FINANCIAL MARKET UPDATE December 2006

Monetary and Capital Markets Department
Global Markets Monitoring and Analysis Division

Data as of December 14, 2006, or as noted

The September 2006 Global Financial Stability Report (GFSR) *presented a baseline scenario of solid global growth, contained inflation, and continued financial stability. However, it reported that risks were tilted to the downside. Growth could slow more sharply if the U.S. housing market were to weaken rapidly; inflation could spike, possibly reflecting rising energy prices; and a disorderly unwind of global imbalances remained a threat. Developments since then have been broadly in line with the baseline scenario. Market sentiment has gravitated toward a central scenario for a benign slowdown which keeps inflationary pressures contained. But downside risks remain and there have been changes in underlying financial conditions that warrant continued vigilance.*

The U.S. housing market slowdown has been more severe than some market participants had expected. However, markets still expect this not to trigger broader economic weakness in the U.S. economy, and they view global growth prospects as remaining positive. Nevertheless, the housing slowdown has increased concern about the sub-prime segments of the U.S. mortgage market, and some early signs of distress in that sector are emerging. The proliferation of securitized mortgage structures makes it hard to identify the ultimate holders of this heightened mortgage credit risk, but the wide distribution of risk could mitigate the impact of potential losses.

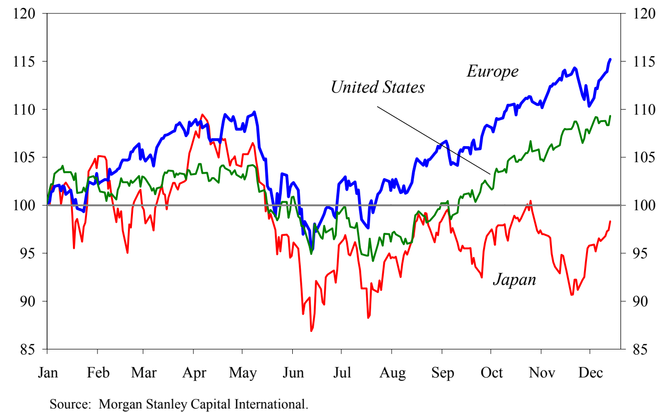
Leverage indicators have also increased in segments of the corporate sector (albeit from low levels), in foreign exchange markets, and in hedge funds. Corporate profits appear robust, and balance sheets strong, credit spreads have declined further, and default rates remain low. However, leverage is increasing rapidly in private equity markets and valuations appear increasingly stretched. Rating agencies warn that private equity-sponsored companies may come under stress should global economic conditions weaken significantly.

Emerging market asset prices have recovered strongly from the May-June turbulence, which at least partly reflects continued fundamental improvements, including policy actions taken by some countries to stabilize market conditions and to shore up credibility of domestic policies. As sovereign issuance in international capital markets has declined, private corporate issuance has filled the void. Household and corporate credit have grown strongly in emerging Europe and Central Asia. Foreign inflows have increased into sub-Saharan Africa as these countries have become a new frontier in investing into emerging markets. But the authorities need to ensure policies are in place to best benefit from foreign investor flows into local markets and avoid the instability that can be associated with these flows.

Note: The Financial Market Update is an online bulletin that covers developments in both mature and emerging markets. It complements the IMF's Global Financial Stability Report (GFSR), a print publication that is published twice a year. It is produced by the staff of the Monetary and Capital Markets Department (MCM). It reflects MCM's interpretation and analysis of market views and developments, which should not be attributed to the Executive Directors, their national authorities, or the IMF. This update covers developments through December 14, 2006.

Investors continue to move out the risk spectrum in a search for yield, and risky assets continue to perform well. At the same time, volatility has fallen to generational lows across a wide range of assets, and many investors appear to have adopted similar trading strategies, in many cases ones predicated on a continuation of the benign scenario. However, investors appear to be giving insufficient weight to downside risks and might assume that the low risk premia are a permanent feature of the financial market landscape. Importantly, the cyclical factors contributing to the low volatility environment—abundant low-cost liquidity, low leverage in the corporate sector, and high risk appetite—may reverse.

Figure 3. Performance of Growth Stocks for 2006



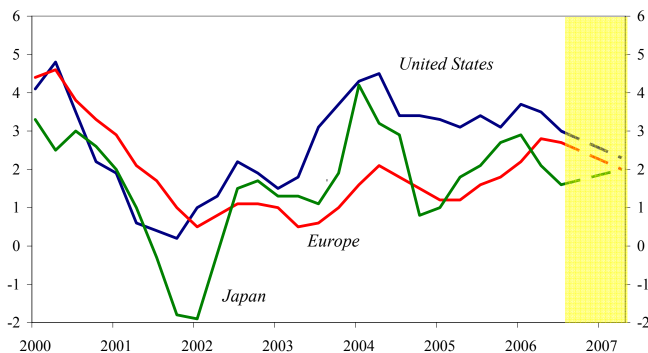
Source: Morgan Stanley Capital International.

A transition from the current state of low volatility to one in which volatility returns to historically more normal levels would likely not be straightforward. The task has been made more difficult by the rapid growth of some innovative instruments and the build-up of leverage in parts of the financial system. Carry trades have grown and the unwinding of those trades has potential to cause perturbations in markets. A "volatility shock"—perhaps caused by a downward shift in growth expectations or by renewed inflationary pressures—could precipitate portfolio adjustments and raise underlying volatility.

Markets are anticipating a benign slowdown but downside risks remain

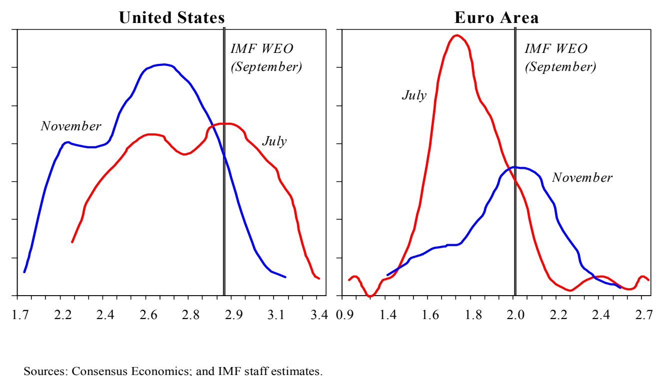
Global growth has been relatively strong as growth rates in key economic regions have converged. As the U.S. economy has slowed, there has been a limited decoupling of the other major economic areas (Figure 1). Against this backdrop, markets have focused on risks of a more pronounced slowdown in the U.S. economy around this favorable outlook. Private forecasts have become less optimistic and slightly more uncertain since September (Figure 2).

Figure 1. Economic Growth in Mature Markets
(Real GDP growth; percent year-on-year)



Sources: Bloomberg L.P; and Consensus Economics.

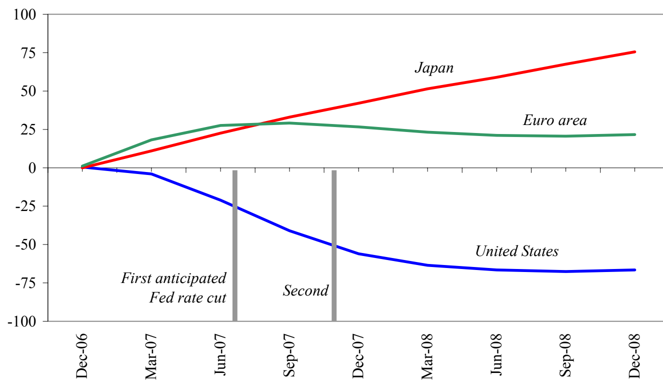
Figure 2. Distribution of Private Sector Growth Forecasts for 2007



Sources: Consensus Economics; and IMF staff estimates.

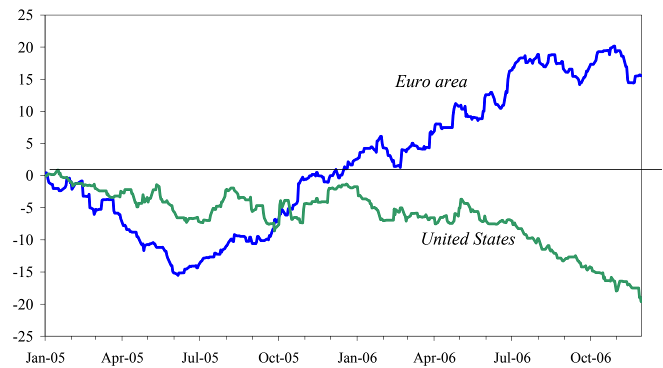
Equity markets appear to expect a soft landing for the U.S. economy as a rebalancing of global growth occurs (Figure 3). In the United States, weaker residential investment helped pull third quarter U.S. GDP growth down to a 2.2 percent annualized pace, but so far there appears to be only limited spillover from the housing market to other areas of the economy. Recent labor market developments point to sustained growth, with payroll rosters and wages expanding at a moderate pace, all supporting consumption. Already, U.S. markets are starting to foresee the time when the housing market downturn will have run its course. However, other sectors of the economy have also started to show signs of softening. Manufacturing indicators have weakened considerably since the summer, while factory and durable goods orders have turned abruptly lower. Against this backdrop, markets anticipate that the U.S. Federal Reserve will begin to cut rates next year in support of a soft landing (Figure 4). Bond markets point to further softening of the economy ahead as real yields have declined and the yield curve remains inverted. In contrast, the outlook for Europe has been bolstered by a series of positive economic data surprises, which has supported equity markets in the region (Figure 5). Investment is leading growth, but consumption has accelerated of late, suggesting that the recovery is broadening and becoming more self-sustaining.

Figure 4. Market Expectations for Policy Rate Changes
(Expected change from current policy rate, in basis points)



Sources: Bloomberg L.P.; and IMF staff estimates.

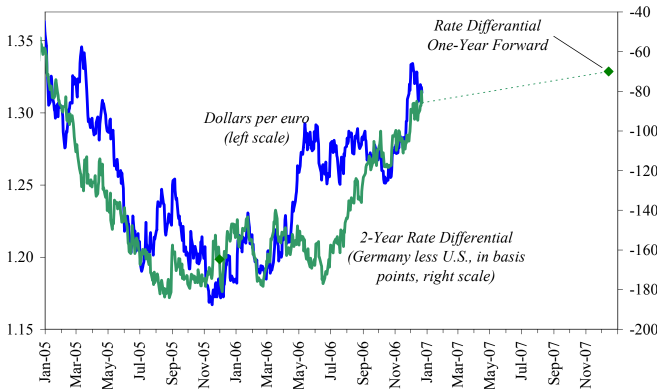
Figure 5. Economic Surprise Indicators
(Cumulative)



Source: Dresdner Kleinwort Securities Ltd.

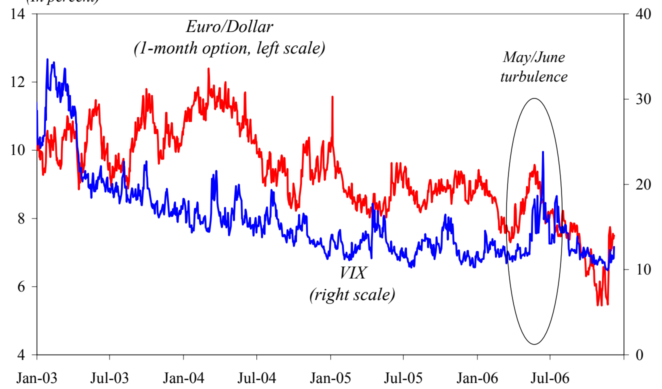
As the United States' advantage in growth and interest rate differentials continues to narrow, the dollar has come under renewed pressure (Figure 6). The initial dollar adjustment fell principally on European currencies, while the yen and some other Asian currencies moved much more modestly. The recent decline in the dollar has been orderly and the increase in volatility was much lower and short-lived than that experienced during the May/June 2006 correction, which was triggered by concern about inflation risks and consequences for growth as the Fed would respond with higher rates (Figure 7).

Figure 6. Interest Rate Differentials and The Euro



Sources: Bloomberg L.P.; and IMF staff estimates.

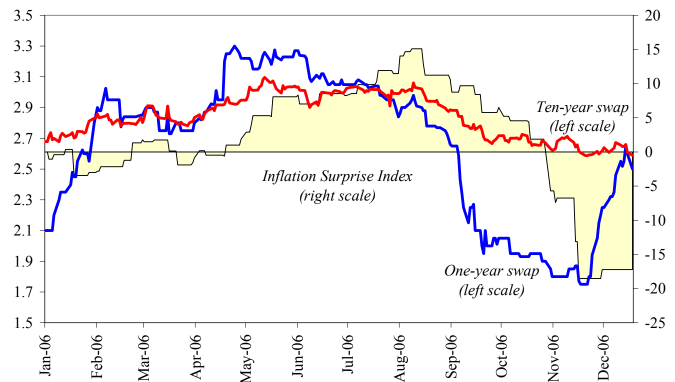
Figure 7. Equity and Currency Market Implied Volatilities
(In percent)



Sources: Bloomberg L.P.; and IMF staff estimates.

However, risks remain that could upset this benign outlook. Market expectations of inflation in the United States have fallen considerably in the last few months on the back of falling oil prices and a successive stream of favorable inflation surprises (Figure 8). However, the average level of expected inflation over the next 10 years, though declining somewhat, remains relatively elevated. In addition, tension remains between the market consensus of abating inflation that would allow the Fed to cut rates, and the continued concerns expressed by the Fed over inflation risks. An inflation shock would force markets to reassess the outlook for price stability and the associated path of easing by the Federal Reserve, likely sparking a significant rise in volatility across markets and a rise in risk premia. Second, growth could slow more sharply in the United States if the housing market undergoes more significant pressures, the indirect effects on consumer spending become more apparent, and increases in household wealth cease. Last, in the event of a harder landing in the United States, there remains concern whether growth elsewhere can be self sustaining. Should these risks transpire, there would likely be a more serious test to global financial stability.

Figure 8. Expected Inflation Rates from U.S. Inflation Swaps
(In percent)

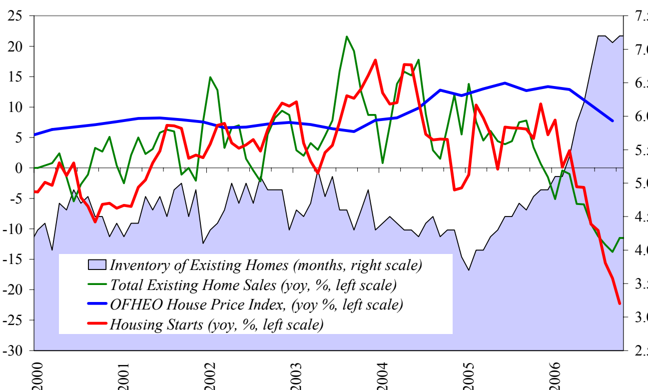


Sources: Dresdner Kleinwort Securities; Ltd., Bloomberg L.P.; and IMF staff estimates.

The cooling housing market may increase risks in the mortgage sector

The shift in recent years toward more risky mortgages may make segments of the mortgage credit markets more vulnerable to the deceleration in housing prices (Figure 9). Innovations in the origination of mortgages have allowed a widening range of borrowers to finance more expensive homes at a given income level. These include mortgages for subprime

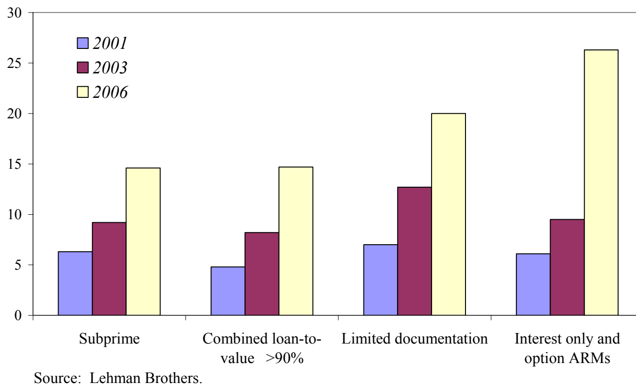
Figure 9. U.S. Housing Market Indicators



Sources: Bloomberg L.P., OFHEO; and IMF staff estimates.

borrowers, mortgages with high degrees of leverage, and mortgages that feature sharply rising monthly payments, resulting in "payment shock" (Figure 10). More than half of mortgages originated in 2005 and 2006 are estimated to contain provisions that will eventually lead to a sharp rise in payments, even if the level of market interest rates does not change. Furthermore, as shorter-term interest rates have increased in recent years, rising payments on conventional adjustable rate mortgages will add to payment shock.

Figure 10. Selected Characteristics of U.S. Mortgage Market
(In percent of total mortgages)

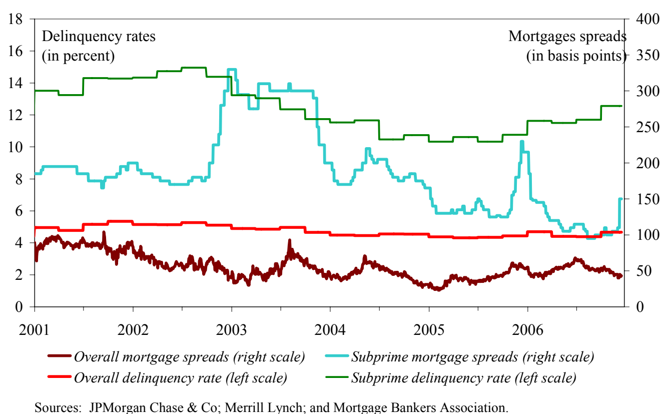


Source: Lehman Brothers.

Although the overall level of home equity remains high, a recent study suggested there may be significant pockets of home purchasers with low or negative equity; that is, mortgage debt in excess of the value of their homes. This may owe to several factors, including falling home prices in some regions, mortgages that initially allow for a buildup of debt over time, and the fact that some homeowners may have overpaid for their homes at the speculative height of the market, facilitated by overly liberal underwriting. Thus, homeowners with small or no equity cushions in their homes may find the payment shock difficult to manage.

So far, delinquency rates have picked up only slightly, and only in the subprime segment (Figure 11). Mortgage spreads have remained low, partly reflecting the broader search for yield, and suggesting that markets may be complacent in pricing risk. As payments increase, default rates in the subprime sector are likely to rise. A sharp economic downturn could increase homeowner defaults more significantly, increasing credit risk in the mortgage and household credit sector more broadly.

Figure 11. Mortgage Spreads and Delinquency Rates



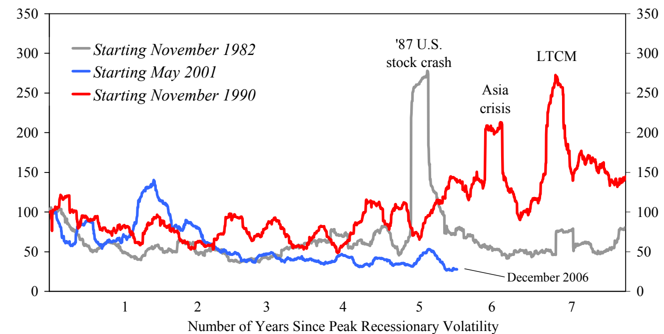
Sources: JPMorgan Chase & Co; Merrill Lynch; and Mortgage Bankers Association.

The bulk of the riskiest mortgage-related securities have been packaged into structured products such as collateralized debt obligations (CDOs). An important reason for this is the demand by institutional investors, including foreign ones, for high-quality fixed-income securities. CDOs can create these securities from underlying securities of mid-level credit quality by concentrating all the risk into a small amount of very risky securities. The higher-risk securities are reportedly bought largely by hedge funds, that, it is supposed, are equipped to manage higher risks. However, the packaging and repackaging of risk in this sector is extremely complex, and it is difficult therefore, to identify with any certainty the ultimate holders of risk. The recent closure of two small subprime mortgage originators highlights signs of stress in that segment of the market, as well as in the securitization process and distribution system for subprime mortgages.

Markets appear complacent despite downside economic risks and underlying changes in financial conditions

Volatility has fallen to remarkably low levels and risk spreads are historically tight. The realized volatility on U.S. equities is well below that observed at this point in any of the last three business cycles (Figure 12). Several *structural* reasons have been put forward to explain the low levels of volatility. One is that inflation risk is less of a concern, partly because emerging economies, in particular China and India, can help meet growing global demand for both goods and services despite narrowing capacity constraints in industrial countries. Others appeal to a shallower credit cycle due to improved macroeconomic policies, including the credibility attached to central banks. In addition, the wider dispersion of risks in the financial system, facilitated by financial innovations and deepening markets for credit derivatives, may also have contributed to lower volatility. Nevertheless, there remains a *cyclical* component to low volatility that can be explained by, first, still abundant global liquidity, second, relatively low corporate leverage, and third, elevated risk appetite.

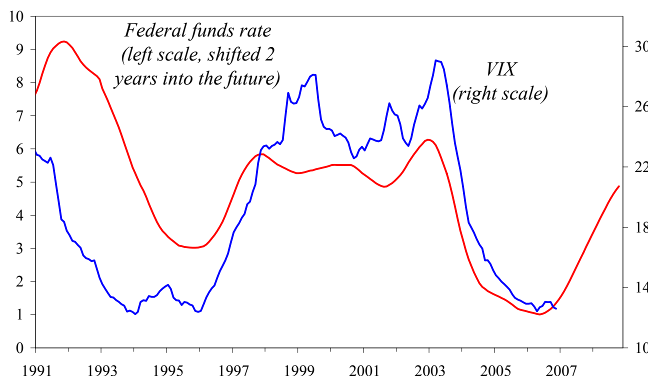
Figure 12. Volatility and the U.S. Business Cycle
(Index rebased to 100 at inception date)



Sources: Bloomberg L.P.; Goldman Sachs; and IMF staff estimates.

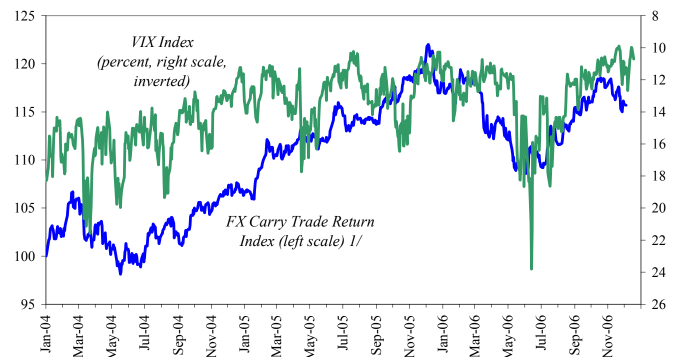
Turning first to **liquidity conditions**, (Figure 13) suggests that in moving from very low to higher interest rates, financial volatility responds only with a lag. The long period of ample liquidity in this business cycle has encouraged the search for yield and high risk appetite, and this is likely to take time to work through. And even as U.S. monetary policy has tightened, liquidity has remained ample elsewhere. The conjunction of low volatility in currency markets with, in some cases, high cross-border interest rate spreads has led to a rise in "carry" trades in which investors borrow in a low interest rate currency to invest in higher yielding currencies, taking on, however, currency risk in the process (Figure 14).

Figure 13. Interest Rates and Asset Price Volatility
(In percent, 12-month moving average)



Sources: Bloomberg L.P.; and IMF staff estimates.

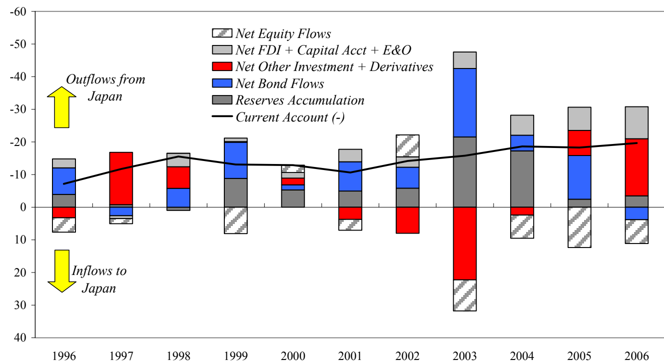
Figure 14. Foreign Exchange Carry Trade Returns and Volatility



1/ The Deutsche Bank G10 Currency Future Harvest Index.
Sources: Deutsche Bank; Bloomberg L.P.; and IMF staff estimates.

Favored funding currencies for these trades have been the Japanese yen, and, to a lesser extent, the Swiss franc. Measuring the size of the yen carry trade is difficult, but there is evidence of substantial participation of foreign investors in this trade at various times over the past two years. One indirect indicator is from the Japanese balance of payments. Domestic Japanese investors have been increasing their purchases of foreign assets (largely bonds) for several years, peaking in 2005. They have fallen somewhat this year but remain substantial. However, starting in 2005 and picking up in 2006, "other" investment outflows (which include banking and derivatives flows) have surpassed net bond outflows as the dominant form of private sector capital outflow (Figure 15). Cross-border yen lending by Japanese banks would show up as these "other" outflows, consistent with the notion that foreign investors are borrowing in yen to finance investments in areas that offer higher yields, including emerging markets (see below). Additional evidence comes from trading of currency futures contracts on the Chicago Mercantile Exchange. Here, "noncommercial" investors, who have no underlying currency transaction to hedge, had large short yen positions in 2005 and early 2006, and again after the market turbulence of May-June 2006 subsided. Positioning in the Swiss franc, another low yielding currency, has closely followed that in the yen. While these futures markets positions cover only a small segment of professional market activity, they may provide a useful barometer of the broader market.

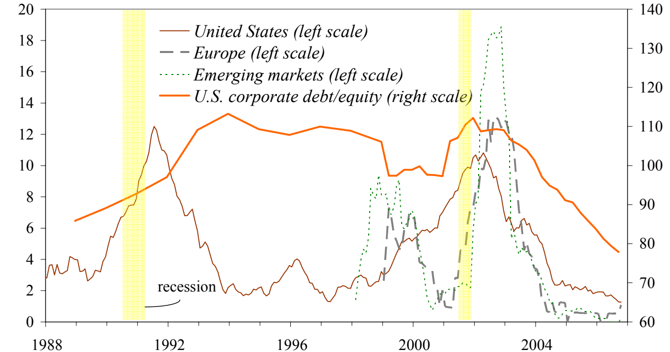
Figure 15. Japanese International Capital Flows
(Trillions of yen)



Note: Y-axis is reversed to highlight outflows; 2006 data for 12-month period ending September 2006.
Sources: Bank of Japan; and IMF staff estimates.

Second, **corporate leverage** is still low relative to past cycles. With profitability and cashflows strong, the balance sheets of the corporate sector have continued to improve (Figure 16). The gearing ratios of listed firms in all major markets have continued to decline. In part, this reflects the fact that corporate investment, though rising, is still modest. The low level of borrowing is one of the factors that has kept default rates at historic lows for longer than had been anticipated, and lower than is usual at this stage in the credit cycle.

Figure 16. Global Speculative Default Rates and U.S. Corporate Leverage
(In percent)



Sources: Board of Governors of the Federal Reserve System, *Flow of Funds*; National Bureau of Economic Research; Standard & Poor's; and IMF staff estaimtes.

However, this is finally changing as corporate leverage in private markets has been rising. One of the most striking features of financial markets over the last year or so has been the massive increase in private equity buyouts, in most cases using leveraged loans as part of the financing (Figure 17). In the 12 months ending September 2006, total leveraged loan issuance reached almost $900 billion. The expansion has been fueled by the growth of private equity groups that have enjoyed huge inflows from real money investors. Valuation metrics for leveraged buyouts look increasingly stretched and pricing is getting finer (Figure 18). Firms are being bought out at increasingly high multiples of their earnings, and the degree of leverage used has reached record highs. In many cases, the buyout groups rapidly recoup part of their investment via dividend and fee payments, which pushes up the leverage in the target firm even further. Ratings agencies so far remain relatively sanguine about the leveraged buyout market. Default levels remain low and liquidity flowing into the sector is vast. However, some warn that business plans of those that engage in buyouts would not look so attractive if global growth were to slow rapidly or if interest rates were to rise. The U.K. Financial Services Authority (FSA) recently completed a review of private equity and found that the exposures of U.K. banks to private equity were significant and rising, but were mitigated by the distribution of some of the risks to institutional investors.

Figure 17. Private Equity Buyouts and Leveraged Loan Issuance
(In billions of U.S. dollars)

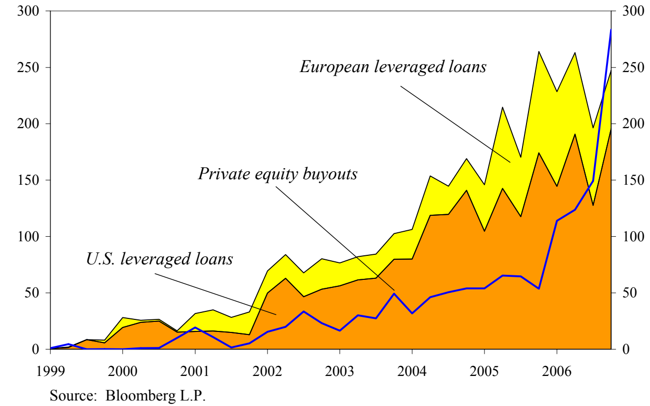
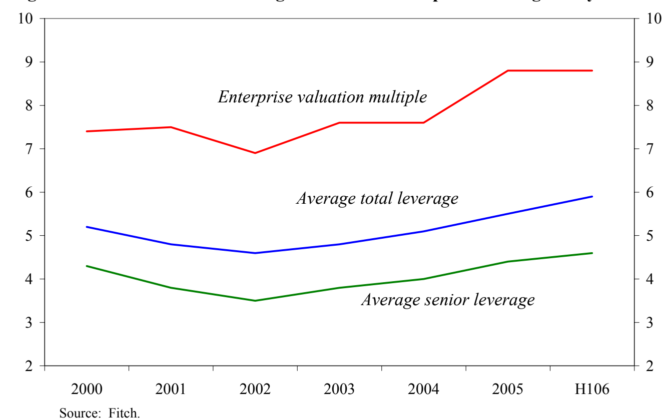
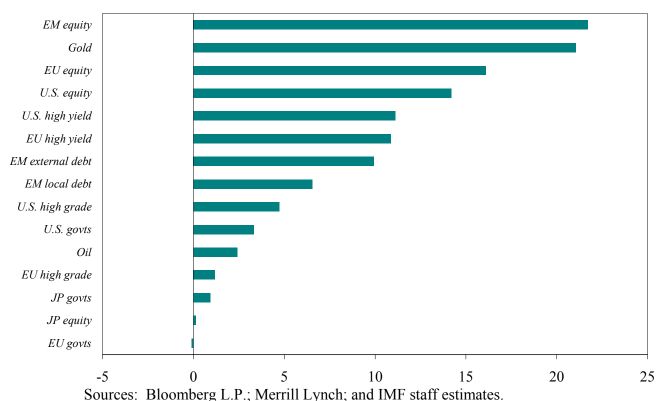


Figure 18. Valuation and Leverage Metrics for European Leveraged Buyouts



The third factor holding volatility down is the rise in **risk appetite** across a wide range of assets. This is evidenced by the tight spreads and rising valuation ratios in mature markets discussed above, but also in emerging markets where the search for yield is moving up the "risk curve" into more risky assets in emerging markets and into new frontiers. So far this year, emerging market equities are the best-performing major asset class, in spite of the sharp sell-off in May/June (Figure 19).

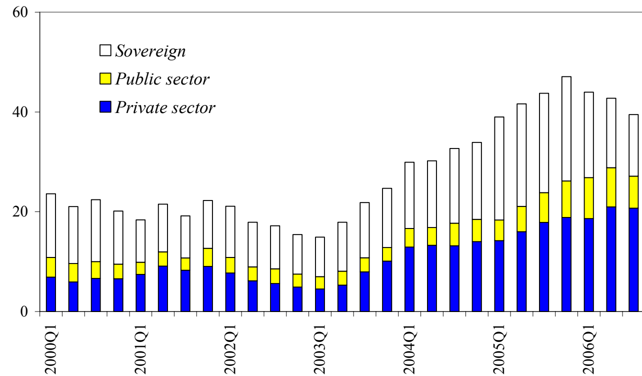
Figure 19. Asset Class Returns, 2006 Year-to-Date
(In percent)



In addition, emerging market debt, both external and local, has produced higher returns than all other fixed-income classes, except for high-yield corporate debt. Investor flows into emerging market asset classes have been strong and allocations are increasingly being made to more "exotic" assets.

For instance, as sovereign issuance on international capital markets has declined, corporate issuance has filled the void (see Annex). This "crowding in" of private sector corporate bonds is welcome, and is underpinned by improving fundamentals in many emerging markets, as well as the needs of emerging markets for greater private sector investment and credit. But such increased holdings by foreign investors of more risky assets is also driven by the search for yield as sovereign spreads have narrowed to historic lows. (Figure 20).

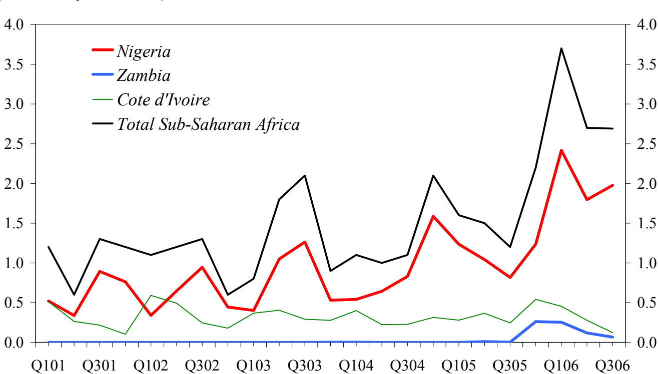
Figure 20. Emerging Market Gross External Bond Issuance by Issuer Type
(4-quarter moving average; in billions of U.S. dollars)



Source: Dealogic.

Also, foreign investor interest in sub-Saharan Africa increased in 2006, albeit from a low base. Dedicated emerging market hedge funds and institutional investors have become increasingly active in this region recently, especially in local currency debt markets (Figure 21). Market intelligence suggests Nigeria received inflows of around $1 billion in the first half of 2006, and there have also been significant flows to Ghana, Kenya, Tanzania, Uganda, and Zambia. Investors have been attracted by high yields, improving macroeconomic fundamentals, and diversification benefits. Also important to the growth of this market is that the number of sub-Saharan assets that can be settled on Euroclear, the leading international securities settlement platform, has grown significantly over the last year, reducing settlement costs for foreign investors.

Figure 21. Sub-Saharan Africa: Debt Trading Volumes
(In billions of U.S. dollars)



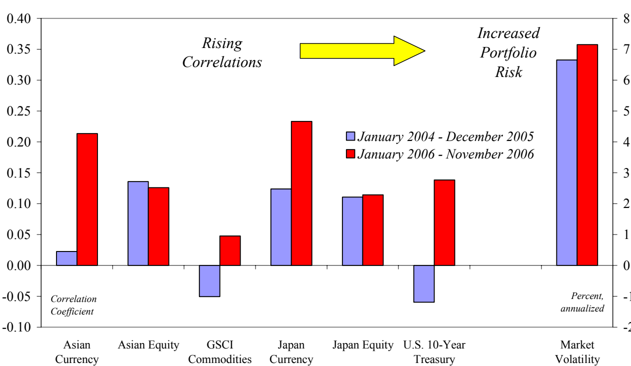
Source: EMTA.

The potential transition from the current state of low volatility poses challenges for financial stability

Looking ahead, the cyclical factors contributing to the low volatility environment—liquidity, leverage, and risk appetite—could reverse. Despite the low level of volatility in individual asset classes, as mentioned above, correlations between asset classes appear to be rising along with risk appetite and the search for yield. If these positive correlations were to persist, or even to rise,

in a sell-off, the traditional diversification benefits of investing in a wide variety of asset classes might be less than investors expect. The possibility that the correlations may persist underscores that investors may eventually demand *higher* risk premiums (Figure 22).

Figure 22. Correlation of Asset Classes with S&P 500 and Broad Market Volatility

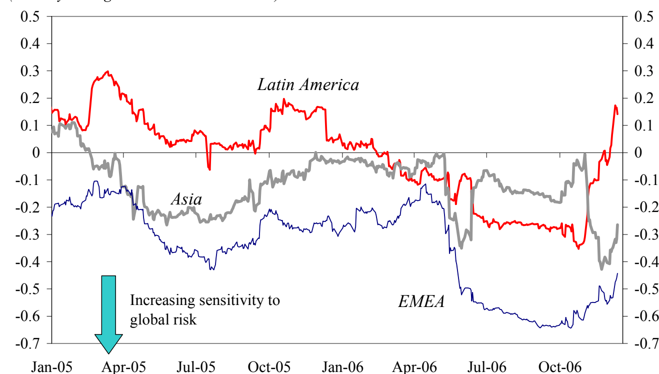


Note: Calculations based on daily returns. Market volatility is calculated as an average of the annualized standard deviation of returns for each of the listed asset classes and the S&P 500. Correlations are plotted on the left scale, market volatility plotted on right scale.
Sources: Bloomberg L.P.; and IMF staff estimates.

The transition from the current state of low volatility but increased vulnerability to one in which volatility returns to historically more normal levels may not be straightforward. The task has been made more difficult by the rapid growth of some innovative instruments and the build-up of leverage in parts of the financial system. Carry trades have grown and the unwinding of those trades has potential to cause perturbations in markets. A "volatility shock"—perhaps caused by a downward shift in growth expectations or by renewed inflationary pressures—could precipitate portfolio adjustments and raise underlying volatility. Many hedge funds have reportedly sold options as a source of premium income—one reason that volatilities implied by option markets have fallen so low. This suggests that such funds are exposed to any sudden turn in market sentiment and, in that event, might scale back their provision of insurance against volatility, which would tend to raise implied volatility further.

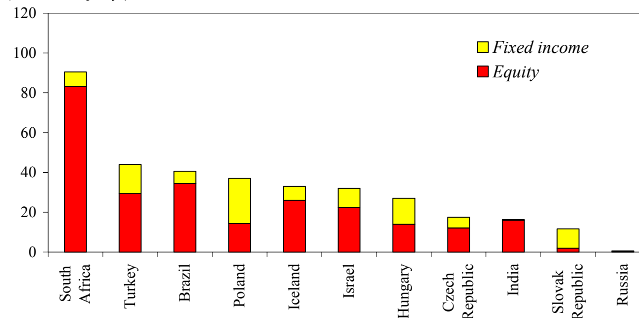
As experienced in May-June 2006, a rapid unwinding of carry trades, perhaps due to an increase in volatility, could lead investors to retrench from some emerging markets. The September *GFSR* underscored that several countries in the Europe, the Middle East, and Africa (EMEA) region have high current account deficits coupled with a heavy reliance on portfolio inflows. This makes them more sensitive to global risk conditions, reflected in high and (negative) correlations with a measure of global risk aversion of roughly three times those in other regions (Figure 23). In particular, trades that have attracted significant inflows from foreign investors in recent years are also liable to unwind rapidly if risk aversion increases (Figure 24).

Figure 23. Global Risk and Emerging Market Currencies
(100-day rolling correlations with the VIX)



Sources: Bloomberg L.P.; JPMorgan Chase & Co; and IMF staff estimates.

Figure 24. Crowded Trades in Local Markets
(In number of days)

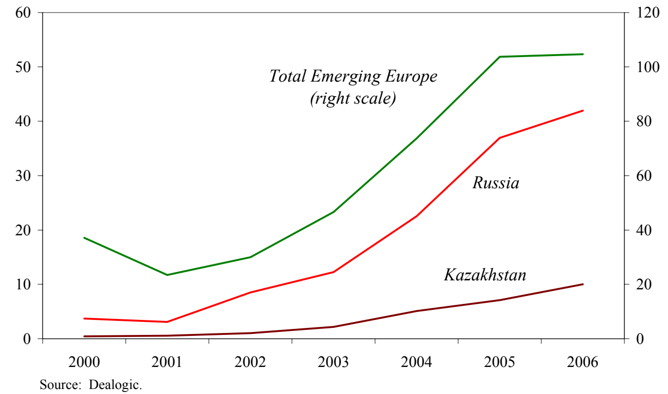


Sources: Deutsche Bank; national authorities; and IMF staff estimates..
Note: The chart shows the stock of foreign equity and local bond positions divided by the average daily spot foreign exchange turnover as of end-April, to give an indicator of how many days it might take for foreign investors to fully unwind their local positions.

Growth in private debt into Eastern Europe and Central Asia has increased rapidly

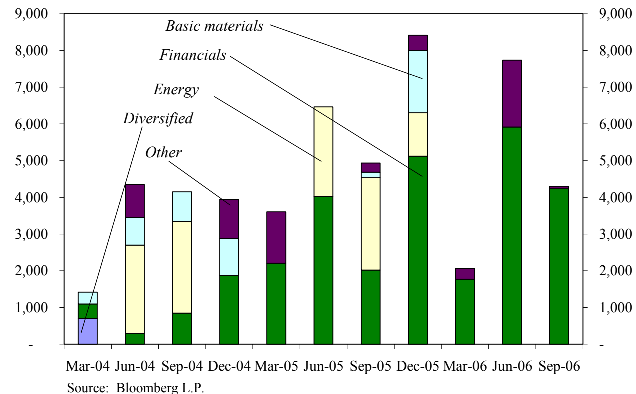
The September *GFSR* also drew attention to the increase in cross-border private debt flows into emerging markets and into Eastern Europe in particular (Figure 25). Growth in private debt to a number of Eastern European countries has continued to grow very rapidly. Foreign-currency-denominated bond issuance by Russian entities, having started from a low base, is now running at a $20 billion annual rate, in part reflecting favorable macroeconomic conditions and the improving credit quality of some borrowers. However, increasingly, issuance is being dominated by banks, with recent issuers including some less well-known banking sector names (Figure 26). As well, capital adequacy of these banks is under pressure from strong domestic loan growth, which has averaged about 75 percent over the past four years, as many firms and households are able to access credit for the first time. Banks are now relying on capital markets for around a third of their funding, leaving them with substantial rollover risk. The challenges are at least as great for Kazakh banks. Lending to Kazakh banks has also grown rapidly, and, as a proportion of GDP is higher than lending to Russian banks.

Figure 25. Gross External Bond, Equity and Loan Issuance
(In billions of U.S. dollars)



Source: Dealogic.

Figure 26. Russian Foreign-Currency-Denominated Issuance
(In millions of U.S. dollars)



Source: Bloomberg L.P.

Annex

Table 1. Emerging Market External Financing

							2005				2006						
	2000	2001	2002	2003	2004	2005	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	1st qtr.	2nd qtr.	3rd qtr.	Oct.	Nov.	Dec.[1]	YTD[1]
							(In billions of U.S. dollars)										
GROSS ISSUANCE BY ASSET	**216.4**	**162.1**	**135.6**	**199.8**	**286.7**	**426.7**	**99.9**	**94.9**	**112.4**	**119.6**	**108.6**	**123.9**	**103.6**	**58.3**	**44.2**	**23.5**	**462.1**
Bonds	80.5	89.0	61.6	99.8	135.1	187.8	61.4	39.6	42.4	44.4	48.9	34.8	30.7	25.1	21.4	8.4	169.3
Equities	41.8	11.2	16.4	27.8	45.4	78.4	10.5	17.4	22.9	27.6	22.3	30.1	20.8	20.9	9.8	11.4	115.3
Loans	94.2	61.9	57.6	72.2	106.2	160.5	28.0	38.0	47.0	47.6	37.4	59.1	52.1	12.3	13.0	3.7	177.5
GROSS ISSUANCE BY REGION	**216.4**	**162.1**	**135.6**	**199.8**	**286.7**	**426.7**	**99.9**	**58.3**	**112.4**	**119.6**	**108.6**	**123.9**	**103.6**	**58.3**	**44.2**	**23.5**	**462.1**
Asia	85.9	67.5	53.9	88.8	123.3	170.3	32.1	37.6	46.1	54.5	44.0	53.2	39.6	28.4	19.6	10.9	195.8
Latin America	69.1	53.9	33.4	43.3	54.3	85.0	34.2	14.1	22.5	14.2	16.7	12.6	15.4	5.7	3.9	3.8	58.0
Europe, Middle East, Africa	61.4	40.8	48.3	67.7	109.1	171.4	33.5	43.3	43.8	50.9	48.0	58.1	48.5	24.2	20.7	8.8	208.3
AMORTIZATION BY ASSET	**113.9**	**147.0**	**128.4**	**119.5**	**128.1**	**107.8**	**21.6**	**7.6**	**32.6**	**27.5**	**22.2**	**28.4**	**28.6**	**7.6**	**8.4**	**8.5**	**103.7**
Bonds	51.8	59.0	58.9	57.1	69.6	65.2	13.3	14.5	21.6	15.8	13.4	17.7	12.3	6.0	6.4	5.1	60.8
Equities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loans	62.1	88.0	69.5	62.4	58.5	42.6	8.3	11.6	11.0	11.7	8.8	10.7	16.3	1.7	2.0	3.4	42.8
AMORTIZATION BY REGION	**113.9**	**147.0**	**128.4**	**119.5**	**128.1**	**107.8**	**21.6**	**7.6**	**32.6**	**27.5**	**22.2**	**28.4**	**28.6**	**7.6**	**8.4**	**8.5**	**103.7**
Asia	56.6	66.0	55.6	45.5	49.8	38.6	8.0	5.9	11.4	13.4	10.7	11.2	12.1	2.7	3.8	3.4	44.0
Latin America	32.3	45.6	40.8	40.4	46.7	37.1	7.7	10.4	11.1	7.9	7.9	7.3	5.3	2.1	1.4	2.6	26.6
Europe, Middle East, Africa	24.9	35.3	32.0	33.6	31.6	32.1	5.9	9.8	10.1	6.3	3.6	9.8	11.2	2.8	3.2	2.5	33.0
NET ISSUANCE BY ASSET	**102.5**	**15.2**	**7.3**	**80.3**	**158.6**	**318.9**	**78.3**	**87.2**	**79.8**	**92.1**	**86.4**	**95.5**	**75.0**	**50.7**	**35.8**	**15.1**	**358.5**
Bonds	28.7	30.1	2.7	42.7	65.5	122.6	48.1	25.1	20.8	28.6	35.6	17.1	18.4	19.1	15.0	3.3	108.4
Equities	41.8	11.2	16.4	27.8	45.4	78.4	10.5	17.4	22.9	27.6	22.3	30.1	20.8	20.9	9.8	11.4	115.3
Loans	32.1	-26.1	-11.8	9.8	47.7	117.9	19.6	26.4	36.0	35.9	28.6	48.4	35.8	10.6	11.0	0.3	134.7
NET ISSUANCE BY REGION	**102.5**	**15.2**	**7.3**	**80.3**	**158.6**	**318.9**	**78.3**	**50.7**	**79.8**	**92.1**	**86.4**	**95.5**	**75.0**	**50.7**	**35.8**	**15.1**	**358.5**
Asia	29.2	1.5	-1.7	43.3	73.5	131.7	24.2	25.7	34.7	41.1	33.3	42.0	27.5	25.7	15.8	7.5	151.8
Latin America	36.8	8.3	-7.4	2.9	7.6	47.9	26.5	3.5	11.4	6.4	8.7	5.3	10.1	3.5	2.5	1.2	31.4
Europe, Middle East, Africa	36.5	5.5	16.3	34.0	77.4	139.3	27.6	21.4	33.7	44.6	44.4	48.3	37.3	21.4	17.5	6.3	175.2
SECONDARY MARKETS																	
Bonds:																	
EMBI Global (spread in bps)	735	728	725	403	347	237	382	356	333	382	191	218	208	194	200	179	179
Merrill Lynch high yield (spread in bps)	890	795	871	418	310	371	319	329	283	319	313	335	344	329	320	300	298
Merrill Lynch high grade (spread in bps)	200	162	184	93	83	92	88	85	81	88	90	97	98	95	94	92	92
U.S. 10 yr. treasury yield (yield in %)	5.12	5.05	3.82	4.25	4.22	4.39	4.60	4.13	4.38	4.60	4.85	5.14	4.63	4.67	4.46	4.60	4.60
Equity:					*(In percent)*												
DOW	-6.2	-7.1	-16.8	25.0	3.1	-0.6	-2.8	-2.7	2.6	-2.6	3.7	0.4	4.7	3.4	1.2	1.6	15.9
NASDAQ	-39.3	-21.1	-31.5	50.5	8.6	1.4	-8.4	-5.2	-0.5	-2.9	6.1	-7.2	4.0	4.8	2.7	0.9	11.3
MSCI Emerging Markets index	-31.8	-4.9	-8.0	51.2	22.4	30.3	0.6	0.0	8.6	-7.4	11.5	-5.1	4.1	4.7	7.3	1.4	25.5
Asia	-42.5	4.2	-6.2	46.1	12.2	23.5	2.8	1.4	6.5	-4.8	9.0	-2.6	6.3	2.7	8.1	-0.1	25.1
Latin America	-18.4	-4.3	-24.8	66.7	34.8	44.9	-0.6	-1.9	13.0	-10.3	14.9	-4.1	4.4	7.7	5.3	4.8	36.7
EMEA	-22.3	-20.9	4.7	51.9	35.8	34.9	-3.0	-1.4	9.7	-10.3	14.1	-10.5	-0.1	6.3	7.4	2.1	18.9

Sources: Bloomberg L.P.; Dealogic; JPMorgan Chase & Co.; Merrill Lynch; Morgan Stanley Capital International; and IMF staff estimates.
1/ Issuance data are as of December 12, 2006 close-of-business London. Secondary markets data are as of December 14, 2006 close-of-busines New York.