2	7	21.2	(6.3)	(9.2)	(5.7)	(12.2)
Philippines								
Total	212	100.0	5	100.0	(52.7)	(30.5)	(52.8)	(30.5)
Government	180	85.1	4	85.1	(59.0)	(40.8)	(59.1)	(40.9)
Central Bank	0	0.0	0	0.0	-	-	-	-
Treasury and Other Govt	180	85.1	4	85.1	(59.0)	(40.8)	(59.1)	(40.9)
Corporate	32	14.9	1	14.9	294.4	_	293.8	_
Singapore								
Total	96	100.0	74	100.0	0.1	58.3	0.9	56.7
Government	93	96.2	71	96.2	1.5	67.9	2.4	66.2
Central Bank	35	36.6	27	36.6	-	-		-
Treasury and Other Govt	57	59.6	44	59.6	5.1	4.0	6.0	2.9
Corporate	4	3.8	3	3.8	(26.6)	(35.7)	(26.0)	(36.4)
Thailand								
Total	2,775	100.0	88	100.0	(7.2)	(15.8)	(8.2)	(19.8)
Government	2,527	91.1	80	91.1	(9.7)	(16.5)	(10.7)	(20.5)
Central Bank	2,484	89.5	79	89.5	(0.2)	(14.3)	(1.3)	(18.3)
Treasury and Other Govt	42	1.5	1	1.5	(86.3)	(67.3)	(86.4)	(68.9)
Corporate	248	8.9	8	8.9	29.6	(7.7)	28.1	(12.1)

continued on next page

Table 4 continued

	LCY (t	oillion)	US\$ (l	oillion)	Growth (LCY-ba		Growth (US\$-ba	
	4Q11	%	4Q11	%	4Q	11	4Q:	l1
	4011	share	4011	share	q-o-q	у-о-у	q-o-q	у-о-у
Viet Nam								
Total	10,549	100.0	0.5	100.0	(57.7)	(6.0)	(58.1)	(12.9)
Government	10,450	99.1	0.5	99.1	(58.1)	9.7	(58.5)	1.7
Central Bank	0	0.0	0.0	0.0	-	-	-	-
Treasury and Other Govt	10,450	99.1	0.5	99.1	(58.1)	9.7	(58.5)	1.7
Corporate	99	0.9	0.0	0.9	-	(94.2)	-	(94.6)
Emerging East Asia (EEA)								
Total	-	-	783	100.0	(7.9)	4.6	(7.2)	4.9
Government	-	-	573	73.1	(18.9)	(5.0)	(18.4)	(4.6)
Central Bank	-	-	387	49.4	(11.3)	(0.9)	(11.0)	(1.7)
Treasury and Other Govt	-	-	186	23.7	(31.3)	(12.4)	(30.5)	(10.1)
Corporate	-	-	211	26.9	46.5	43.6	48.7	43.5
EEA Less PRC								
Total	-	-	526	100.0	(12.9)	5.8	(12.5)	3.8
Government	-	-	416	79.1	(18.4)	4.4	(18.2)	2.6
Central Bank	-	-	335	63.6	(18.4)	2.5	(18.2)	0.6
Treasury and Other Govt	-	-	82	15.5	(18.6)	13.3	(18.0)	11.6
Corporate	-	-	110	20.9	16.8	11.4	18.7	8.7
Japan								
Total	48,443	100.0	630	100.0	(3.7)	(2.3)	(3.5)	3.0
Government	45,008	92.9	585	92.9	(3.3)	(1.3)	(3.1)	4.1
Central Bank	0	0.0	0	0.0	-	-	-	-
Treasury and Other Govt	45,008	92.9	585	92.9	(3.3)	(1.3)	(3.1)	4.1
Corporate	3,435	7.1	45	7.1	(8.4)	(13.4)	(8.2)	(8.6)

^{- =} not applicable, LCY = local currency, q-o-q = quarter-on-quarter, y-o-y = year-on-year. Notes:

q-o-q increases of 299% for MTNs and 1,375% for commercial bank bonds. Commercial bank bond issuance in 4Q11 consisted largely of subordinated debt bonds, which the banks can count as Tier II capital.

Issuance of corporate bonds in the Republic of Korea rose 22.9% q-o-q and 18.5% y-o-y, mostly due to a large increase in issuance by private sector corporates, as opposed to issuance by SOEs or commercial banks. Thai corporate issuance also grew an impressive 29.6% on a q-o-q basis, but fell 7.7% on a y-o-y basis.

The most dramatic increases in corporate issuance on a q-o-q basis in 4Q11 came from the still

modest Philippine and Indonesian corporate bond markets, which grew 294% and 175%, respectively. The large increase in Philippine corporate issuance reflects the fact that firms have run up against their borrowing limits with domestic banks as they come under pressure to improve their capital adequacy in preparation for the Philippines' adoption of Basel III capital adequacy standards. In addition, Philippine banks are issuing Tier II subordinated debt to bolster their capital adequacy ratios.

Most of the increase in issuance of Indonesian corporate bonds came from banks and specialized finance companies, and was driven by the rapid growth of the domestic economy over the last

Corporate bonds include issues by financial institutions.

^{2.} Bloomberg LP end-of-period LCY-US\$ rates are used.

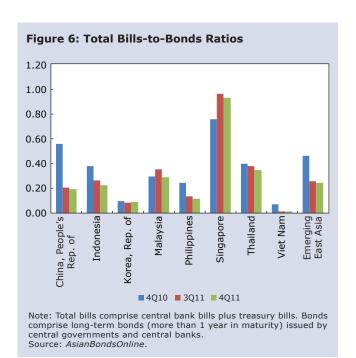
^{3.} For LCY base, emerging East Asia growth figures based on end-December 2011 currency exchange rates and do not include currency effects. Source: People's Republic of China (ChinaBond); Hong Kong, China (Hong Kong Monetary Authority); Indonesia (Bank Indonesia, Indonesia Debt Management Office, and Indonesia Stock Exchange); the Republic of Korea (EDAILY BondWeb and The Bank of Korea); Malaysia (Bank Negara Malaysia); the Philippines (Bloomberg LP); Singapore (Singapore Government Securities and Bloomberg LP); Thailand (Bank of Thailand); Viet Nam (Bloomberg LP); and Japan (Japan Securities Dealers Association).

several years. The recent upgrade of Indonesia's sovereign rating by Fitch Ratings, which returned Indonesia to investment grade level in December, and Moody's, which did so in January, have also boosted corporate issuance in the early months of this year.

Money Market Trends and Bills-to-Bonds Ratios

Bills-to-bonds ratios fell in most emerging East Asian markets in 4Q11.

The total bills-to-bonds ratio fell in 4Q11 for six out of the eight emerging East Asian markets presented in **Figure 6**, which excludes Hong Kong, China due to its unusually high bills-to-bonds ratio. (However, the bills-to-bonds ratio for Hong Kong, China also fell in 4Q11). The principal reason for the decline in the region's total bills-to-bonds ratio from 0.26 in 3Q11 to 0.24 in 4Q11 was the sharp drop in the ratio of central bank bills to bonds from 0.96 in 3Q11 to 0.92 in 4Q11, signaling the continuation of a trend in place since the end of last year **(Table 5)**. Central



banks and monetary authorities in the region have had less need to use sterilization as tool to mop up excess liquidity since the latter months of 2011, or have resorted to other policy tools, such as raising bank's reserve requirements in the case of the PRC. In 4Q11, there was a continued decline in the central bank bills-to-bonds ratio for the PRC, reflecting a decline in the PBOC's stock of bills outstanding from US\$127 billion in 3Q11 to US\$125 billion in 4Q11, while the PBOC's stock of bonds rose from US\$203 billion to US\$213 billion.

The bills-to-bonds ratio also fell for the Bank of Thailand (BOT) from 1.12 in 3Q11 to 1.05 in 4Q11, reflecting a modest rise in the stock of BOT bonds from US\$38 billion in 3Q11 to US\$41 billion in 4Q11, while BOT's stock of bills remained unchanged at US\$43 billion. The Bank of Korea's ratio for central bank bills to bonds actually rose in 4Q11 to 0.35 from 0.30 in 3Q11, as the bank's stock of bills rose to US\$37 billion and its stock of bonds fell slightly. In addition, the Hong Kong Monetary Authority's (HKMA) ratio of bills to bonds rose to 8.46 in 4Q11 from 8.41 in 3Q11.

The overall ratio of treasury bills to bonds for the region fell marginally from 0.10 in 3Q11 to 0.09 in 4Q11, reflecting slight declines in this ratio for the PRC, the Philippines, and Singapore. In the PRC and the Philippines, the stock of treasury bills fell slightly as the stock of treasury bonds rose, while in Singapore a small rise in the stock of treasury bills was exceeded by a slightly larger increase in treasury bonds. Treasury bills exist in significant volumes only in these three markets. Meanwhile, treasury bills are either non-existent or exist only in small volumes in Hong Kong, China; the Republic of Korea; Indonesia; Malaysia; Thailand; and Viet Nam. The trends for both ratios in 4Q11—central bank billsto-bonds and treasury bills-to-bonds-reflected the monetary and fiscal policy stances adopted by central banks and monetary authorities, and governments, respectively.

Table 5: Government Bills-to-Bonds Ratios in LCY Bond Markets

	4Q1	.0	3Q1	1	4Q1	1	Go	overnme	ent		h Rate		h Rate
	_	_						o-Bonds		·	ase %)	(US\$-b	
	Amount (US\$ billion)	% share	Amount (US\$ billion)	% share	Amount (US\$ billion)	% share	4Q10	3Q11	4Q11	q-o-q	у-о-у	4Q q-o-q	у-о-у
China, People's Rep. of	(PRC)												
Total	1,521	100.0	1,334	100.0	1,362	100.0				0.7	(14.6)	2.1	(10.4)
Total Bills	546	35.9	229	17.2	218	16.0	0.56	0.21	0.19	(6.1)	(61.9)	(4.8)	(60.0)
Treasury Bills	111	7.3	102	7.6	94	6.9	0.14	0.11	0.10	(9.5)	(19.8)	(8.2)	(15.8)
Central Bank Bills	435	28.6	127	9.5	125	9.2	2.36	0.63	0.59	(3.3)	(72.7)	(2.0)	(71.3)
Total Bonds	975	64.1	1,105	82.8	1,144	84.0				2.1	11.8	3.5	17.3
Treasury Bonds	791	52.0	901	67.6	932	68.4				1.9	12.2	3.3	17.7
Central Bank Bonds	184	12.1	203	15.2	213	15.6				3.1	10.2	4.5	15.7
Hong Kong, China													
Total	87	100.0	90	100.0	91	100.0				0.9	3.9	1.1	4.0
Total Bills	75	86.1	75	83.9	75	83.3	6.21	5.22	5.00	0.2	0.5	0.4	0.6
Treasury Bills	0	0.0	0	0.0	0	0.0	_	_	_	_	_	_	_
Central Bank Bills	75	86.1	75	83.9	75	83.3	8.34	8.41	8.46	0.2	0.5	0.4	0.6
Total Bonds	12	13.9	14	16.1	15	16.7				4.6	24.9	4.9	25.0
Treasury Bonds	3	3.5	5	6.1	6	6.8				12.9	100.0	13.2	100.1
Central Bank Bonds	9	10.3	9	10.0	9	9.9				(0.4)	(0.9)	(0.2)	(0.8)
Indonesia										()	(-1-)	()	(0.0)
Total	94	100.0	96	100.0	93	100.0				(0.1)	0.3	(2.2)	(0.5)
Total Bills	26	27.6	20	20.7	17	18.2	0.38	0.26	0.22	(11.8)	(33.7)	(13.7)	(34.2)
Treasury Bills	3	3.5	3	2.8	3	3.7	0.05	0.04	0.05	30.6	4.8	27.8	3.9
Central Bank Bills	23	24.1	17	17.8	14	14.6	-	_	-	(18.5)	(39.3)	(20.2)	(39.8)
Total Bonds	68	72.4	76	79.3	76	81.8				2.9	13.2	0.7	12.3
Treasury Bonds	68	72.4	76	79.3	76	81.8				2.9	13.2	0.7	12.3
Central Bank Bonds	0	0.0	0	0.0	0	0.0				_	-	_	_
Korea, Rep. of													
Total	422	100.0	449	100.0	450	100.0				(1.8)	9.2	0.4	6.7
Total Bills	37	8.7	34	7.5	37	8.1	0.09	0.08	0.09	6.2	2.5	8.6	0.1
Treasury Bills	0	0.0	0	0.0	0	0.0	-	-	-	_	-	-	_
Central Bank Bills	37	8.7	34	7.5	37	8.1	0.34	0.30	0.35	6.2	2.5	8.6	0.1
Total Bonds	386	91.3	415	92.5	414	91.9				(2.5)	9.8	(0.3)	7.3
Treasury Bonds	277	65.6	301	67.2	308	68.4				(0.1)	13.8	2.1	11.2
Central Bank Bonds	109	25.8	113	25.3	106	23.5				(8.8)	(0.4)	(6.7)	(2.7)
Malaysia													, ,
Total	145	100.0	158	100.0	157	100.0				(1.1)	12.2	(0.5)	8.5
Total Bills	33	23.0	41	26.2	35	22.3	0.30	0.35	0.29	(15.9)	8.7	(15.3)	5.1
Treasury Bills	1	1.0	1	0.9	1	0.9	0.01	0.01	0.01	0.0	(4.0)	0.7	(7.2)
Central Bank Bills	32	22.0	40	25.3	34	21.4	-	-	-	(16.4)	9.3	(15.9)	5.7
Total Bonds	112	77.0	117	73.8	122	77.7				4.1	13.2	4.8	9.5
Treasury Bonds	112	77.0	117	73.8	122	77.7				4.1	13.2	4.8	9.5
Central Bank Bonds	0	0.0	0	0.0	0	0.0				-	-	-	-
Philippines													
Total	61	100.0	63	100.0	65	100.0				3.4	5.8	3.2	5.7
Total Bills	12	19.6	8	12.0	7	10.4	0.24	0.14	0.12	(10.5)		(10.6)	(44.1)
Treasury Bills	12	19.6	8	12.0	7	10.4	0.24	0.14	0.12	(10.5)	(44.1)	(10.6)	(44.1)
Central Bank Bills	0	0.0	0	0.0	0	0.0	-	-	-	_	_	-	-
Total Bonds	49	80.4	55	88.0	58	89.6				5.3	17.9	5.1	17.8
Treasury Bonds	49	80.4	55	88.0	58	89.6				5.3	17.9	5.1	17.8
Central Bank Bonds	0	0.0	0	0.0	0	0.0				-	-	-	-

continued on next page

Table 5 continued

	4Q1	0	3Q1	1	4Q1	.1		vernme			h Rate ase %)	Growt (US\$-b	h Rate ase %)
	Amount	0,	Amount	0/	Amount	0.1	Bills-t	o-Bonds	Ratio	40	11	4Q	11
	(US\$ billion)	% share	(US\$ billion)	% share	(US\$ billion)	% share	4Q10	3Q11	4Q11	q-o-q	у-о-у	q-o-q	у-о-у
Singapore													
Total	103	100.0	116	100.0	118	100.0				0.8	16.0	1.6	14.8
Total Bills	44	43.2	57	49.0	57	48.3	0.76	0.96	0.93	(0.8)	29.8	0.0	28.5
Treasury Bills	44	43.2	44	38.0	46	38.5	0.76	0.75	0.74	2.1	3.5	2.9	2.4
Central Bank Bills	0	0.0	13	11.0	12	9.8	-	-	-	(10.7)	-	(10.0)	-
Total Bonds	59	56.8	59	51.0	61	51.7				2.3	5.6	3.2	4.5
Treasury Bonds	59	56.8	59	51.0	61	51.7				2.3	5.6	3.2	4.5
Central Bank Bonds	0	0.0	0	0.0	0	0.0				-	-	-	-
Thailand													
Total	167	100.0	171	100.0	167	100.0				(1.4)	5.2	(2.6)	0.3
Total Bills	48	28.6	47	27.4	43	25.7	0.40	0.38	0.35	(7.6)	(5.6)	(8.7)	(10.1)
Treasury Bills	2	1.4	4	2.4	0	0.0	0.03	0.05	0.00	-	-	-	-
Central Bank Bills	45	27.2	43	25.0	43	25.7	1.30	1.12	1.05	1.1	(0.6)	(0.1)	(5.3)
Total Bonds	119	71.4	124	72.6	124	74.3				0.9	9.6	(0.2)	4.4
Treasury Bonds	84	50.4	86	50.2	83	49.9				(2.1)	4.1	(3.2)	(8.0)
Central Bank Bonds	35	21.0	38	22.4	41	24.5				7.7	22.7	6.5	16.9
Viet Nam													
Total	6	100.0	7	100.0	7	100.0				1.8	26.0	0.8	16.8
Total Bills	0.4	6.4	0.1	1.4	0.1	1.4	0.07	0.01	0.01	0.0	(72.2)	(1.0)	(74.2)
Treasury Bills	0.4	6.4	0.1	1.4	0.1	1.4	0.07	0.01	0.01	0.0	(72.2)	(1.0)	(74.2)
Central Bank Bills	0	0.0	0	0.0	0	0.0	-	-	-	-	-	-	-
Total Bonds	6	93.6	7	98.6	7	98.6				1.8	32.7	0.8	23.0
Treasury Bonds	6	93.6	7	98.6	7	98.6				1.8	32.7	0.8	23.0
Central Bank Bonds	0	0.0	0	0.0	0	0.0				_	-	-	_
Emerging East Asia (EE	A)												
Total	2,606	100.0	2,484	100.0	2,511	100.0				0.1	(5.5)	1.1	(3.6)
Total Bills	821	31.5	511	20.6	489	19.5	0.46	0.26	0.24	(5.0)	(42.0)	(4.2)	(40.4)
Treasury Bills	175	6.7	162	6.5	151	6.0	0.12	0.10	0.09	(7.8)	(16.3)	(6.9)	(13.9)
Central Bank Bills	646	24.8	349	14.0	338	13.5	1.92	0.96	0.92	(3.6)	(49.0)	(3.0)	(47.6)
Total Bonds	1,785	68.5	1,973	79.4	2,022	80.5				1.3	11.5	2.5	13.3
Treasury Bonds	1,449	55.6	1,609	64.8	1,654	65.9				1.7	12.3	2.8	14.2
Central Bank Bonds	336	12.9	364	14.7	368	14.7				(0.3)	7.8	1.1	9.4
EEA Less PRC													
Total	1,085	100.0	1,150	100.0	1,149	100.0				(0.8)	8.3	(0.1)	5.9
Total Bills	275	25.4	282	24.5	271	23.6	0.34	0.32	0.31	(4.0)	0.2	(3.8)	(1.6)
Treasury Bills	64	5.9	60	5.2	57	5.0	0.10	0.08	0.08	(5.0)	(9.8)	(4.6)	(10.7)
Central Bank Bills	211	19.5	222	19.3	214	18.6	1.38	1.38	1.37	(3.8)	3.2	(3.6)	1.2
Total Bonds	810	74.6	868	75.5	878	76.4				0.3	11.1	1.2	8.4
Treasury Bonds	657	60.6	707	61.5	722	62.9				1.4	12.6	2.2	9.9
Central Bank Bonds	153	14.1	161	14.0	156	13.5				(4.5)	4.8	(3.2)	1.9
Japan												_ , ,	
Total	9,240	100.0	9,987	100.0	10,056	100.0				0.5	3.2	0.7	8.8
Total Bills	370	4.0	389	3.9	390	3.9	0.04	0.04	0.04	(0.0)	0.0	0.2	5.5
Treasury Bills	370	4.0	389	3.9	390	3.9	0.04	0.04	0.04	(0.0)	0.0	0.2	5.5
Central Bank Bills	0	0.0	0	0.0	0	0.0	-	_	_	-	_	-	_
Total Bonds	8,870	96.0	9,598	96.1	9,666	96.1				0.5	3.3	0.7	9.0
Treasury Bonds	8,870	96.0	9,598	96.1	9,666	96.1				0.5	3.3	0.7	9.0
Central Bank Bonds	0	0.0	0	0.0	0	0.0				_	_	-	_

^{- =} not applicable, LCY = local currency, q-o-q = quarter-on-quarter, y-o-y = year-on-year.

Bloomberg LP end-of-period LCY-US\$ rates are used.

For LCY-base, emerging East Asia growth figures are based on end-December 2011 currency exchange rates and do not include currency effects.
 Total figures per market refer to bills and bonds issued by the central government and the central bank. It excludes bonds issued by policy banks and state-owned enterprises. Bills are defined as securities with original maturities of less than 1 year.

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

Foreign Holdings

Foreign holdings of government bonds leveled off in several markets in late 2011.

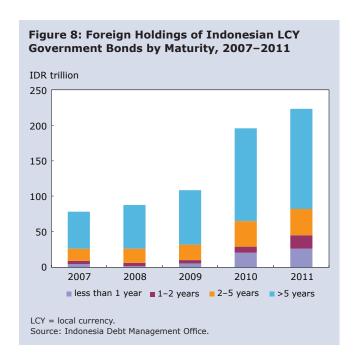
The rapid growth of foreign holdings among the region's LCY government bond markets tapered off in late 2011, except in Malaysia and Thailand. In the case of Indonesia, the share of foreign holdings fell from 31.3% at end-September to 30.8% at end-December (Figure 7). The only markets to experience a rise in foreign holdings of its LCY government bonds in 4Q11 were those of Malaysia and Thailand. At end-December, foreign holdings of Thai LCY government bonds had risen to 11.5% from 10.2% at end-September. Foreign holdings of Malaysian government bonds at end-December had risen to 26.5% from 24.8% at end-September.

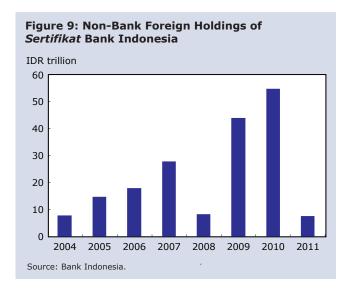
Foreign investors' share of the Indonesian government bond market recovered from the year-end downturn to rise to 32.1% in January, driven in part by the recent upgrade of Indonesian sovereign debt by Fitch Ratings and Moody's, before falling again to 30.4% in mid-March.

Figure 7: Foreign Holdings of LCY Government Bonds in Select Asian Economies (% of total) 40 35 30.80 30 25 26.46 20 11.51 15 10 11.16 5 6.74 n Mar Nov Jun Jan Sep Apr Nov Jul Feb Sep Apr Dec -05 -05 -06 -07 -07 -08 -08 -09 -10 -10 -11 -11 Indonesia Malaysia Thailand — Japan - Korea, Rep. of LCY = local currency. Note: Data as of December 2011. Source: AsianBondsOnline.

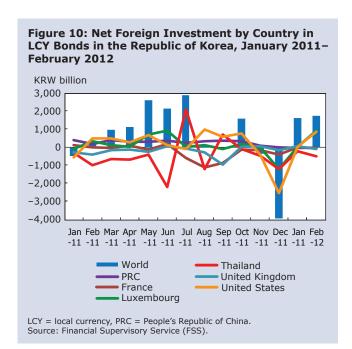
Foreign holdings of SBI fell sharply at the end of last year to 6.5% of the total from 27.4% at end-September. BI has sought to discourage foreign investors from owning SBI out of fear that large foreign holdings of these short-term securities undermines exchange rate stability. BI extended the minimum SBI holding period to 6 months in May 2011, while also reducing issuance of new SBI. BI supplies short-term liquidity to the domestic market by providing domestic deposits to replace SBI and buying government securities for its monetary operations.

At the end of 2011, foreign holdings of Indonesian government bonds in the form of longer-dated tenors (maturities of 5 years or more) stood at IDR140.8 trillion for a 63.2% share of the total, compared with a share of 67.0% in 2010 (Figure 8). Foreign holdings of shorter-dated tenors (maturities of less than 1 year) rose to IDR26.4 trillion at the end of 2011 from IDR19.9 trillion at the end of 2010 and IDR4.8 trillion at the end of 2009, representing a rise from only 4.5% in 2009 to 11.9% of the total at the end of 2011. At the same time, foreign holdings of SBI fell sharply to IDR7.8 trillion at the end of 2010 (Figure 9).





Net foreign investment in the Republic of Korea's LCY bond market stood at KRW1.8 trillion in February—led by large investments from Luxembourg and the US—amid sound economic fundamentals and expectations of currency appreciation (Figure 10). This was an improvement over the previous month's net bond inflows totaling KRW1.6 trillion, following significant net bond outflows of KRW2.6 trillion in 4Q11 on the back of massive redemptions in December.

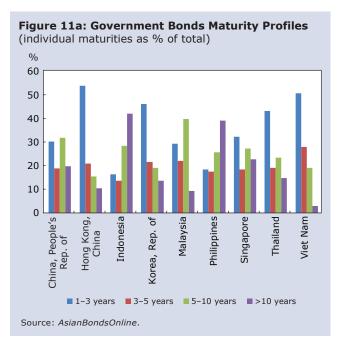


Maturity Profiles

The maturity profiles of the region's government bond markets generally improved between mid-year and the end of 2011, while maturity profiles for most corporate bond markets remained largely unchanged.

Government bond maturities remained more concentrated at the short-end of the curve at the end of 2011 in the markets of Hong Kong, China; the Republic of Korea; Thailand; and Viet Nam. These four markets each had 15% or less of their long-term bonds in maturities of more than 10 years, and 40% or more of their bonds outstanding in maturities of 1–3 years (Figure 11a). Countries with a greater concentration of maturities at the short-end of the curve are more vulnerable to potential concerns about market liquidity. However, there are few such liquidity concerns at the present time.

The four markets with 20% or more of their government bonds outstanding in maturities of 10 years or more were Indonesia (42%), the Philippines (39%), Singapore (23%), and the PRC (20%). These four markets—plus Malaysia—each



had 25% or more of their bonds outstanding in maturities of 5-10 years, resulting in a maturity structure in which 50% or more of all bonds (49% in the case of Malaysia) were carried in maturities of 5 years or more.

A consistent comment from the most recent AsianBondsOnline Bond Market Liquidity Survey was that in most markets investors are seeking a wider range of investable government bonds (See Asia Bond Monitor, November 2011). Furthermore, market participants acknowledged that most governments in the region have made good progress over the last year in extending the maturity structures of their bond stocks, resulting in an increasingly large share of new bonds being issued in maturities greater than 10 years, as discussed below.

Some of the most noticeable improvements in government bond maturity structures have been the following:

- (i) Thailand's recent issue of THB5 billion of 50-year bonds in early March encouraged investors seeking additional longer-dated issues in the future.
- (ii) Singapore issued its maiden 30-year bond for SGD1.2 billion at the end of March.
- (iii) In a series of bond exchanges starting in December 2010, the Philippines increased the percentage of its bonds with maturities of more than 10 years to 39% at the end of 4Q11 from less than 10% at the end of 4Q09.
- (iv) The Republic of Korea increased the portion of its bonds in maturities greater than 10 years from 9.0% at the end of 4Q10 to 13.6% at the end of 4Q11. The government converted settlement of Korean Treasury Bond (KTB) futures contracts from a physical to a cash basis last year to make them more attractive to investors. This contributed to an increase in 10-year KTB futures contracts' share of total contracts traded from only 1% in 1Q11 to 17% in 4Q11. During the first 3 months

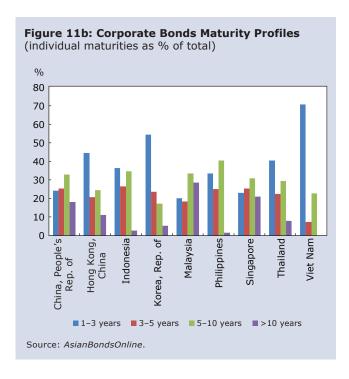
of 2012, the percentage of 10-year KTB futures contracts traded as a share of the total increased to 23%.

- (v) The proportion of Indonesian government bonds with maturities greater than 10 years rose from 37% at the end of 4Q10 to 42% at the end of 4Q11, while the share of government bonds with maturities of 1–3 years shrunk from 20% of the total in 4Q10 to 16% in 4Q11.
- (vi) The share of Malaysian government bonds with maturities greater than 10 years increased slightly in 2011 from 6% at the beginning of the year to 9% at the end of 4Q11. Malaysian government bonds with maturities of 5–10 years also increased from 35% of the total at the end of 4Q10 to 40% at the end of 4Q11. Yet, Malaysian government bond issuance with maturities of more than 10 years remains constrained by the fact that Government Investment Issues (GII)—an Islamic security—stood at MYR110 billion at the end of 2011, or approximately onethird of total Malaysian government bonds outstanding, and are issued only in maturities of 1-10 years.
- (vii) Viet Nam reduced the portion of its government bonds in maturities of 1–3 years from nearly 60% of the total at the end of 2Q10 to 50% at the end of 4Q11, while increasing the proportion of bonds in maturities of 3–10 years from 35% to 47% over the same period.

Maturity Profiles for Corporate Bonds

The maturity profiles of the corporate bond markets of emerging East Asia vary in structure (Figure 11b):

(i) Among the region's corporate bond markets, Indonesia, the Republic of Korea, the Philippines, Thailand, and Viet Nam's corporate bond markets have a much larger share



of their maturities in the 1–3 year range. Furthermore, the proportion of corporate bonds in these four markets with maturities greater than 10 years is small.

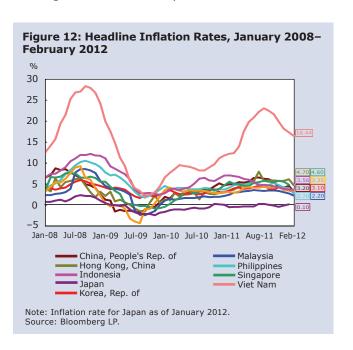
- (ii) The shares of Hong Kong, China; Malaysia; PRC; and Singapore corporate bonds with maturities of 1-3 years are much smaller than the respective shares for government bonds. Malaysia, however, has an extraordinarily large amount of its bonds (28%) issued in maturities greater than 10 years. The shares of Singapore; the PRC; and Hong Kong, China corporate bonds with maturities greater than 10 years are broadly comparable to the respective shares of government bonds.
- (iii) The maturity structure of the Viet Nam corporate bond market is unique in the region. At the end of 4Q11, almost 70% of Viet Nam's corporate bonds outstanding carried maturities of 1–3 years, while there were no Viet Nam corporate bonds with maturities greater than 10 years. However, this structure is a distinct improvement over the one that existed at the end of 2010,

when 92% of Viet Nam's corporate bonds outstanding had maturities of 1–3 years. There also were no Vietnamese corporate bonds with maturities greater than 5 years at the end of 2010, while at the end of 2011, 23% of Viet Nam's corporate bonds outstanding had maturities of 5–10 years.

Government Bond Yield Curves

Government bond yield curves in emerging East Asia flattened in most markets in 2011 on the back of moderating inflation and growth rates, and improving sovereign rating prospects.

The region's quarterly GDP growth rates generally moderated in 2011, while still remaining robust. In some cases, growth trended upwards even as the recent announcement of Premier Wen Jia Bao that the PRC government's GDP growth forecast for 2012 of 7.5% drew global attention and dampened commodity prices. This moderating trend has contributed to reduced inflationary pressures (Figure 12), which had been considered the major risk to the region's economic outlook at mid-year 2011, and a flattening of emerging East Asian government bond yield curves.



Another factor supporting the flattening of the region's government bond yield curves in 2011 is the very moderate debt burden of emerging East Asian governments. The ratio of total government debt to GDP is around 50% or less for most governments in the region. The only governments with ratios significantly above 50% have strong credit ratings, such as the Republic of Korea, Malaysia, and Thailand. Furthermore, foreign-currency-denominated debt is a relatively small portion of total government debt across the region (Figure 13). Two of the three international credit rating agencies have acknowledged this with an upgrade of Indonesian sovereign debt to investment grade. Meanwhile, the prospect for an upgrade of the Philippines' credit rating, which

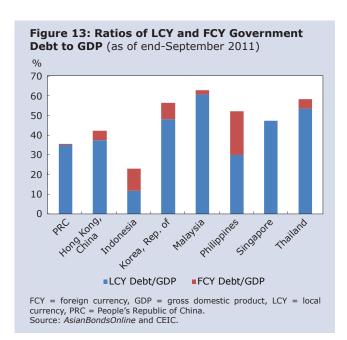


Table 6: Sovereign Credit Ratings

	S&P	Moody's	Fitch
China, People's Rep. of	AA-	Aa3	A+
Hong Kong, China	AAA	Aa1	AA+
Indonesia	BB+	Baa3	BBB-
Korea, Rep. of	А	A1	A+
Malaysia	A-	А3	A-
Philippines	BB	Ba2	BB+
Singapore	AAA	Aaa	AAA
Thailand	BBB+	Baa1	BBB

Source: Rating Agencies.

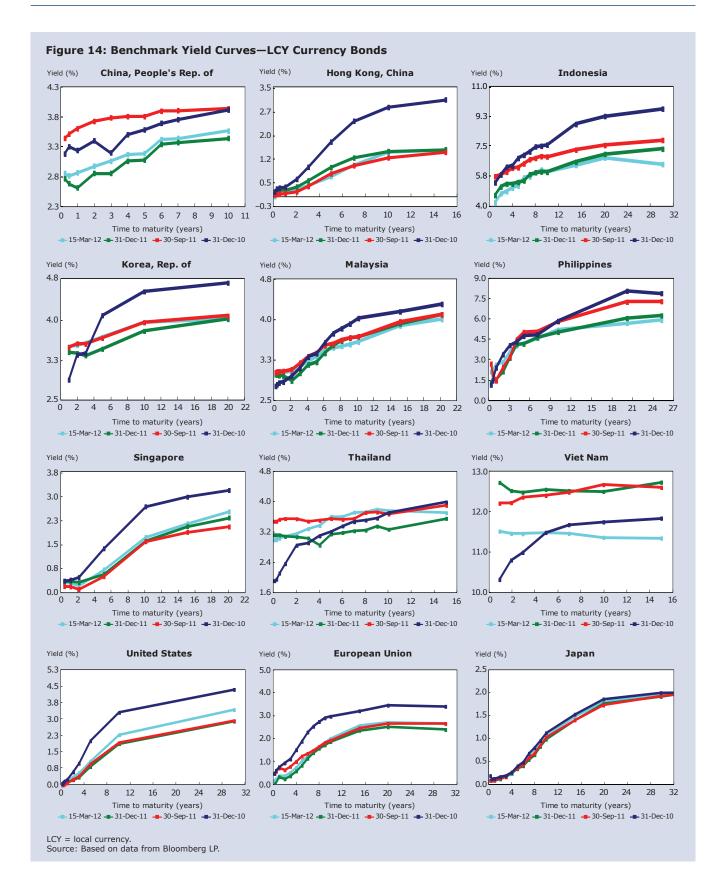
still lies below investment grade, is improving (**Table 6**). For example, S&P upgraded its outlook for the Philippines to positive from stable in December. Moody's and Fitch have not taken any ratings action on the Philippines, although recent statements from Moody's have acknowledged the progress the Philippines has made with its debt consolidation efforts.

Yield Curve Movements in 2011

Most government bond yield curves flattened dramatically between the end of 2010 and the end of 2011 (Figure 14). The most impressive examples of this trend were the government bond yield curves of Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; and Singapore. The government bond yield curves of the PRC, Thailand, and Viet Nam, however, shifted upward between end-December 2010 and end-September 2011. The yield curves for the PRC and Thailand then shifted downward by end-December to join in the trend for the region as a whole. Viet Nam's yield curve remained roughly at its end-September levels at end-December.

The main reasons for the upward shift of the yield curves for the PRC, Thailand, and Viet Nam between end-December 2010 and end-September 2011 include the following:

- (i) The upward movement of the PRC's yield curve between end-December 2010 and end-September 2011 reflected six increases in the PBOC's reserve ratio and three hikes in the PBOC's benchmark interest rate, bringing the 1-year lending rate to 6.56% and the 1-year deposit rate to 3.50%.
- (ii) Although inflation tapered in the PRC after reaching a 37-month high of 6.5% y-o-y in July, before falling to 6.2% in August and 6.1% in September, it remained at a high level.
- (iii) Thailand's yield curve shifted upward from the short-end to the belly of the curve between end-December 2010 and end-September



2011 due to concerns about inflationary pressures and the prospect of a hike in BOT's policy rate, the 1-day repurchase rate. On 13 July, BOT raised its policy rate 25bps to 3.25% before subsequently returning it to 3.00% on 25 January.

(iv) The dramatic rise of Viet Nam's yield curve during the first 9 months of 2011 reflected growing inflationary pressures, which drove Viet Nam's inflation rate to 21.6% in October, the highest level in emerging East Asia, and led to a hike in the State Bank of Viet Nam's (SBV) refinancing rate from 14% to 15%. This move was the fifth increase of the refinancing rate in 2011.

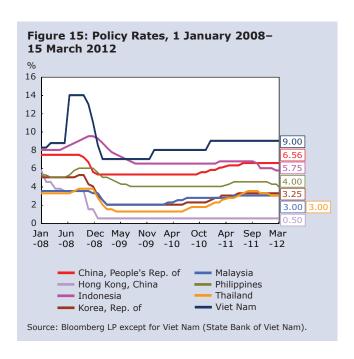
Yield Curve Movements in 1Q12

Between end-December 2011 and 15 March, the yield curves for Hong Kong, China; Indonesia; and Viet Nam shifted downward. The most dramatic movements came from Viet Nam, where yields fell more than 100 bps across most of the curve, and Indonesia, where yields fell 20 bps–88 bps across most of the curve. The movements of the Malaysian and Philippine yield curves between end-December and 15 March might be characterized as more of a conventional flattening, with yields at the long-end of the curve falling while yields at the short-end of the curve rose substantially.

In the case of Malaysia, yields at the long-end of the curve fell 4 bps-12 bps for most maturities, while yields from the short-end to the belly of the curve rose 2 bps-16 bps. The case of the Philippines, however, was more dramatic, with short-term yields rising by as much as 100 bps, while yields at the long-end of the curve fell about 35 bps. The disparity between movements in Philippine short- and long-dated yields reflects in large part a sharp reduction in issuance of shortdated treasury bills as a result of the government executing a very large debt exchange at the end of last year to consolidate its bonds in longer-dated maturities. This move involved issuing substantial amounts of new bonds at the long-end of its yield curve.

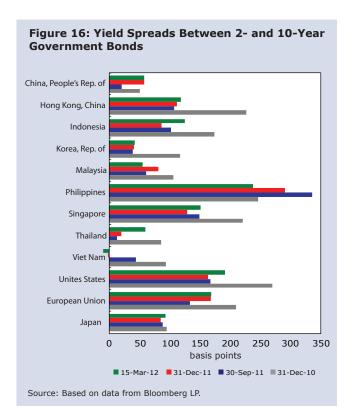
The overall downward trends for yield curves reflect the fact that an earlier bias toward the tightening of monetary policies in the region—evident this time last year—has been replaced thus far in 2012 by a trend of progressive loosening of monetary policies and a reduction of policy interest rates (Figure 15). Examples that support this new trend include the following:

- (i) BOT announced a 25 bps cut in its policy rate to 3.0% on 25 January, which was followed by a BI announcement on 9 February of a 25 bps cut in its policy rate to 5.75%. BOT and BI had both previously cut their policy rates by 25 bps and 50 bps, respectively, in November of last year.
- (ii) More recently, Bangko Sentral ng Pilipinas (BSP) cuts its policy rates on 1 March for the second time this year by 25 bps each, reducing the overnight lending (repurchase) rate to 4.0% from 4.25%, and the overnight lending (repurchase) rate to 6.0% from 6.25%.
- (iii) The SBV reduced its discount rate, refinancing rate, and overnight rate twice this year by 100 bps each in March and April.



Bucking this developing trend, the yield curves for Thailand and Singapore steepened between the end of 2011 and 15 March. Singapore's yields fell 5 bps-10 bps at the short-end of the curve, while rising as much as 19 bps at the long-end. Thai yields fell 9 bps-13 bps at the short-end of the curve, while rising almost 50 bps for some maturities at the long-end, although the yield for the 15-year maturity at the end of the Thai curve rose by only 15 bps. The rise in long-term yields in Thailand may have been driven by market expectations of substantial government bond issues this year to finance the rebuilding of infrastructure following the catastrophic floods of 2011. The fall in Singapore's yields at the short-end of its curve seems to reflect the recent easing of inflationary pressures.

The yield curves for the PRC and the Republic of Korea also shifted upward between the end of 2011 and 15 March. PRC monetary authorities are still concerned about underlying inflationary pressures and have been reluctant to reduce their policy rates. The decision of The Bank of Korea's Monetary Policy Committee to keep its base rate—



the 7-day repurchase rate—steady at 3.25% on 8 March also reflects concerns about inflationary pressures, which appear to be a factor sustaining the upward pressure on government bond yields in the Republic of Korea.

The effects of these trends on the yield spread between 2- and 10-year government bonds are shown in **Figure 16**. Yield spreads fell in most markets in 2011 compared with their end-2010 levels, with the exception of the PRC and the Philippines. However, a more complicated pattern emerged for the period between end-December and 15 March. Yield spreads over this period were unchanged in the PRC and rose in Hong Kong, China; Indonesia; the Republic of Korea; Singapore; and Thailand. On the other hand, yield spreads fell over this period in Malaysia, the Philippines, and Viet Nam.

Also supporting the strong performance of the region's government bond markets in the early months of 2012 has been the strengthening of regional exchange rates—a key factor in attracting foreign funding (Table 7). Any sustained trend of further strengthening in the region's exchange rates will likely spur additional inflows and put downward pressure on yield curves.

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

Currency	2010	2011	As of 15 March 2012		
	у-о-у	у-о-у	у-о-у	q-o-q	
CNY	3.3	4.8	3.8	(0.5)	
HKD	(0.2)	0.1	0.4	0.1	
IDR	4.4	(0.8)	(4.5)	(1.2)	
KRW	3.3	(2.3)	0.6	2.2	
MYR	11.2	(3.4)	0.2	3.6	
PHP	5.2	(0.1)	1.8	1.9	
SGD	9.0	(1.0)	1.6	2.7	
THB	10.4	(4.8)	(1.1)	2.6	
VND	(5.4)	(7.6)	0.2	1.0	
JPY	13.7	5.3	(3.5)	(8.3)	

q-o-q = quarter-on-quarter, y-o-y = year-on-year.
Notes:

^{1.} Appreciation (depreciation) is equal to -LN(end-of-period rate/start-of-period rate).

For 15 March 2012 q-o-q figures, appreciation (depreciation) is equal to -LN(15 March 2012 rate/end-2011 rate).
 Source: Bloomberg LP.

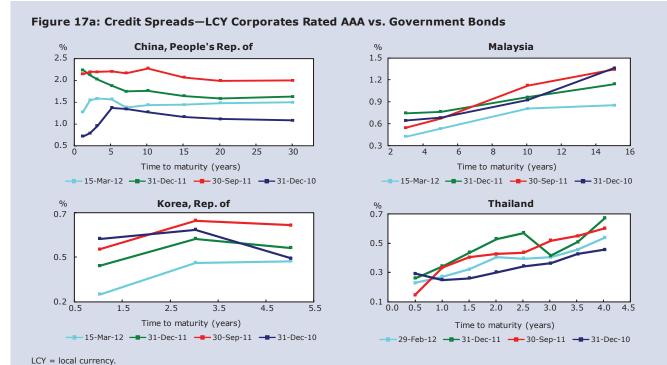
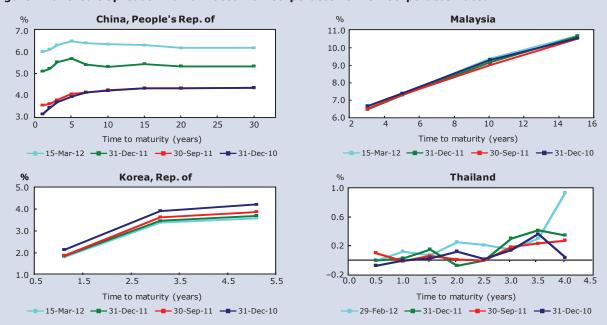


Figure 17b: Credit Spreads—Lower Rated LCY Corporates vs. LCY Corporates Rated AAA

Note: Credit spreads are obtained by subtracting government yields from corporate indicative yields. Source: People's Republic of China (ChinaBond); Republic of Korea (EDAILY BondWeb); Malaysia (Bank Negara Malaysia); and Thailand (ThaiBMA).



LCY = local currency.

- 1. For the People's Republic of China, credit spreads are obtained by subtracting corporate indicative yields rated as AAA from corporate indicative yields rated as BBB.
- 2. For Malaysia, credit spreads are obtained by subtracting corporate indicative yields rated as AAA from corporate indicative yields rated as BBB.
- 3. For the Republic of Korea, credit spreads are obtained by subtracting corporate indicative yields rated as AAA from corporate indicative yields rated as BBB+.

 4. For Thailand, credit spreads are obtained by subtracting corporate indicative yields rated as AAA from corporate indicative yields rated as A. Source: People's Republic of China (ChinaBond); Republic of Korea (EDAILY BondWeb); Malaysia (Bank Negara Malaysia); and Thailand (ThaiBMA).

Corporate Bond Credit Spreads

Corporate credit spreads have generally tightened in the high-grade segments of markets since end-September, while widening in the high-yield segments.

High-grade credit spreads—LCY corporates rated AAA vs. government bonds—have tightened since end-September 2011 over most of the curve in the PRC, Republic of Korea, Malaysia, and Thailand (Figure 17a). The most dramatic movement occurred in the PRC, Republic of Korea, and Malaysia, where in each instance the entire credit spread curve shifted downward between end-September and 15 March.

Malaysian high-grade credit spreads declined along the entire curve between end-September and 15 March. Credit spreads for Thai high-grade bonds had shifted downward by end-February from their levels at the end of 2011, but were still above their end-December 2010 levels.

The movements of credit spreads for high-yield bonds—lower rated corporates vs. AAA corporates—were more complex (Figure 17b). Credit spreads for the PRC's high-yield bonds at 15 March were almost 200 bps higher than at end-September 2011. Credit spreads on high-yield bonds in the Republic of Korea, on the other hand, have trended downward since the end of 2010, albeit by rather modest amounts. Credit spreads for Malaysian high-yield bonds have remained roughly unchanged since end-September, rising 3 bps-50 bps depending on their maturity.

Finally, credit spreads for Thai high-yield corporate bonds have moved upward slightly since end-September, except for maturities of 3 years. Yield movements for Thai high-yield corporate bonds are generally the most erratic in this class of instrument.

G3 Currency Issuance and Bonds Outstanding

G3 currency issuance in emerging East Asia fell 14.0% y-o-y in 2011, although G3 bonds outstanding rose 13.5%. The ratio of G3 currency bonds to LCY bonds remained well under 15% in most markets in the region.

G3 currency issuance in emerging East Asia in 2011 totaled US\$75 billion, a decline of USD12 billion, or 14%, from 2010. The largest declines occurred in the markets of Hong Kong, China; the Philippines; and Singapore. On the other hand, issuance in the first several months of the year has been extremely robust, reaching US\$28.4 billion as of 15 March (Table 8).

At the end of 4Q11, the total amount of G3 currency bonds outstanding amounted to US\$415 billion (Table 9). This amount represents a 2.1% increase over G3 currency bonds outstanding at the end of 2Q11 and a 13.5% increase from the end of 4Q10. The most rapidly growing segment of this market has been bonds outstanding issued by banks and financial institutions. The largest amounts of G3 currency government bonds outstanding at the end of 4Q11 were found in the Philippines (US\$34 billion) and Indonesia (US\$22 billion). The largest amounts of G3 currency corporate bonds outstanding at the end of 4Q11 were in the Republic of Korea (US\$53 billion) and the PRC (US\$47 billion). Despite the rapid growth of G3 currency bond issuance over the last several years, the value of G3 currency bonds outstanding remains quite small compared with LCY bonds in all markets except for Hong Kong, China (Figure 18). (This was still the case even after removing LCY bonds issued by central banks and monetary authorities from the data used to compile Figure 18.)

Table 8: G3 Currency Bond Issuance, 2011 and 1 January–15 March 2012

2011			1 January—15 March 201	. 2	
Issuer	US\$	Issue	Issuer	US\$	Issue
	(million)	Date		(million)	Date
China, People's Rep. of	17,829	26 Jan 11	China, People's Rep. of	1,379	15 5-5 10
CNOOC Finance 4.25% 2021 Country Garden 11.125% 2018		26-Jan-11 23-Feb-11	China Overseas Finance 4.875% 2017	500	15-Feb-12
•			Shui On Development 9.75% 2015	400	16-Feb-12
China Resources Power 7.25% Perpetual	750	9-May-11	Others	479	
Citic Pacific 7.875% Perpetual		15-Apr-11	Hong Kong, China	9,329	
ENN Energy 6.0% 2021		13-May-11	Hutch Whampoa 4.625% 2022	1,000	
Longfor Properties 9.5% 2016	750	7-Apr-11	Wharf Finance 4.625% 2017	900	8-Feb-12
Others	12,429		Henderson Land 4.75% 2017	700	
Hong Kong, China	8,565		Nan Fung Treasury 5.25% 2017	600	20-Jan-12
Bank of China (Hong Kong) 3.75% 2016	750	8-Nov-11	Wheelock Finance 4.75% 2017	535	23-Feb-12
China Resources Land 4.625% 2016	750	19-May-11	Hutch Whampoa 3.5% 2017	500	3-Feb-12
HSBC 1.0599% 2014	500	31-May-11	Hutch Whampoa 4.625% 2022	500	3-Feb-12
Newford Capital 0.0% 2016	500	12-May-11	Sun Hung Kai Properties 4.5% 2022	500	14-Feb-12
The Hong Kong Mortgage Corp. 0.5293% 2013	450	15-Apr-11	Wiseyear Holdings 5.0% 2017	500	15-Feb-12
Others	5,615		Others	3,594	
Indonesia	6,673		Indonesia	2,896	
Indonesia (sovereign) 4.875% 2021	2,500	5-May-11	Indonesia (sovereign) 5.25% 2042	1,750	17-Jan-12
Pertamina 5.25% 2021	1,000	23-May-11	Berau Coal Energy 7.25% 2017	500	13-Mar-12
PLN 4.0% 2018	1,000	21-Nov-11	Listrindo 6.95% 2019	500	21-Feb-12
Others	2,173		Others	146	
Korea, Rep. of	32,035		Korea, Rep. of	8,105	
Korea Development Bank 3.875% 2017	1,000	4-Nov-11	Korea Eximbank 4.0% 2017	1,250	11-Jan-12
Korea Eximbank 4.375% 2021		15-Sep-11	Korea Eximbank 5.0% 2022	1,000	
Korea National Oil Corp. 4.0% 2016			Korea Gas 6.25% 2042	750	
Korea Development Bank 4.0% 2016	750	9-Mar-11		750	
Korea Finance 4.625% 2021		16-Nov-11	·	700	
Korea Eximbank (samurai) 0.93% 2013	730	8-Jul-11			13-Mar-12
Hyundai Capital 4.375% 2016		27-Jan-11	, ,	350	
Korea Eximbank 3.75% 2016		27-Jan-11 20-Apr-11	•	300	9-Feb-12
Posco 5.25% 2021		14-Apr-11	Kookmin Bank (<i>samurai</i>) 1.96% 2013	284	8-Feb-12
Others		14-Api-11	Korea National Oil Corp. 2.717% 2015	250	3-Feb-12
	24,694		Others		3-reb-12
Malaysia	3,100			1,971	
Wakala Global (sukuk) 2.991% 2016	1,200	6-Jul-11	•	400	
Others	1,900		Maybank 3.0% 2017	400	10-Feb-12
Philippines	3,450		Philippines	2,250	
Philippines (sovereign) 5.5% 2026	1,500	30-Mar-11	Philippines (sovereign) 5.0% 2037	1,500	13-Jan-12
San Miguel Corp. 2.0% 2014	600	5-May-11	BDO Unibank 4.5% 2017	300	16-Feb-12
Energy Development Corp. 6.5% 2021	300	20-Jan-11	SM Investments 1.625% 2017	250	15-Feb-12
Others	1,050		RCBC 5.25% 2017	200	30-Jan-12
Singapore	1,868		Singapore	4,090	
Singtel 4.5% 2021	600	8-Mar-11	DBS 2.35% 2017		28-Feb-12
Others	1,268	0 1.0. 11	OCBC Bank 1.625% 2015		13-Mar-12
			United Overseas Bank 2.25% 2017	750	7-Mar-12
Thailand	1,370	E 4 44	SingTel Group 2.375% 2017	700	8-Mar-12
PTTEP 5.692% 2021	700	5-Apr-11	Others	640	0 1101 12
Others	670				
Viet Nam	90		Thailand	0	
HAGL 9.875% 2016		20-May-11		0	
Emerging East Asia Total	74,981		Emerging East Asia Total	28,449	
Memo Items:			Memo Items:		
India	11,673		India	2,627	
Novelis 8.75% 2020	1,400	13-Apr-11	Reliance Holdings 5.4% 2022	1,000	14-Feb-12
Novelis 8.375% 2017	1,100	13-Apr-11	Axis Bank 5.125% 2017	500	5-Mar-12
ICICI Bank 4.75% 2016	1,000	25-May-11	Reliance Holdings 5.4% 2022	500	28-Feb-12
Others	8,173		Others	627	
Sri Lanka	1,512		Sri Lanka	0	

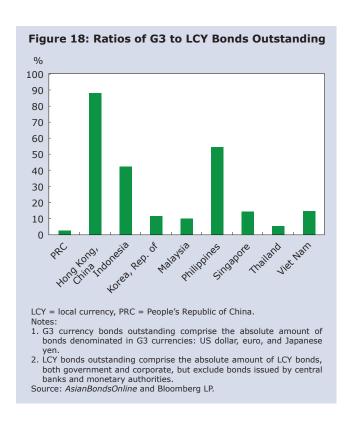
Note: Not included in this table is the Philippines' sovereign Global Peso bond, a PHP54.8 billion (US\$1.2 billion) 25-year bond issued in January 2011. Source: Bloomberg LP, newspaper and wire reports.

Table 9: G3 Currency Bonds Outstanding in Emerging East Asia (US\$ billion)

Edst Asia (034 b		0/		0/		0/
	4Q10	% share	2Q11	% share	4Q11	% share
China, People's R	ep. of (Silare		Juliano
Total	49	100.0	72	100.0	75	100.0
Government	10	21.1	11	16.0	12	15.3
Banks and FIs	8	15.9	14	19.5	17	22.7
Corporate	31	63.0	46	64.5	47	61.9
Hong Kong, China		05.0	40	04.5	77	01.5
Total	63	100.0	72	100.0	74	100.0
Government	2	2.6	2	2.2	2	2.2
Banks and FIs	26	42.0	32	44.4	35	47.4
Corporate	35	55.5	39	53.4	37	50.4
Indonesia	26	400.0	20	400.0	4.4	100.0
Total	36	100.0	39	100.0	41	100.0
Government	18	50.6	21	52.5	22	53.2
Banks and FIs	3	8.0	6	15.7	6	14.1
Corporate	15	41.3	12	31.8	13	32.7
Korea, Rep. of						
Total	117	100.0	120	100.0	125	100.0
Government	19	16.0	19	16.2	21	16.7
Banks and FIs	48	41.1	49	40.7	51	40.6
Corporate	50	42.9	52	43.1	53	42.7
Malaysia						
Total	24	100.0	23	100.0	23	100.0
Government	3	12.7	3	13.0	3	14.2
Banks and FIs	5	20.1	5	21.8	5	22.0
Corporate	16	67.2	15	65.1	15	63.7
Philippines	10	07.2	13	05.1	13	05.7
Total	39	100.0	42	100.0	42	100.0
		100.0		100.0		100.0
Government	32	82.4	34	80.7	34	80.9
Banks and FIs	2	4.2	1	3.0	1	2.8
Corporate	5	13.4	7	16.4	7	16.4
Singapore						
Total	28	100.0	28	100.0	25	100.0
Government	0	0.0	0	0.0	0	0.0
Banks and FIs	18	62.5	17	60.0	16	62.9
Corporate	11	37.5	11	40.0	9	37.1
Thailand						
Total	8	100.0	8	100.0	8	100.0
Government	1	18.6	1	14.3	1	17.0
Banks and FIs	3	38.9	3	44.0	3	41.5
Corporate	3	42.5	3	41.6	3	41.5
Viet Nam						
Total	2	100.0	2	100.0	2	100.0
Government	2	97.2	2	95.6	2	94.1
Banks and FIs	0	0.0			0	
			0	0.0		0.0
Corporate	0.1	2.8	0	4.4	0.1	5.9
Emerging East As						
Total	366	100.0	407	100.0	415	100.0
Government	88	24.1	94	23.0	97	23.3
Banks and FIs	112	30.6	128	31.4	134	32.3
Corporate	166	45.3	185	45.6	185	44.5
Less PRC:						
Total	317	100.0	335	100.0	340	100.0
Government	78	24.5	82	24.6	85	25.0
Banks and FIs	104	32.9	114	33.9	117	34.4
Corporate	135	42.5	139	41.5	138	40.6
FIs = financial institution						

FIs = financial institutions.

Source: AsianBondsOnline and Bloomberg LP.



Market Returns

Returns on emerging East Asia's LCY bonds were very buoyant in 2011, but have since moderated in 2012.

The Pan-Asian Index rose 6.8% on a US\$ unhedged basis in 2011 (**Table 10**). In the current year through 15 March, the Pan-Asian Index rose only 1.7% at a time when the MSCI Equity Market Index for Asia rose 15.0% in US\$ terms (**Table 11**). Indonesian bonds were the best performers in 2011 as a whole, yielding a return of 18.4% on a US\$ unhedged basis and 19.7% on an LCY total return basis. Philippine bonds were the second best performers, yielding an almost identical return of 14.7% on both a US\$ unhedged and LCY total return basis.

In most markets in the region there was little difference in 2011 between US\$ unhedged and LCY returns. The only exceptions were in the PRC, Malaysia, and Thailand. US\$ unhedged returns in the PRC were 9.9%, or almost double LCY returns

Table 10: iBoxx Asia Bond Fund Index Family Returns

	Madified	2010	Returns (%)	2011	Returns (%)	2012 YTI	D Returns (%)
Market	Modified Duration (years)	LCY Total Return Index	US\$ Unhedged Total Return Index	LCY Total Return Index	US\$ Unhedged Total Return Index	LCY Total Return Index	US\$ Unhedged Total Return Index
China, People's Rep. of	5.79	1.5	5.1	5.4	9.9	0.2	(0.2)
Hong Kong, China	4.23	2.0	1.8	5.2	5.2	0.4	0.5
Indonesia	6.87	19.3	23.7	19.7	18.4	2.2	1.5
Korea, Rep. of	4.28	8.0	10.6	6.2	4.7	0.2	2.4
Malaysia	4.74	5.2	15.6	4.7	1.8	0.9	4.8
Philippines	6.88	14.3	19.7	14.8	14.7	2.4	4.3
Singapore	5.68	2.5	11.3	6.3	5.0	0.3	2.8
Thailand	4.81	5.4	15.4	4.9	0.3	(1.1)	1.4
Pan-Asian Index	5.16	-	10.2	-	6.8	-	1.7
HSBC ALBI	7.57	-	11.5	-	4.9	-	2.7
US Govt. 1–10 years	4.04	-	5.3	-	6.8	-	(0.8)

^{- =} not applicable, ALBI = Asian Local Bond Index, LCY = local currency, US = United States, YTD = year-to-date. Notes:

Source: AsianBondsOnline and Bloomberg LP.

Table 11: MSCI Index Returns

	2010 Re	turns (%)	2011 Re	eturns (%)	2012 YTD R	leturns (%)
Market	LCY terms	US\$ terms	LCY terms	US\$ terms	LCY terms	US\$ terms
China, People's Rep. of	2.6	2.3	(20.4)	(20.3)	14.7	14.8
Hong Kong, China	20.0	19.7	(18.5)	(18.4)	17.2	17.3
Indonesia	25.8	31.2	4.7	4.0	2.9	1.8
Korea, Rep. of	22.1	25.3	(11.5)	(12.8)	13.4	15.9
Malaysia	19.3	32.5	(0.2)	(2.9)	3.3	7.1
Philippines	23.5	30.3	(3.1)	(3.2)	16.0	18.2
Singapore	8.1	18.4	(20.0)	(21.0)	15.5	18.4
Thailand	36.4	50.8	(1.2)	(5.6)	15.7	18.6
Far East ex-Japan Index	12.5	16.7	(15.6)	(16.8)	13.5	15.0
MSCI US	-	13.2	-	(0.1)	-	11.8

^{- =} not applicable, LCY = local currency, MSCI = Morgan Stanley Capital International, US = United States, YTD = year-to-date. Notes:

Source: AsianBondsOnline and Bloomberg LP.

^{1.} The Asian Bond Fund (ABF) indices contain only government debt and government-guaranteed debt obligations.

^{2.} Market bond indices are from iBoxx Index Family. Returns for 2012 are year-to-date as of 15 March 2012.

^{3.} Annual returns are computed for each year using a natural logarithm of end-of-year index value/beginning-of-year index value.

^{4.} Duration as of 15 March 2012.

^{1.} Market indices are from MSCI country indexes. 2012 returns are year-to-date as of 15 March 2012.

^{2.} Far East ex-Japan includes the People's Republic of China; Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei, China; and Thailand.

of 5.4%. Meanwhile, US\$ unhedged returns were almost negligible in the case of Thailand and a little under 2% for Malaysia, compared with LCY total returns of just under 5% in both of these markets.

Through 15 March, the rankings for returns in individual markets had changed considerably from the previous year. Malaysia emerged as the market with the highest return on a US\$ unhedged basis (4.8%), followed by the Philippines (4.3%), and Singapore (2.8%). Indonesia fell to fourth place (2.4%), while US\$ returns for the PRC and Hong Kong, China bond markets were negligible. On an LCY basis, however, the Philippines and Indonesia

retained their positions from 2011 as the markets with the two highest returns—albeit in reverse order—at 2.4% and 2.2%, respectively.

Equity returns, as reflected in the MSCI index, dramatically reversed their weak performance in 2011 in the first several months of the year through 15 March. The highest returns on a US\$ basis through 15 March were found in Thailand (18.6%); Singapore (18.4%); the Philippines (18.2%); and Hong Kong, China (17.3%). In LCY terms, however, Hong Kong, China (17.2%) and the Philippines (16.0%) showed the highest returns, followed by Thailand (15.7%) and Singapore (15.5%).

Policy and Regulatory Developments

People's Republic of China

PRC Allows CNH to Be Used for Cross-Border Investment

On 14 October, the People's Republic of China (PRC) released two sets of regulations paving the way for CNH funds raised in Hong Kong, China to be used for foreign direct investment in the PRC. The Notice on Cross-Border Renminbi Foreign Direct Investment was issued by the Ministry of Commerce, and the Renminbi Foreign Direct Investment Settlement Rules were issued by the People's Bank of China (PBOC).

PRC to Provide Support for Small and Micro-Sized Enterprises

On 14 November, the China Regulatory Banking Commission (CBRC) granted three banks authority to issue special bonds for the purpose of funding small-scale enterprises. On 2 February, Premier Wen Jiabao said that the government would provide support for these enterprises through a CNY15 billion fund and the extension of preferential tax policies until 2015.

CSRC to Develop High-Yield Bond Market

On 6 March, the China Securities Regulatory Commission (CSRC) announced plans to develop a high-yield local currency (LCY) bond market that will help provide additional financing to small and medium-sized enterprises (SMEs). According to press reports, the CSRC is working on guidelines for the establishment of the market. The bonds are to be issued on the securities exchanges and will be subject to quotas.

PRC Widens CNY Trading Band

On 16 April, the PBOC began allowing the renminbi to trade within a wider band. The renminbi subsequently began trading in a range of 1.0% above and below a daily reference exchange rate. Previously, the renminbi could only trade in a band of 0.5% above and below the daily reference rate.

Hong Kong, China

HKMA Launches Pilot Platform for Cross-Border Debt Security Investment between Malaysia and Hong Kong, China

On 13 March, the Hong Kong Monetary Authority (HKMA), Bank Negara Malaysia (BNM), and Euroclear Bank jointly announced the launch of a pilot program allowing for cross-border investment and settlement of debt securities. Through the pilot platform, investors in Hong Kong, China and Malaysia can buy and hold the LCY debt securities of each country on a delivery-versus-payment (DVP) basis.

Indonesia

BI to Allow *Sukuk* for Reverse Repo Operations

Effective 1 December, Bank Indonesia (BI) began allowing the use of *sukuk* (Islamic bonds) in the reverse repo transactions of *shari'a* (Islamic law) banks and business units. Indonesian *shari'a* banks can purchase at least IDR1 billion of *sukuk* from the central bank and in exchange they will receive transaction margins when they buy back the *sukuk* at an agreed price after a specified time. This regulation aims to absorb excess liquidity among *shari'a* banks, specifically those banks with a finance-to-deposit ratio of at least 80% and those that participate in BI's *shari'a* monetary operations.

BI to Purchase Long-Term Bonds and Sukuk to Help Stabilize Bond Market

In January, BI announced plans to purchase long-term government bonds as part of efforts to defend the Indonesian rupiah and stabilize the domestic bond market. Since September 2011, the central bank has been buying short- and medium-term government bonds in the market to support prices. In February, BI announced that it would purchase Islamic government debt to help stabilize the bond market and deepen the *shari'a* financial market.

Republic of Korea

2012 Treasury Bill Issuance Plan Introduced

In February, the Ministry of Strategy and Finance (MOSF) introduced its issuance plan for treasury bills in 2012. The plan indicated that issuance in February–March would include 63- and 182-day bills amounting to KRW5 trillion. In an initial step, the government issued 63-day treasury bills totaling KRW1 trillion in February.

KOFIA to Launch Trading Platform for SME Bonds

The Korea Financial Investment Association (KOFIA) plans to establish a trading platform—an electronic over-the-counter system—for the bonds of SMEs. The issuers of the bonds will be local unlisted firms with asset sizes of less than KRW500 billion. The trading system is expected to be launched in May.

Malaysia

BNM and MAS Sign MOU to Enhance Domestic Liquidity

In January, BNM and the Monetary Authority of Singapore (MAS) signed a memorandum

of understanding (MOU) to strengthen their cooperation in carrying out domestic liquidity management and enhance the liquidity of financial institutions in both countries. The cross-border collateral agreement allows eligible financial institutions in Singapore to pledge ringgit or MYR-denominated government and central bank securities to obtain Singapore dollar liquidity from MAS. Likewise, eligible financial institutions in Malaysia may pledge Singapore dollars or SGD-denominated government securities to obtain ringgit liquidity from BNM.

BNM Issues New Liberalization Measures

In February, BNM issued new liberalization measures to enhance competitiveness and develop domestic financial markets. The new measures (i) permit licensed onshore banks to trade one foreign currency (FCY) against another with a resident, (ii) allow licensed onshore banks to offer MYR-denominated interest rate derivatives to a non-bank non-resident; and (iii) permit residents to convert a MYR- or FCY-denominated debt obligation into a debt obligation of another FCY. These new measures are designed to increase liquidity, depth, and participation in domestic financial markets.

BNM Announces a Renminbi Settlement Service

BNM announced that Renminbi Settlement Services (RSS) were to be included in its Real-Time Electronic Transfer of Funds and Settlement System (RENTAS) beginning 21 March. Bank of China (Malaysia) Bhd. has been appointed as the onshore settlement institution for RSS, which will provide greater efficiency and competitiveness in trade settlement, facilitate bilateral trade between Malaysia and the PRC, and provide a natural hedge against the fluctuations and volatility of other currencies while eliminating settlement risk for renminbi transactions.

Philippines

BSP to Implement Basel III Provisions by 2014

In January, Bangko Sentral ng Pilipinas (BSP) announced that it would adopt all provisions of the Basel III Agreement effective 1 January 2014. While the Basel Committee on Banking Supervision allows for the staggered implementation of Basel III provisions up until January 2019, BSP decided to adopt all capital adequacy standards 5 years ahead of this timeline. Further, BSP will impose higher capital ratios than those suggested by the Basel Committee. BSP will be conducting a quantitative study in 2Q12 to identify which banks are most susceptible to potential negative impacts from the implementation of its new guidelines.

BSP Simplifies Reserve Requirement Rules, Cuts Ratios by 3 Percentage Points

Effective 6 April, BSP will adopt a simplified reserve requirement policy. Under the new rules, existing statutory and liquidity reserve requirements will be unified into a single reserve requirement, and BSP will not pay interest to the banks on the unified reserve requirement. Cashin-vault (for banks) and demand deposits (for non-bank financial institutions with quasi-banking functions) will no longer count toward reserve requirement compliance.

Under existing rules, banks are paid interest rates of 4% on amounts up to 40% of their regular reserves. They are also paid on their liquidity reserves—a rate equivalent to comparable government securities less 50 basis points. Upon adoption of the new rules, BSP will lower the reserve requirement ratio by 3 percentage points—to 18%—to offset the impact on banks' intermediation costs. Universal and commercial banks will maintain a reserve ratio of 18% from 21%.

Singapore

MAS Announces Initiatives to Improve LCY Corporate Debt Market

MAS Managing Director Ravi Menon announced in March three initiatives to improve efficiency and liquidity in Singapore's LCY corporate debt market. These initiatives include (i) providing swap liquidity to primary dealer banks handling SGD-denominated debt issuances for foreign companies; MAS will support swap transactions at market-determined prices to develop swap market liquidity for longer tenors; (ii) partnering with the industry in the creation of a lending platform for SGD-denominated corporate debt securities from which market players will be allowed to borrow securities for market making; and (iii) initiating a price discovery platform targeted for completion in the second half of the year. This platform aims to improve transparency in the corporate bond market and provide reliable mark-to-market prices to allow market participants to contribute end-of-day prices for a range of SGD-denominated corporate bonds.

Thailand

Bank of Thailand and BNM Sign MOU on Cross-Border Collateral Arrangement

The Bank of Thailand (BOT) announced in February that it had signed an MOU with BNM to enter into a cross-border collateral arrangement to strengthen liquidity facility measures for financial institutions operating in both countries. Under this arrangement, eligible financial institutions operating in Thailand may acquire Thai baht liquidity from BOT by pledging ringgit or MYR-denominated central bank and government securities, while eligible financial institutions in Malaysia may obtain Malaysian ringgit liquidity from BNM by pledging baht or THB-denominated central bank and government securities.

Ministry of Finance Gives Approval to Seven Foreign Companies to Issue LCY Bonds

The Ministry of Finance announced that it granted approval to seven foreign companies to sell LCY bonds totaling THB66 billion between 1 January and 30 September. The foreign entities and the allowable amount of their respective bond issuances are (i) Australia and New Zealand Corporation (THB8 billion), (ii) Citigroup (THB10 billion), (iii) Hana Bank (THB10 billion), (iv) Industrial Bank of Korea (THB10 billion), (v) Korea Development Bank (THB8 billion), (vi) Korea Eximbank (THB10 billion), and (vii) Korea National Oil Corporation (THB10 billion). Hana Bank issued THB10 billion worth of dual-tranche bonds in February.

Viet Nam

VBMA Agreement Assigns Market Maker Status to Eight Banks

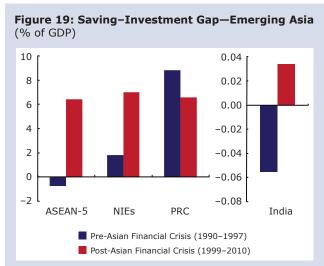
At the annual meeting of the Viet Nam Bond Market Association (VBMA) held on 9 December, eight banks—Bank For Investment and Development of Viet Nam, Viet Nam Bank for Foreign Trade, HSBC Viet Nam, ANZ Viet Nam, Standard Chartered Viet Nam, Viet Nam Technological Commercial Joint-Stock Bank, BNP Paribas Viet Nam, and Viet Nam Maritime Commercial Joint Stock Bank-signed an agreement to commit themselves to act as experimental market makers in the LCY bond market. The move aims to increase market transparency, boost transaction volume and liquidity, improve market efficiency, and provide a reliable LCY bond market yield curve for domestic and potential foreign investors. The banks also agreed to support market players in evaluating their mark-to-market portfolios in order to more accurately reflect portfolio performance and to bring bond trading activities in Viet Nam closer to international best practices.

Intraregional Portfolio Debt Investment⁵

One key feature of Asia in the post-1997/98 crisis period has been its transformation from a region with a current account deficit into one with a current account surplus—or, equivalently, from a net importer of capital into a net exporter of capital. Much of the growth in savings in Asia is attributable to the People's Republic of China (PRC), which together with Japan accounts for the bulk of savings in the region. The PRC's average savings rate increased from 41.3% in 1990–1997 to 45.6% in 1999–2010. India also increased its savings rate from an average of 22.6% in 1990–1997 to 28.1% in 1999–2010.

Figure 19 shows the savings–investment gap both before and after the 1997/98 Asian financial crisis as a percentage of gross domestic product (GDP) for the PRC; NIEs (Hong Kong, China; Republic of Korea; Singapore); ASEAN-5 (Indonesia, Malaysia, Philippines, Thailand, Viet Nam); and India.⁶ The savings–investment gap in the PRC fell slightly in the post-crisis period from a substantial surplus pre-crisis. The savings–investment gap of the NIEs widened in the post-crisis period, while a deficit among ASEAN-5 countries became a large surplus after 1997/98.

Much of these savings are either retained within the country of origin as bank deposits or invested abroad in low-risk securities, which ultimately return to the region in the form of foreign direct and other investment. However, these capital flows invariably push up the cost of intermediation and raise questions about the development, depth, and efficiency of domestic and regional financial markets. The recycling of Asian savings through advanced economies and their global financial centers is an extreme form of the Lucas Paradox. This results in a situation where capital does not flow from developed to emerging economies to reflect the lower availability of capital per worker



ASEAN = Association of Southeast Asian Nations, GDP = gross domestic product, NIEs = newly industrialized economies, PRC = People's Republic of China.

Notes:

- Emerging Asia comprises the People's Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Thailand; Singapore; and Viet Nam.
- Actual data for Viet Nam starts in 1994 and Malaysia and the Republic of Korea only covers up to 2009.
- Saving-Investment gap is computed as difference between gross domestic savings (% of GDP) and gross fixed capital formation (% of GDP). Percent of GDP is computed based on current prices.
- 4. ASEAN-5 comprises Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam.

Source: World Bank's World Development Indicators.

in the latter. In the case of Asia, the direction is reversed, with capital flowing from emerging to developed markets.

The region's policymakers are cognizant of these inefficiencies and have been keen to address the risks emanating from the twin mismatches that contributed to the crippling effects of the 1997/98 Asian financial crisis. They have undertaken significant country-level reforms and regional collective action to develop local currency (LCY) bond markets as a means of channeling the region's massive savings to meet its burgeoning financing needs.

The Asian Bond Markets Initiative (ABMI), which was endorsed at the 2003 ASEAN+3 Finance

⁵ This section is based on a forthcoming paper by Azis and Mitra, 2012.

⁶ ASEAN = Association of Southeast Asian Nations, NIEs = newly industrialized economies.

Ministers Meeting, aims to develop efficient and liquid bond markets in Asia in order to channel Asian savings into long-term productive uses. This regional initiative facilitates intraregional cross-border investment by addressing institutional barriers and developing the requisite market infrastructure. ABMI measures have already yielded significant results. For example, total LCY bonds outstanding in emerging East Asia increased by an annual average rate of 15.1% over the last 5 years to US\$5.7 trillion in 2011.

However, intraregional portfolio debt investment remains low. The share of cross-border debt investment as a percentage of the region's total stood at 7.2% in 2010, up only slightly from 4.2% in 2001 (Table 12). About 46% of total intraregional debt investment in 2010 was placed in markets in the PRC and the Republic of Korea. Meanwhile, investors from Hong Kong, China accounted for about 45% of all debt investments in the region. This suggests that intraregional investments are still concentrated in the larger markets and that there remains room for initiatives to encourage greater regional integration.⁷

The current section focuses on factors affecting cross-border investments in emerging Asian bond markets. It seeks to identify the rationale behind the seeming lack of intraregional bond investments, with the objective of providing valuable inputs to the process of strengthening intraregional bond investment flows. Stylized information on "investment bias" is presented first. Investigating this phenomenon further, an empirical analysis of the factors determining non-resident holdings of domestic bonds is presented next. Lastly, results are shared from a survey conducted to ascertain how Asian investors prioritize factor-considerations affecting their offshore bond investment decisions.

Portfolio Debt Allocation by Asian Investors: A Home, Regional, or Global Bias?

To understand Asian investors' appetite for foreign bonds, it is paramount to investigate whether Asian bond investors have a relative preference for (i) domestic bonds (home bias), (ii) Asian bonds from outside of their home country (regional bias), or (iii) bonds from the United States (US) and European Union (EU) (global bias). We employed simple non-parametric statistical tests to examine whether the distributions of two samples were equal.

Data used for the model included the portfolio debt allocation shares of investors in nine Asian economies—Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; Singapore; and Thailand—in home, regional, and global markets for the years 2001, 2009, and 2010. The use of portfolio allocation shares in a non-parametric test—particularly the Wilcoxon signed rank sum test—have been used in other empirical studies dealing with investment bias (Ackert and Church 2009).

Table 13 presents each of the nine Asian economies' portfolio debt share of the total debt securities held in three investment destinations: (i) the home economy of the Asian investor (Home); (ii) Asian economies including the PRC; Hong Kong, China; India; Indonesia; Japan; Republic of Korea; Malaysia; Philippines; Taipei, China; Thailand; and Viet Nam (Asia); and (iii) global economies including the US and EU-15 member countries (Global).

All nine Asian markets displayed the largest portfolio debt weight in Home markets in all three years under review. Between 2001 and 2009, the Home portfolio debt allocation share rose for Hong Kong, China and the Philippines, but fell for most other Asian economies. The portfolio debt weight for Asia increased for Indonesia, Malaysia, the Philippines, Singapore, and Thailand over the same period, but declined for the Republic of Korea and remained roughly unchanged for the rest.

⁷ International Monetary Fund's Coordinated Portfolio Investment Surveys (CPIS) 2001–2010.

Table 12: Asia Cross-Border Debt Securities Investments (US\$ million)

							Investment from:	it from:					
Investment in:	Hong Kong, India Indonesia China	India	Indonesia	Japan	Korea, Rep. of	Malaysia	Malaysia Philippines	Singapore	Thailand	Total Asia	SN	EU-15	Total Value of Investments
						2001	11						
China, People's Rep. of	2,967	1	1	880	142	1	1	412	1	4,401	634	1,412	7,029
Hong Kong, China	1	1	96	1,268	306	28	25	1,622	119	3,464	1,893	9,717	16,809
India	I	1	I	166	99	9	1	266	1	504	301	834	2,009
Indonesia	1	1	1	108	63	8	3	260	1	741	315	422	1,957
Japan	7,103	1	1	1	75	15	5	9,014	1	16,213	27,125	75,170	209,707
Korea, Rep. of	3,789	1	1	5,454	1	m	7	2,182	1	11,433	4,938	7,360	24,920
Malaysia	1,817	1	2	2,200	329	ı	6	1,591	1	5,947	1,680	1,733	9,705
Philippines	1,179	1	1	1,347	106	41	1	761	1	3,435	2,671	1,926	9,304
Singapore	1,282	1	38	1,209	151	10	59	1	86	2,847	1,442	8,151	14,508
Taipei,China	609	1	1	82	8	15	13	340	1	1,066	253	229	2,074
Thailand	629	1	1	748	159	21	1	841	1	2,429	782	765	4,217
Viet Nam	1	1	1	30	15	I	1	1	1	45	21	37	106
Total Asia (A)	19,405	ı	137	13,492	1,419	147	121	17,588	217	52,526	42,055	108,205	302,348
Total Value of Investment (B)	110,985	1	701	1,062,403	6,735	947	2,024	73,923	743	1,258,460	926'069	3,555,740	7,515,934
Ratio of A to B	17.5%	1	19.5%	1.3%	21.1%	15.5%	%0'9	23.8%	29.2%	4.2%	6.1%	3.0%	4.0%
SN	27,795	1	249	366,689	3,309	140	1,752	11,977	278	412,190	I	628,935	2,074,148
EU-15	22,665	1	214	427,855	1,017	490	61	28,436	198	480,936	360,185	2,218,666	3,670,376
						2010	0.						
China, People's Rep. of	45,875	1	106	494	167	6	1	1,970	1	48,622	1,602	6,332	58,647
Hong Kong, China	ı	1	144	1,484	405	234	217	6,440	419	9,341	2,297	8,023	22,380
India	9,131	1	10	1,057	94	235	1	10,570	446	21,542	2,009	17,665	58,988
Indonesia	376	1	1	2,649	74	253	269	12,637	43	16,730	9,622	14,191	42,294
Japan	18,332	4	14	1	1,220	9	62	10,650	73	30,419	52,700	194,567	534,465
Korea, Rep. of	18,383	I	115	12,200	I	2,427	1	17,543	11,412	62,079	25,772	48,240	147,925
Malaysia	5,555	I	49	2,774	186	1	21	8,264	133	16,982	11,940	21,185	51,409
Philippines	1,161	1	1	2,937	219	512	1	2,769	46	7,646	7,506	7,177	26,656
Singapore	5,308	7	721	4,998	149	1,991	138	I	176	13,488	7,552	11,199	40,438
Taipei,China	1,664	1	5	25	17	ı	1	4,283	1	5,995	377	6,676	13,226
Thailand	729	1	2	988	83	165	1	3,146	1	5,010	2,035	4,810	12,860
Viet Nam	290	1	1	38	22	ı	1	113	1	464	674	2,009	3,168
Total Asia (A)	106,805	12	1,167	29,542	2,635	5,890	1,135	78,384	12,749	238,319	127,086	342,076	1,012,457
Total Value of Investment (B)	344,854	527	5,549	2,667,349	29,990	10,843	5,843	204,636	17,942	3,287,533	2,091,098	12,403,303	24,827,387
Ratio of A to B	31.0%	1	21.0%	1.1%	8.8%	54.3%	19.4%	38.3%	71.1%	7.2%	6.1%	2.8%	4.1%
SN	72,199	175	246	868,676	12,760	1,047	1,804	32,895	1,604	994,407	1	1,928,954	5,968,406
EU-15	93,912	302	1,468	874,774	7,871	1,182	1,144	58,852	1,055	1,040,560	923,866	8,109,088	12,454,422
data not available Ell = European Union 11S = United States	- Furonean Union	ה ה	Inited States										

- = data not available, EU = European Union, US = United States.

^{1.} The data are derived from the creditor side for both assets and liabilities.
2. EU-15 consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom. Source: OREI calculations based on data from the International Monetary Fund's Coordinated Portfolio Investments Survey.

Table 13: Portfolio Debt Allocation of Asian Investors (%)

Portfolio Debt		2010			2009			2001	
Allocation of Investors from:	Home	Asia	Global	Home	Asia	Global	Home	Asia	Global
Hong Kong, China	37.8	19.3	30.0	37.4	12.4	34.0	34.6	11.4	29.7
India	99.9	0.0	0.04	100.0	0.0	0.0	100.0	0.0	0.0
Indonesia	94.7	1.1	1.6	96.4	0.8	1.6	98.6	0.3	0.9
Japan	80.9	0.2	12.5	80.4	0.2	13.2	83.5	0.2	12.4
Korea, Rep. of	97.4	0.2	1.8	97.6	0.1	1.8	98.4	0.3	1.0
Malaysia	95.3	2.5	1.0	96.3	1.4	1.0	98.9	0.2	0.7
Philippines	93.6	1.2	3.2	94.2	0.5	3.2	94.0	0.4	5.3
Singapore	44.1	21.4	25.9	41.9	16.3	32.5	43.5	13.4	30.9
Thailand	92.4	5.4	1.1	89.8	8.0	1.4	98.2	0.5	1.1

Notes:

Source: OREI calculations based on data from AsianBondsOnline, Bank for International Settlements, and International Monetary Fund's Coordinated Portfolio Investment Survey.

Moreover, the Global allocation climbed between 2001 and 2009 for Hong Kong, China; Indonesia; Japan; the Republic of Korea; Malaysia; and Singapore; but fell for the Philippines.

Between 2009 and 2010, the Global portfolio debt share declined in Hong Kong, China; Japan; Singapore; and Thailand; while remaining steady in other markets. Meanwhile, the Asia portfolio debt share climbed in most markets, including Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; Philippines; and Singapore. Changes to the debt allocation in Home markets between 2009 and 2010 were mixed, rising for Hong Kong, China; Japan; Singapore; and Thailand; while falling for all other markets.

The results for 2001 reveal that the difference between the portfolio debt allocation of Asian investors in Home and Asian markets was statistically significant (at the 1% level). As the portfolio debt weights for Home were substantially larger than for Asia, this implies a home bias among Asian investors relative to bonds in other Asian markets. There was also a statistically significant difference (at the 5% level) in the portfolio debt shares of Asian investors between Home and Global, indicating that Asian investors also have a home bias relative to bonds available in global markets.

Comparing the portfolio debt shares of Asian investors with respect to Asia versus Global, there was a statistically significant difference between the two, suggesting that Asian investors prefer US and EU bonds over those from other Asian markets.

Meanwhile, the results for 2009 showcase a home bias relative to other Asian and global bonds. That is, there was a statistically significant difference in the portfolio debt allocation of Home with respect to Asia (at the 1% level), and with respect to Global (at the 5% level). However, there was no statistically significant difference for Asian investors between Asia and Global bonds.

The results for 2010 are similar to those from 2009: Asian investors had a home bias relative to bonds from other Asian countries and global markets, with no discernible bias between the latter two categories. Interestingly, the significance of the difference of portfolio debt allocation between Home and Global strengthened in 2010, which suggests that the home bias of Asian bond investors strengthened between 2009 and 2010. Overall, Asian investors have a bias toward their own respective bond markets and this bias appears to have strengthened in 2010, especially relative to bonds from the US and Europe.

^{1.} Asia comprises the People's Republic of China (PRC); Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei, China; Thailand; and Viet Nam.

^{2.} Global refers to the United States (US) and European Union (EU)-15 member countries.

Box: Determinants of Cross-Border Debt Securities Holdings in Asia

This box analyzes the factors affecting cross-border investment in Asian bond markets in order to explain the low level of intraregional bond investment and identify effective methods for increasing such flows.

The determinants of intraregional cross-border bond holdings are analyzed using a gravity equation similar to that applied to trade flows. A gravity model was used to identify the following factors:^a

$$\begin{split} & \ln FI_{sdt} = \beta_0 + \beta_1 Distance_{dt} + \beta_2 \ln Trade_{sdt} + \beta_3 FinOpen_{st} + \beta_4 Yield_\\ & Spread_{dst} + \beta_5 ExpER_App(1)_{dst} + \beta_6 Yield_Volatility_{dt} + \beta_7 BAS_{dt} + \beta_8 MCap_GDP_{dt} + \varepsilon_{sdt} \end{split}$$

For the analysis, annual data on cross-border holdings of long-term debt securities was obtained from the *Coordinated Portfolio Investment Survey* (CPIS) published by the International Monetary Fund (IMF).^b In constructing source-destination pairs for holdings of long-term debt securities, the source and destination economies include Hong Kong, China; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; Singapore; and Thailand.

Table B1 shows the determinants of intraregional, crossborder, long-term bond holdings in Asia. The results show that bilateral asset holdings are significantly affected by the return on assets, market liquidity and volatility, various market transaction and information costs, and crossmarket relationships.

Increasing overall returns remains the primary motivation of Asian investors. Thus, the return on investment is an important factor in an investor's decision to hold foreign assets, as indicated by the significant positive relationship between yield spreads and cross-border, long-term bond holdings. When currency returns are considered, an expected appreciation of the destination country's currency would result in an exchange for more source country LCY, thereby making cross-border investments attractive, as reflected by the positive coefficient of $ExpER_App(1)_{dst}$. On average, investor holdings of foreign debt assets respond positively to two components of portfolio returns: (i) the return on assets in the currency of the destination

Table B1: Determinants of Cross-Border Long-Term
Bond Holdings in Asia, 2001–2009

	•	
Variables	Coefficient	SE
Constant	1.083***	0.660
Technological distance	0.425**	0.197
Trade openness	0.888*	0.170
Financial openness	0.682*	0.114
Yield spread	0.125*	0.030
Expected currency appreciation	0.054*	0.015
Yield volatility	(0.513)*	0.204
Bid-ask spread	(0.009)*	0.004
Stock market cap-to-GDP ratio	0.271**	0.140
	F-Statistics:	14.195
	R-squared:	0.330

- () = negative, GDP = gross domestic product, SE = standard error.
- 1. Cross-sections included: 51.
- 2. Total panel (unbalanced) observations: 240.
- 3. * denotes significance at 1%, ** denotes significance at 5%, and *** denotes significance at 10% confidence level.

Source: AsianBondsOnline.

country relative to the source country, and (ii) the return stemming from the exchange rate gains when converted to the currency of the source country.

The importance of bond market liquidity and stability is evident for Asian investors. The significant coefficient of BAS_{dt} highlights the importance of a liquid bond market in encouraging portfolio investments. The negative coefficient of $Yield_Volatility_{dt}$ shows that foreign investor sentiment is dampened by a high degree of return volatility.

Financial openness promotes an outward investment perspective and encourages bilateral financial linkages. The limited ability to freely move capital and the existence of trading barriers exacerbate the dearth of intraregional investment since most Asian financial markets are still in the developmental stage.

Trade among Asian countries plays a significant role in fostering financial linkages. Trade openness is associated with increased demand for external finances, thereby encouraging greater financial flows between the partners, as evident in the positive coefficient of *Trade_{ctt}*.

The size of the destination country's stock market has also been shown to encourage cross-border bond holdings, suggesting that investor interest in exploring other markets is enhanced by the existence of relatively large financial markets.

The results of this study justify further support for national and regional initiatives that focus on the development of local and regional financial markets to encourage Asians to invest in each other's markets instead of outside the region. Thus, the creation of deep and liquid Asian financial markets can stimulate greater financial flows within the region.

 $^{^{}a}$ FI_{ut} is the cross-border holding of the source country s of long-term debt securities issued by the destination country d at time t. $Distance_{dt}$ is a technological measure of distance, given by the number of telephone lines per person in the destination country at time used t. $Trade_{ut}$ is the sum of export and import between the partner countries at time used t. $FinOpen_{ut}$ is the financial openness index of the source country s at time t computed by Chinn-Ito based on information from the IMF Annual Report on Exchange Arrangements and Exchange Restrictions. Tield $Spread_{stt}$ is the difference between 5-year LCY bond yields in the destination and source country. ExpER, $App(1)_{dt}$ is the expected 1-year appreciation of the destination country's currency relative to the source country's currency. Tield Tield

^b Long-term debt securities have an original term to maturity of more than 1 year and include instruments such as bonds, debentures, and notes.

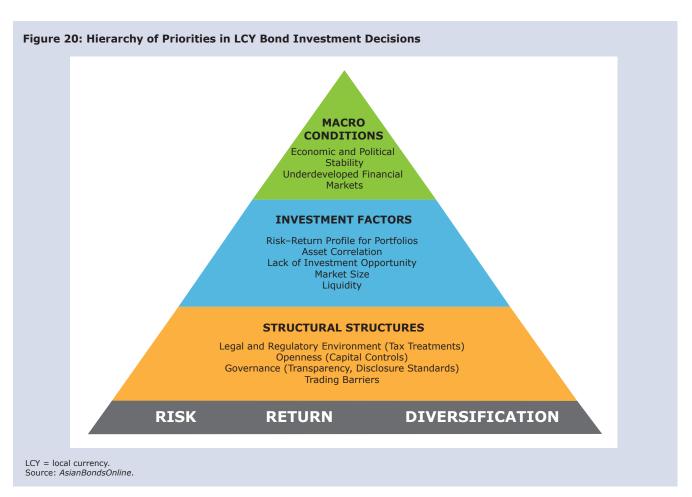
Investing in Regional Markets: An Investor Survey

To learn more about intraregional bias—a preference for Asian bonds outside of an investor's home country over US or EU bonds—a survey of Asian investors was conducted by *AsianBondsOnline*. The investor survey was designed to ascertain how Asian investors prioritize various factor-considerations affecting their offshore bond investment decisions.

In modeling the decision-making process of Asian investors, the analytic hierarchy process (AHP) representation was utilized. The AHP is a structured technique for organizing and analyzing complex decisions. Based on mathematics and psychology, it was developed by Thomas L. Saaty in the 1970s and has been extensively studied and refined since then.

Figure 20 shows the hierarchy map of the decision problem. The general objective is to gain insight on the motivations and priorities in the decision to invest in the LCY bonds of foreign countries. Investors pursue a top-down decision-making approach by initially considering the macro perspective before reviewing the detailed aspects of each macro criterion, and eventually synthesizing this information based on the underlying motives of the decision-making process. The next considerations relate to investment factors, and finally, structural issues. At the same time, all priorities are related to the three underlying motives—risk, return, and diversification.

A total of 78 responses were collected from participants in the following economies: (i) PRC; (ii) Hong Kong, China; (iii) India; (iv) Indonesia; (v) Japan; (vi) Republic of Korea; (vii) Malaysia; (viii) Philippines; (ix) Singapore; and



(x) Thailand.⁸ In terms of geographic distribution, the largest number of responses came from Japan with 22%, followed by the Republic of Korea and Singapore with 13% each (Figure 21). Of the total sample, 77% of respondents came from investment grade sovereigns, while subinvestment grade sovereigns accounted for 23%. By investor type, asset management companies and funds comprised the majority of the sample with 63% of the total (Figure 22).

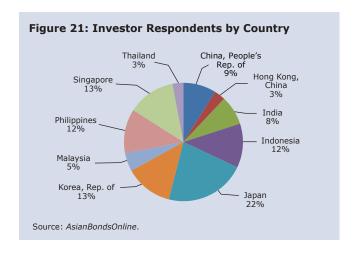
The survey, which comprised pair-wise questions, sought to identify and rank the considerations and primary motives of Asian investors when making intraregional investments. The responses were processed by Expert's Choice, decision-support software that relies on AHP methodology to determine the factors, motivation, and consistency of choices.

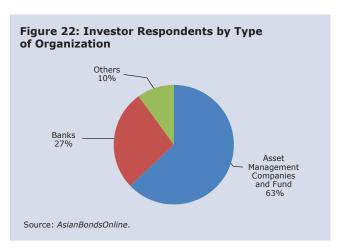
Responses were also segregated into categories such as high-yield versus conservative investors; responses from countries with investment grade sovereign ratings were classified as conservative or low-yield investors, while investors from countries with below investment grade ratings were classified as high-yield investors. Therefore, investors from Indonesia and the Philippines comprised the high-yield segment of the sample.9 All others were considered to be conservative or high-grade. Participants were also classified as being employed by either a bank or a fund. Those participants employed by banks generally managed the treasury assets of a bank. Participants employed by a fund were tasked with managing the portfolios of either institutional or retail investors.

Survey Results

Underlying Motivations

Increasing portfolio returns was found to be the primary motivation for making an intraregional





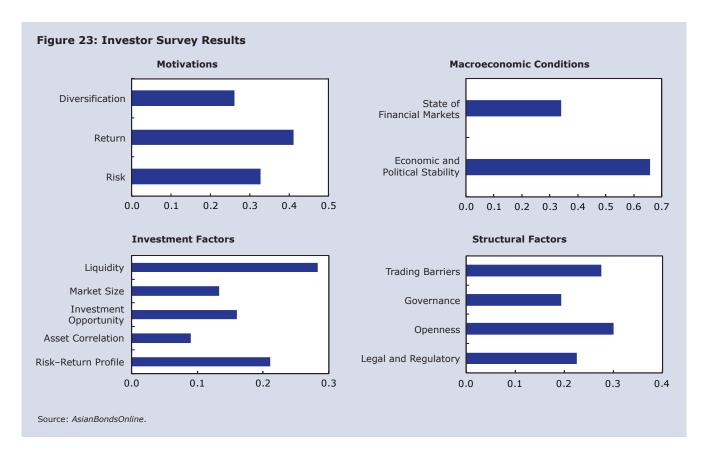
investment. Minimizing portfolio risk was a close second. Diversification—despite being important in reducing correlation among items in a portfolio basket—was found to be the least important motivational factor for intraregional investment. This was likely due to the fact that investors in the region believe that bond returns in ASEAN countries are highly correlated.

Macroeconomic Conditions

Investors look for economic and political stability in a country they are considering investing in before they consider the state of its domestic financial markets (Figure 23). Stable economic and political conditions provide greater reassurance of long-term growth and a higher probability that historical trends will persist.

 $^{^{\}rm 8}$ The total assets under management of these investors exceeded US\$5.3 trillion.

⁹ This survey was conducted before Fitch Ratings and Moody's Investors Service assigned investment grade ratings to Indonesia in December and January, respectively.



Investment Factors

Specific investment factors are examined after considering the macroeconomic conditions. High liquidity, or the ease of entering and exiting local markets without adversely affecting prices, is the leading investment factor for intraregional investments. The next most important investment factors, in order of priority, are (i) risk-return profile, (ii) availability of investment opportunity, (iii) market size, and (iv) asset correlation.

Structural Factors

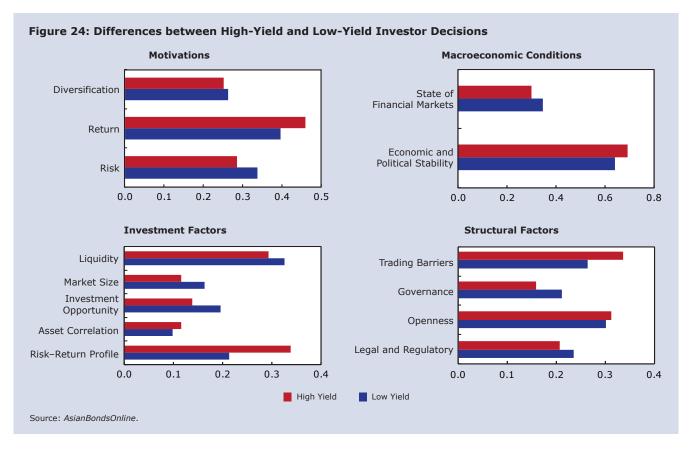
Finally, investors consider structural issues in executing intraregional investments. Economic openness and the presence of trading barriers were given nearly equal importance, followed by a country's regulatory framework and the level of transparency in its governance. The total sample result was influenced by the responses of low-yield or conservative investors, who placed more importance on openness than on trading

barriers, whereas the reverse was true for high-yield investors.

High-Yield versus Low-Yield Investors

High-yield investors prioritize higher absolute returns over reducing risk, especially compared with the rest of the sample (Figure 24). The wider the gap between return and risk, the more reluctant high-yield investors will be to make intraregional investments since their respective domestic yields provide the highest returns in the region.

Meanwhile, the gap between return and risk priority weighting for conservative or low-yield investors is minimal, which is an indication of a more conservative investing approach as minimizing risk is considered to be almost as important as chasing higher returns. This explains the limited investments of low-yield investors in high-yield countries.



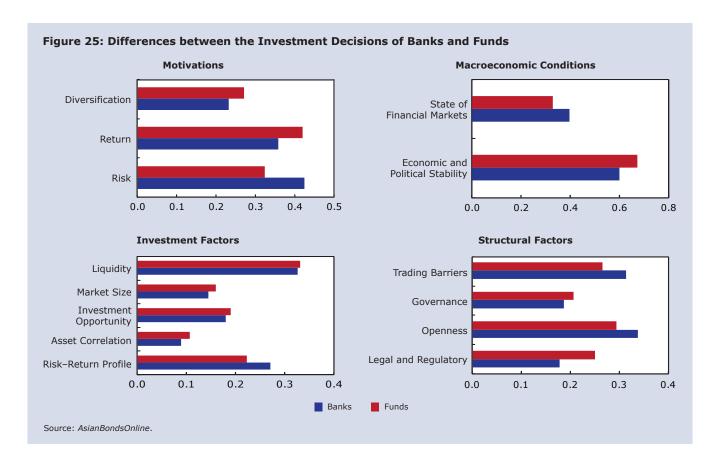
Low-yield or conservative investors, such as Japanese investors, place greater value on liquidity compared with other investors, a tendency that skews the total sample to favor this factor. It is vital for these investors that markets in which they plan to invest have ample liquidity and the necessary depth to execute trade views or portfolio rebalancing with ease and precision. The magnitude of funds these investors can deploy prevents them from participating in small highyield markets without adversely influencing prices. Thus, any added benefit from an intraregional investment in a high-yield market is difficult to achieve. Furthermore, conservative investors believe that liquidity vanishes first in high-yield markets during a crisis, which would prevent them from immediately liquidating their holdings.

Meanwhile, high-yield investors—mostly Indonesians in our sample—attach more importance to the risk-return profile of the investment on a stand-alone and aggregate basis. These investors are willing to allocate a portion of their portfolios

to regional investments if they show higher riskadjusted returns than their respective domestic market. Since these investors operate in high-yield markets already, they are not as interested in investing outside of their home market.

Low-yield investors' bias toward openness can be viewed in the context of their preference for liquidity among investment factors. Since these investors value liquidity, they are on the lookout for any form of explicit or implicit capital controls. Restricting capital flows prevents the execution of trade views and portfolio rebalancing, resulting in lower risk-adjusted returns.

Meanwhile, high-yield investors initially consider the administrative difficulty and cost of trading in a prospective market. These trading barriers include documentary requirements, transaction costs, varying modes of settlement, and ineffective monitoring of investments. Ultimately, these investors can only allocate a small amount of their portfolio for intraregional investment.



Banks versus Funds

Banks prioritize the minimization of risk exposure over maximizing returns (Figure 25). On the other hand, funds favor higher returns over minimizing risk exposure when undertaking regional or overseas investments. This difference highlights the more conservative investment stance of banks compared with fund management companies.

Conclusion

Increasing overall returns remains the primary motivation of Asian investors. However, risk minimization is another factor that is closely considered. This suggests general cautiousness among participants when considering intraregional investment. The enormous weight placed on economic and political stability also provides a partial explanation of the high degree of home bias among Asian investors. The emphasis on stability in macro conditions is primarily a

function of familiarity with and knowledge of domestic situations.

Prioritizing liquidity, openness, and trading barriers only exacerbates the reluctance of investors to pursue intraregional investment as most emerging Asian financial markets are still in a developmental stage. Finally, intraregional investments are hampered by restrictions on capital mobility, whether due to existing regulatory restrictions or to limited depth and breadth in market liquidity. Survey participants also highlighted regulatory hurdles that exist in their respective domestic jurisdictions as factors inhibiting intraregional investments.

This study shows that the direction of cross-border financial flows is determined by key financial market characteristics such as market liquidity, the risk-return profile of the asset and currency, and financial openness. Looking at the decision-making

process of Asian investors, policymakers would be prudent to focus on the importance investors give to macroeconomic and political stability, market liquidity, openness, and trading barriers.

The results of this study have important implications for financial and monetary cooperation in Asia. Along with investor indifference between regional and global markets in the aftermath of the

2007–2009 global financial crisis, the results justify providing further support to initiatives that focus on the development of local capital markets to encourage Asians to pursue intraregional investments. The creation of deep and liquid markets and the lifting of cross-border barriers in Asia can stimulate greater financial integration and put the region's vast savings to greater long-term productive uses.

Market Summaries

People's Republic of China—Update

Yield Movements

The People's Republic of China's (PRC) government bond yield curve shifted upward between the beginning of 2011 and end-September 2011, particularly at the short-end of the curve, due to rising inflation (Figure 1). On tenors of 2 years or less, the yield curve rose an average of 29 basis points (bps). However, from end-September to end-December, yields fell as inflation tapered off toward the end of the year. In addition, the People's Bank of China (PBOC) began easing monetary policy. In October, the PBOC temporarily suspended sales of 3-year central bank bonds. The PBOC also slashed the reserve requirement ratio by 50 bps for the first time in 3 years in December. Thus, from end-September to end-December, yields declined the most at the short-end and belly of the curve, falling between 67 bps and 98 bps on tenors of 5 years or less. For tenors longer than 5 years, yields fell 49 bps-55 bps.

The market continues to keep a close watch on monetary policy action and economic data. The PRC's gross domestic product (GDP) growth fell to 8.9% in 4Q11 from 9.1% in 3Q11, while consumer price inflation continued to drop in 4Q11: from 5.5% year-on-year (y-o-y) in October to 4.2% in November and 4.1% in December. There was a brief spike in inflation in January due to the Lunar New Year as inflation hit 4.5% y-o-y. But inflation has come down again with February registering a 3.2% y-o-y rise in consumer prices and March registering a 3.6% rise.

Markets were surprised, when the PBOC left the reserve requirement ratio unchanged before the start of the Lunar New Year in January. Monetary authorities remain concerned about underlying inflationary pressures, and also have yet to ease

Figure 1: People's Republic of China's Benchmark Yield Curve—LCY Government Bonds

Yield (%)
4.3
3.8
3.3
2.8
2.3
0 1 2 3 4 5 6 7 8 9 10 11
Time to maturity (years)
15-Mar-12 31-Dec-11 30-Sep-11 31-Dec-10

LCY = local currency.
Source: Bloomberg LP.

any of their policy rates. Thus, yields rose between the beginning of the year and 15 March but rose more at the short-end than at the long-end of the curve, resulting in a flatter yield curve.

The yield curve rose 9 bps-25 bps on tenors of 1 year or less while yields rose 8 bps-12 bps on tenors longer than 5 years. The yield spread between the 2- and 10-year rate remained unchanged at 58 bps on 15 March from its end-December levels.

New loans disbursed in January totaled CNY738.1 billion, while new loans disbursed in February were lower at CNY710.7 billion.

In response to emerging economic data, the PBOC reduced the reserve requirement ratio of banks by 15 bps on 18 February. On 21 March, the PBOC expanded its differentiated reserve requirement scheme for Agricultural Bank of China. The move effectively reduced the reserve requirement ratio for 565 banks by 200 bps.

Table 1: Size and Composition of the LCY Bond Market in the People's Republic of China

				Amount (billion)	(billion)						Grow	Growth Rates (%)	(%)		
	Sep-11	11	Oct-11	11	Nov-11	11.	Dec-11	11	Sep-11	117	Oct-11	Nov-11		Dec-11	
	CNY US\$	\$SN	CNY	\$SN	CNY	\$SN	CNY	\$SN	y-0-y	b-o-b	m-o-m		y-0-y	b-o-b	m-o-m
Total	20,720 3,247	3,247	20,845	3,238	21,011	3,294	21,354	3,392	3.5	0.5	9.0	0.8	5.9	3.1	1.6
Government	15,788	15,788 2,474	15,770	2,450	15,771	2,473	15,991	2,540	(0.7)	0.1	(0.1)	0.01	0.5	1.3	1.4
Treasury Bonds	7,276	7,276 1,140	7,323	1,138	7,326	1,149	7,384	1,173	13.7	4.8	9.0	0.04	10.8	1.5	0.8
Central Bank Bonds	2,116	2,116 332	2,016	313	2,015	316	2,129	338	(52.4)	(24.0)		(0.05)	(47.9)	9.0	5.7
Policy Bank Bonds	968'9	6,396 1,002	6,431	666	6,430	1,008	6,478	1,029	26.3	5.8	0.5	(0.01)	25.5	1.3	0.7
Corporate	4,932	773	5,074	788	5,239	821	5,363	852	20.0	1.8		3.3	26.0	8.7	2.4
Policy Bank Bonds															
China Development Bank	4,455	869	4,474	704	4,455	869	4,443	902	21.6	4.0	0.4	(0.4)	20.7	(0.3)	(0.3)
Export-Import Bank of China	780	122	795	125	811	127	833	132	53.2	14.0	1.9	2.0	50.7	6.9	2.7
Agricultural Devt. Bank of China 1,162	1,162	182	1,162	183	1,164	182	1,201	191	30.2	7.9	0.04	0.2	29.6	3.4	3.2

LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.

1 Opportunity of mains data from mational common

1. Calculated using data from national sources.

Treasury bonds include savings bonds and local government bonds
 Bloomberg LP end-of-period LCY-US\$ rate is used.

Bloomberg LP end-of-period LCY-US\$ rate is used.
Growth rates are calculated from LCY base and do not include currency surce: ChinaBond and Bloombera LP.

effects

Weaker external demand from advanced economies has also pressured the PBOC into taking policy actions. Export growth slowed in 4Q11 before turning negative in the first month of the new year, with y-o-y growth in exports in October, November, December, and January at 15.9%, 13.8%, 13.4%, and -0.5%, respectively. However, February exports posted a recovery, growing 18.4% y-o-y. Foreign direct investment (FDI) in the PRC also posted negative y-o-y growth rates in November, December, January, and February, declining most recently by 0.9% in February.

Size and Composition

The amount of outstanding local currency (LCY) bonds in the PRC market reached CNY21.4 trillion (US\$3.4 trillion) at end-2011, representing a y-o-y increase of 5.9% and a quarter-on-quarter (q-o-q) rise of 3.1% (Table 1).

LCY government bonds outstanding grew 0.5% y-o-y and 1.3% q-o-q in 4Q11, while corporate bonds rose 26.0% y-o-y and 8.7% q-o-q. In the government sector, marginal y-o-y growth was due to a drop in central bank bonds outstanding, which fell 47.9% y-o-y and only rose 0.6% q-o-q. In contrast, treasury bonds grew 10.8% y-o-y and 1.5% q-o-q, while policy bank bonds grew 25.5% y-o-y and 1.3% q-o-q.

Corporate Bonds. Overall, corporate bonds outstanding grew 26.0% y-o-y in 4Q11. Growth was driven mainly by an increase in outstanding commercial bank bonds and medium-term notes (MTNs). Commercial bank bonds grew 51.6% y-o-y in 4Q11, due largely to issuances of subordinated notes as banks sought to bolster their capital base in advance of the PRC's implementation in 2012 of stricter capital rules under Basel III.

Local corporate bonds grew 37.3% and MTNs grew 45.9% y-o-y in 4Q11, while state-owned corporate bonds grew only 1.7% (Table 2). Commercial paper outstanding fell 23.1% y-o-y and asset- and mortgage-backed securities outstanding fell 47.7% due to a lack of issuance in the last quarter of the year.

Table 2: Corporate Bonds Outstanding in Key Sectors

			Am	ount				Gı	rowth R	ates (%	b)	
			(CNY	billion)					q-o-q			у-о-у
	3Q10	4Q10	1Q11	2Q11	3Q11	4Q11	4Q10	1Q11	2Q11	3Q11	4Q11	4Q11
Commercial Bank Bonds	609.0	609.5	625.0	758.8	755.2	924.3	0.1	2.5	21.4	(0.5)	22.4	51.6
State-Owned Corporate Bonds	842.6	879.6	879.6	877.1	876.4	894.4	4.4	-	(0.3)	(0.1)	2.1	1.7
Local Corporate Bonds	501.3	569.4	653.1	714.1	727.3	782.1	13.6	14.7	9.3	1.8	7.5	37.3
Commercial Paper	670.6	653.0	683.3	687.1	616.5	502.4	(2.6)	4.6	0.6	(10.3)	(18.5)	(23.1)
Asset- and Mortgage-Backed Securities	21.9	18.2	10.8	10.1	9.9	9.5	(16.8)	(41.0)	(6.1)	(2.3)	(3.5)	(47.7)
Medium-Term Notes	1,289.5	1,353.6	1,532.5	1,621.4	1,768.6	1,974.3	5.0	13.2	5.8	9.1	11.6	45.9

-= not available, q-o-q = quarter-on-quarter, y-o-y = year-on-year. Source: *ChinaBond*.

MTNs continued to have higher growth rates than other types of corporate bonds due to regulatory arbitrage, given that the facility benefits from an ease of issuance and a quick approval processes. In fact, MTNs have consistently enjoyed double digit q-o-q growth rates since 3Q08.

On a q-o-q basis, most categories of outstanding corporate bonds grew in 4Q11, with the exception of commercial paper and asset- and mortgage-backed securities. Local corporate bonds grew 7.5%, MTNs grew 11.6%, and state-owned enterprise bonds grew 2.1%.

Issuance of corporate bonds was up in 4Q11 from 3Q11 levels (Figure 2), with the exception of commercial paper and asset- and mortgage-back securities, as there was no new issuance of either of these types of corporate bonds in 4Q11. Commercial bank bond issuance was up dramatically from 3Q11 due to banks' capital-raising efforts in light of expected increases in capital requirements in 2012 resulting from Basel III.

At end-December, the top 30 corporate bond issuers accounted for CNY3.04 trillion, or about 57%, of total corporate bonds outstanding **(Table 3)**. Among the top 30 corporate issuers, the 10 largest issuers accounted for CNY2.1 trillion, or 69%, of the bonds outstanding of the top 30 issuers.

State-owned companies (defined as majority-owned by the government), in particular, dominate

Figure 2: Corporate Bond Issuance in Key Sectors, 3Q10-4Q11 CNY billion 300 250 200 150 100 50 3Q10 4Q10 1Q11 2Q11 3Q11 4Q11 Commercial Bank Bonds State-Owned Corporate Bonds Local Corporate Bonds Commercial Paper Asset- and Mortgage-Backed Securities Medium-Term Notes Source: ChinaBond.

the corporate bond market in the PRC. Among the top 30 corporate bond issuers, 25 are stateowned, with a total of CNY2.77 trillion worth of bonds outstanding at end-December.

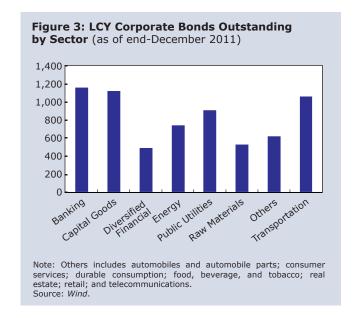
The top issuers are from the infrastructure, energy, and banking sectors (**Figure 3**). This is consistent with the fact that all of these industries are capital intensive with extensive financing needs.

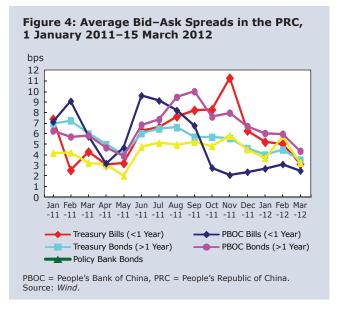
Bid-Ask Spreads. Bid-ask spreads continued to fall for most government bond categories from

Table 3: Top 30 Issuers of LCY Corporate Bonds in the People's Republic of China (as of end-December 2011)

Left		Outstandir	ng Amount	- · ·			
2. State Grid Corporation of China 2. Industrial and Commercial Bank of China 2. Industrial and Commercial Bank of China 4. Bank of China 1. 196.9 3. 3. 8 Ves No Yes Banking 4. Bank of China 1. 196.9 3. 3. 8 Ves No Yes Banking 5. China National Petroleum 1. 191.0 2. 19.33 4. Exp 6. China Construction Bank 1. 160.0 2. 5. 7 Ves No Yes Banking 7. China Petroleum & Chemical 1. 131.5 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Issuers			State- Owned	Privately- Owned	Listed Company	Type of Industry
3. Industrial and Commercial Bank of China 210.0 32.91 Yes No Yes Banking 4. Bank of China 196.9 30.86 Yes No Yes Banking 5. China National Petroleum 191.0 29.93 Yes No Yes Banking 6. China Construction Bank 160.0 25.07 Yes No Yes Banking 7. China Petroleum & Chemical 131.5 20.61 Yes No Yes Energy 8. Central Huijin Investment 109.0 17.08 Yes No No Diversified Financial 9. Agricultural Bank of China 100.0 15.67 Yes No Yes Banking 11. Industrial Bank 84.1 13.18 No Yes Banking 12. Bank of Communications 76.0 11.91 No Yes Banking 13. China Guodian 74.6 11.69 Yes No No Public Utilities 14. China United Network Communications 53.0 8.31	1. Ministry of Railways	617.0	96.69	Yes	No	No	Transportation
4. Bank of China 196.9 30.86 Yes No Yes Banking 5. China National Petroleum 191.0 29.93 Yes No No Energy 6. China Construction Bank 160.0 25.07 Yes No Yes Banking 7. China Petroleum & Chemical 131.5 20.61 Yes No Yes Banking 8. Central Huijin Investment 109.0 17.08 Yes No No Diversified Financial 9. Agricultural Bank of China 100.0 15.67 Yes No Yes Banking 10. Petrochina 97.5 15.28 Yes No Yes Banking 11. Industrial Bank 84.1 13.18 No Yes Yes Banking 12. Bank of Communications 76.0 11.91 No Yes Yes Banking 13. China Guodian 74.6 11.69 Yes No No Public Utilities 14. China United Network Communications 53.0 8.31 Yes No No Public Utilities 15. State-Owned Capital Operation and Management Center of Beijing 17. China Three Gorges Project 49.5 7.76 Yes No No Diversified Financial 18. Shenhua Group 44.5 6.97 Yes No No Diversified Financial 19. Agricultural Bank 10. Yes Telecommunications 10. Public Utilities 10. State-Owned Capital Operation and Management Center of Beijing 10. Citic Group 44.5 6.97 Yes No No Diversified Financial 19. Agricultural Bank 10. Yes No No Diversified Financial 10. Thina Three Gorges Project 49.5 7.76 Yes No No Diversified Financial 10. Citic Group 44.5 6.97 Yes No No Diversified Financial 10. Citic Group 40.0 6.27 Yes No No Public Utilities 10. China Power Investment 40.1 6.28 Yes No No Raw Materials 21. China Huaneng Group 41.2 6.46 Yes No No Public Utilities 10. Shangala Pudong Development Bank 37.2 38.3 No Yes Banking 22. China Minsheng Bank 38.3 6.00 No Yes Banking 23. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 13. Shangala Pudong Development Bank 37.2 5.83 No Yes Banking 10. Public Utilities 10. Shangala Pudong Development Bank 37.2 38.83 No Yes Banking 10. Yes Banking 10. Public Utilities 10. Shangala Pudong Development Bank 37.2 5.83 No Yes Banking 10. No Public Utilities	2. State Grid Corporation of China	294.5	46.15	Yes	No	No	Public Utilities
5. China National Petroleum 191.0 29.93 Yes No No Energy 6. China Construction Bank 160.0 25.07 Yes No Yes Banking 7. China Petroleum & Chemical 131.5 20.61 Yes No Yes Energy 8. Central Huijin Investment 100.0 15.67 Yes No No Diversified Financial 9. Agricultural Bank of China 100.0 15.67 Yes No Yes Banking 10. Petrochina 97.5 15.28 Yes No Yes Banking 11. Industrial Bank 84.1 13.18 No Yes Yes Banking 12. Bank of Communications 76.0 11.91 No Yes Pes Banking 13. China Guodian 74.6 11.69 Yes No No Public Utilities 14. China United Network Communications 53.0 8.31 Yes No No Public Utilities 15. China Southern Power Grid 51	3. Industrial and Commercial Bank of China	210.0	32.91	Yes	No	Yes	Banking
6. China Construction Bank 160.0 25.07 Yes No Yes Banking 7. China Petroleum & Chemical 131,5 20.61 Yes No Yes Energy 8. Central Hujip Investment 109.0 17.08 Yes No No Diversified Financial 9. Agricultural Bank of China 100.0 15.67 Yes No Yes Banking 10. Petrochina 100.0 15.67 Yes No Yes Banking 11. Industrial Bank of China 100.0 15.67 Yes No Yes Banking 11. Industrial Bank 11. 13.18 No Yes Yes Banking 12. Bank of Communications 13. China Guodian 13. China Guodian 14. China United Network Communications 15. China Southern Power Grid 15. China Southern Power Grid 15. China Southern Power Grid 16. State-Owned Capital Operation and Management Center of Beijing 17. China Three Gorges Project 18. Shenhua Group 19. Citic Group 14.5 16. Shenhua Group 14.5 16. Shen Power Investment 14. China Huaneng Group 14.2 16. China Huaneng Group 16. China Huaneng Group 17. China Huaneng Group 18. Yes No No Public Utilities 18. Shanhiang Bank 19. Shanhiang Bank 19. Shanhiang Bank 19. Shanhiang Bank 19. Shanh	4. Bank of China	196.9	30.86	Yes	No	Yes	Banking
7. China Petroleum & Chemical 131.5 20.61 Yes No Yes Energy 8. Central Huijin Investment 109.0 17.08 Yes No No Diversified Financial 9. Agricultural Bank of China 100.0 15.67 Yes No Yes Banking 10. Petrochina 97.5 15.28 Yes No Yes Energy 11. Industrial Bank 84.1 13.18 No Yes Yes Banking 12. Bank of Communications 76.0 11.91 No Yes Banking 13. China Guodian 74.6 11.69 Yes No No Public Utilities 14. China United Network Communications 53.0 8.31 Yes No Yes Telecommunications 15. China Southern Power Grid 51.0 7.99 Yes No No Public Utilities 16. State-Owned Capital Operation and Management Center of Beijing 50.0 7.84 Yes No No Public Utilities 16. State-Ow	5. China National Petroleum	191.0	29.93	Yes	No	No	Energy
8. Central Huijin Investment 109.0 17.08 Yes No No Diversified Financial 9. Agricultural Bank of China 100.0 15.67 Yes No Yes Banking 10. Petrochina 97.5 15.28 Yes No Yes Energy 11. Industrial Bank 84.1 13.18 No Yes Yes Banking 12. Bank of Communications 76.0 11.91 No Yes Yes Banking 13. China Guodian 74.6 11.69 Yes No No Public Utilities 14. China United Network Communications 53.0 8.31 Yes No Yes Telecommunications 15. China Southern Power Grid 51.0 7.99 Yes No No Public Utilities 16. State-Owned Capital Operation and Management Center of Beijing 17. China Three Gorges Project 49.5 7.76 Yes No No Public Utilities 18. Shenhua Group 44.5 6.97 Yes No No Diversified Financial 20. Shougang Group 44.5 6.97 Yes No No Diversified Financial 21. China Huaneng Group 41.2 6.46 Yes No No Public Utilities 22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Telecom 40.0 6.27 Yes No No Public Utilities 24. China Minsheng Bank 38.3 6.00 No Yes Yes Banking 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 5.52 Yes No No Ro Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Raw Materials 30. China Gverantos Group 44.86 Yes No No Public Utilities 31.0 A.86 Yes No No Public Utilities 34. Beijing Infrastructure Investment 32.0 5.01 Yes No No Public Utilities 35. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 36. Metallurgical Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking 30. China Merchants Band 30.0 4.70 No Yes Yes Banking 30	6. China Construction Bank	160.0	25.07	Yes	No	Yes	Banking
9. Agricultural Bank of China 10.0. 15.67 Yes No Yes Banking 10. Petrochina 97.5 15.28 Yes No Yes Energy 11. Industrial Bank 84.1 13.18 No Yes Yes Banking 12. Bank of Communications 76.0 11.91 No Yes Yes Banking 13. China Guodian 74.6 11.69 Yes No No Public Utilities 14. China United Network Communications 53.0 8.31 Yes No Yes Telecommunications 15. China Southern Power Grid 51.0 7.99 Yes No No Public Utilities 16. State-Owned Capital Operation and Management Center of Beijing 17. China Three Gorges Project 49.5 7.76 Yes No No Diversified Financial 18. Shenhua Group 48.4 7.58 Yes No No Public Utilities 19. Citic Group 44.5 6.97 Yes No No Diversified Financial 20. Shougang Group 42.0 6.58 Yes No No Diversified Financial 21. China Huaneng Group 41.2 6.46 Yes No No Raw Materials 22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Fower Investment 40.1 6.28 Yes No No Public Utilities 24. China Power Investment 40.1 6.28 Yes No No Public Utilities 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 5.52 Yes No Yes Capital Goods 27. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 30. China Guangdong Nuclear Power Holding 31.0 4.86 Yes No No Public Utilities 31.0 Ala6 Yes No No Public Utilities 32. Aluminum Corporation of China 31.0 4.86 Yes No No Public Utilities 33. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 34. Beijing Infrastructure Investment 32.0 5.01 Yes No No Public Utilities 35. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 36. Metallurgical Corporation of China 31.0 4.86 Yes No No Raw Materials 37.0 China Merchants Bank 37.0 4.86 Yes No No Raw Materials 38.0 China Merchants Bank 37.0 Yes Pes Banking	7. China Petroleum & Chemical	131.5	20.61	Yes	No	Yes	Energy
10. Petrochina 97.5 15.28 Yes No Yes Energy 11. Industrial Bank 84.1 13.18 No Yes Yes Banking 12. Bank of Communications 76.0 11.91 No Yes Yes Banking 13. China Guodian 74.6 11.69 Yes No No Public Utilities 14. China United Network Communications 53.0 8.31 Yes No Yes Telecommunications 15. China Southern Power Grid 51.0 7.99 Yes No No Public Utilities 16. State-Owned Capital Operation and Management Center of Beijing 50.0 7.84 Yes No No Diversified Financial 17. China Three Gorges Project 49.5 7.76 Yes No No Public Utilities 18. Shenhua Group 48.4 7.58 Yes No No Energy 19. Citic Group 44.5 6.97 Yes No No Diversified Financial 20. Shougang Group 42.0 6.58 Yes No No Raw Materials 21. China Huaneng Group 41.2 6.46 Yes No No Public Utilities 22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Telecom 40.0 6.27 Yes No No Public Utilities 24. China Minsheng Bank 38.3 6.00 No Yes Telecommunications 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 5.52 Yes No No Raw Materials 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Public Utilities 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking 40. China Minsheng Bank 30.0 4.70 No Yes Yes Banking 40. China Minsheng Bank 30.0 4.70 No Yes Yes Banking 40. China Minsheng Bank 30.0 4.70 No Yes Yes Banking 40. China Minsheng Bank 30.0 4.70 No Yes Yes Banking 40. China Minsheng Bank 30.0 4.70 No Yes Yes Banking	8. Central Huijin Investment	109.0	17.08	Yes	No	No	Diversified Financial
11. Industrial Bank	9. Agricultural Bank of China	100.0	15.67	Yes	No	Yes	Banking
12. Bank of Communications 76.0 11.91 No Yes Yes Banking 13. China Guodian 74.6 11.69 Yes No No Public Utilities 14. China United Network Communications 53.0 8.31 Yes No Yes Telecommunications 15. China Southern Power Grid 51.0 7.99 Yes No No Public Utilities 16. State-Owned Capital Operation and Management Center of Beijing 17. China Three Gorges Project 49.5 7.76 Yes No No Public Utilities 18. Shenhua Group 48.4 7.58 Yes No No Diversified Financial 19. Citic Group 44.5 6.97 Yes No No Diversified Financial 20. Shougang Group 42.0 6.58 Yes No No Raw Materials 21. China Huaneng Group 41.2 6.46 Yes No No Public Utilities 22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Telecom 40.0 6.27 Yes No No Public Utilities 24. China Minsheng Bank 38.3 6.00 No Yes Yes Banking 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 5.52 Yes No No Raw Materials 27. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds 5,362.9 840.42	10. Petrochina	97.5	15.28	Yes	No	Yes	Energy
13. China Guodian 74.6 11.69 Yes No No Public Utilities 14. China United Network Communications 53.0 8.31 Yes No Yes Telecommunications 15. China Southern Power Grid 51.0 7.99 Yes No No Public Utilities 16. State-Owned Capital Operation and Management Center of Beijing 17. China Three Gorges Project 49.5 7.76 Yes No No Public Utilities 18. Shenhua Group 48.4 7.58 Yes No No Public Utilities 19. Citic Group 44.5 6.97 Yes No No Diversified Financial 48.4 7.58 Yes No No Diversified Financial 48.4 7.58 Yes No No Diversified Financial 48.4 7.58 Yes No No Public Utilities 20. Shougang Group 42.0 6.58 Yes No No Raw Materials 21. China Huaneng Group 41.2 6.46 Yes No No Public Utilities 22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Telecom 40.0 6.27 Yes No No Public Utilities 24. China Minsheng Bank 38.3 6.00 No Yes Yes Banking 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 7. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Ro Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Public Utilities 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12	11. Industrial Bank	84.1	13.18	No	Yes	Yes	Banking
14. China United Network Communications 15. China Southern Power Grid 16. State-Owned Capital Operation and Management Center of Beijing 17. China Three Gorges Project 18. Shenhua Group 19. Citic Group 10. No No No No No No Public Utilities 10. Citic Group 19. Citic Gro	12. Bank of Communications	76.0	11.91	No	Yes	Yes	Banking
15. China Southern Power Grid 51.0 7.99 Yes No No Public Utilities 16. State-Owned Capital Operation and Management Center of Beijing 7. China Three Gorges Project 49.5 7.76 Yes No No Public Utilities 18. Shenhua Group 48.4 7.58 Yes No No Energy 19. Citic Group 44.5 6.97 Yes No No Diversified Financial 20. Shougang Group 42.0 6.58 Yes No No Diversified Financial 20. Shougang Group 41.2 6.697 Yes No No Raw Materials 21. China Huaneng Group 41.2 6.46 Yes No No Public Utilities 22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Telecom 40.0 6.27 Yes No No Public Utilities 24. China Minsheng Bank 38.3 6.00 No Yes Yes Banking 25. Shanghai Pudong Development Bank 37.2 26. Metallurgical Corporation of China 35.2 75.12 Yes No No Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Public Utilities 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds 5,362.9 840.42	13. China Guodian	74.6	11.69	Yes	No	No	Public Utilities
16. State-Owned Capital Operation and Management Center of Beijing 17. China Three Gorges Project 18. Shenhua Group 19. Citic Group 19. No No Public Utilities 10. China Minsheng Group 10. Citic Group 10. No Yes Telecommunications 10. Citic Group 10. No No No No No Raw Materials 10. China Merchants Bank 10. Citic Group 10. No No No No No Raw Materials 10. China Merchants Bank 10. Citic Group 10. Citic Group 10. No No No No Raw Materials 10. China Merchants Bank 10. Citic Group 10. Citic Group 10. Citic Group 10. Citic Group 10. No No No No No No No No N	14. China United Network Communications	53.0	8.31	Yes	No	Yes	Telecommunications
Management Center of Beijing 17. China Three Gorges Project 49.5 7.76 Yes No No Public Utilities 18. Shenhua Group 48.4 7.58 Yes No No Diversified Financial 20. Shougang Group 42.0 6.58 Yes No No Raw Materials 21. China Huaneng Group 41.2 6.46 Yes No No Public Utilities 22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Telecom 40.0 6.27 Yes No No Public Utilities 24. China Minsheng Bank 38.3 6.00 No Yes Telecommunications 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Banking 26. Metallurgical Corporation of China 35.2 7.76 Yes No No No Public Utilities No Yes Banking 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 7.12 7.12 Yes No No Public Utilities No No Public Utilities No No Public Utilities No No Public Utilities No No Raw Materials And And And And And And And An	15. China Southern Power Grid	51.0	7.99	Yes	No	No	Public Utilities
18. Shenhua Group 48.4 7.58 Yes No No Diversified Financial 20. Shougang Group 42.0 6.58 Yes No No Raw Materials 21. China Huaneng Group 41.2 6.46 Yes No No Public Utilities 22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Telecom 40.0 6.27 Yes No Yes Telecommunications 24. China Minsheng Bank 38.3 6.00 No Yes Yes Banking 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 5.52 Yes No No Public Utilities 7.58 No Yes Capital Goods 7. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 8. Beijing Infrastructure Investment 32.0 5.01 Yes No No Capital Goods 9. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds	16. State-Owned Capital Operation and Management Center of Beijing	50.0	7.84	Yes	No	No	Diversified Financial
19. Citic Group 44.5 6.97 Yes No No Diversified Financial 20. Shougang Group 42.0 6.58 Yes No No Raw Materials 21. China Huaneng Group 41.2 6.46 Yes No No Public Utilities 22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Telecom 40.0 6.27 Yes No Yes Telecommunications 24. China Minsheng Bank 38.3 6.00 No Yes Yes Banking 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 5.52 Yes No Yes Capital Goods 27. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Capital Goods 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds 5,362.9 840.42	17. China Three Gorges Project	49.5	7.76	Yes	No	No	Public Utilities
20. Shougang Group 42.0 6.58 Yes No No Public Utilities 21. China Huaneng Group 41.2 6.46 Yes No No Public Utilities 22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Telecom 40.0 6.27 Yes No Yes Telecommunications 24. China Minsheng Bank 38.3 6.00 No Yes Yes Banking 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 5.52 Yes No Yes Capital Goods 27. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Capital Goods 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds	18. Shenhua Group	48.4	7.58	Yes	No	No	Energy
21. China Huaneng Group 41.2 6.46 Yes No No Public Utilities 22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Telecom 40.0 6.27 Yes No Yes Telecommunications 24. China Minsheng Bank 38.3 6.00 No Yes Yes Banking 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 5.52 Yes No Yes Capital Goods 27. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Capital Goods 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12	19. Citic Group	44.5	6.97	Yes	No	No	Diversified Financial
22. China Power Investment 40.1 6.28 Yes No No Public Utilities 23. China Telecom 40.0 6.27 Yes No Yes Telecommunications 24. China Minsheng Bank 38.3 6.00 No Yes Yes Banking 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 5.52 Yes No Yes Capital Goods 27. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Capital Goods 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds 5,362.9 840.42	20. Shougang Group	42.0	6.58	Yes	No	No	Raw Materials
23. China Telecom 40.0 6.27 Yes No Yes Telecommunications 24. China Minsheng Bank 38.3 6.00 No Yes Yes Banking 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 5.52 Yes No Yes Capital Goods 27. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Capital Goods 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12	21. China Huaneng Group	41.2	6.46	Yes	No	No	Public Utilities
24. China Minsheng Bank 25. Shanghai Pudong Development Bank 37.2 5.83 No Yes Yes Banking 26. Metallurgical Corporation of China 35.2 5.52 Yes No Yes Capital Goods 27. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Capital Goods 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12	22. China Power Investment	40.1	6.28	Yes	No	No	Public Utilities
25. Shanghai Pudong Development Bank 26. Metallurgical Corporation of China 35.2 5.52 Yes No Yes Capital Goods 27. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Capital Goods 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds	23. China Telecom	40.0	6.27	Yes	No	Yes	Telecommunications
26. Metallurgical Corporation of China 35.2 5.52 Yes No Yes Capital Goods 27. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Capital Goods 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds 5,362.9 840.42	24. China Minsheng Bank	38.3	6.00	No	Yes	Yes	Banking
27. China Guangdong Nuclear Power Holding 32.7 5.12 Yes No No Public Utilities 28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Capital Goods 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds 5,362.9 840.42	25. Shanghai Pudong Development Bank	37.2	5.83	No	Yes	Yes	Banking
28. Beijing Infrastructure Investment 32.0 5.01 Yes No No Capital Goods 29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds 5,362.9 840.42	26. Metallurgical Corporation of China	35.2	5.52	Yes	No	Yes	Capital Goods
29. Aluminum Corporation of China 31.0 4.86 Yes No No Raw Materials 30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds 5,362.9 840.42	27. China Guangdong Nuclear Power Holding	32.7	5.12	Yes	No	No	Public Utilities
30. China Merchants Bank 30.0 4.70 No Yes Yes Banking Total Top 30 LCY Corporate Issuers 3,038.2 476.12 Total LCY Corporate Bonds 5,362.9 840.42	28. Beijing Infrastructure Investment	32.0	5.01	Yes	No	No	Capital Goods
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Total LCY Corporate Bonds 5,362.9 840.42	30. China Merchants Bank	30.0	4.70	No	Yes	Yes	Banking
·	Total Top 30 LCY Corporate Issuers	3,038.2	476.12				
Top 30 as % of Total LCY Corporate Bonds 56.7% 56.7%	Total LCY Corporate Bonds	5,362.9	840.42				
	Top 30 as % of Total LCY Corporate Bonds	56.7%	56.7%				

LCY = local currency. Source: Bloomberg LP and Wind.





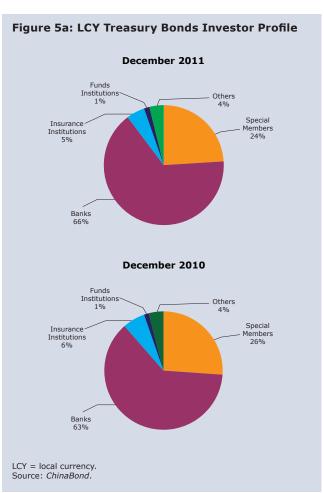
end-December to mid-March (Figure 4). Liquidity for government bonds improved toward end-2011 as the market was expecting the PBOC to ease monetary policy on the back of lower inflation and GDP growth rates.

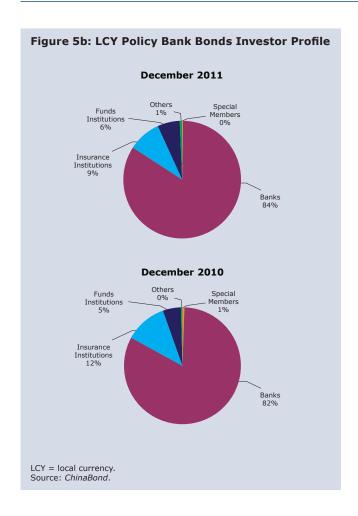
Investor Profile

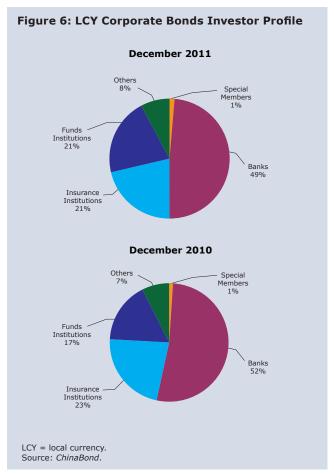
Treasury Bonds. Banks remained the largest category of investors in the PRC's treasury bond market, holding a slightly larger share of these bonds at end-December 2011 (66%) than at end-December 2010 (63%) **(Figure 5a)**. The shares held by special members remained unchanged at end-December. Special members comprise the PBOC, Ministry of Finance, policy banks, China Government Securities Depository Trust and Clearing Co., and China Securities Depository and Clearing Corporation.

Banks are a much more significant holder of policy bank bonds (**Figure 5b**). As of December 2011, banks held 84% of outstanding policy bank bonds, up from 82% in December 2010. Insurance institutions are the next largest holder, holding 9% in December 2011 from 12% in December 2010.

Corporate Bonds. Banks remained the largest holder of corporate bonds in 2011, with a share







that fell slightly to 49% from 52% in end-December 2010 (Figure 6). The shares held by insurance and fund institutions were each 21% at end-December 2011 after standing at 23% and 17%, respectively, at end-December 2010.

Figure 7 presents the investor profile across different bond categories. Banks were the largest holder of policy bank bonds at end-December, with slightly more than 80% of outstanding policy bank bonds. Meanwhile, insurance institutions were the largest holder of commercial bank bonds.

Interest Rate Swaps

The total notional amount traded in the interest rate swap (IRS) market fell 25.7% y-o-y and 33.9% q-o-q in 4Q11 to CNY521.9 billion, on a total of 3,285 transactions (**Table 4**). The overnight SHIBOR became the most popular

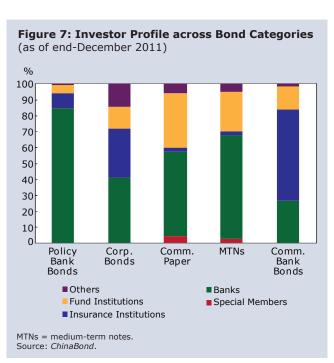


Table 4: Notional Values of the PRC's Interest Rate Swap Market (as of 4Q11)

Interest Rate Swap Benchmarks	Notional Amount (CNY billion)	% of Total Notional Amount	Number of Transactions	Growth	Rate (%)
		4Q11		q-o-q	у-о-у
7-Day Repo Rate	176.5	33.8	1,702	(56.5)	(39.7)
Overnight SHIBOR	255.1	48.9	714	(8.5)	(5.3)
3-Month SHIBOR	88.9	17.0	842	(8.8)	(28.9)
1-Year Term Deposit Rate	1.3	0.2	17	(94.4)	(96.7)
1-Year Lending Rate	0.1	0.02	10	(38.2)	(94.7)
Total	521.9	100.0	3,285	(33.9)	(25.7)

^{- =} not applicable, PRC = People's Republic of China, q-o-q = quarter-on-quarter, repo = repurchase, SHIBOR = Shanghai Interbank Offered Rate, y-o-y = year on year. Source: ChinaMoney, Wind, and AsianBondsOnline.

benchmark in 4Q11, accounting for 48.9% of the total notional amount traded. The 7-day repurchase (repo) rate accounted for 33.8% of the total. These two benchmarks were the most active in 4Q11 because the primary participants in the PRC's onshore IRS market are commercial banks with funding exposure mainly in the form of repo transactions. Therefore, banks desire to use the repo rate as the base rate to hedge their funding.

Policy, Institutional, and Regulatory Developments

PRC Allows CNH to Be Used for Cross-Border Investment

On 14 October, the PRC released two sets of regulations paving the way for CNH funds raised in Hong Kong, China to be used for FDI in the PRC. The Notice on Cross-Border Renminbi Foreign Direct Investment was issued by the Ministry of Commerce and the Renminbi Foreign Direct Investment Settlement Rules were issued by the PBOC.

PRC to Provide Support for Small and Micro-Sized Enterprises

On 14 November, the China Regulatory Banking Commission (CBRC) granted three banks authority to issue special bonds for the purpose of funding small-scale enterprises. On 2 February, Premier Wen Jiabao said that the government would

provide support for these enterprises through a CNY15 billion fund and the extension of preferential tax policies until 2015.

PRC Launches Trial Program for RQFII

On 31 December, the PRC announced the launch of the Renminbi Qualified Foreign Institutional Investor (RQFII) program with an initial quota of CNY10.7 billion. The program will allow CNH funds to be placed in the PRC's domestic securities market. At least 80% of the funds must be placed in fixed-income investments.

PRC Issues Additional QFII Licenses

On 16 January, the China Securities Regulatory Commission (CSRC) announced that it had issued an additional 14 licenses for the Qualified Foreign Institutional Investors (QFII) program in December. The 14 institutions granted QFII licenses include Canada Pension Plan Investment Board; Van Eck Associates Corp.; Hansberger Global Investors; EARNEST Partners; Bank of Thailand; Kuwait Investment Authority; Northern Trust Global Investments; a life insurance company in Taipei, China; Bank of Korea; Ontario Teachers' Pension Plan Board; Korea Investment Corp.; Russell Investments Ireland; Metzler Asset Management; and HI Asset Management Co.

On 20 January, the CSRC announced that seven more licenses had been granted in January. The institutions granted the license include Shinhan BNP Paribas Asset Management, Stichting Pensioenfonds voor Huisartsen, Republic of Korea's National Pension Service, Mercuries Life Insurance, Prudential Financial Securities Investment Trust Enterprise, Principal Global Investors, and Hospital Authority Provident Fund Scheme.

PBOC to Provide Support for First-Home Buyers

On 8 February, the PBOC announced that banks must provide mortgage loans to first-time home buyers. The PBOC also said that it would support efforts to construct affordable housing.

PBOC Reduces Reserve Requirement Ratio

On 18 February, the PBOC reduced the reserve requirement ratio of banks by 50 bps, bringing the ratio to 20.5% for larger financial institutions and 18.5% for small and medium-sized banks.

PBOC Expands Cross-Border Settlement Program

On 2 March, the PBOC announced that it had expanded its cross border settlement program to include all companies that are engaged in foreign trade activities.

CSRC to Develop High-Yield Bond Market

On 6 March, the CSRC announced plans to develop a high-yield LCY bond market that will help provide additional financing to small and medium-sized enterprises (SMEs). According to press reports, the CSRC is working on guidelines for the establishment of the market. The bonds are to be issued on the securities exchanges and will be subject to quotas.

PBOC Expands Differentiated Reserve Requirement for Agricultural Bank Branches

On 18 March, the PBOC expanded its differentiated reserve requirement ratio scheme for Agricultural Bank of China to include an additional 379 branches. The PBOC also announced that the reserve requirement ratio for a total of 565 branches will be reduced by 200 bps in an effort to expand the amount of rural credit available by CNY23 billion.

PRC Widens CNY Trading Band

On 16 April, the PBOC began allowing the renminbi to trade within a wider band. The renminbi subsequently began trading in a range of 1.0% above and below a daily reference exchange rate. Previously, the renminbi could only trade in a band of 0.5% above and below the daily reference rate.

Hong Kong, China—Update

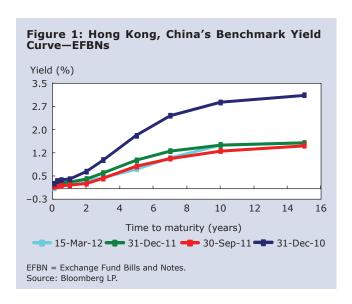
Yield Movements

The yield curve for Hong Kong, China's Exchange Fund Bills and Notes (EFBNs) shifted significantly downward in 2011 (Figure 1). Between end-December 2010 and end-September 2011, the yield curve fell 73 basis points (bps) on average. The drop was greatest at the long-end of the curve, with the 10-year tenor falling 159 bps and the 15-year tenor falling 166 bps. From end-September to end-December, there was a slight shift upward in the yield curve, particularly in the middle- to the long-end of the curve. The 5-year tenor rose 20 bps while the 7-year tenor rose 24 bps. However, the end-December levels were still significantly lower than where the curve was at end-December 2010.

More recently, the yield curve fell for all maturities between end-December and 15 March, except for the 15-year tenor. The 5-year tenor declined the most, falling 28 bps, followed by the 7-year tenor, which fell 23 bps. Yields on the 10-year maturity fell only 2 bps while the 15-year tenor rose by 0.2 bps. For tenors of less than 5 years, yields fell an average of 11 bps. Due to the slightly larger drop in the 2-year rate versus the 10-year rate, the yield spread between the 2- and 10-year rate widened to 118 bps from 112 bps from end-December to 15 March.

The decline in yields reflected concerns that Hong Kong, China's economy would continue to weaken. Gross domestic product (GDP) growth in 4Q11 fell to 3.0% year-on-year (y-o-y) from 4.3% in 3Q11. During the 2011–12 Budget Speech, Financial Secretary John Tsang said that declining exports could weaken the economy, with the 2012 GDP growth rate expected to reach only 1%–3%. In January, exports fell 8.6% y-o-y, while imports fell 10.5%. In contrast, December saw an export growth rate of 7.4% y-o-y and an import growth rate of 8.1%.

In 2012, HKD80 billion will be allocated for relief and stimulus measures to help boost the economy.



The measures will take the form of tax rebates, electricity subsidies, and property tax rate waivers.

Inflation hit a peak in January, rising 6.1% y-o-y, driven by food and housing-related expenses from 5.7% in December. However consumer price rises tapered off in February, rising 4.7%. The government plans to increase the supply of land to help stabilize property prices.

Size and Composition

The size of Hong Kong, China's local currency (LCY) bond market grew 3.1% y-o-y to HKD1.3 trillion (US\$168.5 billion) as of end-December (Table 1). However, on a quarter-on-quarter (q-o-q) basis, LCY bonds outstanding fell 0.9%, driven by a fall in corporate bonds outstanding.

Total LCY government bonds outstanding rose 3.9% y-o-y as of end-December, while q-o-q growth was 0.9%. Government bonds include Exchange Fund Bills (EFBs), Exchange Fund Notes (EFNs), and bonds issued under the Institutional Bond Issuance Programme (HKSAR Bonds).

The amount of LCY government bonds outstanding at end-December reached HKD703 billion.

Table 1: Size and Composition of the LCY Bond Market in Hong Kong, China

				Amount (billion)	(billion)						Grov	Growth Rate (%)	(%)		
	Sep-11	11	Oct-11	11	Nov-11	11.	Dec-11	11	Sep-11	11	Oct-11 Nov-11	Nov-11		Dec-11	
	НКБ	\$SN	НКБ	\$SN	НКБ	\$SN	НКБ	\$SN	y-0-y	b-o-b	m-o-m		y-o-y		m-o-m
Total	1,320	170	1,315	169	1,312	169	1,309	169	5.7	1.6	(0.4)	(0.2)	3.1	(0.9)	(0.2)
Government	869	06	869	06	701	06	703	91	3.8	1.9	0.01	0.4	3.9	6.0	0.4
Exchange Fund Bills	585	75	585	75	586	75	586	75	9.0	90.0	0.01	0.1	0.5	0.2	0.03
Exchange Fund Notes	70.0	6	70	6	69	6	69	6	(0.9)	0.00	0.00	(0.9)	(0.9)	(0.4)	0.4
HKSAR Bonds	42.5	5.5	43	2	46	9	48	9	117.9	41.7	0.00	7.1	100.0	12.9	5.5
Corporate	623	80	617	79	611	79	909	78	7.8	1.2	(0.9)	(0.9)	2.2	(2.8)	(0.9)

HKSAR = Hong Kong Special Administrative Region, LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year

Calculated using data

LP end-of-period

Kong Monetary Authority and Bloomberg

growth October and November were estimated based on the compounded monthly rates are calculated from LCY base and do not include currency effects. of corporate bonds outstanding for

rate between September 2011 and December 2011

Most of the growth in government bonds in 4Q11 can be attributed to growth in HKSAR Bonds, which expanded 100.0% y-o-y to HKD48 billion from HKD24 billion at end-December 2010. On the other hand, the stock of EFNs declined 0.9% y-o-y to HKD69 billion. EFBs grew only slightly by 0.5% y-o-y to HKD586 billion.

In November, HKD3.0 billion in 3-year HKSAR Bonds were issued; HKD2.5 billion in 5-year bonds were sold in December.

The size of LCY corporate bonds outstanding fell to HKD605.5 billion at end-December, reflecting growth of 2.2% y-o-y and a decline of 2.8% q-o-q. The top 20 non-bank corporate issuers in Hong Kong, China accounted for about 15% of total corporate bonds outstanding as of end-December (Table 2). Hong Kong, China's top corporate issuer of LCY bonds remained the state-owned Hong Kong Mortgage Corporation (HKMC), with bonds valued at HKD20.8 billion at end-December. Sun Hung Kai Properties (Capital Market) Ltd. was the next largest issuer with outstanding bonds of HKD12.5 billion, while CLP Power Hong Kong Financing Ltd. was in the third spot with HKD10.1 billion.

Financial firms dominated the list of the top 20 non-bank corporate issuers, accounting for all but six of the firms among the top 20. Six state-owned companies were included on the list, while 12 were privately owned. Among the companies in Table 2, only three were listed on the Hong Kong Exchange.

Policy, Institutional, and **Regulatory Developments**

Hong Kong Exchange Simplifies Listing Requirements for Bonds Sold to Professional Investors

On 21 October, the Hong Kong Exchange issued an amendment to the listing requirements for bonds sold to professional investors. Under the new rules, listing procedures will be made much simpler. According to the Hong Kong Exchange,

Table 2: Top 20 Non-Bank Corporate Issuers in Hong Kong, China (as of end-December 2011)

	Outstandir	ng Amount	Chaha	Duivetele		
Issuers	LCY Bonds (HKD billion)	LCY Bonds (US\$ billion)	State- Owned	Privately- Owned	Listed Company	Type of Industry
1. The Hong Kong Mortgage Corporate Ltd.	20.75	2.66	Yes	No	No	Finance
2. Sun Hung Kai Properties (Capital Market) Ltd.	12.54	1.61	No	Yes	No	Finance
3. CLP Power Hong Kong Financing Ltd.	10.10	1.30	No	Yes	No	Finance
4. Kowloon-Canton Railway Corporation	6.60	0.85	Yes	No	No	Transportation
5. MTR Corporation (C.I.) Ltd.	5.70	0.73	Yes	No	Yes	Transportation
6. Airport Authority Hong Kong	4.61	0.59	Yes	No	No	Trannsportation
7. Hongkong Electric Finance Ltd.	4.51	0.58	No	Yes	No	Finance
8. The Link Finance (Cayman) 2009 Ltd.	4.29	0.55	No	Yes	No	Finance
9. Swire Pacific MTN Financing Ltd.	4.10	0.53	No	Yes	No	Finance
10. HKCG (Finance) Limited	4.00	0.51	No	Yes	No	Finance
11. Cheung Kong Bond Finance Ltd.	2.95	0.38	No	Yes	No	Finance
12. Wharf Finance Ltd.	2.45	0.31	No	Yes	No	Finance
13. Cheung Kong Finance (MTN) Ltd.	2.21	0.28	No	Yes	No	Finance
14. Hysan (MTN) Ltd.	1.80	0.23	No	Yes	No	Finance
15. Urban Renewal Authority	1.70	0.22	Yes	No	No	Property Development
16. The Hongkong Land Notes Company Ltd.	1.19	0.15	No	Yes	No	Finance
17. Bauhinia MBS Ltd.	0.86	0.11	Yes	No	No	Finance
18. Cathay Pacific MTN Financing Ltd.	0.66	0.08	No	No	Yes	Airlines
19. Wheelock Finance Ltd.	0.44	0.06	No	No	Yes	Property Development
20. Henderson Land MTN Ltd.	0.20	0.03	No	Yes	No	Finance
Total Top 20 Non-Bank LCY Corporate Issuers	91.64	11.77				
Total LCY Corporate Bonds	605.52	77.77				
Top 20 as % of Total LCY Corporate Bonds	15.1%	15.1%				

LCY = local currency.

Note: Based on Central Money Markets Unit data on tradeable non-bank debt securities issued and outstanding as of 1 July 2011.

Source: Hong Kong Monetary Authority.

the effect will be to shorten the listing time to 5 days after receiving the application.

Hong Kong, China's Role as Offshore Renminbi Center Expanded

On 18 January, the Hong Kong Monetary Authority (HKMA) issued new regulations making it easier for financial institutions to hold CNH. Previously, participating financial institutions were required to keep 25% of their CNH deposits in cash with the Clearing Bank and to maintain a net open position—the amount by which assets are not matched by corresponding liabilities—of 20%. Under the new rules, CNH bonds issued by the People's Republic of China will be eligible to qualify

as investments that satisfy the 25% deposit requirement. In addition, the net open position limit was reduced to 10%.

HKMA Launches Pilot Platform for Cross-Border Debt Security Investment between Malaysia and Hong Kong, China

On 13 March, HKMA, Bank Negara Malaysia (BNM), and Euroclear Bank jointly announced the launch of a pilot program allowing for cross-border investment and settlement of debt securities. Through the pilot platform, investors in Hong Kong, China and Malaysia can buy and hold the LCY debt securities of each country on a delivery-versus-payment (DVP) basis.

Indonesia—Update

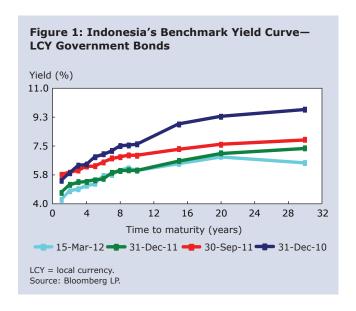
Yield Movements

Between end-September and end-December, the government bond yield curve in Indonesia shifted downward as yields fell across all tenors (Figure 1). The entire curve shifted further downward between end-December and 15 March. However, yields for the 6- and 9-year maturities rose slightly by 17 basis points (bps) and 12 bps, respectively. Yields at the short-end of the curve fell between 39 bps and 43 bps, while yields from the 15-year maturity through the long-end of the curve fell between 18 bps and 89 bps. The yield spread between the 2- and 10-year maturities narrowed to 86 bps at end-December before widening to 125 bps in mid-March.

The overall bullish trend in Indonesia's government bond market can be attributed to positive market sentiments from Indonesia regaining its investment grade credit rating from Fitch Ratings (Fitch) in December and Moody's Investors Service (Moody's) in January. In addition, easing inflation has led Bank Indonesia (BI) to make further cuts to its benchmark policy rate, bringing it to a new record-low level of 5.75% in February. Capitalizing on low borrowing costs and the sovereign debt upgrades, a number of Indonesian corporate borrowers have announced plans to sell bonds.

Consumer price inflation accelerated for the first time in 7 months in March to 4.0% year-on-year (y-o-y), compared with 3.6% in February, on higher food prices. On a month-on-month (m-o-m) basis, consumer prices rose 0.07% following a rise of 0.05% in February. For the full-year 2012, BI's inflation target stands at 3.5%–5.5%.

In March, the Finance Ministry submitted its proposed revisions to the 2012 State Budget to the House of Representatives. However, it failed to get approval from the House of Representatives



to raise subsidized fuel prices by 33% on 1 April. Instead, authority was provided to adjust fuel prices if the 6-month average price of the Indonesian crude exceeds the budget assumption of US\$105 per barrel by 15%. Based on the revised state budget, the budget deficit will widen to IDR190.1 trillion, equivalent to 2.2% of gross domestic product (GDP), from IDR124 trillion, equivalent to 1.5% of GDP, in the original budget. To help finance the wider budget deficit, the government plans to raise its net debt issuance target by IDR25 trillion to IDR159.6 trillion from IDR134.6 trillion (see **Policy, Institutional, and Regulatory Developments** for more details).

In a meeting held on 12 April, Bank Indonesia's (BI) Board of Governors decided to keep its benchmark rate steady at 5.75%. According to the central bank, the benchmark rate remains consistent with inflationary pressures going forward, BI also said it will remain vigilant on the possibility of temporary inflationary pressures driven by the government's fuel policy and will stand ready to take necessary measures to anticipate it.

Table 1: Size and Composition of the LCY Bond Market in Indonesia

			Ā	mount	Amount (billion)						Gro	Growth Rate (%)	(%)		
	Sep-11	ъ.	Oct-11		Nov-11		Dec-11		Sep-11	11	Oct-11	Oct-11 Nov-11		Dec-11	
	IDR	\$SN	IDR	\$SN	IDR	\$SN	IDR	\$SN	y-0-y	b-o-b		m-o-m m-o-m	y-o-y	b-o-b	m-o-m
Total	982,415	111	992,734	112	112 1,000,105	110	993,827	110	(1.8)	(5.9)	1.1	0.7	3.6	1.2	(0.6)
Government	847,778	96	857,649	26	864,910	92	846,859	93	(5.6)	(3.7)	1.2	8.0	0.3	(0.1)	(2.1)
Central Govt. Bonds	696,561	78	712,006	80	723,756	79	723,606	80	8.0	0.8	2.2	1.7	12.8	3.9	(0.02)
Central Bank Bills	151,217	17	145,643	16	141,154	15	123,253	14	(40.1)	(20.0)	(3.7)	(3.1)	(39.3)	(18.5)	
Corporate	134,637		15 135,086	15	135,196	15	146,969	16	30.5	2.0	0.3	0.1	28.0	9.5	8.7

= local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year. Ç

Calculated u Bloomberg L

using data from n LP end-of-period

and do not include currency effects. end-December stands at IDR224.6 trillion. agement Office, Indonesia Stock Exchange, and Bloomberg LP. rates are calculated from LCY base and do not al stock of non-tradable bonds as of end-Decem Growth The tota

Indonesia's economy expanded 6.5% y-o-y in 4Q11, growing at the same pace as in 3Q11, boosted by domestic consumption and strong growth in investment. Domestic consumption grew 5.0% y-o-y in 4Q11 compared with 4.8% in 3Q11; investment climbed 11.5% after posting annual growth of 7.1% in the previous quarter. All major industrial sectors posted positive y-o-y growth with the exception of mining, which contracted 0.04%. For the full-year 2011, the economy expanded 6.5%, following revised growth of 6.2% in 2010, marking the fastest annual GDP growth rate since 1996. The government is looking to achieve a growth target of 6.5% based on the revised 2012 state budget.

Size and Composition

Total local currency (LCY) bonds outstanding in Indonesia expanded 3.6% y-o-y in 4Q11 after declining 1.8% in 3011 (Table 1). On a guarteron-quarter (q-o-q) basis, bonds outstanding rose 1.2%. In terms of volume, total bonds outstanding reached IDR993.8 trillion (US\$110 billion) at end-December.

As of end-December, outstanding LCY government bonds had grown a marginal 0.3% y-o-y in 4Q11 to reach IDR846.9 trillion. The growth in LCY government bonds was mainly driven by central government bonds comprising treasury bills and treasury bonds issued by the Ministry of Finance. On the other hand, central bank bills, known as Sertifikat Bank Indonesia (SBI), fell a significant 39.3% y-o-y.

Central Government Bonds. On a y-o-y basis, the stock of central government bonds grew 12.8% to IDR723.6 trillion in 4Q11. On a q-o-q basis, central government bonds rose a modest 3.9%.

In 4Q11, a total of IDR25.6 trillion in treasury bills and bonds were issued by the central government, representing a 141.4% rise from 3Q11. However, treasury issuance fell 31.5% on a q-o-q basis. LCY bond issues during the guarter included treasury bills and fixed-rate treasury bonds. The government cancelled its last scheduled

auction in December due to a slowdown in state budget spending.

In 2011, the government had raised a total of IDR204.6 trillion in gross bond sales (including international bond issuance). According to the Ministry of Finance, a deficit of IDR90.1 trillion, equivalent to 1.3% of GDP based on preliminary figures, was recorded in 2011. The government will continue to rely on domestic issuance as a funding source in 2012 and has capped foreign currency (FCY) debt issuance at 18% of total gross debt issuance for the year.

The Ministry of Finance also said that it will continue with its frontloading strategy by issuing 55%–60% of its debt securities in the first half of the year. The government raised IDR60.4 trillion in debt securities in 1Q12, higher than the target amount of IDR53.2 trillion. The Ministry of Finance conducted 11-IDR-denominated bond auctions in 1Q12, comprising both conventional and Islamic bonds.

The government has identified FR0060, FR0061, FR0059, and FR0058 as the new benchmark bonds for 5-, 10-, 15-, and 20-year maturities, respectively. Details for the new benchmark bond series are provided in **Table 2**.

Central Bank Bills. The stock of central bank bills continued to fall sharply in 4Q11. Outstanding SBI stood at IDR123.3 trillion in 4Q11, contracting 39.3% y-o-y and 18.5% q-o-q. The decline in the stock of SBI is in line with the central bank's policy of reducing SBI issuance as they have become an ineffective tool for managing the money supply. BI has instead been providing term deposits to replace SBI and buying government securities for

Table 2: Indonesian Government Benchmark Bonds for 2012

Bond Series	Outstanding Amount (IDR billion)	Coupon (%)	Maturity Date
1. FR0060	3,700	6.25	15-Apr-17
2. FR0061	7,100	7.00	15-May-22
3. FR0059	7,850	7.00	15-May-27
4. FR0058	9,400	8.25	15-Jun-32

Source: Indonesia Debt Management Office.

its monetary operations. On a q-o-q basis, central bank bill issuance rose 160.5% in 4Q11, but fell 66.6% on a y-o-y basis. But this was still a small amount compared to the volume of short-term SBI maturing during the quarter.

Corporate Bonds. The corporate bond market reported robust growth in 4Q11, expanding 28.0% y-o-y. On a q-o-q basis, growth in corporate bonds was 9.2%. Corporate bonds comprise a small percentage of Indonesia's LCY bond market, accounting for only 14.8% of total LCY bonds outstanding in Indonesia at end-December.

At end-December, the outstanding bonds of the top 30 corporate issuers in Indonesia totaled IDR114.9 trillion, accounting for almost 80% of total LCY corporate bonds outstanding (Table 3). State-power firm PLN remained the top issuer in 4Q11 with outstanding bonds valued at IDR15.1 trillion. Automotive leasing company Adira Dinamika Multifinance took the second spot with bonds outstanding of IDR7.4 trillion, followed by Indonesia Eximbank with bonds outstanding of IDR7.2 trillion.

Bond issuers from the banking and financial sector dominated the list of the top 30 LCY corporate issuers, accounting for 73% of the firms on the list. Meanwhile, 10 companies on the list were state-owned firms. More than half of the 30 firms were also listed on the Indonesia Stock Exchange, indicating that these firms are tapping both the equity and bond markets for their funding needs.

In 4Q11, total corporate LCY bond issuance reached IDR16.0 trillion, up significantly from IDR5.8 trillion in 3Q11. Out of a total of 10 corporate issuers in 4Q11, seven companies issued in December to take advantage of lower borrowing cost after BI's rate cut of 50 bps in November.

Once again, corporate bond issuance in 4Q11 was dominated by firms from the banking and financial sectors. The corporate bonds issued in 4Q11 were all conventional bonds except for one subordinated bond issue. More than half of these new bond issues carried maturities of 3–5 years.

Table 3: Top 30 Issuers of LCY Corporate Bonds in Indonesia (as of end-December 2011)

	Outstanding Amount		Charles	B :		
Issuers	LCY Bonds (IDR billion)	LCY Bonds (US\$ billion)	State- Owned	Privately- Owned	Listed Company	Type of Industry
1. PLN	15,100	1.67	Yes	No	No	Energy
2. Adira Dinamika Multifinance	7,426	0.82	No	Yes	Yes	Finance
3. Indonesia Eximbank	7,191	0.79	Yes	No	No	Banking
4. Bank Pan Indonesia	6,900	0.76	No	Yes	Yes	Banking
5. Indosat	6,350	0.70	No	Yes	Yes	Telecommunications
6. Bank Tabungan Negara	5,450	0.60	Yes	No	Yes	Banking
7. Jasa Marga	5,000	0.55	Yes	No	Yes	Toll Roads, Airports, and Harbors
8. Federal International Finance	4,742	0.52	No	Yes	No	Finance
9. Bank CIMB Niaga	4,480	0.49	No	Yes	Yes	Banking
10. Bank Danamon Indonesia	4,050	0.45	No	Yes	No	Banking
11. Bank Internasional Indonesia	4,000	0.44	No	Yes	Yes	Banking
12. Perum Pegadaian	3,664	0.40	Yes	No	No	Finance
13. Bank Tabungan Pensiunan Nasional	3,650	0.40	No	Yes	Yes	Banking
14. Indofood Sukses Makmur	3,574	0.39	No	Yes	Yes	Food and Beverages
15. Bank Mandiri	3,500	0.39	Yes	No	Yes	Banking
16. Astra Sedaya Finance	3,480	0.38	No	Yes	No	Finance
17. Antam	3,000	0.33	Yes	No	Yes	Petroleum and Natural Gas
18. Telekomunikasi Indonesia	3,000	0.33	Yes	No	Yes	Telecommunications
19. Bank Jabar Banten	2,750	0.30	No	Yes	Yes	Banking
20. Bank Rakyat Indonesia	2,000	0.22	Yes	No	Yes	Banking
21. Sarana Multigriya Finansial	1,940	0.21	Yes	No	No	Finance
22. Bank Permata	1,750	0.19	No	Yes	Yes	Banking
23. Summit Oto Finance	1,565	0.17	No	Yes	No	Finance
24. Bank DKI	1,500	0.17	No	Yes	No	Banking
25. XL Axiata	1,500	0.17	No	Yes	Yes	Telecommunications
26. Medco-Energi Internasional	1,500	0.17	No	Yes	Yes	Petroleum and Natural Gas
27. Oto Multiartha	1,500	0.17	No	Yes	No	Finance
28. BCA Finance	1,489	0.16	No	Yes	No	Finance
29. Bank OCBC NISP	1,480	0.16	No	Yes	Yes	Banking
30. Wahana Ottomitra Multiartha	1,400	0.15	No	Yes	Yes	Finance
Total Top 30 LCY Corporate Issuers	114,930	12.67				
Total LCY Corporate Bonds	146,969	16.21				
Top 30 as % of Total LCY Corporate Bonds	78.2%	78.2%				

LCY = local currency. Source: Indonesia Stock Exchange.

Table 4: Notable LCY Corporate Bond Issuance, 4Q11

Corporate Issuers	Amount Issued (IDR billion)
Indonesia Eximbank	3,250
Antam	3,000
Adira Dinamika Multi Finance	2,523
Bank Internasional Indonesia	2,500
Bank CIMB Niaga	1,500
Clipan Finance Indonesia	1,000
Perum Pegadaian	1,000
Others	1,200
Total	15,973

Source: Indonesia Stock Exchange.

Table 4 lists the most notable corporate bond issues in 4Q11.

State-owned lender Indonesia Eximbank raised IDR3.25 trillion in three tranches in December. The proceeds from the bonds will be used to help fund lending to importers. The bonds comprised the following series:

- 3-year bonds worth IDR202 billion, coupon of 7.00%;
- 5-year bonds worth IDR243 billion, coupon of 7.75%; and
- 7-year bonds worth IDR2.8 trillion, coupon of 8.50%.

Antam issued IDR3.0 trillion worth of bonds in December. Proceeds from the bond sale will be used to fund the firm's investments and business development. The bonds consisted of the following series:

- 7-year bonds worth IDR900 billion, coupon of 8.38%; and
- 10-year bonds worth IDR2.1 trillion, coupon of 9.05%.

Adira Dinamika Multifinance issued a total of IDR2.5 trillion of conventional bonds in December. The proceeds from the bond sale will be used to raise capital for its automotive financing business. The bonds consisted of the following series:

 2-year bonds worth IDR325 billion, coupon of 7.75%;

- 3-year bonds worth IDR665 billion, coupon of 8.00%; and
- 5-year bonds worth IDR1.5 trillion, coupon of 9.00%.

Bank Internasional Indonesia raised a total of IDR2.5 trillion from a three-tranche sale consisting of conventional bonds and one subordinated bond. The proceeds from the bond issue will be used to boost lending. The bonds consisted of the following series:

- 3-year bonds worth IDR440 billion, coupon of 7.75%;
- 5-year bonds worth IDR1.6 trillion, coupon of 8.75%; and
- 7-year subordinated bonds worth IDR500 billion, coupon of 10.00%.

Bank CIMB Niaga issued IDR1.5 trillion worth of conventional bonds in December. The proceeds from the bond sale will be used to support its lending expansion. The bonds consisted of the following series:

- 3-year bonds worth IDR180 billion, coupon of 7.38%; and
- 5-year bonds worth IDR1.3 trillion, coupon of 8.30%.

Clipan Finance Indonesia sold a total of IDR1.0 trillion of conventional bonds in November. The proceeds from the bond sale will be used to boost the firm's working capital. The bonds consisted of the following series:

- 1-year bonds worth IDR248 billion, coupon of 8.75%;
- 2-year bonds worth IDR123 billion, coupon of 9.75%; and
- 3-year bonds worth IDR629 billion, coupon of 10.25%.

State-owned pawnshop operator Perum Pegadaian issued IDR1.0 trillion of bonds in three tranches in November. The proceeds from the bonds will be used to fund working capital and for debt repayment. The bonds comprised the following series:

- 3-year bonds worth IDR250 billion, coupon of 7.50%;
- 5-year bonds worth IDR250 billion, coupon of 8.00%; and
- 10-year bonds worth IDR500 billion, coupon of 9.00%.

Corporate Rating Changes. On 28 February, Fitch downgraded Bakrie Telecom's long-term FCY and LCY issuer default ratings to CCC from B. According to Fitch, the downgrade reflects growing liquidity risks faced by the company as IDR650 billion worth of bonds are scheduled to mature in September and finance leasing obligation payments for the year total IDR660 billion. As of end-December 2011, the company's cash and cash equivalents stood at only IDR250 billion. Fitch does not expect the company to generate sufficient cash to meet its obligations.

On 15 March, Fitch downgraded Berlian Laju Tanker's (BLT) long-term FCY and LCY issuer default ratings to Restricted Default (RD) from C, while it affirmed at C with a Recovery Rating of RR5 its rating on the company's US\$400 million senior unsecured notes due 2014. In February, S&P lowered its long-term corporate rating on the company to D from CC. S&P also lowered its issuer rating on the US\$400 million senior unsecured notes due 2014 to D from C. The Indonesia Stock Exchange (IDX) suspended the bonds issued by BLT effective 28 February after the company announced a default on its debt instruments. The company, including its subsidiaries, defaulted on debts amounting to IDR421.5 billion. BLT had issued six series of bonds, comprising both conventional and Islamic bonds.

On 20 March, Moody's downgraded its ratings for Davomas Abadi, an Indonesian cocoa producer to Ca from Caa3 with a negative outlook. According to Moody's, weak sales over the past two quarters and poor inventory management could have led to the depletion of cash reserves and impaired the company's ability to service interest payments.

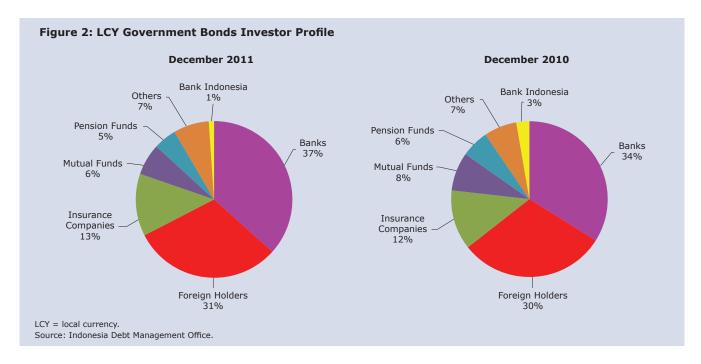
Foreign Currency Bonds. The government raised US\$1.75 billion from the sale of US\$-denominated 30-year bonds, the proceeds of which will be used to help fund the budget deficit. The bond sale was part of Indonesia's Global Medium-Term Note Program. The bonds carried a coupon of 5.25% and a yield of 5.375%. The offering was oversubscribed 2.06 times, with the order book totaling US\$3.6 billion. The bonds were allocated to asset managers (73%), banks (20%), insurance and pension funds (4%), and private banks (3%). The sale was handled by HSBC, JP Morgan Chase, and Standard Chartered as joint lead managers and joint bookrunners, and PT Mandiri Sekuritas as co-manager.

In 2012, 18% of the government's gross debt issuance will come from FCY issuance. The government is planning to issue JPY-denominated bonds in June and global *sukuk* (Islamic bonds) in the second half of the year.

On the corporate front, Indonesian power firm Cikarang Listrindo priced US\$500 million in 7-year bonds in February. The bonds were priced at par and carried a coupon of 6.95%. The bond deal was the first Indonesian corporate high-yield issue of 2012 as well as the first RegS/144A high-yield issued in the region this year. The bonds were well distributed, with 38% sold to investors in Asia, 35% to investors in the United States (US), and 27% to investors in Europe. The bond sale was oversubscribed, with the order book reaching US\$4.3 billion.

Investor Profile

Central Government Bonds. Banking institutions remain the largest holder of LCY government bonds in Indonesia, with a slightly higher share of total LCY government bonds outstanding at end-December 2011 (37%) compared with 1 year earlier (34%) (Figure 2). Banking institutions include state banks, private banks, non-recap banks, regional banks, and *shari'a* (Islamic law) banks. State banks account for about 60% of the total bond holdings of banks.



The second largest share of government bond holdings at end-December belonged to foreign investors with a share of 31%. Foreign investors' share peaked at 36% on 12 September, before a sell-off in LCY government bonds by offshore investors led to the rapid decline of their holdings to 31% by end-September. This share declined further to 30% by end-November before recovering in December (Figure 3).

Foreign buying by investors resumed after Indonesia's upgrade to investment grade status from Fitch in December and Moody's in January. Government bond holdings of foreign investors recovered to 32.1% at end-January before falling again to 30.4% by mid-March. The government's planned fuel price hike dampened market sentiments in the bond and currency markets over inflationary concerns.

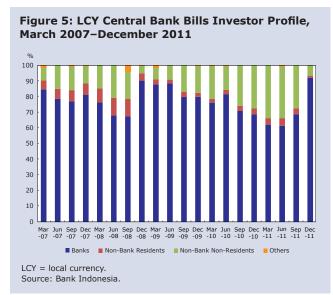
At end-December, 63% of the total bonds held by foreigners were in the form of long-dated tenors (maturities of 5 years or more) (Figure 4). However, this reflected a drop from a share of 67% in 2010 and 71% in 2009. Offshore holdings of short-dated tenors (maturities of less than 1 year) climbed to 12% at end-December,



compared with 10% in 2010 and only 5% in 2009.

The central bank's share in government bonds dropped to 1% in 4Q11 from 3% in 4Q10. At end-December, BI's holdings of LCY bonds reached IDR7.8 trillion, after hitting IDR17.0 trillion at end-September. BI has been purchasing government bonds both to help stabilize prices and to increase its holdings, which it plans to use for monetary operations as a replacement for SBI.





Meanwhile, the share of contractual savings institutions' holdings of government bonds is relatively low in Indonesia compared with other markets in the region. Insurance companies and pension funds held shares of 13% and 5%, respectively, at end-December.

Central Bank Bills. The dominant share of SBI were held by banking institutions at the end of 4Q11, with their ownership share climbing to 92% at end-December from 69% at end-September (**Figure 5**). BI has noted that banks were using SBI as an investment tool instead of channeling funds for lending.

On the other hand, foreign investors' holdings of SBI fell sharply at the end of 4Q11, as their share dropped to 7% at end-December from 27% at end-September. Foreign ownership in SBI peaked in May 2011 at a share of 39% when the SBI holding period was extended to 6 months. Furthermore, since February 2011, SBI have only been issued with maturities of 9 months. The share of foreign investors' holdings of SBI had declined steadily before dropping sharply in 4Q11 to its current level. At end-December, foreign investors held a total of IDR7.8 trillion in SBI.

Rating Changes

On 15 December, Fitch upgraded Indonesia's long-term FCY and LCY debt to BBB- (Table 5). The outlook for both ratings is stable. Fitch cited Indonesia's improved economic performance, strengthened external liquidity, low and declining public debt ratios, and a prudent overall macro policy framework as reasons for the upgrade.

Table 5: Selected Sovereign Ratings and Outlook for Indonesia

	Moody's	S&P	Fitch	R&I
Sovereign FCY LT Ratings	Baa3	BB+	BBB-	BB+
Outlook	Stable	Positive	Stable	Positive

FCY = foreign currency, LT = long term. Source: Rating agencies.

On 18 January, Moody's raised Indonesia's FCY and LCY ratings to Baa3 from Ba1, with a stable outlook for both. According to Moody's, the key factors for the upgrade were expectations that the government's financial metrics would remain in line with its new Baa3 peers, the demonstrated resilience of Indonesia's economic growth in the face of large external shocks, the presence of policy buffers and tools that address financial

vulnerabilities, and a healthier banking system capable of withstanding stress.

Policy, Institutional, and Regulatory Developments

BI to Allow *Sukuk* for Reverse Repo Operations

Effective 1 December, BI began allowing the use of *sukuk* in the reverse repo transactions of *shari'a* banks and business units. Indonesian *shari'a* banks can purchase at least IDR1 billion of *sukuk* from the central bank and in exchange they will receive transaction margins when they buy back the *sukuk* at an agreed price after a specified time. This regulation aims to absorb excess liquidity among *shari'a* banks, specifically those banks with a finance-to-deposit ratio of at least 80% and those that participate in BI's *shari'a* monetary operations.

BI to Purchase Long-Term Bonds and Sukuk to Help Stabilize Bond Market

In January, BI announced plans to purchase long-term government bonds as part of efforts to defend the Indonesian rupiah and stabilize the domestic bond market. Since September 2011, the central bank has been buying short- and medium-term government bonds in the market to support prices. In February, BI announced that it would purchase Islamic government debt to help stabilize the bond market and deepen the *shari'a* financial market.

BI Widens Lower Limit on Benchmark Rate to 200 bps

Effective 18 January, BI widened the lower limit of its benchmark rate (deposit facility) from 150 bps to 200 bps below the BI rate. This measure was taken in order to bolster banks' liquidity management by encouraging them to transact with one another, thereby boosting banking efficiency. Following the policy rate cut in February, rates now stand at 3.75% for the overnight deposit facility and 6.75% for the overnight lending facility.

House of Representatives Approves the 2012 Revised State Budget

In March, the Ministry of Finance submitted its proposed revisions to the 2012 State Budget to the House of Representatives. On 1 April, the Parliament approved the 2012 economic growth assumptions, which include (i) an economic growth target of 6.5%, (ii) an inflation rate target of 6.8%, (iii) an IDR-US\$ exchange rate of IDR9,000 per US\$1, (iv) a 3-month treasury bill rate of 5%, (v) an Indonesian Crude Price of US\$105 per barrel, and (vi) an oil lifting volume of 930,000 barrels per day.

Indonesian Government Raises IDR13.6 trillion from the Sale of Islamic Retail Bonds

In March, the government raised IDR13.6 trillion from the sale of its fourth series of retail Islamic bonds. The bonds carried a maturity of 3 years and offered a 6.25% coupon. A total of IDR19 trillion in orders were received during the offer period. The bonds were allocated to 17,606 investors: 28% of which were civil servants, 21% were private employees, 20% were entrepreneurs, 16% were housewives, and the remaining 15% were employees working in other fields.

Republic of Korea—Update

Yield Movements

Government bond yields in the Republic of Korea fell for all maturities between end-September and end-December, with the fall ranging from 6 basis points (bps) for the 20-year tenor to 21 bps for the 3-year tenor (Figure 1). The drop in yields during this period has been largely attributed to increased concerns over the eurozone's sovereign debt crisis. Between end-December and 15 March, however, yields rose for most maturities amid inflation expectations.

The yield spread between 2- and 10-year tenors widened 2 bps between end-September and end-December—as the fall in the 2-year was larger than that in the 10-year, and increased 1 bp between end-December and 15 March—as the rise in the 10-year was larger than that of the 2-year.

The Bank of Korea's Monetary Policy Committee decided on 13 April to keep its base rate—the 7-day repurchase rate—steady at 3.25%; it was the tenth consecutive month that the policy rate was left unchanged. The committee noted that the global recovery will be moderated by sluggish economic activity in Europe and weakening growth in emerging markets. It also noted the presence of high inflationary expectations amid geopolitical tensions in the Middle East.

Consumer price inflation decelerated to 2.6% year-on-year (y-o-y) in March from 3.1% in February and 3.4% in January. Food and non-alcoholic beverage prices climbed 4.9% y-o-y for the month, while housing and utility costs rose 5.4%. On a month-on-month (m-o-m) basis, consumer prices decreased 0.1% in March, led by a 0.8% monthly drop in education costs.

Economic growth moderated in 4Q11 on the back of weakening personal and government consumption, investment spending, and exports. Based on preliminary data from The Bank of Korea, real gross domestic product (GDP) growth

Figure 1: The Republic of Korea's Benchmark Yield Curve-LCY Government Bonds Yield (%) 4.8 4.0 3.3 8 10 12 14 16 18 20 Time to maturity (years) --- 15-Mar-12 --- 31-Dec-11 --- 30-Sep-11 --- 31-Dec-10 LCY = local currency. Source: Bloomberg LP.

eased to 0.3% quarter-on-quarter (q-o-q) in 4Q11 from 0.8% in the previous quarter. The slowdown in growth has been attributed to (i) a 0.5% g-o-g fall in final consumption expenditure—as personal consumption and government expenditure both declined, (ii) negative 1.5% q-o-q growth in gross fixed capital formation, and (iii) a 2.3% q-o-q decline in exports of goods and services. On the supply-side, manufacturing production contracted 0.3% q-o-q in 4Q11, following 1.1% growth in the previous quarter, and construction activity also declined 0.2% for the quarter. On an annual basis, real GDP grew 3.3% y-o-y in 4Q11, lower than the 3.6% growth in 3Q11. For the fullyear 2011, real GDP growth stood at 3.6%, lower than the growth rate of 6.3% in 2010.

Size and Composition

The Republic of Korea's local currency (LCY) bond market continued to expand in 4Q11, with total LCY bonds outstanding increasing 9.5% y-o-y and 2.0% q-o-q to reach KRW1,416 trillion (US\$1,229 billion) at end-December (Table 1). Government bonds outstanding stood at KRW587.3 trillion, which was up 6.0% y-o-y but down 0.5% q-o-q. Central government

Table 1: Size and Composition of the LCY Bond Market in the Republic of Korea

				Amount	Amount (billion)						Grow	Growth Rate (%)	(%		
	Sep-11	11	0ct-11	1	Nov-11	11	Dec-11	11	Sep-11	-11	Oct-11	Oct-11 Nov-11		Dec-11	
	KRW	\$SN	KRW	\$SN	KRW	\$SN	KRW	\$SN	y-0-y	y-o-y q-o-q	m-o-m		y-0-y	b-o-b	m-o-m
[otal	1,389,038 1,179 1,400	1,179	1,400,338	1,261	1,261 1,415,673 1,239 1,416,376	1,239		1,229	8.6	2.1	0.8	1.1	9.5	2.0	0.0
Government	590,429	501	589,293	531	594,633	520	587,316	510	4.4	1.2	(0.2)	6.0	0.9	(0.5)	(1.2)
Central Bank Bonds	169,420	144	167,220	151	168,770	148	164,760	143	3.0	1.4	(1.3)	6.0	0.8	(2.8)	(2.4)
Central Government Bonds	391,213	332	392,847	354	397,291	348	392,675	341	5.5	1.1	0.4	1.1	8.3	0.4	(1.2)
Industrial Finance Debentures	29,796	25	29,226	56	28,572	25	29,881	26	(1.5)	1.0	(1.9)	(2.2)	6.7	0.3	4.6
Corporate	798,609	678	811,045	731	821,040	719	829,060	719	11.9	2.9	1.6	1.2	12.1	3.8	1.0
-	-			1											

= local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year

include currency using data from national sources. I. P end-of-period LCV-US\$ rates are used. ese are calculated from LCY base and do not I.Y BondWeb and The Bank of Korea. . Calculated usir . Bloomberg LP . Growth rates a (KTBs), increased 8.3% y-o-y and 0.4% q-o-q to reach KRW392.7 trillion. Meanwhile, central bank bonds, known as Monetary Stabilization Bonds (MSBs), rose a marginal 0.8% y-o-y, but posted negative q-o-q growth of 2.8%, to level off at KRW164.8 trillion. Industrial finance debentures—bonds sold by the Korea Development Bank (KDB)—expanded 6.7% y-o-y and increased a marginal 0.3% q-o-q to reach KRW29.9 trillion.

bonds, which include Korea Treasury Bonds

Government bond issuance in 4Q11 totaled KRW66.5 trillion, which was down 9.7% q-o-q. Central bank issuance, which comprised 62% of total government issuance, fell to KRW41.4 trillion from KRW47.1 trillion in the previous quarter. On the other hand, issuance of central government bonds increased slightly in 4Q11 to KRW22.3 trillion from KRW21.1 trillion in 3Q11, as KTB issuance rose 5.5% q-o-q to KRW19.6 trillion.

The outstanding stock of LCY corporate bonds jumped 12.1% y-o-y and 3.8% q-o-q to KRW829.1 trillion at end-December, spearheading growth in the overall LCY bond market. Private corporate bonds surged 22.0% y-o-y and 6.5% q-o-q to KRW353.6 trillion. Similarly, special public bonds expanded 10.1% y-o-y and 2.6% q-o-q to KRW268.3 trillion. Meanwhile, financial debentures (excluding KDB bonds) increased marginally, rising 1.0% y-o-y and 0.5% q-o-q, to level off at KRW207.2 trillion.

As of end-December, the combined bonds outstanding of the top 30 corporate issuers amounted to KRW515.9 trillion, accounting for 62% of total corporate bonds outstanding (Table 2). The top 30's share of the total was about the same in 4Q11 as in the previous quarter. Korea Land & Housing Corp. continued to be the largest corporate issuer with total bonds outstanding of KRW57.0 trillion.

In 4Q11, LCY corporate bond issuance amounted to KRW95.3 trillion, of which 52% were private corporate bonds, 28% financial debentures, and 20% special public bonds. Compared with

Table 2: Top 30 Issuers of LCY Corporate Bonds in the Republic of Korea (as of end-December 2011)

	Outota a dia						
Issuers		ng Amount	State-	Privately-	List	ed on	Type of Industry
	LCY Bonds (KRW billion)	LCY Bonds (US\$ billion)	Owned	Owned	KOSPI	KOSDAQ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1. Korea Land & Housing Corp.	57,032	49.5	Yes	No	No	No	Real Estate
2. Korea Housing Finance Corp.	38,547	33.4	Yes	No	No	No	Financial
3. Korea Finance Corp.	32,960	28.6	Yes	No	No	No	Financial
4. Industrial Bank of Korea	31,474	27.3	Yes	No	Yes	No	Bank
5. Daewoo Securities	26,057	22.6	Yes	No	Yes	No	Securities
6. Korea Deposit Insurance Corp.	25,280	21.9	Yes	No	No	No	Insurance
7. Korea Electric Power Corp.	24,220	21.0	Yes	No	Yes	No	Utillity
8. Kookmin Bank	21,205	18.4	No	Yes	No	No	Bank
9. Shinhan Bank	19,297	16.7	No	Yes	No	No	Bank
10. Woori Investment and Securities	19,253	16.7	Yes	No	Yes	No	Securities
11. Korea Highway	18,560	16.1	Yes	No	No	No	Infrastructure
12. Woori Bank	16,692	14.5	Yes	No	No	No	Bank
13. Korea Investment and Securities	16,104	14.0	No	Yes	No	No	Securities
14. Small & Medium Business Corp.	14,738	12.8	Yes	No	No	No	Financial
15. Hana Bank	13,834	12.0	No	Yes	No	No	Bank
16. Tong Yang Securities	13,256	11.5	No	Yes	Yes	No	Securities
17. Korea Rail Network Authority	12,660	11.0	Yes	No	No	No	Infrastructure
18. Mirae Asset Securities	12,232	10.6	No	Yes	Yes	No	Securities
19. Korea Gas Corp.	12,155	10.5	Yes	No	Yes	No	Utility
20. Nonghyup (National Agricultural Cooperative Federation)	10,710	9.3	Yes	No	No	No	Bank
21. Hyundai Securities	10,334	9.0	No	Yes	Yes	No	Securities
22. Shinhan Card	9,331	8.1	No	Yes	No	No	Financial
23. Korea Water Resources	8,778	7.6	Yes	No	Yes	No	Utility
24. Hana Daetoo Securities	7,918	6.9	No	Yes	No	No	Securities
25. Korea Eximbank	7,630	6.6	Yes	No	No	No	Bank
26. Standard Chartered First Bank Korea	7,550	6.6	No	Yes	No	No	Bank
27. Hyundai Capital Services	7,482	6.5	No	Yes	No	No	Securities
28. Shinhan Financial Group	7,290	6.3	No	Yes	Yes	No	Financial
29. Korea Railroad Corp.	7,110	6.2	Yes	No	No	No	Infrastructure
30. KB Kookmin Card	6,240	5.4	No	Yes	No	No	Financial
Total Top 30 LCY Corporate Issuers	515,929	447.7					
Total LCY Corporate Bonds	829,060	719.4					
Top 30 as % of Total LCY Corporate Bonds	62.2%	62.2%					

KOSPI = Korea Composite Stock Price Index, KOSDAQ = Korean Securities Dealers Automated Quotations, LCY = local currency. Source: AsianBondsOnline, Bloomberg LP, and EDAILY BondWeb.

the previous quarter, issuance of corporate bonds jumped 22.9%, led by a 37.9% spike in private corporate bond issues. On a y-o-y basis, corporate bond issuance surged 18.5% on the back of double-digit growth in special public bonds, financial debentures, and private corporate bonds. The largest corporate bond issue in 4Q11 was the Korea Development Insurance Corp.'s 3-year bond worth KRW1.2 trillion with a coupon rate of 3.8%.

Liquidity

The turnover ratio for LCY government bonds fell from 1.30 in 3Q11 to 1.08 in 4Q11 as liquidity conditions tightened for both central government and central bank bonds. The turnover ratio for central government bonds—largely comprising KTBs—decreased to 1.10 in 4Q11 (from 1.32 in 3Q11), while it also declined for MSBs from 1.51 in 3Q11 to 1.25 in 4Q11.

In the KTB futures market, trading activity weakened in 4Q11 compared with 3Q11, with the number of traded KTB futures contracts falling to 7.6 million in 4Q11 from 11.9 million in 3Q11. In 1Q12, however, trading activity rebounded as the number of traded KTB futures contracts increased to 8.3 million.

The share of 10-year KTB futures has been steadily increasing in recent quarters—from 1.3%



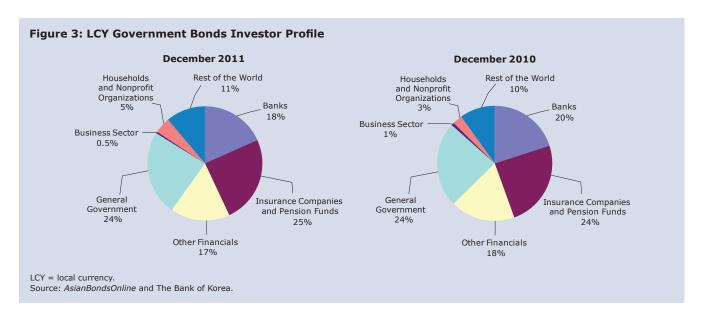
in 1Q11, it climbed to 17.2% in 4Q11, and further rose to 23.3% in 1Q12 (Figure 2). In contrast, the share of 3-year KTB futures dropped from 98.7% in 1Q11 to 82.8% in 4Q11, and further declined to 76.7% in 1Q12.

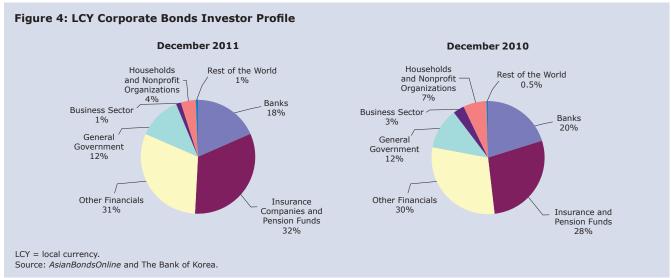
Liquidity in the LCY corporate bond market has improved in 4Q11, with the turnover ratio increasing to 0.18 in 4Q11 from 0.16 in 3Q11. This was led by financial debentures and private corporate bonds, with their turnover ratios rising to 0.38 from 0.34 and 0.10 from 0.08, respectively. Meanwhile, the turnover ratio for special public bonds remained unchanged from the previous quarter at 0.13.

Investor Profile

The largest investor group in LCY government bonds at end-December was insurance companies and pension funds with a 25% share followed by the general government—consisting of the central government, local government, and social security funds—at 24% (Figure 3). Banks and other financial institutions held 18% and 17% of the total, respectively, while foreign investors owned 11%. Between end-December 2010 and end-December 2011, the share of households and nonprofit organizations rose 2 percentage points while the shares of foreign investors and insurance companies and pension funds increased 1 percentage point each. Conversely, the share of banks dropped 2 percentage points and the shares of other financial institutions and non-financial companies declined 1 percentage point each.

The largest investor group in LCY corporate bonds as of end-December was insurance companies and pension funds, which held a share of 32% of total corporate bonds, followed by other financial institutions with a 31% share (Figure 4). Banks held 18% of corporate bonds and the general government accounted for 12%. Compared with December 2010, the shares in corporate bonds increased by 4 percentage points for insurance companies and pension funds, and by 1 percentage point each for foreign investors and other financial





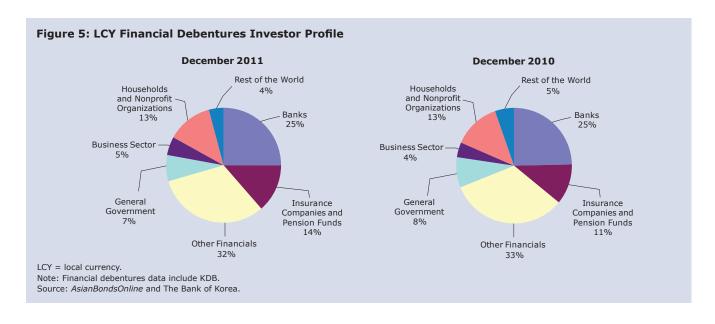
institutions. In contrast, the share of households and nonprofit organizations dropped 3 percentage points, and the shares of banks and non-financial companies fell 2 percentage points each.

The largest investor group in LCY financial debentures (including KDB) as of end-December was financial institutions other than banks with a 32% share (Figure 5). Banks had the second-largest share at 25%, followed by insurance firms and pension funds with 14%, and households and nonprofit organizations with 13%. The shares of insurance companies and pension funds, and

non-financial companies, climbed 3 percentage points and 1 percentage point, respectively, from end-December 2010 levels. In contrast, the shares of the general government, foreign investors, and other financial institutions each fell by 1 percentage point.

Rating Changes

On 2 April, Moody's changed the outlook on the Republic of Korea's A1 government bonds rating from stable to positive (**Table 3**). The change in the ratings outlook stemmed from



(i) the sovereign's strong and improving fiscal fundamentals, (ii) a relatively robust mediumterm outlook for GDP growth, (iii) resilience in the government's external financing position, and (iv) reduction in the domestic banking sector's external vulnerability.

Table 3: Selected Sovereign Ratings and Outlook for the Republic of Korea

	Moody's	S&P	Fitch	R&I
Sovereign FCY LT Ratings	A1	А	A+	A+
Outlook	Positive	Stable	Positive	Stable

FCY = foreign currency, LT = long term. Source: Rating agencies.

Policy, Institutional, and Regulatory Developments

QFII License Granted to the Bank of Korea, Korea Investment Corporation, and National Pension Service

The China Securities Regulatory Commission (CSRC) granted qualified foreign institutional investor (QFII) licenses to The Bank of Korea and the Korea Investment Corporation—a sovereign wealth fund—in December, and to the National Pension Service in January. The licenses will allow the three institutions to invest in CNY-

denominated assets—such as bonds and stocks—that are listed on the Shanghai and Shenzhen stock exchanges.

FSC Sets 2012 Financial Policy Agenda

In January, the Financial Services Commission (FSC) announced its 2012 financial policy agenda, which contains three policy goals: (i) better crisis preparation, (ii) the promotion of entrepreneurship and business growth, and (iii) low-income households' increased access to financial services. The agenda also includes six key steps to achieve these policy objectives: (i) taking preemptive actions to ensure market stability, (ii) advancing the financial system, (iii) creating a financial environment that is conducive for the growth of start-up businesses and SMEs, (iv) ensuring financial services for sustainable development, (v) widening access to financial services for low-income households, and (vi) raising the social contribution of financial institutions and enhancing financial consumer protection.

2012 Treasury Bill Issuance Plan Introduced

In February, the Ministry of Strategy and Finance introduced its issuance plan for treasury bills

in 2012. The plan indicated that issuance in February–March would include 63- and 182-day bills amounting to KRW5 trillion. In an initial step, the government issued 63-day treasury bills totaling KRW1 trillion in February.

KOFIA to Launch Trading Platform for SME Bonds

The Korea Financial Investment Association (KOFIA) plans to establish a trading platform—an electronic over-the-counter system—for the bonds of small and medium-sized enterprises (SMEs). The issuers of the bonds will be local unlisted firms with asset sizes of less than KRW500 billion. The trading system is expected to be launched in May.

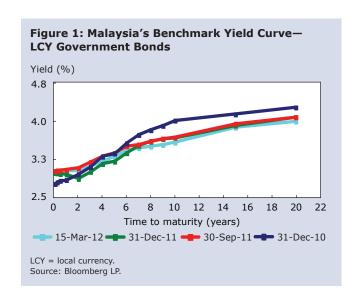
Malaysia—Update

Yield Movements

The yield curve for Malaysian local currency (LCY) government bonds fell across all maturities between end-September and end-December 2011. The yield curve then flattened between end-December and 15 March as yields rose at the shortend and the belly of the curve, but dropped at the long-end (Figure 1). Yields at the very short-end rose between 2 basis points (bps) and 4 bps, while 2- and 3-year maturities rose 17 bps and 12 bps, respectively. Yields for the 5-year maturity rose 11 bps, while yields for 4- and 6-year maturities both increased by 6 bps. On the other hand, yields between the 7- and 20-year maturities fell 5 bps-12 bps. The yield spread between 2- and 10-year maturities narrowed to 92 bps in mid-March from 106 bps at end-December.

Bank Negara Malaysia (BNM) decided to keep its overnight policy rate steady at 3.0% after its Monetary Policy Committee meeting on 9 March. BNM has kept its rate at this level since May last year. Consumer price inflation averaged 3.2% in 2011 and is expected to moderate in 2012 as cost-push inflation eases amid a slowdown in global economic activity. Malaysia's consumer price inflation slowed to 2.2% year-on-year (y-o-y) in February from 2.7% in January. Index for food and non-alcoholic beverages increased 2.9% y-o-y in February, significantly lower than the 4.8% y-o-y increase posted in January. Meanwhile, index for non-food increased 1.8% y-o-y in February, slightly higher than January's 1.7%.

Malaysia's gross domestic product (GDP) expanded 5.2% y-o-y in 4Q11, down slightly from the 5.8% growth posted in 3Q11. Growth in 4Q11 was supported by sustained domestic demand that increased 10.5% y-o-y, compared with 9.0% in 3Q11, and was driven by higher growth in public sector consumption and gross fixed capital formation. On the other hand, net exports dropped 25.7% y-o-y in 4Q11 in a reversal from the 18.1% increase posted in



the previous quarter. For the full-year 2011, Malaysia's GDP increased 5.1%.

Size and Composition

Total LCY bonds outstanding reached MYR833.8 billion (US\$263.2 billion) at the end of 2011, up 10.4% y-o-y but flat on a quarter-on-quarter (q-o-q) basis (Table 1). Growth in LCY government bonds eased to 12.0% y-o-y in 4Q11—for a total of MYR499.0 billion (US\$157.5 billion)—after posting a 19.8% increase in 3Q11. Central government bills and bonds rose 13.0% y-o-y at end-December versus 10.9% at end-September. However, central bank bills growth slowed to 9.3% y-o-y at end-December from 58.0% at end-September. On a q-o-q basis, total LCY government bonds outstanding fell 1.2% in 4Q11.

Issuance of government bonds—Malaysian Government Securities (MGSs) and Government Investment Issues (GIIs)—increased 92.8% y-o-y to MYR20.2 billion in 4Q11. Total government bond issuance increased 60.6% in 2011 to reach MYR93.3 billion, up from MYR58.1 billion in 2010. A total of MYR48.1 billion worth of government bonds matured in 2011, which brought net issuance to MYR45.2 billion.

Table 1: Size and Composition of the LCY Bond Market in Malaysia

				Amount (billion)	(billion)						Grov	Growth Rate (%)	(%)		
	Sep-11	-11	0ct-11	11	Nov-11	-11	Dec-11	11	Sep-11	11	Oct-11 Nov-11	Nov-11		Dec-11	
	MYR	\$SN	MYR	\$SN	MYR	\$SN	MYR	\$SN	y-0-y	b-0-b	m-o-m		y-0-y	b-o-b	m-o-m
Fotal	840.0	840.0 263.4	839.7	273.9	843.7	265.5	833.8	263.2	16.5	3.4	(0.03)	0.5	10.4	(0.7)	(1.2)
Government	505.0	158.4	504.1	164.4	502.1	158.0	499.0	157.5	19.8	4.1	(0.2)	(0.4)	12.0	(1.2)	(0.6)
Central Government Bonds	376.8	118.2	383.0	124.9	389.0	122.4	392.0	123.7	10.9	0.2	1.6	1.6	13.0	4.0	0.8
Central Bank Bills	127.7	40.0	120.6	39.3	112.6	35.4	106.7	33.7	58.0	17.8	(5.6)	(9.9)	9.3	(16.4)	(5.2)
Others	0.5	0.1	0.5	0.2	0.5	0.1	0.2	0.1	(52.1)	ı	1	ı	(75.0)	(47.8)	(47.8)
Corporate	335.0	335.0 105.0	335.6	109.5	341.6 107.5	107.5	334.8	105.7	11.8	2.3	0.2	1.8	8.1	(0.02)	(2.0)

– = not applicable, LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year

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Islamic Securities, Ąjii Bithaman and Notes, Berhad and Cagamas Bonds calculated from LCY base and do not include currency by Khazanah Nasional Khazanah Bonds issued by Cagamas Berhad refers to ssued

Fully Automated System for Issuing/Tendering (FAST); and Bloomberg

and Sanadat Mudharabah Cagamas

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Outstanding LCY corporate bonds rose 8.1% y-o-y as of end-2011. However, on a q-o-q basis, total LCY corporate bonds outstanding were unchanged in 4Q11. LCY corporate bonds outstanding have been steadily increasing since 2005, largely driven by the surge in *sukuk* (Islamic bonds). At the end of 2011, LCY corporate *sukuk* outstanding stood at MYR206.1 billion, more than double the level from 2006 and more than 5 times the amount in 2001. On the other hand, outstanding conventional LCY corporate bonds were unchanged in 2011 (Figure 2).

Despite the drop in the stock of more traditional Islamic bonds issued by corporations (IBONDS) and Islamic corporate paper, Islamic-based LCY corporate bonds outstanding were up 14.1% y-o-y at end-2011 due to an increase in Islamic Medium-Term Notes (IMTNs) outstanding, which surged 49.9% to MYR101.5 billion in 2010 and 29.0% to MYR130.8 billion in 2011 (Table 2). The large issuers of IMTNs in 2011 included water asset management company Pengurusan Air (MYR9.9 billion), Tenaga Nasional's special purpose vehicle Manjung Island Energy (MYR4.9 billion), and national infrastructure company Prasarana (MYR3.1 billion). State-owned GovCo Holdings and state electricity provider Sarawak Energy each sold MYR3.0 billion worth of IMTNs in 2011, while road toll operator Anih Bhd. issued MYR2.5 billion of IMTNs.

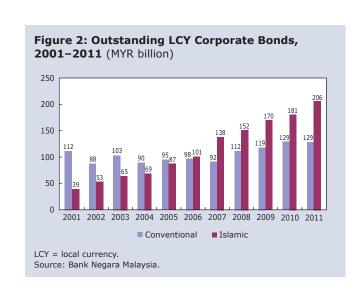


Table 2: Outstanding Islamic Corporate LCY Bonds, 2001-2011 (MYR billion)

Year	IABS/ ABS-IMTN	IBONDS	ICP	IMTN
2001	-	18.33	4.48	1.12
2002	-	33.29	4.46	1.75
2003	-	46.11	4.69	2.57
2004	0.99	52.09	6.21	5.43
2005	0.60	55.09	3.62	9.97
2006	3.25	62.88	4.49	16.75
2007	3.21	65.05	5.89	26.96
2008	5.55	70.99	6.46	55.07
2009	6.17	71.95	5.89	67.67
2010	5.12	68.79	5.28	101.45
2011	5.10	67.05	3.18	130.82

 – a data not available, ABS-IMTN = asset-backed securities-Islamic mediumterm notes, IABS = Islamic asset-backed securities, IBONDS = Islamic bonds, ICP = Islamic corporate paper, IMTN = Islamic medium-term notes.
 Source: Bank Negara Malaysia.

Issuance of LCY corporate bonds fell 9.2% y-o-y to MYR23.2 billion in 4Q11, but total corporate LCY bond issuance increased 12.4% to MYR92.3 billion in full-year 2011.

As of end-2011, the top 30 issuers in Malaysia accounted for 56% of total LCY corporate bonds outstanding. Cagamas Bhd., Khazanah Nasional, and Binariang GSM remained the biggest issuers of LCY corporate bonds, with outstanding amounts of MYR20.0 billion, MYR13.2 billion, and MYR11.3 billion, respectively (Table 3).

Investor Profile

As of end-December, financial institutions were the largest holders of MGSs and GIIs, with 42% of total outstanding government bonds, followed by social security institutions, which held 24%. Insurance companies comprised 6% of the total (Figure 3). The share of government bonds held by foreign investors continued to rise to 26% at end-December, up from a 25% share at end-September and 22% at end-December 2010.

Domestic commercial and Islamic banks were the largest holders of LCY corporate bonds, with an estimated share of 45% at end-December 2010. Life insurance companies and the Employment

Provident Fund followed with shares of 30% and 13%, respectively (**Figure 4**).

Ratings Change

In January, Moody's affirmed Malaysia's A3 long-term LCY and foreign currency (FCY) rating and gave it a stable outlook (Table 4). According to Moody's, Malaysia's A3 sovereign rating was based on its economic resiliency, backed by a highly open, medium-sized economy, and a well-diversified external sector. While Malaysia's credit metrics have weakened due to the global financial crisis, the stable outlook reflects prospects for the effective implementation of countercyclical fiscal policy and gradual reforms to help cushion the impact of external shocks.

Policy, Institutional, and Regulatory Developments

BNM Announces a Renminbi Settlement Service

BNM announced that Renminbi Settlement Services (RSS) were to be included in its Real-Time Electronic Transfer of Funds and Settlement System (RENTAS) beginning 21 March. Bank of China (Malaysia) Bhd. has been appointed as the onshore settlement institution for RSS, which will provide greater efficiency and competitiveness in trade settlement, facilitate bilateral trade between Malaysia and the People's Republic of China (PRC), and provide a natural hedge against the fluctuations and volatility of other currencies while eliminating settlement risk for renminbi transactions.

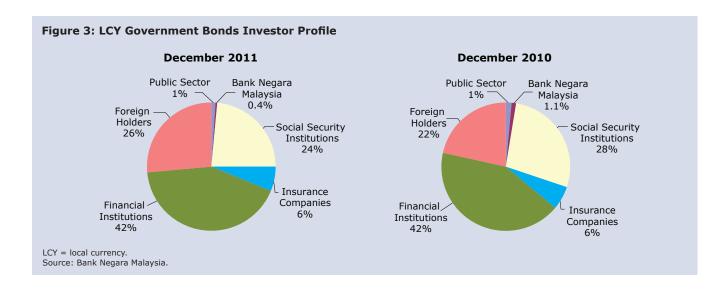
HKMA, BNM, and Euroclear Unveil Pilot Program for Cross-Border Bond Transactions

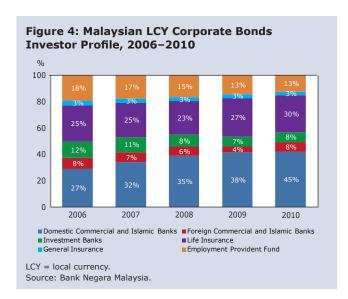
The Hong Kong Monetary Authority (HKMA), BNM, and Euroclear Bank announced the launch of a pilot platform in March. The platform, which became operational on 30 March, allows investors in Hong Kong, China and Malaysia to buy and hold foreign debt securities, and settle cross-border transactions on a delivery-

Table 3: Top 30 Issuers of LCY Corporate Bonds in Malaysia (as of end-December 2011)

Issuers			nding Am YR billion)			State-	Privately-	Listed	Type of
-5540.5	BONDS	IBONDS	MTN	IMTN	TOTAL	Owned	Owned	Company	Industry
1. Cagamas			9.77	10.22	19.99	Yes	No	No	Finance
2. Khazanah		13.20			13.20	Yes	No	No	Quasi-Govt. and Other
3. Binariang GSM		3.02		8.28	11.30	No	Yes	No	Transport, Storage, and Comm.
4. Pengurusan Air Bhd.				11.08	11.08	Yes	No	No	Energy, Gas, and Water
5. Maybank	9.10	1.50			10.60	No	Yes	Yes	Finance
6. Project Lebuhraya		5.62		3.68	9.30	No	Yes	Yes	Transport, Storage, and Comm.
7. Prasarana	2.91	2.00		4.00	8.91	Yes	No	No	Finance
8. Malakoff Corp.		1.70		5.60	7.30	No	Yes	No	Finance
9. CIMB Bank	7.00				7.00	No	Yes	No	Finance
10. Public Bank	1.20		4.87		6.07	No	Yes	Yes	Finance
11. KL International Airport	1.60	4.26			5.86	Yes	No	No	Transport, Storage, and Comm.
12. Rantau Abang Capital Bhd.				5.80	5.80	No	Yes	No	Quasi-Govt. and Other
13. Senai Desaru Expressway Bhd.				5.58	5.58	No	Yes	No	Construction
14. 1Malaysia Development Bhd.				5.00	5.00	Yes	No	No	Finance
15. AM Bank	0.49		4.48		4.96	No	Yes	Yes	Finance
16. Manjung Island Energy Bhd.				4.85	4.85	Yes	No	No	Energy, Gas, and Water
17. Jimah Energy Ventures				4.43	4.43	No	Yes	No	Energy, Gas, and Water,
18. Putrajaya Holdings		0.57		3.78	4.35	Yes	No	No	Finance
19. Celcom Transmission				4.20	4.20	No	Yes	No	Transport, Storage, and Comm.
20. Bank Pembangunan Malaysia	0.90		2.40	0.90	4.20	Yes	No	No	Finance
21. RHB Bank	0.60		3.25		3.85	No	Yes	No	Finance
22. Tanjung Bin				3.73	3.73	No	Yes	No	Energy, Gas, and Water
23. Danga Capital				3.60	3.60	Yes	No	No	Finance
24. YTL Power International			3.53		3.53	No	Yes	Yes	Energy, Gas, and Water
25. Cekap Mentari	3.50				3.50	No	Yes	Yes	Finance
26. Hong Leong Bank	2.20		1.16		3.36	No	Yes	Yes	Finance
27. Anih Bhd.	0.62			2.50	3.12	No	Yes	No	Finance
28. GOVCO Holdings				3.00	3.00	Yes	No	No	Quasi-Govt. and Other
29. Sarawak Energy				3.00	3.00	Yes	No	Yes	Energy, Gas, and Water
30. CIMB Group	2.13		0.50	0.35	2.98	No	Yes	Yes	Finance
Total Top 30 LCY Corporate Issuers	32.25	31.87	29.96	93.57	187.65				
Total LCY Corporate Bonds	59.06	67.05	56.41	130.82	334.81				
Top 30 as % of Total LCY Corporate Bonds	54.6%	47.5%	53.1%	71.5%	56.0%				

 $IBONDS = Islamic \ bonds, \ IMTN = Islamic \ medium-term \ notes, \ LCY = local \ currency, \ MTN = medium-term \ notes. \\ Source: \ Bank \ Negara \ Malaysia \ Fully \ Automated \ System for \ Issuing/Tendering \ (FAST).$





versus-payment (DVP) basis. According to BNM and HKMA's joint press release, the platform is intended to facilitate the harmonization of market practices and standardization of the issuance and settlement of debt securities in order to deepen Asian bond market liquidity, attract investment, and increase operational efficiency. The pilot platform will optimize existing system links between HKMA's Central Moneymarkets Units (CMUs), BNM's RENTAS, and Euroclear Bank, as well as strengthen the connections between local central securities depositories and foreign current real-time gross settlement systems. It will also contain a comprehensive Asian debt securities

Table 4: Selected Sovereign Ratings and Outlook for Malaysia

	Moody's	S&P	Fitch	R&I
Sovereign FCY LT Ratings	A3	A-	A-	А
Outlook	Stable	Stable	Stable	Stable

FCY = foreign currency, LT = long term. Source: Rating agencies.

database maintained by Euroclear Bank. The new infrastructure is expected to strengthen cross-border issuance of local bonds in Hong Kong, China and Malaysia, and the rollout of the platform will provide investors and market intermediaries with efficient and cost effective cross-border access to the Hong Kong, China and Malaysian bond markets.

BNM and MAS Sign MOU to Enhance Domestic Liquidity

In January, BNM and the Monetary Authority of Singapore (MAS) signed a memorandum of understanding (MOU) to strengthen their cooperation in carrying out domestic liquidity management and enhance the liquidity of financial institutions in both countries. The cross-border collateral agreement allows eligible financial institutions in Singapore to pledge ringgit or MYR-denominated government and central bank securities to obtain Singapore dollar liquidity

from MAS. Likewise, eligible financial institutions in Malaysia may pledge Singapore dollars or SGD-denominated government securities to obtain ringgit liquidity from BNM.

BNM Issues New Liberalization Measures

In February, BNM issued new liberalization measures to enhance competitiveness and develop domestic financial markets. The new measures (i) permit licensed onshore banks to trade one FCY against another with a resident, (ii) allow licensed onshore banks to offer MYR-denominated interest rate derivatives to a nonbank non-resident; and (iii) permit residents to convert a MYR- or FCY-denominated debt obligation into a debt obligation of another FCY.

These new measures are designed to increase liquidity, depth, and participation in domestic financial markets.

PBOC and BNM Enter Into Currency Swap Agreement

The People's Bank of China (PBOC) and BNM signed a currency swap agreement in February to exchange CNY180 billion–MYR90 billion over a period of 3 years. The swap value was increased to CNY180 billion–MYR90 billion from CNY80 billion–MYR40 billion, which had previously been agreed to in February 2009. The PBOC said that the swap agreement will facilitate bilateral trade between the People's Republic of China and Malaysia, and maintain regional financial stability.

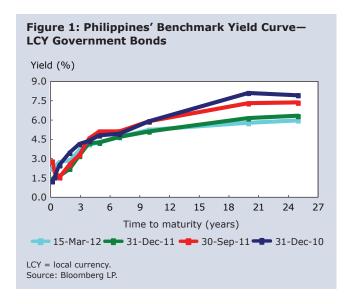
Philippines—Update

Yield Movements

The Philippines' government bond yield curve flattened between end-2010 and end-2011 as inflation fears dissipated and concerns over weakening growth heightened, leading to calls for a more accommodative monetary policy and aggressive fiscal stimulus measures. In 2011, the yields on tenors of less than 1 year increased between 5 basis points (bps) and 18 bps, while the rest of the curve fell between 17 bps and nearly 200 bps (Figure 1).

The yield curve continued to flatten between end-December and 15 March, as yields in most tenors across the curve rose—with maturities of 3 years or less rising more than the others. Yields for maturities between 3 months and 3 years increased between 45 bps and 110 bps, while tenors of 5 years and 10 years rose 3 bps and 15 bps, respectively. Meanwhile, yields in other tenors declined between 4 bps and 37 bps. Yield spreads between 2- and 10-year tenors narrowed to 238 bps in 15 March from 291 bps at end-December.

The gross domestic product (GDP) of the Philippines grew 3.7% year-on-year (y-o-y) in 2011 after expanding 3.7% y-o-y in 4Q11. GDP growth in 2011 failed to meet the government's target of 4.5%-5.5% and was well below 2010's growth rate of 7.6%. Spillover effects from the eurozone debt crisis and a slowdown in the United States (US) and Japan weighed heavily on the country's export sector in 2011. Cumulative exports for the full-year 2011 stood at US\$48 billion—a contraction of 6.9% from 2010. Merchandise exports showed signs of recovery in the first two months of 2012generating \$8.6 billion receipts or 8.8% higher than same period of 2011. Remittances from overseas Filipinos buoyed the country's economy, reaching a record-high US\$20.1 billion in 2011 or annual growth of 7.2%. Remittances in January-February 2012 reached US\$3.1 billion—5.6% higher than the same period in 2011.



Average consumer price inflation in the Philippines was 4.8% in 2011, based on 2006 consumer price index (CPI) data, which was well within the government's target range of 3.0%–5.0%. (Inflation averaged 4.4% based on 2000 CPI data.) Benign inflation continued in 1Q12 as inflation in January, February, and March eased to 3.9%, 2.7%, and 2.6% y-o-y, respectively. Bangko Sentral ng Pilipinas (BSP) has set an inflation target range for 2012–2014 of 3.0%–5.0%. Year-to-date average is at 3.1%.

With inflation risks well within manageable levels and growth lagging in 2011, BSP shifted its monetary policy stance from neutral to accommodative by slashing key interest rates 25 bps in both January and March. The overnight borrowing (reverse repurchase) and lending (repurchase) rates were lowered to 4.0% and 6.0%, respectively. Policy rates have thus reverted to their historic lows last seen in March 2011. BSP also reduced its reserve requirement ratio by 3 percentage points from 21% to 18%—for commercial and universal banks-effective 6 April. In 19 April, BSP kept its policy rates unchanged pausing from its easing monetary stance—as (i) oil prices remain elevated leading to upside risks to inflation outlook and (ii) gains from previous rate cuts have yet to be assessed.

Table 1: Size and Composition of the LCY Bond Market in the Philippines

				Amount (billion)	(billion)						Gro	Growth Rate (%)	(%)		
	Sep-11	11.	0ct-11	11	Nov-11	11	Dec-11	11	Sep-11	11	Oct-11	Oct-11 Nov-11		Dec-11	
	ЬНР	\$SN	РНР	\$SN	ЬНР	\$SN	ЬНР	\$SN	y-o-y	b-o-b	m-o-m	m-o-m m-o-m	y-o-y	b-o-b	m-o-m
Total	3,276	75	3,321	78	3,368	77	3,391	77	3.2	0.3	1.4	1.4	5.9	3.5	0.7
Government	2,867	65	2,902	89	2,936	29	2,956	29	2.4	0.7	1.2	1.2	4.9	3.1	0.7
Treasury Bills	330	8	313	7	296	7	295	7	(43.0)	(13.5)	(5.2)	(5.5)	(44.1)	(10.5)	(0.2)
Treasury Bonds	2,420	52	2,472	28	2,524	28	2,547	28	15.8	3.1	2.1	2.1	17.9	5.3	6.0
Others	117	3	117	m	117	8	113	m	(11.2)	(1.7)	I	1	(13.5)	(3.1)	(3.1)
Corporate	409	6	419	10	432	10	436	10	8.9	(2.2)	2.8	3.0	13.4	6.5	0.0
															L

not applicable, LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year

sour data using o Calculated u Bloomberg e

of-period LCY-US\$ rates are used. calculated from LCY base and do not

As of 31 December 2011, the Government of the Philippines and Petron included. not are Bonds Treasury

repayment was guaranteed by the National Government. These include issues of Power Sector Assets and

"Others" includes bonds issued by government agencies/instrumentalities/corporations with which I Liabilities Management (PSALM), National Food Authority, and others.

Peso Global Bonds (PHP-denominated bonds but payable in US\$) and multi-currency Retail Trea Corporation have an outstanding PHP98.9 billion and PHP20.0 billion of Peso Global Bonds, respect Bloomberg Philippine BTr and Size and Composition

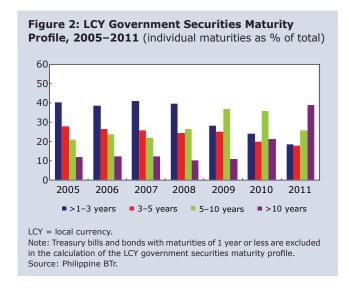
As of end-December, LCY bonds outstanding stood at PHP3.4 trillion for an increase of 3.5% quarter-onquarter (q-o-q). Growth in treasury and corporate bonds led the robust expansion. Fixed-Rate Treasury Notes (FXTNs) stood at PHP2.96 trillion at end-December, rising 5.3% q-o-q; corporate bonds ended at PHP436 billion for a 6.5% q-o-q increase. Treasury bills, meanwhile, shrank 10.5% q-o-q to PHP295 billion (Table 1).

On an annual basis, total LCY bonds outstanding surged 5.9% in 4Q11, led by y-o-y growth of 17.9% and 13.4%, respectively, in treasury and corporate bonds. The growth figures are a result of the government and private issuers taking advantage of massive liquidity in the financial system and the low interest rate environment to issue long-term bonds.

In October, the Bureau of the Treasury (BTr) issued PHP110 billion of Retail Treasury Bonds (RTBs) with maturities of 10 years and 15 years. The 10-year RTBs, totaling PHP54.9 billion, carry a coupon of 5.75%; the 15-year RTBs, totaling PHP55.1 billion, have a coupon of 6.25%. RTBs are FXTNs that are sold primarily to individual investors and pay coupons on a quarterly basis.

Consistent with its strategy of lengthening its debt maturity profile, BTr offered only 7-, 10-, and 25-year bonds in 4Q11. BTr was able to sell PHP7.8 billion of 7-year bonds, PHP9.0 billion of 10-year bonds, and PHP18.8 billion of 25-year bonds.

The maturity profile of government FXTNs continued to lengthen in 2011. The average term of FXTNs increased to 9.7 years in 2011 from 7.6 years in 2010. Noticeably, the share of FXTNs with maturities between 1 year and 3 years fell to 18.3% in 2011 from 23.9% in 2010. The share of FXTNs with maturities between 3 years and 5 years decreased to 17.4% from 19.5%. The share of FXTNs with maturities between 5 years and 10 years fell to 25.5% from 35.5%. In contrast, the share of FXTNs with maturity terms of more



than 10 years rose to 38.8% in 2011 from 21.1% in 2010 (Figure 2).

Major issuers of corporate bonds in 4Q11 were banks, investment houses, and a telephone company. BDO Unibank Inc. sold PHP6.5 billion of Tier 2 notes with a coupon of 6.375% and a maturity date of 7 January 2022. First Metro Investment Corporation, the investment banking arm of Metrobank Group, sold PHP5 billion worth of retail bonds with a coupon of 5.675% and a maturity date of 25 February 2017. Rizal Commercial Banking Corporation (RCBC) sold PHP3.85 billion of long-term certificates of deposit due on 29 June 2017 with a coupon of 5.25%. Philippine National Bank (PNB) issued PHP3.1 billion of 5.25-year long-term certificates of deposit with a coupon rate of 5.18% and a maturity date of 17 February 2017.

Corporate Bond Market Development. Total LCY corporate bonds outstanding in the Philippines reached PHP435.8 billion at end-December. San Miguel Brewery Inc. (SMB) remained the top corporate issuer with PHP38.8 billion worth of outstanding bonds (Table 2). Recently, SMB gained approval from the majority of its bondholders to change several covenants in its existing bonds and was given the authority to raise another PHP20 billion through the issuance of 5- and 10-year bonds.

The four next largest borrowers in the bond market in 4Q11 were (i) BDO Unibank, Inc. with PHP38.0 billion of debt; (ii) Ayala Corporation, a holding company, with PHP26.0 billion; (iii) Philippine National Bank with PHP24.4 billion; and (iv) SM Investments Corporation with PHP21.1 billion.

Among the top 30 bond issuers, 27 companies were listed on the Philippine Stock Exchange. Only Manila North Tollways Corporation; Tanduay Distillers, Inc.; and Philippine Phosphate Fertilizer Corporation were privately-owned companies. Meanwhile, 14 out of the 30 issuers have bonds listed with the Philippine Dealing and Exchange Corporation (PDEx), the sole fixed-income exchange in the country. (The Power Sector Assets and Liabilities Management Corporation [PSALM] has PHP30 billion worth of bonds listed with PDEx; however, *AsianBondsOnline* classifies these as government bonds.)

Banking and financial services institutions remained the dominant issuers of bonds in 4Q11, accounting for 36% of the total market (Figure 3). The share of banks and financial institutions was up from 34% in 3Q11 as BSP-supervised institutions enhanced their capitalization (Tier 2) and deposit bases (long-term certificates of deposit) in anticipation of the adoption of Basel III provisions by 2014, based on the latest guidance from BSP (See Policy, Regulatory, and Institutional Developments). In a low interest rate environment, banks have been tapping the bond market to protect existing lending franchises, expand operations, and ensure liquidity.

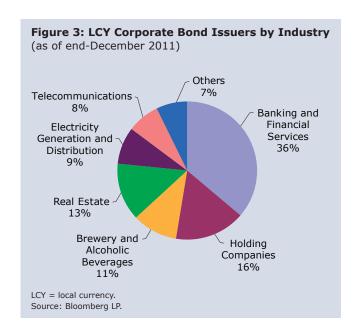
Holdings companies' share represented 16% of the total in 4Q11 and real estate companies accounted for 13%. A brewery and other companies selling alcoholic beverages comprised 11% of the total corporate bond market, while electricity and telecommunications companies accounted for 9% and 8%, respectively.

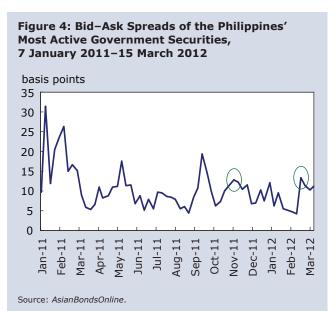
Foreign Currency Bonds. In January, the government took advantage of favorable market conditions to issue a 25-year US\$-denominated benchmark bond designed to meet the country's

Table 2: Top 30 Issuers of LCY Corporate Bonds in the Philippines (as of end-December 2011)

	Outstandir	ng Amount				
Issuers	LCY Bonds (PHP billion)	LCY Bonds (US\$ billion)	State- Owned	Privately- Owned	Listed Company	Type of Industry
1. San Miguel Brewery Inc	38.80	0.89	No	Yes	Yes	Brewery
2. BDO Unibank Inc	38.00	0.87	No	Yes	Yes	Banking
3. Ayala Corporation	26.00	0.59	No	Yes	Yes	Diversified Operations
4. Philippine National Bank	24.35	0.56	No	Yes	Yes	Banking
5. SM Investments Corporation	21.10	0.48	No	Yes	Yes	Diversified Operations
6. Rizal Commercial Banking Corporation	19.85	0.45	No	Yes	Yes	Banking
7. Manila Electric Company	18.82	0.43	No	Yes	Yes	Electricity Distribution
8. Metropolitan Bank & Trust Co	18.50	0.42	No	Yes	Yes	Banking
9. Philippine Long Distance Telephone Co	17.50	0.40	No	Yes	Yes	Telecommunications
10. Ayala Land Inc	15.51	0.35	No	Yes	Yes	Real Estate
11. Robinsons Land Corporation	15.00	0.34	No	Yes	Yes	Real Estate
12. Petron Corporation	13.60	0.31	No	Yes	Yes	Oil Refining and Marketing
13. JG Summit Holdings, Inc	13.31	0.30	No	Yes	Yes	Diversified Operations
14. Globe Telecommunications	12.72	0.29	No	Yes	Yes	Telecommunications
15. Energy Development Corporation	12.00	0.27	No	Yes	Yes	Electricity Generation
16. Bank of the Philippine Islands	10.00	0.23	No	Yes	Yes	Banking
17. SM Development Corporation	10.00	0.23	No	Yes	Yes	Real Estate
18. First Philippine Holdings Corporation	8.49	0.19	No	Yes	Yes	Electricity Generation and Distribution
19. Allied Banking Corporation	8.00	0.18	No	Yes	Yes	Banking
20. Filinvest Land, Inc	8.00	0.18	No	Yes	Yes	Real Estate
21. United Coconut Planters Bank	7.67	0.17	No	Yes	Yes	Banking
22. Aboitiz Power Corporation	6.87	0.16	No	Yes	Yes	Electricity Generation
23. Megaworld Corporation	6.38	0.15	No	Yes	Yes	Real Estate
24. Metrobank Card Corporation	6.30	0.14	No	Yes	Yes	Diversified Financial Services
25. Manila North Tollways Corporation	5.28	0.12	No	Yes	No	Public Thoroughfares
26. China Banking Corporation	5.00	0.11	No	Yes	Yes	Banking
27. First Metro Investment Corporation	5.00	0.11	No	Yes	Yes	Investment Banking
28. Tanduay Distillers Inc	5.00	0.11	No	Yes	No	Alcoholic Beverages
29. Philippine Phosphate Fertilizer Corporation	4.50	0.10	No	Yes	No	Agricultural Chemicals
30. Manila Water Company Inc	4.00	0.09	No	Yes	Yes	Water Distribution
Total Top 30 LCY Corporate Issuers	405.55	9.25				
Total LCY Corporate Bonds	435.80	9.94				
Top 30 as % of Total LCY Corporate Bonds	93.1%	93.1%				

LCY = local currency. Source: Bloomberg LP.





budgetary requirements. The government raised US\$1.5 billion from the offering. The bonds carried an interest rate of 5.0% per annum. Investors comprised buyers from the United States (35%), Philippines (25%), the rest of Asia (25%), and Europe (15%). The government has a planned foreign borrowing program of US\$4.02 billion in 2012 to be sourced from commercial borrowing (US\$2.25 billion) and project loans (US\$1.77 billion).

Benchmark Government Securities Bid-Ask Spreads

Bid-ask spreads for the most traded government securities between 7 January 2011 and 15 March 2012 are presented in **Figure 4**. Treasury bonds with daily or most frequent available bid-ask (two-way) quotes were gathered to monitor liquidity in the LCY secondary market. The data used to capture the bid-ask spreads for these securities were obtained from the Bloomberg pages of the money brokers operating in the Philippines.

During the period covered, average bid-ask spreads narrowed considerably. In 1Q11, average bid-ask spreads were 15.9 bps. In 2Q11, average spreads narrowed to 9.6 bps before

falling further to 9.1 bps in 3Q11. Average bidask spreads rose marginally to 9.3 bps in 4Q11, then tightened again in the first several months of 2012, averaging 8.4 bps on expectations of monetary easing and a positive outlook for the country's economy.

Starting in the second half of 2011, less data are available on bid-ask levels for short tenors—such as FXTN 5-67, FXTN 7-48, and FXTN 10-42—as short tenors have been increasingly swapped-out for longer tenors and the government did not offer any notes with tenors of 2–5 years in 4Q11.

Some notable widening of average bid-ask spreads were recorded in 4Q11 and the first 2.5 months of 2012. During the two consecutive weeks of 8–11 and 14–18 November, average bid-ask spreads were 12.8 bps and 12.2 bps, respectively. Risk aversion sentiment crept into the LCY market as the eurozone's debt turmoil was perceived to be deepening on account of escalating European borrowing costs. In 2012, average bid-ask spreads were at their highest in the week of 20–24 February at 13.3 bps, when BTr set the coupon rates for its long-dated RTBs at least 25 bps higher than secondary trading of the same tenored treasuries.

The bonds posting single-digit bid-ask spreads during the period of observation were RTB 20-1 (1.9 bps), FXTN 20-17 (2.1 bps), RTB 15-2 (4.7 bps), FXTN 10-54 (6.1 bps), RTB 10-3 (7.1 bps), FXTN 10-53 (7.2 bps), FXTN 25-8 (7.3 bps), RTB 10-2 (7.4 bps), and FXTN 7-51 (8.1 bps).

Rating Changes

S&P raised its outlook on the Philippines' BB sovereign credit rating to positive from stable in December. The agency cited strong external liquidity and signs of improving growth prospects as reasons for the upgrade (Table 3).

Table 3: Selected Sovereign Ratings and Outlooks for the Philippines

	Moody's	S&P	Fitch
Sovereign FCY LT Ratings	Ba2	ВВ	BB+
Outlook	Positive	Positive	Stable

FCY = foreign currency, LT = long term. Source: Rating agencies.

Policy, Institutional, and Regulatory Developments

BTr Sells PHP179.8 Billion of Long-Dated RTBs

BTr sold a record-breaking PHP179.8 billion of 15-and 20-year RTBs in the last week of February. The 15- and 20-year bonds carry coupon rates of 5.375% and 5.875% per annum, respectively. The RTB coupons are payable on a quarterly basis. Of the total PHP179.8 billion worth of bonds issued, PHP44.1 billion were in the form of 15-year RTBs and PHP135.7 billion were 20-year RTBs. The RTBs were settled on 1 March. Previously, in October 2011, BTr raised PHP110 billion from the sale of 10- and 15-year RTBs.

BSP Relaxes Rules on FX Transactions

BSP amended several foreign exchange (FX) regulations to provide easier access for both resident and non-resident FX users and to

encourage investment in the country. The new measures aim to improve the data monitoring of private external debt and simplify procedures for FX transactions. The rule changes will

- (i) allow, within a 3-month period (December 2011–February 2012), unregistered private sector foreign loans to be paid using FX purchased from authorized agent banks (AABs) and their subsidiary and/or affiliate FX corporations;
- (ii) expand the list of non-trade current account transactions for which FX may be freely purchased from AABs or AAB FX corporations, without prior BSP approval, to include the following: (a) lease of foreign-owned equipment; (b) refund of unused foreign grant or aid funds, and foreign loan proceeds; (c) payment of underwriting expenses, fees, and commissions, including brokers' fees payable or due to non-residents for initial public offerings (IPOs) involving Philippine shares; and (d) settlement by the Philippine Deposit Insurance Corporation of Foreign Currency Deposit Unit (FCDU) claims against banks that have ceased operations;
- (iii) allow AABs and AAB FX corporations to sell FX for advance payment of imports regardless of amount and without prior BSP approval, but subject to standard document requirements;
- (iv) lift the requirements to (a) inwardly remit dividends, earnings, and divestment proceeds from outward investments funded by FX purchased from AABs or AAB FX corporations; and (b) reinvest these funds within 30 banking days from receipt;
- (v) lift the requirement to convert to pesos the FX funding of foreign direct equity investments to qualify for registration with the BSP;
- (vi) exempt from BSP approval foreign and FCDU loans that finance infrastructure projects included in the government's list of publicprivate partnerships (PPP), provided these are subsequently registered with BSP to qualify for servicing using FX to be purchased from AABs or AAB FX corporations, and include microfinance activities in the list of

- projects eligible for foreign financing under Section 25 of the Manual of Regulations on Foreign Exchange Transactions;
- (vii) lift the 3-day period within which FX purchased for import payments and deposited in FCDU accounts must be remitted to the offshore beneficiary; and
- (viii) lift the BSP approval requirement for extensions beyond 1 year of the validity of letters of credit.

On 16 March, BSP further revised the FX rules by (i) raising the ceiling of undocumented importations from US\$50,000 to US\$500,000, (ii) lifting the requirement for submission of hard copies of daily investment registrations and outward remittance reports, and (iii) revising the list of regulated and prohibited products for export.

BSP Simplifies Reserve Requirement Rules, Cuts Ratios by 3 Percentage Points

Effective 6 April, BSP will adopt a simplified reserve requirement policy. Under the new rules, existing statutory and liquidity reserve requirements will be unified into a single reserve requirement, and BSP will not pay interest to the banks on the unified reserve requirement. Cash-in-vault (for banks) and demand deposits (for non-bank financial institutions with quasi-banking functions) will no longer count toward reserve requirement compliance.

Under existing rules, banks are paid interest rates of 4% on amounts up to 40% of their regular reserves. They are also paid on their liquidity reserves—a rate equivalent to comparable government securities less 50 bps. Upon adoption of the new rules, BSP will lower the reserve requirement ratio by 3 percentage points—to 18%—to offset the impact on banks' intermediation costs. Universal and commercial banks will maintain a reserve ratio of 18% from 21%.

BSP to Implement Basel III Provisions by 2014

In January, BSP announced that it would adopt all provisions of the Basel III Agreement effective 1 January 2014. While the Basel Committee on Banking Supervision allows for the staggered implementation of Basel III provisions up until January 2019, BSP decided to adopt all capital adequacy standards 5 years ahead of this timeline. Further, BSP will impose higher capital ratios than those suggested by the Basel Committee. Table 4 provides a summary of the minimum capital requirements of Basel III compared with BSP's existing and proposed guidelines.

BSP will be conducting a quantitative study in 2Q12 to identify which banks are most susceptible to potential negative impacts from the implementation of its new guidelines.

Table 4: Capital Requirements under Basel III and BSP Guidelines (%)

	Base	SI TTT		35P Guidelines	
Capital Requirements	Minimum Ratios	With Conservation Buffer	Existing Minimum Ratios	Proposed Minimum Ratios	Proposed Minimum with Conservation Buffer
Common Equity Tier 1 Ratio	4.5	7.0	None	6.0	8.5
Tier 1 Ratio	6.0	8.5	5.0 (6.0 trigger for PCA)	7.5	10.0
Capital Adequacy Ratio	8.0	10.5	10.0	10.0	12.5

PCA = prompt corrective action. Source: Bangko Sentral ng Pilipinas.

Singapore—Update

Yield Movements

The yield curve for local currency (LCY) government bonds in Singapore rose across all maturities between end-September and end-December 2011. Between end-December and 15 March, the yield curve steepened as yields fell at the shortend on the back of easing inflationary pressures, and rose from the belly to the long-end (Figure 1). Between end-December and 15 March, yields for the 3- and 12-month tenors dropped 5 basis points (bps) each, while yields for the 2-year maturity fell 10 bps. Meanwhile, yields for the 5-, 10-, 15-, and 20-year tenors rose 14, 12, 9, and 19 bps, respectively. The yield spread between the 2- and 10-year maturities widened to 151 bps in 15 March from 129 bps at end-December and 149 bps at end-September.

Consumer price inflation in Singapore eased to 4.6% y-o-y in February from 4.8% in January and 5.5% in December as food and services inflation moderated. For the full-year 2011, consumer price inflation was 5.2%. In its policy statement in April, the Monetary Authority of Singapore (MAS) said that external inflationary pressures are likely to be sustained due to higher oil prices. MAS revised its inflation forecast for 2012 from 2.5–3.5% to 3.5–4.5%. MAS announced that it will continue with the policy of a modest and gradual appreciation, and will slightly increase the slope of the policy band of the Singapore dollar Nominal Effective Exchange Rate (S\$NEER). Also, MAS is restoring a narrower policy band.

According to the Ministry of Trade and Industry (MTI), Singapore's economy expanded 3.6% y-o-y in 4Q11, down from 6.0% in the previous quarter. On a seasonally adjusted and annualized quarter-on-quarter (q-o-q) basis, Singapore's gross domestic product (GDP) contracted 2.5% in 4Q11, a reversal of the 2.0% growth rate reported in 3Q11. Growth in the manufacturing sector slowed to 9.2% y-o-y in 4Q11 from 13.7% in 3Q11, while growth in the construction sector

Figure 1: Singapore's Benchmark Yield Curve–LCY Government Bonds

Yield (%)

3.8

3.0

2.3

1.5

0.8

0.0

0 2 4 6 8 10 12 14 16 18 20 22

Time to maturity (years)

15-Mar-12 31-Dec-11 30-Sep-11 31-Dec-10

LCY = local currency.
Source: Bloomberg LP.

was slightly higher in 4Q11 at 2.9% from 2.4% in the previous quarter. Growth among service producing industries weakened to 2.1% in 4Q11 from 3.6% in 3Q11. The finance and insurance sector and the transportation and storage sector posted lower 4Q11 growth rates of 3.5% and 2.4%, respectively, from 11.6% and 5.1% in 3Q11. For the full-year 2011, Singapore's GDP expanded 4.9%, significantly lower than growth of 14.8% registered in 2010. MTI is maintaining a 1.0%–3.0% growth forecast for 2012 amid the bleak global economic outlook.

Size and Composition

The total amount of LCY bonds outstanding surged 29.6% y-o-y to SGD245.6 billion (US\$189.4 billion) at end-December, as the MAS started issuing MAS bills in April (Table 1). Outstanding Singapore Government Securities (SGS) bills and bonds rose 4.7% y-o-y and 2.2% q-o-q to SGD138.5 billion. This figure, however, does not include the special issues of SGS for the Singapore Central Provident Fund, which amounted to SGD176.1 billion in 2010.

Issuance of SGS bonds increased 3.7% y-o-y and 9.5% q-o-q in 4Q11. MAS also started issuing

Table 1. Size and Composition of the LCY Bond Market in Singapore

				Amount (billion)	(billion)						Grov	Growth Rate (%)	(%)		
	Sep	Sep-11	Oct-11	11	Nov-11	-11	Dec-11	11	Sep-11	11	Oct-11	Oct-11 Nov-11		Dec-11	
	SGD	\$SN	SGD	\$SN	SGD	\$SN	SGD	\$SN	y-o-y	b-o-b	m-o-m		y-o-y	b-o-b	m-o-m
Total	246.2	188.3	243.4	194.0	194.0 245.6	191.6 245.6	245.6	189.4	12.7	4.0	(1.2)	6.0	13.1	(0.2)	0.02
Government	152.3	116.5	153.0	122.0	153.0 122.0 153.6	119.9 153.5	153.5	118.4	18.9	5.8	0.5	0.4	16.0	0.8	(0.1)
Central Bank Bills	135.5	103.6	137.6	109.7	137.6 109.7 138.0	107.7 138.5	138.5	106.8	5.8	(2.2)	1.5	0.3	4.7	2.2	0.4
Central Gov't Bonds and Bills	16.8	12.9	15.4	12.3	15.6	12.2	15.0	11.6	1	211.1	(8.3)	1.3	1	(10.7)	(3.8)
Corporate	93.9	71.8	90.4	72.0	92.0	71.8	92.1	71.0	3.8	1.0	(3.8)	1.8		8.6 (1.9)	0.2

not applicable, LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year

Government bonds are calculated using data from national sources. Corporate bonds are based on AsianBondOnline estimates.
 Government bonds and bills does not include the special issue of Singapore Government Securities held by the Singapore Central Provident Fund (CPF) 3. Bloomberg LP end-of-period LCV-US\$ rate is used.
 Growth rates are calculated from LCY base and do not include currency effects.
 Gource: Monetary Authority of Singapore, Singapore Government Securities, and Bloomberg LP.

MAS bills in April—as mentioned above—as part of its money market operations. Outstanding MAS bills increased from SGD5.4 billion at end-June to SGD15.0 billion at end-December.

Meanwhile, outstanding LCY corporate bonds increased 8.6% y-o-y to SGD92.1 billion at end-December, up from the 3.8% y-o-y growth posted at end-September. On a q-o-q basis, outstanding LCY corporate bonds slightly fell 1.9% at end-December.

Notable issues during 4Q11 included the Temasek Financial III's SGD790 million zerocoupon, guaranteed 3-year exchangeable bond in October and another SGD500 million zerocoupon, guaranteed 2-year exchangeable bond in December. Also, the Housing and Development Board issued SGD600 million worth of 7-year bonds in November and Global Logistics Properties sold SGD600 million worth of perpetual bonds in December.

The top 30 corporate issuers in Singapore accounted for about 54% of total LCY corporate bonds outstanding at end-December, mostly from the financial and consumer sectors (Table 2). The Housing and Development Board remained the biggest issuer, with SGD9.1 billion of outstanding bonds at end-4Q11, followed by CapitaLand and Temasek Financial I, with outstanding amounts of SGD4.9 billion and SGD3.6 billion, respectively.

Ratings

In March, Moody's reaffirmed Singapore's Aaa long-term LCY and foreign currency (FCY), and senior unsecured issuer ratings (Table 3). According to Moody's, Singapore's Aaa ratings are supported by the high level of economic resiliency brought about by its rapid economic growth, rising per capita income, and strong institutions. Moody's also cited Singapore's high level of private savings and conservative fiscal policies, which allows the government to maintain a strong balance sheet to provide ample cushion against exogenous shocks.

Table 2: Top 30 Issuers of LCY Corporate Bonds in Singapore (as of end-December 2011)

	Outstandir	ng Amount	State-	Deivertely	Listed	
Issuers	LCY Bonds (SGD billion)	LCY Bonds (US\$ billion)	Owned	Privately- Owned	Company	Type of Industry
1. Housing and Development Board	9.1	7.0	Yes	No	No	Financial
2. Capitaland	4.9	3.8	No	Yes	Yes	Financial
3. Temasek Financial I	3.6	2.8	No	Yes	No	Financial
4. United Overseas Bank	3.3	2.6	No	Yes	Yes	Financial
5. DBS Bank Singapore	3.0	2.3	No	Yes	Yes	Financial
6. SP Power Assets	2.5	1.9	No	Yes	No	Utilities
7. Land Transport Authority	2.4	1.8	Yes	No	No	Industrial
8. Public Utilities Board	2.1	1.6	Yes	No	No	Utilities
9. Oversea-Chinese Banking	2.0	1.6	No	Yes	Yes	Financial
10. Temasek Financial III	1.3	1.0	No	Yes	No	Financial
11. F&N Treasury	1.3	1.0	No	Yes	No	Financial
12. Keppel Land	1.2	0.9	No	Yes	Yes	Financial
13. City Developments	1.1	0.8	No	Yes	Yes	Consumer
14. Capitamall Trust	1.0	0.8	No	Yes	Yes	Financial
15. PSA Corporation	1.0	0.8	No	Yes	No	Consumer
16. Hyflux	0.9	0.7	No	Yes	Yes	Industrial
17. Singtel Group Treasury	0.9	0.7	No	Yes	No	Communications
18. Singapore Airlines	0.8	0.6	No	Yes	No	Communications
19. Overseas Union Enterprise	0.8	0.6	No	Yes	Yes	Consumer
20. Olam International	0.8	0.6	No	Yes	Yes	Consumer
21. GLL IHT PTE	0.8	0.6	No	Yes	No	Financial
22. Mapletree Treasury Services	0.7	0.6	No	Yes	No	Financial
23. Capitaland Treasury	0.7	0.6	No	Yes	No	Financial
24. Sembcorp Financial Services	0.7	0.5	No	Yes	No	Industrial
25. Singapore Press Holdings	0.6	0.5	No	Yes	Yes	Communications
26. Neptune Orient Lines	0.6	0.4	No	Yes	Yes	Industrial
27. Ascott Capital	0.6	0.4	No	Yes	No	Financial
28. United Overseas Land	0.6	0.4	No	Yes	Yes	Financial
29. Capitamalls Asia Treasury	0.6	0.4	No	Yes	No	Financial
30. Global Logistic Properities	0.5	0.4	No	Yes	Yes	Diversified
Total Top 30 LCY Corporate Issuers	50.1	38.7				
Total LCY Corporate Bonds	92.1	71.0				
Top 30 as % of Total LCY Corporate Bonds	54.4%	54.4%				

LCY = local currency. Source: Bloomberg LP.

Table 3: Selected Sovereign Ratings and Outlook for the Singapore

J			
	Moody's	S&P	Fitch
Sovereign FCY LT Ratings	Aaa	AAA	AAA
Outlook	Stable	Stable	Stable

$$\label{eq:fcy} \begin{split} & \mathsf{FCY} = \mathsf{foreign} \ \mathsf{currency}, \ \mathsf{LT} = \mathsf{long} \ \mathsf{term}. \\ & \mathsf{Source:} \ \mathsf{Rating} \ \mathsf{agencies}. \end{split}$$

Policy, Institutional, and Regulatory Developments

SGX Introduces Dual Currency Trading

In March, the Singapore Exchange (SGX) introduced dual currency trading that enables the trading of listed securities in two different currencies. Dual-currency listed shares will be consolidated in investors' central depository accounts. The introduction of dual currency trading is aimed at improving cost efficiency by allowing investors to trade FCY-denominated securities in their LCY.

MAS Announces Initiatives to Improve LCY Corporate Debt Market

MAS Managing Director Ravi Menon announced in March three initiatives to improve efficiency and liquidity in Singapore's LCY corporate debt market. These initiatives include (i) providing swap liquidity to primary dealer banks handling SGD-denominated debt issuances for foreign companies; MAS will support swap transactions at market-determined prices to develop swap market liquidity for longer tenors; (ii) partnering with the industry in the creation of a lending platform for SGD-denominated corporate debt securities from which market players will be allowed to borrow securities for market making; and (iii) initiating a price discovery platform targeted for completion in the second half of the year. This platform aims to improve transparency in the corporate bond market and provide reliable mark-to-market prices to allow market participants to contribute end-of-day prices for a range of SGD-denominated corporate bonds.

BNM and MAS Sign MOU to Enhance Domestic Liquidity

In January, Bank Negara Malaysia (BNM) and MAS signed a memorandum of understanding (MOU) to strengthen their cooperation in carrying out domestic liquidity management and enhance the liquidity of financial institutions in both countries. The cross-border collateral agreement allows eligible financial institutions in Singapore to pledge ringgit or MYR-denominated government and central bank securities to obtain Singapore dollar liquidity from MAS. Likewise, eligible financial institutions in Malaysia may pledge Singapore dollars or SGD-denominated government securities to obtain ringgit liquidity from BNM.

MAS Implements New Regulatory Framework for CRAs

In January, MAS implemented a new regulatory framework to govern credit rating agencies (CRAs). Under the new framework, the provision of credit rating services will be regulated under the Securities and Futures Act (SFA), consequently requiring CRAs to be licensed under SFA's Capital Markets Services. MAS will also introduce a new code of conduct for CRAs in conjunction with the establishment of the new regulatory regime.

Thailand—Update

Yield Movements

Thailand's government bond yields dropped for all tenors between end-September and end-December, with declines ranging from 33 basis points (bps) for the 7-year tenor to 66 bps for the 4-year tenor (Figure 1). The drop in yields was partly due to expectations of lower inflationary pressures. Yield movements, however, rose for most tenors between end-December and 15 March.

The yield spread between 2- and 10-year tenors widened 7 bps between end-September and end-December—as the decline in the 2-year tenor was larger than that in the 10-year tenor—and increased further by 40 bps between end-December and 15 March—as the rise in the 10-year tenor was larger than that in the 2-year tenor.

The Bank of Thailand's (BOT) Monetary Policy Committee decided on 21 March to keep the 1-day repurchase rate steady at 3.00%. The decision was made in light of the committee's assessment that the global economy would continue to grow slowly, risks to financial stability emanating from Europe had weakened, economic recovery in Thailand had gained pace, and domestic inflationary pressures remained stable in the short-run but were generally inching up amid rising global oil prices. The committee had previously lowered its policy rate by 25 bps from 3.50% to 3.25% on 30 November, and by another 25 bps from 3.25% to 3.00% on 25 January.

Consumer price inflation in Thailand stood at 3.4% year-on-year (y-o-y) in March—compared with 3.3% in February and 3.4% in January—as food and beverage prices climbed 7.1% y-o-y for the month. On a month-on-month (m-o-m) basis, consumer prices increased 0.6% in March, led by a 1.2% monthly hike in raw food and energy prices.

Thailand's real gross domestic product (GDP) in 4Q11 shrank 9.0% y-o-y following a revised 3.7% gain in the previous quarter. The sharp fall

Figure 1: Thailand's Benchmark Yield Curve—LCY Government Bonds

Yield (%)

4.8

4.0

3.2

2.4

1.6

Time to maturity (years)

15-Mar-12 31-Dec-11 31-Dec-10

LCY = local currency.
Source: Bloomberg LP.

in the y-o-y GDP growth rate has been largely attributed to a 6.5% drop in total exports of goods and services, and a 3.0% decline in personal consumption. Compared with the previous quarter, real GDP contracted 6.3%—following 1.1% quarter-on-quarter (q-o-q) growth in 3Q11—largely on the back of a 17.1% decline in total exports of goods and services.

Size and Composition

The outstanding size of the local currency (LCY) bond market in Thailand at end-December amounted to THB7.1 trillion (US\$225 billion), rising 5.3% y-o-y and 1.2% month-on-month (m-o-m), while falling 0.6% q-o-q (Table 1). Total government bonds, which accounted for 81% of total bonds outstanding, increased 4.4% y-o-y and 0.9% m-o-m, but fell 1.4% q-o-q, to reach THB5.7 trillion. The annual and quarterly growth in total government bonds was spearheaded by the growth in central bank bonds. The outstanding stock of BOT bonds amounted to THB2.6 trillion at end-December. The size of government bonds also rose at end-December, by 1.2% y-o-y, while contracting 6.5% q-o-q, to level off at THB2.6 trillion. (There were no treasury bills outstanding at end-December.) In contrast, the outstanding bonds of state-owned

Table 1: Size and Composition of the LCY Bond Market in Thailand

				Amount (billion)	(billion)						Grov	Growth Rate (%)	(%)		
	Sep-11	ij	0ct-11	11	Nov-11	11	Dec-11	Į.	Sep-11	ij	Oct-11	Oct-11 Nov-11		Dec-11	
	ТНВ	\$SN	THB	\$SN	ТНВ	\$SN	ТНВ	\$SN	y-o-y	b-o-b	m-o-m		y-0-y		m-o-m
Total	7,149	229	7,047	229	7,023	228	7,110	225	8.7	4.8	(1.4)	(0.3)	5.3	(0.6)	1.2
Government	5,823	187	5,712	186	2,690	184	5,743	182	8.9	6.5	(1.9)	(0.4)	4.4	(1.4)	6.0
Government Bonds and Treasury Bills	2,809	06	2,684	87	2,627	85	2,627	83	8.2	6.6	(4.5)	(2.1)	1.2	(6.5)	0.0
Central Bank Bonds	2,535	81	2,552	83	2,588	84	2,642	84	12.7	4.5	0.7	1.4	9.5	4.2	2.1
State-Owned Enterprise and Other Bonds	479	15	476	15	476	15	474	15	(4.8)	(0.8)	(0.6)	(0.0)	(3.7)	(0.9)	(0.3)
Corporate	1,326	43	1,336	43	1,333	43	1,367	43	8.1	(2.1)	0.7	(0.2)	9.1	3.1	2.5

LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.

Notes:

1. Calculated using data from national sources.

oomberg end-of-period LCY-US\$ rates are used. owth rates are calculated from LCY base and do not include currency effects. ce: Bank of Thailand (BOT) and Bloomberg LP. enterprises (SOEs) and other government entities posted decreases of 3.7% y-o-y, 0.9% q-o-q, and 0.3% m-o-m to fall to THB474 billion.

Issuance of total LCY government bonds in 4Q11 amounted to THB2.5 trillion for a decline of 16.5% y-o-y and 9.7% q-o-q. The drop is largely attributed to a fall in BOT bond issuance of 14.3% y-o-y and 0.2% q-o-q to THB2.48 trillion. Moreover, issuance of government bonds plunged 74.5% y-o-y and 89.0% q-o-q to THB32.1 billion. Issuance of SOE bonds and other government bonds remained relatively small at THB10.2 billion, which was down 39.1% q-o-q but up a significant 187.3% y-o-y.

LCY corporate bonds outstanding were valued at THB1.4 trillion at end-December, up 9.1% y-o-y and 3.1% q-o-q. On a m-o-m basis, LCY corporate bonds outstanding increased 2.5% in December. New issuance of LCY corporate bonds in 4Q11 stood at THB248.2 billion, up 29.6% q-o-q but down 7.7% y-o-y. The largest corporate bond issue of the quarter was made by Siam Cement in the form of a 4-year bond amounting to THB10 billion and with a coupon rate of 4.5%.

The top 30 issuers of LCY corporate bonds at end-December had combined bonds outstanding of THB917.2 billion, which accounted for about 67% of the total LCY corporate bond market (Table 2). PTT and Siam Cement remained the two largest LCY corporate issuers at the end of 4Q11 with bonds outstanding of THB168.5 billion and THB110.0 billion, respectively.

Investor Profile

Contractual savings funds and insurance companies were the two largest holders of LCY government bonds (excluding BOT bonds and SOE bonds) in Thailand at end-December, accounting for 24% and 21% of the total, respectively (Figure 2). They were followed by resident investors (15%), commercial banks (14%), and foreign investors (12%). Compared with end-December 2010, the shares of the central bank and foreign investors

Table 2: Top 30 Issuers of LCY Corporate Bonds in Thailand (as of end-December 2011)

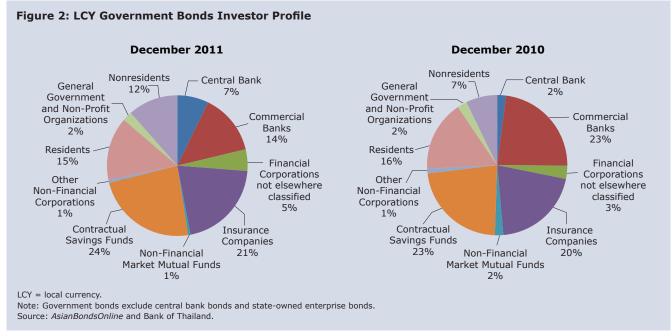
	Outstandi	ng Amount	a			
Issuers	LCY Bonds (THB billion)	LCY Bonds (US\$ billion)	State- Owned	Privately- Owned	Listed Company	Type of Industry
1. PTT Public Company	168.5	5.3	Yes	No	Yes	Energy
2. Siam Cement Public Company	110.0	3.5	Yes	No	Yes	Diversified
3. Krung Thai Bank	55.4	1.8	Yes	No	Yes	Financial
4. PTT Exploration and Production Company	49.0	1.6	Yes	No	Yes	Energy
5. Charoen Pokphand Foods	39.9	1.3	No	Yes	Yes	Consumer
6. PTT Global Chemical	35.4	1.1	Yes	No	Yes	Basic Materials
7. Thanachart Bank	28.0	0.9	No	Yes	no	Financial
8. Thai Airways International	27.8	0.9	Yes	No	Yes	Consumer
9. Krung Thai Card	26.5	0.8	Yes	No	Yes	Financial
10. Kasikorn Bank	25.1	0.8	No	Yes	Yes	Financial
11. Bank of Ayudhya	24.0	0.8	No	Yes	Yes	Financial
12. DAD SPV Company LTD	24.0	0.8	Yes	No	No	Financial
13. Ayudhya Capital Auto Lease	22.3	0.7	No	Yes	No	Financial
14. Toyota Leasing Thailand	21.9	0.7	No	Yes	No	Consumer
15. Banpu	21.3	0.7	No	Yes	Yes	Energy
16. Thai Oil	20.8	0.7	Yes	No	Yes	Energy
17. Glow Energy	20.6	0.7	No	Yes	Yes	Utilities
18. Siam Commercial Bank	20.0	0.6	No	Yes	Yes	Financial
19. Quality Houses	17.8	0.6	No	Yes	Yes	Consumer
20. TMB Bank	17.3	0.5	No	Yes	Yes	Financial
21. Kiatnakin Bank	16.5	0.5	No	Yes	Yes	Financial
22. True Corporation	16.1	0.5	No	Yes	Yes	Communications
23. Advanced Info Service	15.5	0.5	No	Yes	Yes	Communications
24. Bangkok Expressway	15.1	0.5	No	Yes	Yes	Consumer
25. Central Pattana	14.7	0.5	No	Yes	Yes	Industrial
26. Mitr Phol Sugar Corporation	14.3	0.5	No	Yes	No	Consumer
27. Ratchaburi Electricity Generating	13.3	0.4	No	Yes	Yes	Utilities
28. Minor International Public Company	12.2	0.4	No	Yes	Yes	Consumer
29. Italian-Thai Development Public Company	12.1	0.4	No	Yes	Yes	Industrial
30. Bangkok Mass Transit System	12.0	0.4	Yes	Yes	No	Industrial
Total Top 30 LCY Corporate Issuers	917.2	29.1				
Total LCY Corporate Bonds	1,367.0	43.3				
Top 30 as % of Total LCY Corporate Bonds	67.1%	67.1%				

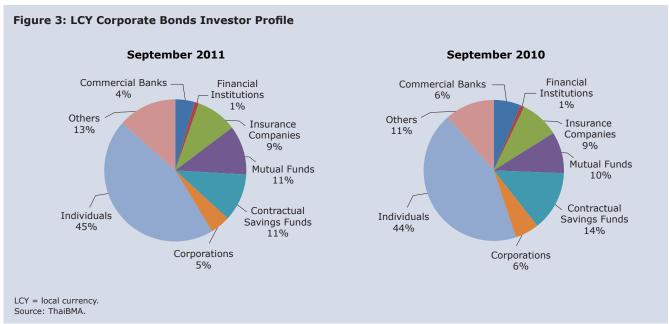
LCY = local currency.
Source: Bloomberg LP.

increased the most at 5 and 4 percentage points, respectively. In contrast, the share of commercial banks had the biggest drop over the same period, declining 9 percentage points.

Individual retail investors were the largest investor group in LCY corporate bonds in Thailand, holding 45% of the total as of end-September (Figure 3). This was followed by

other investors—such as the government, cooperatives, and foundations—with a combined 13% share, contractual savings funds and mutual funds with an 11% share each, and insurance companies with 9%. Compared with end-September 2010, the shares of individual investors and mutual funds rose 1 percentage point each, while the share of other investors climbed 2 percentage points. On the other





hand, the shares of contractual savings funds, commercial banks, and corporations declined 3, 2, and 1 percentage point(s), respectively.

Policy, Institutional, and Regulatory Developments

BOT and BNM Sign MOU on Cross-Border Collateral Arrangement

BOT announced in February that it had signed a memorandum of understanding (MOU) with Bank Negara Malaysia (BNM) to enter into a cross-border collateral arrangement to strengthen liquidity facility measures for financial institutions operating in both countries. Under this arrangement, eligible financial institutions operating in Thailand may acquire Thai baht liquidity from BOT by pledging ringgit or MYR-denominated central bank and government securities, while eligible financial institutions in Malaysia may obtain Malaysian ringgit liquidity from BNM by pledging baht or THB-denominated central bank and government securities.

Ministry of Finance Gives Approval to Seven Foreign Companies to Issue LCY Bonds

The Ministry of Finance announced that it granted approval to seven foreign companies to sell LCY bonds totaling THB66 billion between 1 January and 30 September. The foreign entities and the allowable amount of their respective bond issuances are (i) Australia and New Zealand Corporation (THB8 billion), (ii) Citigroup (THB10 billion), (iii) Hana Bank (THB10 billion), (iv) Industrial Bank of Korea (THB10 billion), (v) Korea Development Bank (THB8 billion), (vi) Korea Eximbank (THB10 billion), and (vii) Korea National Oil Corporation (THB10 billion). Hana Bank issued THB10 billion worth of dual-tranche bonds in February.

Bank of Thailand Receives QFII License

BOT was granted a Qualified Foreign Institutional Investors (QFII) license by the China Securities Regulatory Commission (CSRC) in December, allowing the central bank to invest in CNY-denominated bonds and stocks listed on the Shanghai and Shenzhen stock exchanges.

Viet Nam—Update

Yield Movements

Between end-September and end-December, government bond yields in Viet Nam rose across all tenors, except for the 10-year tenor, largely due to a lack of liquidity in the banking sector in 4Q11 (Figure 1). The largest rise in the yield curve was observed at the short-end, particularly for the 1-year tenor, which rose 51 basis points (bps), resulting in a flattened yield curve. Between end-December and 15 March, government bond yields fell across all tenors, especially at the shortend (1-year tenor fell 120 bps) and the long-end (15-year tenor fell 138 bps) of the curve. The drop in government bond yields since the beginning of this year has been the result of banks' improved liquidity as well as speculation that the State Bank of Viet Nam (SBV) will lower policy rates since inflation declined for 7 straight months between September and March. Meanwhile, consumer price inflation slowed from 22.4% year-on-year (y-o-y) in September to 14.2% in March, according to the General Statistics Office of Viet Nam (GSO).

The country's cumulative gross domestic product (GDP) growth for full-year 2011 slowed to 5.9% from 6.8% in 2010 due to production difficulties and the government's efforts to curb inflation and stabilize macroeconomic fundamentals. According to the GSO, the agriculture, forestry, and fishery sector expanded 4.0% in 2011; the industry and construction sector grew 5.5%; and the service sector grew 7.0%.

Size and Composition

As of end-December, Viet Nam's total local currency (LCY) bonds outstanding stood at VND354.7 trillion (US\$16.9 billion), which represents 16.5% y-o-y growth that was mainly driven by 19.9% growth in government bonds outstanding. However, growth in government bonds was offset by an 8.7% y-o-y contraction in corporate bonds outstanding; more corporate bonds matured in 2011 than were issued

Figure 1: Viet Nam's Benchmark Yield Curve—LCY Government Bonds

Yield (%)

12.0

11.0

10.0

2 4 6 8 10 12 14 16

Time to maturity (years)

15-Mar-12 31-Dec-11 30-Sep-11 31-Dec-10

LCY = local currency.
Source: Bloomberg LP.

as high inflation rates made it difficult for corporate issuers to come to the market last year (**Table 1**).

Among LCY government bonds outstanding, treasury bonds and other government bonds—bonds issued by the Viet Nam Development Bank and other government agencies—posted double-digit annual growth of 26.0% and 15.0% y-o-y, respectively. As a result, total government bonds outstanding stood at VND322.4 trillion at end-December.

As mentioned above, LCY corporate bonds outstanding contracted 8.7% y-o-y to VND32.4 trillion as of end-December. However, the LCY corporate sector grew marginally on a quarter-on-quarter (q-o-q) basis in 4Q11, rising 0.3%, due to the issuance by Sai Gon Thuong Tin Real Estate of a VND99 billion bond in October. This represented the only issuance in Viet Nam's LCY corporate bond market in 4Q11. LCY corporate bond issuance was mostly inactive in 2011, with only 3 corporate bond issues during the entire year due to high rates of inflation.

The top 15 corporate issuers in Viet Nam at the end of 4Q11 retained the same rankings as end-3Q11. These issuers mainly comprised commercial banks and real estate developers. Total bonds outstanding

Table 1: Size and Composition of the LCY Bond Market in Viet Nam

			A	mount	Amount (billion)						Grov	Growth Rate (%)	(%)		
	Sep-11	ᆔ	Oct-11	ᆔ	Nov-11	Ŧ.	Dec-11	1	Sep-11	11	Oct-11 Nov-11	Nov-11		Dec-11	
	VND	\$SN	VND	\$SN	VND	\$SN	VND	\$SN	y-0-y	b-o-b	m-o-m m-o-m		y-0-y	b-0-b	m-o-m
Total	353,370	17	353,429	17	352,468	17	354,748	17	22.2	1.8	0.02	(0.3)	16.5	0.4	9.0
Government	321,112	15	321,072	15	320,111	15	322,391	15	21.1	2.1	(0.01)	(0.3)	19.9	0.4	0.7
Treasury Bonds	146,087	7	146,487	7	146,506	7	148,676	7	23.3	12.0	0.3	0.01	26.0	1.8	1.5
Central Bank Bonds	1	ı	1	1	1	1	I	1	1	1	1	ı	1	1	1
Viet Nam Development Bank Bonds, State- Owned Enterprise Bonds, and Other Bonds	175,025	∞	174,585	∞	173,605	8	8 173,715	∞	19.3	(4.9)	(0.3)	(0.6)	15.0	(0.7)	0.1
Corporate	32,258	2	32,357	2	32,357	2	32,357	2	34.7	(1.6)	0.3	I	(8.7)	0.3	ı
and the second s		17	4												

not applicable, LCY = local currency, m-o-m = month-on-month, q-o-q = quarter-on-quarter, y-o-y = year-on-year.

include currency effects are and d LCY-US\$ rates a from LCY base a

used. do not i Bloomberg LP end-of-period of Growth rates are calculated fource: Bloomberg LP. w . Growth rates are c ource: Bloomberg L among the 15 largest issuers comprised 94.7% of all corporate bonds outstanding at end-December (Table 2). Vietin Bank remained the largest corporate bond issuer in Viet Nam with total bonds outstanding of VND7.1 trillion, the same level as end-September.

Policy, Institutional, and **Regulatory Developments**

VBMA Agreement Assigns Market Maker Status to Eight Banks

At the annual meeting of the Viet Nam Bond Market Association (VBMA) held on 9 December, eight banks—Bank For Investment and Development of Viet Nam, Viet Nam Bank for Foreign Trade, HSBC Viet Nam, ANZ Viet Nam, Standard Chartered Viet Nam, Viet Nam Technological Commercial Joint-Stock Bank, BNP Paribas Viet Nam, and Viet Nam Maritime Commercial Joint Stock Bank signed an agreement to commit themselves to act as experimental market makers in the LCY bond market. The move aims to increase market transparency, boost transaction volume and liquidity, improve market efficiency, and provide a reliable LCY bond market yield curve for domestic and potential foreign investors. The banks also agreed to support market players in evaluating their mark-to-market portfolios in order to more accurately reflect portfolio performance and to bring bond trading activities in Viet Nam closer to international best practices.

SBV Issues New Reporting Requirements for Credit Institutions and Foreign Bank Branches

On 6 February, the SBV issued requirements for credit institutions and foreign bank branches (excluding local people's credit funds) to report to the Monetary Statistics and Forecast Department of the SBV activities related to lending, depositing, borrowing, deposit-taking from other banks, and investing in bonds and valuable paper issued by other credit institutions. The SBV is seeking to assess the operation of the inter-bank market and to make these institutions fully responsible for accurately reporting all relevant information.

Table 2: Top 15 Issuers of LCY Corporate Bonds in Viet Nam (as of end-December 2011)

	Outstandin	g Amount	Chaha	Duiseatales	lioto d	
Issuers	LCY Bonds (VND billion)	LCY Bonds (US\$ billion)	State- Owned	Privately- Owned	Listed Company	Type of Industry
1. Vietin Bank	7,095	0.34	No	Yes	Yes	Finance
2. Asia Commercial Joint Stock Bank	5,090	0.24	No	Yes	Yes	Finance
3. Vincom	5,000	0.24	No	Yes	Yes	Real Estate
4. Vietnam Techcombank	3,880	0.18	No	Yes	No	Finance
5. Agribank Securities	2,000	0.10	No	Yes	Yes	Finance
6. Sacombank	1,900	0.09	No	Yes	Yes	Finance
7. Vietnam Maritime Commercial Bank	1,000	0.05	No	Yes	No	Finance
8. Minh Phu Seafood	900	0.04	No	Yes	No	Fisheries
9. Hoa Phat Group	800	0.04	No	Yes	Yes	Industrial
10. An Binh Bank	600	0.03	No	Yes	No	Finance
11. HAGL	530	0.03	No	Yes	Yes	Real Estate
12. Kinh Bac City Development	500	0.02	No	Yes	Yes	Real Estate
13. Vinpearl	500	0.02	No	Yes	Yes	Resorts/Theme Parks
14. HCMC General Import Export & Investment	450	0.02	No	Yes	Yes	Trade
15. Vietnam Steel	400	0.02	No	Yes	No	Industrial
Total Top 15 LCY Corporate Issuers	30,645	1.46				
Total LCY Corporate Bonds	32,357	1.54				
Top 15 as % of Total LCY Corporate Bonds	94.7%	94.7%				

LCY = local currency. Source: Bloomberg LP.

SBV Cuts Key Interest Rates

Effective 13 March, the SBV decided to cut key interest rates—the refinancing interest rate, overnight rate for inter-bank electronic payment, and discount rate—by 100 bps each to 14%, 15%, and 12%, respectively. The move was based on a downward trend in inflation as well as capital supply and demand in the market.

The SBV also decided to cut ceiling VND deposit rates by 100 bps to 5% for demand deposits and time deposits of less than 1 month, and to 13% for time deposits of 1 month or longer. Effective 11 April, these three interest rates were cut again by the SBV by another 100 bps to 13%, 14%, and 11%, respectively, in order to stimulate economic growth as well as to boost market liquidity.

Asia Bond Monitor

April 2012

This publication reviews recent developments in East Asian local currency bond markets along with the outlook, risks, and policy options. It covers the 10 members of the Association of Southeast Asian Nations plus the People's Republic of China; Hong Kong, China; and the Republic of Korea.

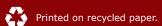
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About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries 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: 1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

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