

## Economics

25 May 2011 | 80 pages

# Global Economic Outlook and Strategy

May 2011

- We continue to expect strong global growth this year and next, with global GDP rising 3½-4% each year, well above the long-run average of just below 3% YoY. We expect that US GDP growth will rebound to about 3% QoQ SAAR in Q2, buoyed by solid job growth, strong business investment and less drag from energy costs. The slowdown in China is likely to prove mild and, in terms of QoQ GDP growth, Q2 is likely to prove the weakest quarter. But growth remains uneven and many economies will not be growing particularly strongly this year and in 2012.
- The ECB probably will signal at the upcoming June meeting that another 25bp rate hike is likely in July. We expect a further 25bp hike before year-end, with rates rising to about 2.5% by end-2012. The US Fed remains likely to keep rates on hold this year and – provided the economy improves as expected and financial conditions remain supportive — probably will then normalize rates by 300-400bp over time.
- The EMU sovereign credit crisis is unlikely to fade quickly. We believe the chance of debt restructuring is high in Greece, Ireland and Portugal. For Spain, we believe risks of fiscal slippage over time are greater than markets currently price in.
- US “Strong Dollar” rhetoric stands in contrast to weak dollar reality. Treasury yields remain low, but continuing contrast between rhetoric and policy implies that the reputational capital of US monetary and fiscal authorities is being eroded. Nevertheless, there is little prospect for change in either rhetoric or policy (see Chief Economist Essay, page 12).
- Against this background, Citi strategists expect the USD to strengthen near term, but weaken medium term. Citi strategists believe the recent widening in credit spreads probably has further to run, but look for about 10% further upside in global equities by year-end. Citi rate strategists advocate caution and expect industrial country bond yields to rise in H2 this year.

**Figure 1. Currency and Interest Rate Forecasts (End of Period, Unless Specified), as of 25 May 2011**

	25 May 2011	2Q 11	3Q 11	4Q 11	1Q 12	2Q 12	3Q 12
		Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
United States: Federal Funds	0.25	0.25	0.25	0.25	0.50	0.75	1.00
10-Yr. Treasuries (Period Ave.)	3.12	3.30	3.35	3.60	3.70	3.85	4.00
Euro Area: US\$/€	1.40	1.38	1.37	1.42	1.47	1.49	1.46
Euro Repo Rate	1.25	1.25	1.50	1.75	2.00	2.25	2.25
10-Yr. Bunds (Period Average)	3.06	3.30	3.45	3.65	3.75	3.80	3.90
Japan: Yen/US\$	82	81	82	83	84	85	86
Call Money	0.10	0.10	0.10	0.10	0.10	0.10	0.10
10-Yr. JGB (Period Average)	1.12	1.25	1.40	1.40	1.60	1.80	1.80

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Figure 2. Forecast Highlights and Changes from Last Month

■ Global	We continue to expect strong global growth this year and next, with global GDP rising 3½-4% each year (4-4½% using PPP exchange weights), well above the long-run average of just below 3% YoY. But growth will remain uneven between regions and between countries.
■ United States	A sustained pattern of modestly above-trend growth and stabilizing inflation continues to point to early 2012 for the beginnings of gradual monetary policy normalization. Supply chain disruptions have slowed industrial activity temporarily but hiring trends have strengthened and a reprieve from rising energy costs will provide a timely boost to consumer spending power ahead.
■ Euro Area	With stronger-than-expected GDP growth in 1Q and upward revisions of our GDP forecast for the core countries, we are more optimistic on euro area GDP growth for 2011 and 2012. However, growth divergence in the euro area is likely to stay high in coming years and the sovereign debt crisis is far from over. However, we expect the ECB to go ahead with the next rate hike in July and to increase rates to 2.25% by mid next year.
■ China	China's economy is showing initial signs of a slowdown, in line with our forecast. Inflation pressures have softened and the tightening cycle is approaching an end. As a result, the pace of FX appreciation may slow near term, especially in an environment of a more stable USD. However, growth is unlikely to see a deep downturn in the absence of much further tightening, which may create an inflection point for asset markets after the recent risk aversion runs its course.
■ Japan	We expect the economy to rebound sharply in the second half of 2011 after negative growth in 1Q and 2Q, as supply chains normalize and reconstruction demand materializes. The government will likely introduce another supplementary budget in months to come, but a debate on possible tax hikes to fund the budget has not progressed yet.
■ United Kingdom	The UK economy is likely to continue with modest growth and above-target inflation. We continue to expect the MPC will start to hike in H2 this year but risks are tilted to only one hike in H2 rather than the two we have pencilled in.
■ Canada	The expansion remains on track, but the outlook is bifurcated. Faster near-term growth and inflation, and the likelihood that the economy will return to full capacity by mid-2012, suggest modest tightening in H2 this year. However, the BoC's lacklustre medium-term projection points to an extended pause next year.
■ Australia	With the flood impact largely passed through the monthly activity data, the RBA is focusing back on the central outlook for the Australian economy. The Bank has chosen to move away from a neutral policy stance. Instead, further monetary policy tightening is likely in the near term to keep inflation within the target.
■ Emerging Asia (ex China)	Growth momentum remains resilient with production disruptions from the Japan earthquake limited so far. Inflation remains a concern with India and Thailand's inflation surprising on the upside, but food disinflation (likely temporary) provided downside inflation surprises to Korea and Indonesia. We expect central banks will continue to hike rates (India, Malaysia, Philippines and Vietnam have all hiked this month), but Indonesia and Korea are more reluctant (we have reduced our forecast rate hikes this year for both). Currency appreciation should play a greater role for disinflation, though only Indonesia seems to be publicly advocating that view.
■ CEEMEA	We have raised our CEE GDP forecast for 2011 on the back of generally better-than-expected Q1 growth so far. But it looks like it is still a long hard slog ahead — with consumption and investment still in the doldrums — and we have cut by 1 ppt our 2012 GDP growth forecast to 4%. Inflation, too, will likely be higher than we previously forecast, and we have raised our 2011 CPI forecast by 1ppt to 6.7%. We think Israel's central bank will continue to hike rates this year by another 75bps, and we thus remain bullish about the shekel.
■ Latin America	The most relevant development during the month was the drop in commodity prices and broad-based rise of the US dollar. The commodity price slide has brought some long-needed relief for inflation-targeting countries by reducing nominal appreciation pressures on their currencies while capping imported food and energy inflation. However, given that our commodity strategist expects the downward trend in prices to reverse over the next 6-12 months, the interest rate "normalization" cycle should resume in full force to stop economies from overheating and inflation from accelerating.

Source: Citi Investment Research and Analysis

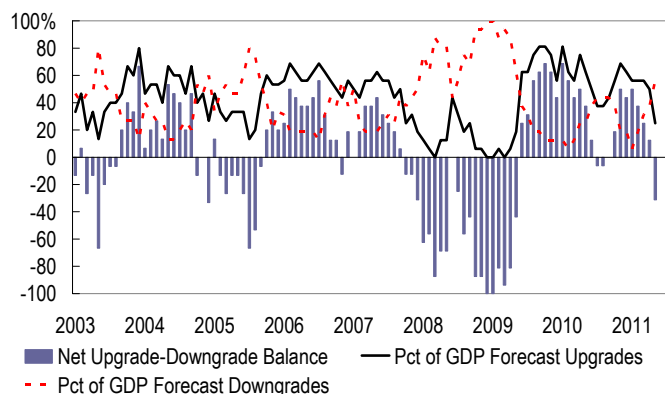
## Overview — Strong But Uneven Global Growth

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We continue to expect strong global growth this year and next, with global GDP rising 3½-4% each year (4-4½% using PPP exchange weights), well above the long-run average of just below 3% YoY. We do not regard the recent slide in commodities, plus softer Q1 GDP data from the US and Japan, as signs of extended weakness, but rather as symptoms of unusual factors (previous build-up of long positions in commodities, heavy snow in the US, power shortages and supply chain disruptions in Japan) that ultimately will prove temporary. We expect GDP growth to rebound in the US in Q2, whereas for Japan we expect continued decline in Q2 followed by a sharp rebound in Q3.

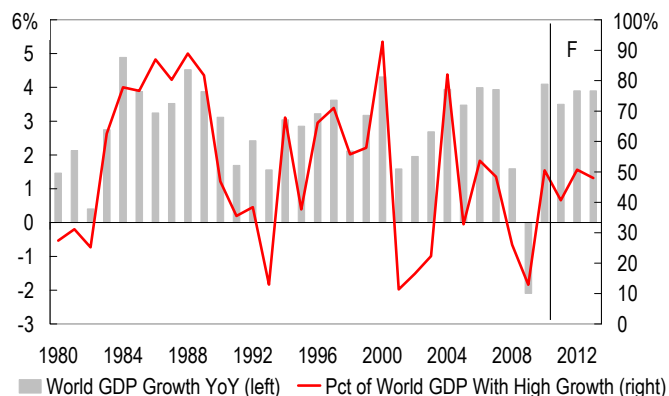
This month, we have again raised our euro area growth forecasts, and now expect GDP growth of 2.1% this year and 1.6% in 2012 (up 0.3% for each year), with our German forecasts revised up by 0.4-0.5% per year. We also have raised our 2011-12 growth forecasts for Brazil, New Zealand, Hong Kong and Singapore. Against that, we have cut our 2011 growth forecasts for India, Portugal and Japan — although we expect that Japan's economy will partly regain this lost ground next year. In total, for this month, we have trimmed our 2011 global growth forecast by 0.1% (concentrated in advanced economies) and raised our 2012 forecast by 0.1%. Across 16 major economies, we have made slightly more GDP forecast downgrades than upgrades in the last three months. The outlook remains very uneven, with wide divergences between high-growth emerging markets (especially Asia and Latin America) and modest growth in advanced economies, but little or no growth in the EMU periphery.

Figure 3. Global — Pct of Citi Growth Forecast Upgrades and Downgrades, 3-Month Total, 2003-11



Note: We compare revisions to our growth forecasts for the current and next year in the US, Euro, Japan, UK, Australia, Brazil, Canada, China, India, Korea, Norway, Poland, Russia, Sweden, South Africa, Switzerland.  
Source: Citi Investment Research and Analysis.

Figure 4. Global — GDP Growth and Percent of Global GDP in High-Growth Countries, 1980-2013F



F Forecast. Note: We use Citi forecasts where available, IMF forecasts for other countries. Sources: IMF and Citi Investment Research and Analysis

The global backdrop continues to be shaped by three major themes. First, many emerging markets continue to grow rapidly amidst industrialization catch-up, especially EM Asia. Second, many industrial countries are following the usual model after a financial crisis of a sluggish recovery in domestic demand. Third, heavy fiscal tightening in periphery EMU countries is likely to hit growth but probably will fail to return those countries to sustainable fiscal paths. Sovereign debt restructuring ultimately is likely in Greece, Portugal and Ireland, and Spain's fiscal deficit probably will overshoot government targets. The overall result is that the recovery remains highly uneven, and although we expect strong global growth, we do not expect most economies to grow strongly. Figure 4 compares total global growth (at market exchange rates) to the share of global GDP that is in high-growth countries (defined

**Figure 5. Selected Countries — Industrial Production Data and Forecasts (Pct.), 2010-12F**

	2010	2011F	2012F
<b>World</b>	<b>9.4%</b>	<b>4.9%</b>	<b>5.5%</b>
United States	5.3	4.4	4.0
Japan	16.6	-1.4	7.3
Euro Area	7.4	4.8	3.1
United Kingdom	2.0	2.0	1.6
Canada	4.8	1.4	0.8
China	15.5	13.6	12.5
India	7.8	7.5	8.3
Korea	16.2	10.0	9.6
Brazil	10.5	3.5	4.5

Source: Citi Investment Research and Analysis

as growth above the 1985-2005 average, or at or above 8% YoY if the 1985-2005 average exceeds 8%). The current global boom is unique, in that global growth is strong but the countries that are growing strongly sum to only 40-50% of global GDP. By contrast, in the global booms of the mid-1980s, mid-1990s and mid-2000s, the countries that were growing strongly summed to comfortably more than half of global GDP — and usually amounted to 70-80% of global GDP. Very few economies are likely to experience negative growth this year, but — even with high global growth — most economies will not be growing strongly<sup>1</sup>. As a result, country selection is likely to continue to play a major role in asset allocation decisions.

The ECB remains likely to hike rates again soon, and probably will use “*strong vigilance*” language at the upcoming June policy meeting (alongside updated economic forecasts) to signal that a rate hike is likely at the July meeting. We have penciled in a further 25bp hike late this year plus another 25bp hike (to 2.0%) in early 2012. But, we do not expect the ECB to continue to hike rates rapidly or far beyond that. In our view, the ECB’s decision to start hiking before the US Fed and UK MPC does not imply that the euro area has a bigger inflation threat than the US and UK. Rather, the ECB seems to have a different reaction function to the Fed and MPC. The ECB appears to believe that the long period of low policy rates in 2003-06 helped fuel the credit boom (which has since bust so spectacularly). With concerns over some euro area banks mandating ongoing liquidity assistance, the ECB now judges that, once the recession has ended, it is preferable to exit somewhat earlier than in 2003-06 from the ultra-loose policy stance needed in the recession.

But because the ECB is starting to hike relatively early and the euro area faces sizeable headwinds, we expect that — despite the low starting point for rates — the total ECB tightening cycle in 2011-13 will be similar to the 225bp cycles of 1999-2000 and 2005-08. By contrast, the Fed and MPC believe that policy s in 2003-06 chiefly lie with financial regulation rather than monetary policy. The Fed is willing to follow its usual approach of holding rates low for an extended period in the post-recession recovery period, and then normalizing policy through a 300-400bp tightening cycle. Although it will be starting to normalise later than the ECB, we suspect that the Fed will make a bigger hiking cycle over time.

**Figure 6. Global — Summary of Views of Citi’s Market Strategists**

	Equities	G10 Rates	Credit	Securitized Products	FX	Commodities	Global Macro Strategy
<b>Overall View</b>	Constructive, 10% upside to the end of 2011	Recent rally has broken bear-trend but higher yields still expected in H2	Correction wider in spreads has further to run	Market weight	Bullish \$ short term. Bearish medium to long term	Bullish medium term on EM growth outperformance	Cautious risk assets short term, weaker USD in medium term
<b>Most-Favoured Region/Sector</b>	EM, Japan/ IT, Materials, Industrials	30yr GBP	Core BB and BBBs	US CMBS senior tranches	AUD, EUR, GBP, EM in long term	Base metals, gold and Ags	Long UST, short EUR/USD, long implied equity vol
<b>Least-Favoured Region/Sector</b>	Eur x UK/ Financials, Cons. Staples, Telecoms	3yr EUR	Undiversified periphery corporates	Spanish & Irish RMBS	USD, JPY, CHF	Silver	European financials
<b>Key Risks</b>	Sharp rise in bond yields, global profits recovery is a false dawn	MENA tensions, Japan slowdown, EMU default	Sovereign contagion, early corporate deleveraging	Regulation	\$ rally, which we expect short term, extends for longer	Chinese business cycle	Overstretched positioning in risk assets, rising EM inflation, political instability

Source: Citi Investment Research and Analysis

<sup>1</sup> Of course, this recovery is more evenly based than previous ones in terms of the share of global population that are in high-growth economies.

Figure 7. Selected Countries — Economic Forecast Overview (Percent) 2010-2015F

	GDP Growth						CPI Inflation						Short-Term Interest Rates					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
<b>Global</b>	<b>4.1</b>	<b>3.5</b>	<b>3.9</b>	<b>3.9</b>	<b>4.3</b>	<b>4.2</b>	<b>2.7</b>	<b>3.9</b>	<b>3.3</b>	<b>3.2</b>	<b>3.1</b>	<b>3.2</b>	<b>2.07</b>	<b>2.75</b>	<b>3.37</b>	<b>3.84</b>	<b>4.22</b>	<b>4.43</b>
<i>Based on PPP weights</i>	4.9	4.3	4.6	4.6	4.9	4.8	3.4	4.6	3.9	3.7	3.6	3.6						
<b>Industrial Countries</b>	<b>2.5</b>	<b>2.0</b>	<b>2.6</b>	<b>2.4</b>	<b>3.0</b>	<b>2.8</b>	<b>1.4</b>	<b>2.6</b>	<b>1.9</b>	<b>1.9</b>	<b>2.0</b>	<b>2.0</b>	<b>0.65</b>	<b>0.86</b>	<b>1.48</b>	<b>2.24</b>	<b>2.94</b>	<b>3.40</b>
United States	2.9	2.7	3.1	3.0	4.5	4.0	1.6	2.9	1.7	2.0	2.0	2.2	0.25	0.25	0.75	1.85	2.85	3.50
Japan	4.0	-0.6	3.2	1.7	1.6	1.5	-0.7	0.5	0.5	0.5	0.7	1.0	0.10	0.10	0.10	0.13	0.48	0.83
Euro Area	1.6	2.1	1.6	1.8	1.8	1.7	1.6	2.7	2.2	2.1	2.3	1.9	1.00	1.40	2.25	3.00	3.50	3.75
Canada	3.1	2.9	2.6	2.5	2.9	3.3	1.8	2.9	2.1	2.0	2.0	2.0	0.69	1.38	2.25	2.25	2.75	3.25
Australia	2.7	2.5	4.3	4.3	4.4	3.8	2.8	3.1	2.7	3.1	3.0	2.8	4.44	5.00	5.30	5.70	6.00	6.25
New Zealand	1.4	1.5	3.4	2.5	2.8	3.0	2.3	4.3	2.9	2.5	2.4	2.6	2.81	2.50	3.00	4.50	5.25	6.00
Germany	3.5	3.5	2.5	2.3	2.2	1.9	1.1	2.6	2.1	1.8	1.9	2.1						
France	1.4	2.0	1.7	1.6	1.8	1.8	1.7	2.3	2.0	2.2	1.6	1.7						
Italy	1.2	0.8	1.0	0.9	0.9	0.9	1.6	2.9	2.7	1.9	1.9	1.9						
Spain	-0.1	0.3	0.2	1.0	1.2	1.3	2.0	3.3	1.6	1.5	1.7	1.7						
Greece	-4.4	-3.7	-2.2	0.0	0.5	1.0	4.7	3.3	1.5	1.3	1.4	1.5						
Portugal	1.3	-2.1	-1.9	-0.5	0.6	1.0	1.4	3.7	0.9	0.7	1.1	1.0						
Netherlands	1.8	2.7	1.8	2.1	1.7	1.9	1.3	2.1	1.8	1.9	1.8	2.0						
Denmark	2.1	2.1	2.1	2.2	2.5	2.4	2.3	2.4	2.1	2.1	2.2	2.0	1.05	1.45	2.40	3.25	3.75	4.00
Norway	2.1	3.2	3.3	3.0	2.8	2.8	2.4	1.8	2.2	2.3	2.5	2.5	1.91	2.24	3.44	4.50	4.80	4.80
Sweden	5.3	5.0	3.3	3.0	2.6	2.5	1.2	3.1	2.3	2.3	2.4	2.1	0.50	1.88	3.06	3.91	4.00	4.00
Switzerland	2.6	3.1	2.4	2.2	2.2	2.2	0.7	1.5	1.2	0.7	0.6	0.8	0.22	0.44	1.31	1.88	2.38	2.25
United Kingdom	1.3	1.8	2.6	2.8	3.0	3.3	3.3	4.6	3.4	2.6	2.9	3.0	0.50	0.65	1.54	2.54	3.81	4.90
<b>Emerging Markets</b>	<b>7.2</b>	<b>6.3</b>	<b>6.2</b>	<b>6.3</b>	<b>6.3</b>	<b>6.2</b>	<b>5.3</b>	<b>6.4</b>	<b>5.8</b>	<b>5.3</b>	<b>4.9</b>	<b>4.9</b>	<b>5.02</b>	<b>6.16</b>	<b>6.58</b>	<b>6.42</b>	<b>6.19</b>	<b>5.92</b>
China	10.3	9.2	9.0	8.8	8.5	8.0	3.3	5.0	4.0	3.8	3.5	3.5	2.30	3.38	3.75	3.75	3.75	3.75
Hong Kong	7.0	5.8	5.5	4.0	4.0	4.0	2.4	5.5	3.3	3.0	3.5	3.5	0.25	0.29	0.69	3.00	3.80	4.50
India	8.6	8.1	8.4	8.8	8.8	9.0	8.6	8.0	6.5	6.0	6.0	6.0	5.96	8.00	7.50	7.50	7.50	7.50
Indonesia	6.1	6.5	6.6	6.7	6.9	7.0	5.1	6.0	6.6	6.8	6.8	6.8	6.50	6.81	7.44	7.50	7.75	7.75
Korea	6.2	4.3	4.6	4.4	5.0	4.2	3.0	4.0	3.4	2.8	3.2	3.0	2.68	3.82	4.48	4.75	5.00	5.15
Singapore	14.5	7.0	5.5	7.1	7.1	7.1	2.8	4.2	2.8	2.5	2.5	2.5	0.56	0.40	0.75	2.30	2.80	3.20
Czech Republic	2.3	2.0	2.8	4.0	4.2	3.8	1.5	2.1	2.8	1.9	2.2	2.0	0.83	0.90	1.77	2.56	3.33	3.50
Hungary	1.2	3.0	3.4	2.9	2.9	2.9	4.7	4.3	3.4	3.1	3.0	3.1	5.48	6.00	6.50	6.60	6.02	6.00
Poland	3.8	4.2	4.0	3.7	3.4	3.4	2.7	4.2	2.8	2.6	2.5	2.5	3.50	4.29	5.00	5.00	5.00	4.63
Romania	-1.3	2.0	4.2	4.7	4.8	4.8	6.1	6.7	4.0	3.0	3.0	3.0	6.67	6.25	5.13	5.00	5.00	5.00
Russia	4.0	4.3	4.1	4.1	4.2	4.3	6.9	8.8	7.3	5.9	5.5	5.5	7.75	8.25	7.50	6.00	6.00	5.50
Turkey	8.9	5.6	3.8	5.0	5.0	5.0	8.6	5.7	6.4	5.8	5.3	5.0	6.50	7.75	9.00	8.00	7.50	7.50
Nigeria	7.2	6.8	6.5	6.5	6.9	7.2	13.7	10.5	10.7	10.5	10.3	9.5	6.08	7.96	9.00	10.00	10.50	10.00
South Africa	2.8	3.8	3.8	4.1	4.2	4.3	4.1	4.8	5.7	6.0	5.7	5.5	6.41	5.75	7.25	8.50	8.75	8.50
Argentina	9.2	7.0	4.0	3.0	3.0	3.0	18.4	27.5	32.5	32.5	30.0	30.0	10.19	11.70	13.68	13.39	11.00	9.00
Brazil	7.5	4.0	4.5	4.5	4.5	4.5	5.0	6.6	5.5	4.5	4.0	4.0	9.80	11.63	12.50	11.75	10.25	9.00
Mexico	5.5	4.8	3.8	3.5	3.2	3.2	4.2	3.7	3.9	4.0	3.9	3.8	4.40	4.58	5.81	6.81	7.00	7.00
Venezuela	-1.4	3.5	3.9	2.3	2.5	2.4	28.2	26.1	27.0	28.0	26.0	29.0	14.52	19.40	20.40	21.00	21.00	21.00

Source: Citi Investment Research and Analysis

Figure 8. Selected Countries — Economic Forecast Overview (Percent) 2010-2015F

	Current Balance (Pct of GDP)						Fiscal Balance (Pct of GDP)						Government Debt (Pct of GDP)					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
<b>Global</b>	<b>0.3</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>-5.7</b>	<b>-5.2</b>	<b>-3.9</b>	<b>-3.2</b>	<b>-2.7</b>	<b>-2.4</b>	<b>69</b>	<b>71</b>	<b>70</b>	<b>70</b>	<b>69</b>	<b>68</b>
<i>Based on PPP weights</i>	<i>0.6</i>	<i>0.2</i>	<i>0.0</i>	<i>-0.1</i>	<i>-0.2</i>	<i>-0.2</i>	<i>-5.3</i>	<i>-4.9</i>	<i>-3.9</i>	<i>-3.2</i>	<i>-2.8</i>	<i>-2.6</i>						
<b>Industrial Countries</b>	<b>-0.7</b>	<b>-0.8</b>	<b>-0.7</b>	<b>-0.7</b>	<b>-0.6</b>	<b>-0.4</b>	<b>-7.3</b>	<b>-6.8</b>	<b>-5.1</b>	<b>-4.0</b>	<b>-3.3</b>	<b>-2.9</b>	<b>88</b>	<b>94</b>	<b>95</b>	<b>96</b>	<b>96</b>	<b>96</b>
United States	-3.2	-3.3	-3.1	-3.1	-3.1	-2.9	-8.9	-9.2	-7.0	-5.4	-4.3	-4.3	62	70	73	76	76	76
Japan	3.6	2.3	2.5	3.0	3.2	3.3	-9.8	-10.3	-8.8	-8.5	-8.2	-7.7	225	237	239	244	248	252
Euro Area	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	-6.0	-4.3	-3.2	-2.5	-2.1	-1.8	85	87	87	87	87	86
Canada	-3.1	-1.2	-0.1	0.4	1.1	1.9	-2.5	-1.7	-1.0	-0.5	0.0	0.2	34	33	33	32	30	29
Australia	-2.6	-2.0	-3.4	-5.5	-6.9	-5.5	-4.2	-3.6	-1.5	0.2	0.2	0.3	3	6	7	7	6	6
New Zealand	-2.3	-0.7	-5.5	-5.0	-5.5	-5.7	-3.3	-8.4	-4.7	-1.8	-0.3	0.5	14	21	26	29	30	30
Germany	5.7	5.5	5.9	5.9	6.0	6.3	-3.3	-1.8	-0.7	0.3	0.7	0.8	88	87	85	82	79	76
France	-2.1	-0.9	-0.7	-0.4	-0.1	0.1	-7.0	-5.8	-4.3	-3.3	-3.0	-2.5	82	85	86	86	86	86
Italy	-3.3	-4.2	-4.2	-4.4	-4.5	-4.6	-4.6	-4.1	-3.7	-3.9	-3.8	-3.9	119	121	122	122	123	124
Spain	-4.5	-3.3	-2.1	-1.7	-1.5	-1.4	-9.3	-6.9	-5.2	-4.5	-4.1	-3.9	60	69	74	77	80	83
Greece	-10.4	-8.0	-5.5	-3.7	-3.6	-4.4	-10.5	-9.9	-9.6	-8.1	-7.8	-7.1	142	160	173	180	185	189
Portugal	-10.5	-8.3	-6.2	-4.7	-3.5	-2.3	-9.1	-6.4	-5.8	-5.8	-5.5	-5.1	93	104	114	119	122	124
Netherlands	7.7	7.3	6.8	6.7	6.6	6.7	-5.4	-2.9	-2.3	-1.9	-1.2	0.0	64	64	64	64	63	60
Denmark	5.4	4.9	4.0	3.3	2.8	2.6	-2.7	-2.5	-2.3	-2.0	-1.3	0.0	44	46	46	46	45	43
Norway	12.9	14.5	16.0	16.5	16.0	16.0	9.7	9.6	12.5	13.0	15	19	NA	NA	NA	NA	NA	NA
Sweden	6.3	6.4	6.5	6.6	6.7	6.9	0.0	0.4	1.6	2.6	2.6	3.9	39	36	32	30	30	29
Switzerland	14.3	12.0	10.4	10.3	11.3	12.4	1.1	1.3	1.5	1.7	2.0	2.0	42	39	37	34	31	31
United Kingdom	-2.5	-1.6	-1.7	-1.0	-0.3	0.4	-9.8	-8.5	-6.4	-4.5	-2.7	-1.0	75	80	82	83	81	78
<b>Emerging Markets</b>	<b>2.4</b>	<b>1.7</b>	<b>1.2</b>	<b>1.1</b>	<b>0.9</b>	<b>0.8</b>	<b>-2.5</b>	<b>-2.3</b>	<b>-2.0</b>	<b>-1.8</b>	<b>-1.8</b>	<b>-1.7</b>	<b>29</b>	<b>29</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>
China	5.3	4.2	3.5	2.9	2.3	1.7	-1.6	-2.0	-2.0	-2.0	-2.0	-2.0	21	20	21	21	21	21
Hong Kong	6.6	9.1	10.0	10.0	10.0	10.0	4.2	2.9	3.0	2.5	2.0	2.0	1	1	2	2	3	3
India	-2.0	-2.7	-2.2	-1.8	-1.3	-0.7	-8.1	-7.9	-7.1	-7.0	-6.0	-6.0	67	66	64	63	60	58
Indonesia	0.9	0.5	0.1	-0.5	-0.7	-0.7	-0.6	-1.4	-1.5	-1.5	-1.3	-1.0	26	26	25	24	23	23
Korea	2.8	1.7	1.1	0.4	-0.4	-0.3	1.4	0.8	1.0	1.4	1.6	1.4	35	35	34	33	31	30
Singapore	22.2	16.5	15.0	13.0	13.0	12.0	0.5	0.0	2.0	2.0	1.0	1.0	107	110	115	118	120	120
Czech Republic	-3.7	-4.9	-4.3	-3.9	-4.2	-3.9	-4.7	-4.5	-3.4	-3.1	-2.3	-1.5	39	41	43	43	43	42
Hungary	2.1	1.3	-0.6	-1.5	-2.7	-3.8	-4.2	2.5	-3.0	-3.3	-3.4	-3.4	80	73	72	69	67	65
Poland	-3.4	-5.6	-6.3	-5.9	-5.7	-5.3	-7.9	-5.7	-4.0	-3.1	-2.4	-2.2	53	52	51	50	50	48
Romania	-4.2	-5.1	-5.4	-5.5	-5.5	-5.0	-6.7	-4.5	-3.0	-2.5	-2.0	-1.5	33	35	35	35	34	32
Russia	4.8	4.7	1.6	-0.6	-2.0	-2.8	-4.0	-2.2	-2.1	-2.0	-0.6	-0.6	8	8	9	10	9	9
Turkey	-6.6	-8.5	-8.3	-5.5	-5.0	-4.5	-3.6	-3.2	-3.2	-3.0	-3.0	-3.0	43	41	40	38	38	37
Nigeria	6.1	8.8	8.2	6.0	4.8	3.8	-5.3	-2.4	-2.0	-1.9	-2.3	-2.9	NA	NA	NA	NA	NA	NA
South Africa	-2.7	-2.9	-5.9	-6.1	-6.5	-6.2	-5.2	-5.0	-4.7	-4.0	-3.8	-3.5	34	37	41	39	36	34
Argentina	1.0	-0.1	0.8	0.3	-0.1	-0.1	0.2	-0.6	1.0	1.5	2.1	2.3	49	49	49	50	52	53
Brazil	-2.3	-2.2	-2.7	-2.5	-2.2	-2.0	-2.5	-2.6	-2.5	-2.2	-2.8	-1.8	63	63	63	70	70	71
Mexico	-0.5	-2.0	-2.4	-2.6	-2.7	-2.7	-2.8	-2.5	-2.0	-1.9	-1.9	-1.9	42	41	41	41	41	40
Venezuela	3.7	11.0	8.3	5.0	4.9	4.7	-6.6	-5.0	-5.0	-5.5	-5.9	-5.8	38	37	31	39	41	40

Note: US debt and deficit figures are for the Federal government only. All other countries are general government debt and deficits. Source: Citi Investment Research and Analysis



Figure 9. Selected Countries — Changes in Economic Forecast from the Previous Month (Percent) 2011-2013F

	GDP Growth			CPI Inflation			Current Balance (Pct of GDP)			Fiscal Balance (Pct of GDP)		
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Global	-0.1	0.1					0.1			0.2		
Based on PPP weights		0.1					0.1	0.1		-0.1		
Industrial Countries	-0.2	0.1								-0.2	-0.1	-0.1
United States	-0.1	-0.1			-0.2		0.1	0.1	0.1			
Japan	-1.5	0.5		-0.1			-0.6	-0.5	-0.5	-0.7		
Euro Area	0.3	0.3	0.2	-0.2				0.1	0.1	-0.1		-0.1
Canada					-0.1	0.1		0.4	0.4		0.1	
Australia				0.5	-0.1	-0.1				-0.6	-0.7	
New Zealand	0.4	0.5					0.3	-1.3		-3.3	-1.5	0.4
Germany	0.4	0.5	0.1			-0.1	-0.1	0.2		0.2	0.3	0.4
France	0.4	0.2	0.2			-0.2	0.1	0.2	0.4	0.2	0.2	0.2
Italy	-0.2				0.2		-0.2		-1.7	0.3	0.2	
Spain	0.2		0.1	0.3	0.2				0.5			0.1
Greece		-0.4	-0.5	-0.2	-0.2		-0.1	-0.2	-1.2	-1.3	-1.3	-1.7
Portugal	-0.4	-0.1		-0.1		0.1	0.1	0.5	0.6	-0.5	-0.6	-0.5
Netherlands	0.2		0.3				1.5	1.3	1.4	0.5	0.4	0.1
Denmark		0.2					0.4	0.2	0.1	1.6	1.0	0.5
Norway				0.1							1.0	
Sweden		-0.3	-0.2	0.5	0.4						-0.1	
Switzerland							-0.1					
United Kingdom	0.2	0.1	-0.5	0.3	0.3	0.2	-0.1	-0.2	0.1	-1.0	-1.0	-1.1
<b>Emerging Markets</b>	<b>0.1</b>			<b>0.1</b>	<b>0.1</b>		<b>0.1</b>	<b>0.2</b>		<b>0.3</b>	<b>0.5</b>	<b>0.3</b>
China												
Hong Kong	1.3	0.3		1.0	0.3					0.7		
India	-0.3	-0.3		0.5	0.5		0.4	0.4	0.4		0.5	
Indonesia				-0.4	-0.1					0.1		
Korea							0.7					
Singapore	1.5	-0.5				0.5						
Czech Republic	0.1			0.3	0.3		-0.2			-0.1	0.6	0.6
Hungary	0.3	-0.1	-0.2	0.6			0.2	-0.9	-0.5	-0.5	0.3	0.5
Poland		-0.5	-0.4	0.5			-0.1	0.1		0.3	0.2	0.1
Romania				0.2	0.3							
Russia				0.1			0.2					
Turkey							-0.1	0.3				
Nigeria				-0.6	0.6		1.2	1.1	0.8	-0.1		
South Africa												
Argentina												
Brazil					0.4		0.1	0.1			0.3	-0.4
Mexico												
Venezuela	2.5	2.3		-0.7	0.6		5.6	4.4				

Source: Citi Investment Research and Analysis



Figure 10. Selected Countries — Economic Forecast Overview and Exchange Rate Forecasts(Percent) 2010-2015F

	10-Year Yields						Exchange Rates Versus U.S. Dollar*						Exchange Rate Versus Euro					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
<b>Industrial Countries</b>																		
United States	3.21	3.45	3.90	4.30	5.10	5.00	NA	NA	NA	NA	NA	NA	1.32	1.40	1.46	1.38	1.37	1.37
Japan	1.18	1.33	1.75	1.80	1.80	2.00	87	82	85	87	87	87	114	115	125	120	119	119
Euro Area	2.78	3.40	3.90	4.10	4.20	4.20	1.32	1.40	1.46	1.38	1.37	1.37	NA	NA	NA	NA	NA	NA
Canada	3.24	3.62	4.40	4.55	5.00	5.40	1.03	0.97	0.94	0.95	0.97	0.99	1.35	1.36	1.37	1.32	1.33	1.35
Australia	5.55	5.87	6.30	6.80	7.20	6.60	0.94	1.04	1.04	0.90	0.87	0.85	1.41	1.35	1.40	1.53	1.57	1.61
New Zealand	5.87	5.75	6.30	6.70	7.00	6.80	0.73	0.77	0.75	0.63	0.62	0.62	1.81	1.82	1.96	2.18	2.21	2.22
Germany	2.78	3.60	4.00	4.10	4.15	4.20												
France	3.12	3.95	4.30	4.35	4.40	4.45												
Italy	4.00	5.00	4.90	5.10	5.10	5.10												
Spain	4.30	5.70	5.60	5.30	5.30	5.30												
Greece	9.20	16.60	14.60	13.10	12.70	11.70												
Portugal	5.40	9.50	9.70	8.60	8.20	8.20												
Netherlands	3.00	3.90	4.20	4.25	4.25	4.30												
Denmark	2.95	3.63	4.00	4.05	4.15	4.25												
Norway	3.41	4.02	4.43	4.50	4.6	4.65	6.02	5.34	5.64	5.68	5.69	5.34	7.95	7.86	7.80	7.80	7.79	7.77
Sweden	2.89	3.57	4.05	4.10	4.25	4.35	7.09	6.03	6.36	6.41	6.45	6.03	9.36	8.97	8.81	8.80	8.80	8.80
Switzerland	1.57	2.00	2.25	2.35	2.65	2.75	1.01	0.93	1.01	1.02	1.03	0.93	1.33	1.27	1.36	1.40	1.41	1.41
United Kingdom	3.58	3.95	4.55	4.65	4.70	4.75	1.54	1.72	1.74	1.74	1.73	1.72	0.86	0.86	0.85	0.79	0.79	0.79
<b>Emerging Markets</b>																		
China	2.91	3.78	4.15	4.50	4.40	4.50	6.77	6.45	6.18	6.00	5.80	5.60	9.50	9.02	9.03	8.30	7.96	7.64
Hong Kong	1.54	1.89	2.45	3.25	3.50	4.00	7.77	7.76	7.75	7.75	7.75	7.75	10.90	10.86	11.32	10.71	10.63	10.58
India	8.00	8.00	8.00	8.00	8.00	8.00	45.6	44.83	44.75	44.40	44.00	42.00	64.0	62.68	65.37	61.39	60.36	57.34
Indonesia	8.49	7.89	8.35	8.25	8.50	8.50	9092	8565	8363	8350	8150	8050	12762	11974	12215	11545	11180	10989
Korea	4.08	4.40	4.98	5.35	5.45	5.60	1156	1069	1023	1000	975	970	1623	1494.90	1494	1383	1338	1324
Singapore	2.41	2.79	3.11	2.80	3.20	3.60	1.36	1.24	1.20	1.17	1.16	1.15	1.91	1.73	1.75	1.62	1.59	1.57
Czech Republic	3.71	4.12	4.33	4.40	4.40	4.40	19.10	17.49	16.12	16.78	16.85	16.89	26.81	24.46	23.55	23.20	23.12	23.05
Hungary	7.97	7.75	7.90	7.66	6.88	6.79	208	193	188	201	203	205	291.87	269.5	274	278	279	279
Poland	NA	NA	NA	NA	NA	NA	3.02	2.83	2.59	2.60	2.59	2.58	4.23	3.954	3.788	3.600	3.559	3.526
Romania	NA	NA	NA	NA	NA	NA	3.18	2.93	2.74	2.82	2.78	2.73	4.46	4.10	4.00	3.90	3.81	3.73
Russia	7.27	7.33	7.57	7.59	7.60	7.60	30.4	28.6	28.8	30.2	30.2	30.2	42.62	40.00	42.03	41.78	41.48	41.19
Turkey	NA	NA	NA	NA	NA	NA	1.50	1.60	1.62	1.65	1.64	1.62	2.11	2.23	2.37	2.29	2.25	2.22
Nigeria	NA	NA	NA	NA	NA	NA	151	154	153	150	148	150	212	215.19	223.49	207.39	203.03	204.77
South Africa	8.38	8.67	9.10	9.50	9.25	9.20	7.32	6.89	7.38	8.32	8.92	9.50	10.3	9.63	10.78	11.50	12.23	12.97
Argentina	16.96	13.92	15.68	16.58	15.19	13.00	3.90	4.11	4.68	6.27	6.77	7.27	5.47	5.75	6.84	8.67	9.29	9.93
Brazil	12.05	12.67	12.74	11.90	10.20	8.75	1.76	1.61	1.61	1.66	1.71	1.76	2.47	2.25	2.36	2.30	2.35	2.40
Mexico	6.93	7.37	8.32	7.50	8.10	8.00	12.6	11.8	11.9	12.3	12.5	12.8	17.7	16.4	17.4	16.9	17.2	17.5
Venezuela	13.78	13.00	14.00	15.00	15.00	15.00	2.59	4.30	4.30	4.80	4.80	5.30	3.63	6.01	6.28	6.64	6.58	7.24

\*Per USD except Euro Area, Australia, New Zealand, United Kingdom. Note: All foreign exchange forecasts are consistent with the rolling forecasts presented in Figure 96 Source: Citi Investment Research and Analysis

Figure 11. Short Rates (End of Period), as of 25 May 2011 (Percent)

	Current	2Q 11	3Q 11	4Q 11	1Q 12	2Q 12	3Q 12
<b>United States</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.50</b>	<b>0.75</b>	<b>1.00</b>
<b>Japan</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>
<b>Euro Area</b>	<b>1.25</b>	<b>1.25</b>	<b>1.50</b>	<b>1.75</b>	<b>2.00</b>	<b>2.25</b>	<b>2.25</b>
Canada	1.00	1.00	1.50	2.00	2.25	2.25	2.25
Australia	4.75	4.75	5.00	5.25	5.25	5.25	5.25
New Zealand	2.50	2.50	2.50	2.50	2.50	3.00	3.00
Denmark	1.30	1.30	1.55	1.80	2.10	2.40	2.40
Norway	2.25	2.25	2.50	2.75	3.00	3.50	3.75
Sweden	1.75	1.75	2.25	2.50	2.75	3.00	3.25
Switzerland	0.25	0.25	0.50	0.75	1.00	1.25	1.50
United Kingdom	0.50	0.50	0.75	1.00	1.25	1.50	1.75
<b>China</b>	<b>3.25</b>	<b>3.50</b>	<b>3.75</b>	<b>3.75</b>	<b>3.75</b>	<b>3.75</b>	<b>3.75</b>

Note: The rates shown are overnight rates, except for Denmark, where it is the central bank's seven-day repo rate, Switzerland, where it is the SNB's three-month LIBOR target, and China, where it is the one-year deposit rate. Source: Citi Investment Research and Analysis.

Figure 12. 10-Year Yield Forecasts (Period Average), as of 25 May 2011 (Percent)

	Current	2Q 11	3Q 11	4Q 11	1Q 12	2Q 12	3Q 12
<b>United States</b>	<b>3.12</b>	<b>3.30</b>	<b>3.35</b>	<b>3.60</b>	<b>3.70</b>	<b>3.85</b>	<b>4.00</b>
<b>Japan</b>	<b>1.12</b>	<b>1.25</b>	<b>1.40</b>	<b>1.40</b>	<b>1.60</b>	<b>1.80</b>	<b>1.80</b>
<b>Euro Area (Germany)</b>	<b>3.06</b>	<b>3.30</b>	<b>3.45</b>	<b>3.65</b>	<b>3.75</b>	<b>3.80</b>	<b>3.90</b>
Canada	3.11	3.30	3.75	4.10	4.25	4.35	4.50
Australia	5.28	5.60	5.90	6.10	6.10	6.30	6.10
New Zealand	5.17	5.50	5.75	6.00	6.20	6.20	6.40
Denmark	3.07	3.45	3.60	3.80	3.90	4.00	4.10
Norway	3.41	3.25	3.55	3.80	4.00	4.05	4.15
Sweden	2.93	3.76	3.95	4.25	4.30	4.40	4.55
Switzerland	1.86	2.15	2.25	2.50	2.65	2.80	2.90
United Kingdom	3.32	3.60	3.85	4.10	4.25	4.35	4.50

Note: Bond yields measured on local market basis (semi-annual for the United States, United Kingdom, Canada, Australia, and New Zealand; annual for the rest). The 10-year yield for the euro area is the Bund yield.

Source: Citi Investment Research and Analysis.

Figure 13. 10-Year Yield Spreads (Period Average), as of 25 May 2011

	Spread vs. US\$						Spread vs. Germany					
	Current	2Q 11	3Q 11	4Q 11	1Q 12	2Q 12	Current	2Q 11	3Q 11	4Q 11	1Q 12	2Q 12
<b>United States</b>	NA	NA	NA	NA	NA	NA	8	3	-7	-2	-2	9
<b>Japan</b>	-202	-208	-198	-223	-213	-209	-194	-205	-205	-225	-215	-200
<b>Euro Area</b>	-8	-3	7	2	2	-9	NA	NA	NA	NA	NA	NA
Canada	-1	0	41	51	56	51	7	3	34	49	55	60
Australia	221	235	261	256	246	251	229	238	254	254	244	260
New Zealand	209	225	245	246	256	241	218	228	238	244	255	250
France	33	30	47	42	37	21	41	33	40	40	35	30
Italy	163	159	177	152	122	91	171	162	170	150	120	100
Spain	233	221	257	232	202	151	241	223	250	230	200	160
Netherlands	21	22	32	25	22	11	29	25	25	23	20	20
Belgium	108	102	127	112	112	96	116	105	120	110	110	105
Denmark	-7	12	22	17	17	11	1	15	15	15	15	20
Norway	27	43	57	62	57	51	35	46	50	60	55	60
Sweden	-21	-8	17	17	27	16	-13	-5	10	15	25	25
Switzerland	-134	-118	-103	-108	-103	-114	-126	-115	-110	-110	-105	-105
United Kingdom	12	27	57	52	57	41	20	30	50	50	55	50

NA Not applicable. Note: Spreads calculated on annual basis (except those of the United Kingdom, Canada, Australia and New Zealand over the United States).

Source: Citi Investment Research and Analysis

Figure 14. Emerging Market Countries — Short Rates Actual and Forecast of Additional Rate Moves (End of Period), as of 25 May 2011

Country	Current Rate (%)	Total Cumulative Rate Moves Expected				
		by Jun 11	Sep 11	Dec 11	Mar 12	Jun 12
Turkey	6.25	0	50	100	100	25
Colombia	3.75	25	25	25	50	125
Chile	5.00	25	75	0	0	100
Mexico	4.50	0	0	50	50	100
South Africa	5.50	0	50	50	50	0
Israel	3.25	0	25	50	50	0
Czech	0.75	0	25	25	25	25
Brazil	12.00	25	25	0	0	50
Philippines	4.50	25	25	0	25	25
India	7.25	0	50	25	0	0
Indonesia	6.75	0	0	25	25	25
Korea	3.00	25	25	0	25	0
Poland	4.25	0	25	25	25	0
Thailand	2.75	25	50	0	0	0
China	3.25	25	25	0	0	0
Hungary	6.00	0	0	0	25	25
Russia	8.25	0	0	0	-25	0

Source: Citi Investment Research and Analysis

Figure 15. Foreign Exchange Forecasts (End of Period), as of 25 May 2011

	vs USD						vs EUR					
	Current	Jun 11	Sep 11	Dec 11	Mar 12	Jun 12	Current	Jun 11	Sep 11	Dec 11	Mar 12	Jun 12
United States	NA	NA	NA	NA	NA	NA	1.40	1.38	1.37	1.42	1.47	1.49
Japan	82	81	82	83	84	85	114	112	112	118	124	127
Euro Area	1.40	1.38	1.37	1.42	1.47	1.49	NA	NA	NA	NA	NA	NA
Canada	0.98	0.98	0.98	0.96	0.94	0.93	1.37	1.36	1.35	1.37	1.39	1.39
Australia	1.06	1.04	1.02	1.05	1.08	1.08	1.33	1.33	1.34	1.35	1.36	1.38
New Zealand	0.79	0.78	0.76	0.77	0.78	0.77	1.78	1.78	1.79	1.84	1.88	1.92
Norway	5.60	5.70	5.75	5.53	5.32	5.24	7.86	7.87	7.89	7.85	7.82	7.80
Sweden	6.37	6.50	6.58	6.28	6.02	5.92	8.93	8.98	9.02	8.93	8.85	8.80
Switzerland	0.88	0.89	0.91	0.91	0.91	0.92	1.24	1.23	1.25	1.29	1.33	1.36
United Kingdom	1.62	1.61	1.61	1.65	1.70	1.73	0.87	0.86	0.85	0.86	0.87	0.86
China	6.50	6.48	6.43	6.35	6.28	6.20	9.1	9.0	8.8	9.0	9.2	9.2
India	45.3	44.5	45.0	45.3	45.5	45.0	63.6	61.5	61.7	64.3	66.9	66.9
Korea	1098	1080	1060	1040	1030	1030	1541	1492	1453	1478	1515	1532
Poland	2.81	2.86	2.87	2.75	2.63	2.57	3.95	3.95	3.94	3.90	3.87	3.82
Russia	28.4	28.6	28.8	28.6	28.3	28.4	39.8	39.5	39.5	40.6	41.6	42.2
South Africa	6.98	6.93	6.88	6.97	7.05	7.21	9.80	9.57	9.44	9.90	10.37	10.73
Turkey	1.60	1.61	1.62	1.62	1.61	1.62	2.25	2.23	2.22	2.30	2.37	2.40
Brazil	466.80	468.12	470.00	470.00	470.00	470.52	655.20	646.69	644.28	667.95	691.36	699.90
Mexico	11.7	11.7	11.7	11.7	11.8	11.8	16.4	16.2	16.1	16.7	17.3	17.6

Note: All foreign exchange forecasts are consistent with the rolling forecasts presented Figure 95. Source: Citi Investment Research and Analysis

Figure 16. Foreign Exchange Forecasts (End of Period), as of 25 May 2011

	vs JPY					
	Current	Jun 11	Sep 11	Dec 11	Mar 12	Jun 12
United States	82	81	82	83	84	85
Japan	NA	NA	NA	NA	NA	NA
Euro Area	114	112	112	118	124	127
Canada	83	83	83	86	89	91
Australia	86	84	83	87	91	92
New Zealand	64.3	63.1	62.3	64.2	66.1	65.9
Norway	14.6	14.3	14.2	15.0	15.8	16.2
Sweden	12.8	12.5	12.4	13.2	14.0	14.4
Switzerland	92	91	90	91	93	93
United Kingdom	132	131	131	137	143	147
China	13	13	13	13	13	14
India	1.80	1.83	1.81	1.83	1.85	1.89
Korea	13.47	13.28	13.00	12.55	12.23	12.09
Poland	29.0	28.5	28.4	30.2	32.0	33.1
Russia	2.9	2.8	2.8	2.9	3.0	3.0
South Africa	11.7	11.7	11.8	11.9	11.9	11.8
Turkey	50.8	50.5	50.4	51.3	52.3	52.8
Brazil	0.2	0.2	0.2	0.2	0.2	0.2
Mexico	7.0	7.0	7.0	7.1	7.1	7.2

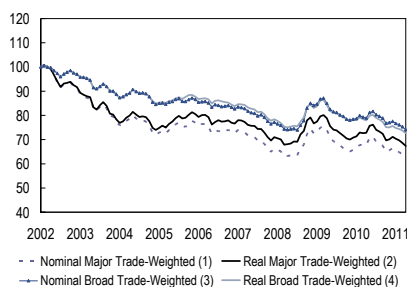
Note: All foreign exchange forecasts are consistent with the rolling forecasts presented in Figure 95. Source: Citi Investment Research and Analysis

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**The Strong Dollar policy is a US government policy based on the assumption that a strong exchange rate of the US dollar is both in the US national interest and in the interest of the rest of the world**

**Figure 17. US — Dollar Nominal and Real Effective Exchange Rates, Jan 2002-Apr 2011 (Jan 2002 = 100)**



Note: 1 — Nominal Trade-Weighted Exch Value of USD vs Major Currencies; 2 — Real Trade-Weighted Exch Value of USD vs Major Currencies; 3 — Nominal Broad Trade-Weighted Exch Value of the USD; 4 — Real Broad Trade-Weighted Exch Value of the USD  
Sources: Federal Reserve Board and CIRA

**Since 2002, the dollar has been on a downward trend in both real and nominal terms**

# Chief Economist Essay — The ‘Strong Dollar’ Policy of the US

## Introduction

The Strong Dollar policy is a US government policy based on the assumption that a strong exchange rate of the US dollar is both in the US national interest and in the interest of the rest of the world. The policy was first enunciated by the then US Secretary of the Treasury Robert E Rubin, shortly after he succeeded Lloyd Bentsen as US Secretary of the Treasury on 11 January 1995. It followed a sharp rise in Treasury bond yields at the end of 1994 and the weakness of the US dollar early in 1995, especially vis-à-vis the DM and the yen — at the time the two major currencies after the US dollar. The US dollar hit 80.63 yen on 18 April 1995, which was its post-war low until 16 and 17 March 2011.

Since August 1995, the Strong Dollar policy has consisted exclusively of periodic statements by government officials — mainly the Secretary of the Treasury, occasionally the Chairman of the Fed — insisting that the US continues to pursue a Strong Dollar policy. While not all Treasury Secretaries have explicitly advocated a strong dollar (notably Treasury Secretaries Paul O'Neill and John Snow), current Treasury Secretary Timothy Geithner has repeatedly affirmed his support.<sup>2</sup>

The Strong Dollar rhetoric contrasts with a weak dollar reality. Not only have the trends of the dollar nominal and real exchange rates been downwards since 2002, there has also been an almost complete absence of any policy measures to support the dollar. The rationale behind the Strong Dollar policy is to prevent a rise in the yields on US Treasuries and many related assets and to deflect potential allegations of ‘competitive depreciation’, while there are net trade benefits from a weak dollar. The Strong Dollar policy thus relies on misguided foreign exchange market participants or on ‘benign neglect’ — benign neglect of the statements of US policymakers, that is. Either way, we think continuation of the Strong Dollar policy and weak dollar reality damages the reputational capital of the Treasury and the Fed and reduces their ability to influence markets by using statements of intent or announcements, but is unlikely to disappear anytime soon.

## The evolution of the dollar since 2002

Since the first quarter of 2002, the trends of the nominal and real effective exchange rate indices of the US dollar have been inexorably downwards. There was a year of US dollar strengthening between March 2008 and March 2009, as safe-haven demand for the US dollar and US dollar-denominated securities in general overcame the dollar-weakening impact of monetary policies in the US relative to those abroad, but by the end of March 2011, the broad real effective exchange rates and the narrow real and nominal effective exchange rates were either at or very close to their lowest values since the start of generalised floating in 1973<sup>3</sup>. From their peaks early in 2002, the narrow nominal effective exchange rate of the dollar declined by 36.7%, the narrow real effective exchange rate by 32.0%, the broad nominal effective exchange rate by 25.1% and the broad real effective exchange rate by 26.7%.

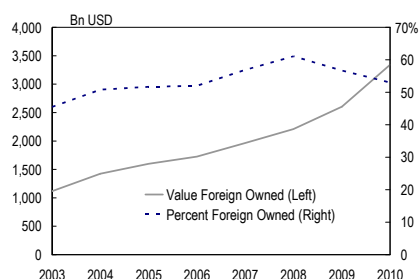
<sup>2</sup> During the Senate Finance Committee hearing on 2 February 2010, Geithner even stated that he (or at any rate his office) helped craft the Strong Dollar policy when working in the Treasury during 1995 for the then Treasury Secretary Robert Rubin under the Clinton administration: “That particular phrase and commitment of policy was first written in my office at the Treasury Department in 1995” “Geithner Maintains Support for Strong Dollar, Lower Deficits”, Rebecca Christie – 2 February 2010 13:13 EST, Bloomberg, <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=axlMH1Xs3s10>; see also <http://finance.senate.gov/hearings/watch/?id=d76a17ee-c4b8-6638-3554-a5b9d4993a97>.

<sup>3</sup> Over a longer period, say from 1973, the downward trend is less dramatic, but still discernible. During that period, there have been major deviations from the depreciation trend, such as the prolonged dollar appreciation between 1995 and 2002.

The economic rationale for the Strong Dollar policy lies in the desire to hold down US Treasury bond yield

The political rationale lies in supporting the US position in its dispute with China over the renminbi exchange rate and in the 'currency wars' debate

Figure 18. United States — Foreign-Owned Marketable US Treasury Holdings



Sources: Bureau of the Public Debt, Table 1, Summary of Public Debt Summary of Treasury Securities Outstanding, Total marketable held by the public less Bills, and CIRA

By contrast, a low actual dollar is a net benefit due to the boost it gives to the US tradables sectors

Prima facie, the combination of a steadily declining nominal and real effective exchange rate for the US dollar during the past nine years suggests a successful *weak* dollar policy — not a *strong* dollar policy.

## The politics and economics of the Strong Dollar policy and the weak dollar reality

We view the desire of senior US policymakers to prevent a sharp decline in the dollar or collapse in its external value as motivated by the recognition that a sudden weakening of the dollar (and even more the market's belief or fear that a sudden weakening or collapse of the dollar is imminent) would almost surely be associated with a sharp rise in long-term US Treasury yields and of the many economically and politically important public and private interest rates that co-move with them. The most important one of these, politically, is the rate on 30-year fixed-rate mortgages. It is also likely that the sharp rise in long yields associated with a (feared) weakening of the dollar would depress the valuations of long-dated US assets like equity, land and real estate.

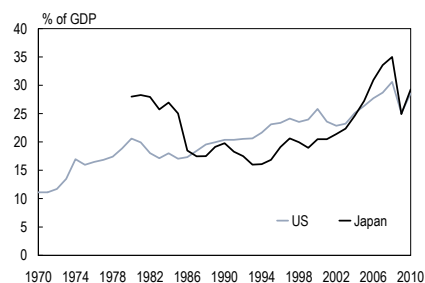
A lower dollar reduces the local currency return on dollar investments for foreign investors and should call forth an increase in the yield required for foreign investors to hold on to, let alone add, to their holdings of Treasury securities. The share of foreign ownership of US government securities has risen over the past decade and has been above 50% since 2004. The level of foreign ownership has risen much further, as the stock of outstanding US (federal and general) government debt has risen strongly over the past few years, implying that foreign investors loom larger in the minds of US Treasury officials than in previous decades. Since domestic investors in principle also have a choice to invest in alternative securities abroad, the above concerns should apply similarly to domestic investors. In practice, institutional or behavioural reasons may suggest that the distinction between domestic and foreign holders continues to be relevant. Additional concerns about the external value of the dollar may be generated by its reserve currency status. Reserve currency status of a currency is primarily a function of the size, openness and liquidity of a country's financial markets, but strength and stability of the external value of the currency are also relevant. The benefit the US derives from the dollar's reserve currency status most explicitly manifests itself in lower required returns on dollar-denominated securities — several studies have estimated the reduction in US Treasury yields to be of the order of 50-100bps.<sup>4</sup>

Financial stability concerns can also induce US policymakers to care about the dollar exchange rate. However, the liabilities of the US banking system are mostly in dollars, implying that a dollar depreciation is either irrelevant or conducive to financial stability. The Strong Dollar policy thus derives from a desire to keep US Treasury yields low rather than caring about the external value of the dollar per se.

By contrast, a low actual dollar exchange rate may in fact be seen as a net benefit for the US. This is because, in the presence of nominal rigidities, a depreciation of the nominal dollar exchange rate implies a real depreciation and therefore an increase in the international competitiveness of the US tradables sectors. The US is quite an open economy today, with the ratio of trade (the sum of imports and exports) to GDP at around 30%, comparable to Japan. Net exports have also played a significant part in the slowly solidifying recent cyclical recovery in the US, though it is, of course, true that many factors affect the evolution of net exports besides the level of the (nominal or real) exchange rate.

<sup>4</sup> See e.g. Warnock, F., and V. Warnock, 2009. International capital flows and U.S. interest rates. *Journal of International Money and Finance* 28: 903-919

**Figure 19. US and Japan — Trade Openness (% of GDP), 1970-2010**



Note: Exports plus imports of goods and services, % of GDP. Sources: Census Bureau, Bank of Japan/Ministry of Finance and CIRA

**The value of the nominal exchange rate is affected by any factors influencing the demand for and supply of base money, including fiscal policy, the nature of the exchange rate regime and the depth, breadth and liquidity of financial markets**

An improvement in the international competitiveness of the US tradables sectors is equivalent to a deterioration in the competitiveness of the trading partners of the US. It is therefore no surprise that a weak dollar can lead to irritations in the corridors of international diplomacy. Two additional factors come into play currently. The first is that the US has long upheld the view that the very slow appreciation of the renminbi vis-à-vis the US dollar results in an undervalued renminbi that puts the US at a competitive disadvantage. We tend to agree with this view, but irrespective of the merit of the argument, any moral high ground the US can occupy in this dispute is eroded if the US is seen to engage in a form of market-mediated downward adjustment of the dollar exchange rate.

The expansionary monetary policies in the US and other advanced economies have also created a number of problems for EMs, prompting Brazil's Finance Minister Guido Mantega to coin the memorable phrase of 'currency wars'. Low policy rates and highly supportive liquidity policies in advanced economies have left many EMs complaining about a 'Wall of Money' that is coming their way, reinforcing pre-existing pressures for exchange rate appreciation, inflation, and credit and asset bubbles. Notwithstanding that one policy option that is entirely under the control of EM policymakers — fiscal tightening — has not been used to anywhere near the extent likely to be appropriate in many EMs, the US position in the currency wars debate would undoubtedly be weakened if it became widely accepted that the expansionary monetary policies pursued by the US since 2008 would inevitably entail a weakening of the US dollar.

## Exchange rate determination

A bilateral nominal exchange rate is the relative price of two moneys, strictly speaking, of two currencies or base monies. All drivers of money demand and money supply, at home and abroad, are therefore relevant to the determination of the nominal exchange rate. The supply of base money is typically endogenous in a modern economy because the monetary authority sets the cost for banks of borrowing base money from the central bank (and/or the return to lending base money to the central bank) and lets the stock of base money be demand determined. At the zero lower bound or effective lower bound (ELB) on short nominal interest rates, the quantity of base money can become an instrument of monetary policy again.

On the demand side, the existence of a host of private and public base money substitutes complicates the monetary transmission mechanism. Because of portfolio balance considerations, the composition (maturity, currency denomination, liquidity, credit risk) and size of non-monetary financial and even real wealth may influence the demand for base money. Fiscal policy can influence base money demand by changing one or more of the arguments in the base money demand function, including income and asset rates of return. The nature of the exchange rate regime (fixed, floating or managed) can influence domestic and foreign base money demand and supply. The domestic and international transmission of domestic and foreign money demand or supply shocks, and of other shocks, depend both on the nature of the exchange rate regime, on the degree of cross-border financial capital mobility and on the depth, breadth and liquidity of the financial markets. Confidence and other drivers of liquidity preference can alter the balance between domestic and external demand for and supply of base money stocks.

We therefore recognize a large number of factors that can influence the US dollar exchange rate when this exchange rate is market determined and floats more or less cleanly; some are predictable, others unpredictable; some have transitory effects, others have a permanent impact. Many of these factors are not under the



**Yet monetary policy is one of the primary determinants of the nominal exchange rate — and a monetary expansion can be expected to depreciate the exchange rate, *ceteris paribus***

control of the policy authorities in the US or elsewhere. Some, such as the forces of productivity catch-up which are at the heart of Balassa-Samuelson theory of real exchange rate determination, even imply that the dollar would depreciate in real (though not necessarily nominal) terms relative to the currencies of countries engaging in catch-up growth with the US.

Yet when all is said and done, we cannot think of any model of the monetary transmission mechanism in an open economy with a floating (market-determined) exchange rate for which the proposition fails to hold that expansionary monetary policy will, *ceteris paribus*, weaken the exchange rate.

When the official policy rate of the monetary authority is above the ELB, a cut in the official policy rate will be transmitted to the real economy and to the general price level through a range of interest rates, financial asset prices (equity, land and real estate prices will typically strengthen), the exchange rate (which will weaken) and through the credit channel and the liquidity channel. Expansionary monetary policy (say a cut in the official policy rate) will cause the currency to depreciate both when capital mobility is low or high (the second case being more relevant for the US), when money prices and wages are flexible or rigid (in the US wages and core prices are characterized by nominal stickiness — in that case, expansionary monetary policy will cause a depreciation also of the real exchange rate). Many models, starting with Dornbusch (1976), have the property that in response to a monetary shock the exchange rate may ‘overshoot’, ie move more in the short run than in the long run when the full adjustment of money wages and prices is completed.

Because of irreducible financial market inefficiencies, large-scale asset purchases are somewhat effective instruments even away from the ELB.<sup>5</sup> At the ELB, they are the only monetary instruments left. Note that sterilised foreign exchange market intervention — international reserve purchases, say, that don’t change the monetary base because the Fed sells non-monetary assets (say, Fed holdings of Treasury debt) or increases non-monetary liabilities (say, Treasury deposits with the Fed), is CE or qualitative easing from the perspective of the Fed alone. Non-sterilised foreign exchange market intervention is QE for the Fed, as the monetary base expands, either because the Fed acquires additional assets or because it runs down non-monetary liabilities.

When the Fed engages in QE, the increase in the stock of monetary liabilities themselves doesn’t provide any stimulus to demand when the official policy rate is at the ELB. It is the change in the relative supplies of long-dated and short-dated instruments (including base money, which is, at the ELB, a perfect substitute for non-monetary short financial instruments) that affects long yields. When the Fed purchases long-dated sovereign debt (funding it with base money, or by reducing the stock of very short debt instruments) long rates fall. Other things equal, this will strengthen equity prices and the market valuation of other long-dated outside assets, such as land, real estate and commodities (viewed as an asset class). For the same reason, it will cause the exchange rate to weaken in a world with forward-looking financial markets and a high degree of international financial integration.

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<sup>5</sup> LSAP include QE (changes in the stock of base money funded through asset purchases that don’t change the liquidity and credit risk profile of the Fed’s balance sheet) and CE or qualitative easing (changes in the risk or liquidity composition of the asset side that don’t affect the monetary base).



## Policy actions and the (ir)relevance of intent

**US authorities have — with a small exception — not intervened a single time since 1999 to support the dollar, despite sizable dollar depreciation**

**Monetary policy in the US has been expansionary since 2008 relative to its own history and relative to its trading partners**

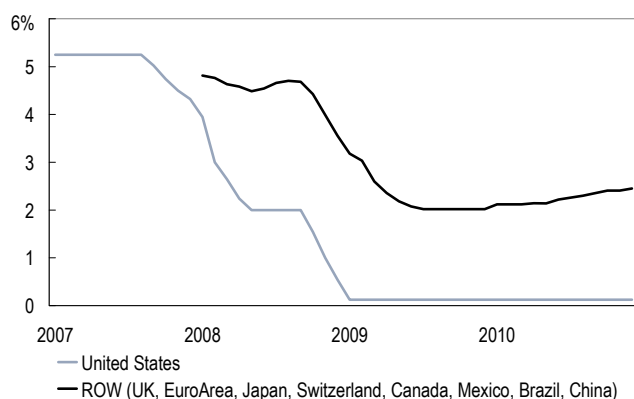
**Yet the Fed hardly mentions the exchange rate in its statements, due to an institutional anomaly, 'closed-economy thinking' and confusion over intent and responsibility**

With the exception of a tiny operation with the Bank of Japan, the ECB, the Bank of Canada and the Bank of England in March 2011 to prevent excessive yen appreciation following the Japan earthquake, US authorities have not intervened a single time since 1999, in sharp contrast to the first quarter century since the collapse of the Bretton Woods regime in 1973 when intervention was quite frequent.

Monetary policy on the other hand has been unqualifiedly expansionary since the onset of the financial crisis (expansionary not only in relation to earlier US monetary policy, but also relative to the monetary policies pursued by the other leading central banks). The exchange rate consequences of this policy, significant and predictable as they are, nevertheless scarcely receive mention in statements and speeches of Fed officials. One reason is an institutional anomaly which is not unique to the US, namely that, although monetary policy constitutes the single most important type of policy affecting exchange rates, ultimate authority over the management of the exchange rate rests with the Treasury, not the Fed. Another reason for the omission of discussion of the exchange rate in Fed documents may be a legacy from the now bygone days when closed-economy thinking was less inappropriate.

Yet another reason for the lack of discussion may be the view that because the dollar is freely floating and its value is thus set by market participants or by 'the market', unlike the currencies of countries with managed exchange rates, its value is not manipulated in any view. We consider this argument to hold little merit. As noted above, expansionary monetary policy can always be expected to depreciate the currency, and even if a depreciation is not desired, sought or intended by the monetary policymaker, it does not absolve the Fed from responsibility for the foreseeable exchange rate consequences of its policies.

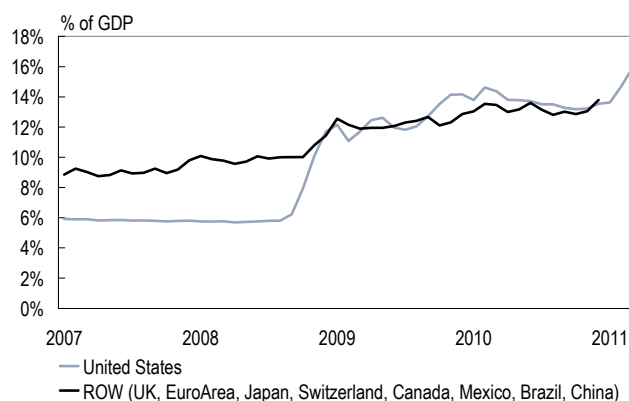
Figure 20. Selected Countries — Official Policy Rates, 2007-2011



Note: US – FOMC: Fed Funds Target Rate; UK – BoE Official Bank Rate; Euro Area – Deposit Rate; Japan – Call Rate: Uncollateralized Overnight; Switzerland – Repo Rate; Canada – Overnight Repo Rate; Mexico – Target Rate; Brazil – Interest Rate: Selic - Target Rate; China – Prime Lending Rate. Countries in ROW are weighted by trade shares with the US.

Sources: FRB, BoE, Assoc of Call & Disc Companies/Nihon Keizai Shinbun, ECB, SNB, Bank of Canada, Bank of Mexico, Central Bank of Brazil, China Statistical Information Center and CIRA

Figure 21. Selected Countries — Monetary Base (% of GDP), 2007-2011



Note: Countries in ROW are weighted by trade shares with the US.

Sources: Federal Reserve Board, Bank of England, Bank of Japan, European Central Bank, Swiss National Bank, Bank of Canada, Bank of Mexico, Central Bank of Brazil, People's Bank of China and CIRA

**Strong Dollar policy has been successful in keeping down Treasury yields, but has carried a cost in reducing the reputational capital of the US fiscal and monetary authorities**

**We see little prospect for change — more Strong Dollar rhetoric and weak dollar reality to come**

**Higher yields on US Treasuries or sharp fall in the dollar do not imply loss of reserve currency status in the near term — it will simply be a reserve currency with higher yields and a cheaper exchange rate**

## Conclusion and outlook

This essay argues that the US Strong Dollar rhetoric has contrasted sharply with a weak dollar reality — which is not surprising given the almost complete absence of any policy measures to support the Strong Dollar policy and, especially since the financial crisis, a consistently expansionary monetary policy with predictable (depreciative) exchange rate consequences. By one measure, the Strong Dollar policy has been a success: Treasury yields remain close to all-time lows despite persistent depreciation of the dollar, a very large (federal and general) government budget deficit, and high and rising (federal and general) government debt.

The downside, however, of talking a strong dollar talk while walking a weak dollar walk has been damage to the reputational capital of the US monetary and fiscal authorities and thus a reduction in their ability to use statements of intent or announcements of future policy actions to influence markets.

In any case, we see little immediate prospect for either the Strong Dollar rhetoric or the weak dollar reality to disappear anytime soon. High and rising levels of general government debt and corresponding large funding requirements imply that US officials will continue to use open-mouth operations, including Strong Dollar rhetoric, to limit Treasury yields. At the same time, monetary policy in the US is expected to 'normalise' more slowly than in other advanced, let alone emerging, economies, implying further monetary easing in relative terms — the only terms which are relevant for exchange rate determination. Undoubtedly, any further boost for the still-budding recovery from net export growth owing to the weak dollar will be welcomed by the Fed, if not explicitly acknowledged. Timely fiscal tightening, if and when it happens, will provide further pressures for moderate depreciation of the dollar. Finally, fiscal crisis — or the absence of any substantial and timely fiscal tightening — is also likely to result in dollar depreciation, but of a more dramatic kind. There is (fortunately) relatively little experience of fiscal crises in the economic and financial center of the world. However, this implies that we can have rather little confidence in our ability to predict the way such a crisis would play out. Certainly, the occurrence of fiscal crises in smaller nations has traditionally been associated with: i) a steep rise in government bond yields; ii) a large rise in CDS spreads; and iii) a drastic depreciation of the exchange rate (unless the nation is a member of a much larger currency union, like Greece, Ireland, Portugal and Spain). Very low Treasury yields indicate that for now markets remain relaxed — in our view, too relaxed — about the likelihood of such a scenario. Potential triggers for a switch to crisis mode could, in our view, be a sovereign downgrade by one of the major ratings agencies, a technical default due to a failure to raise the Federal debt ceiling, a prominent sub-sovereign default or a sharp deterioration in the Federal budget balance. The case for an end to the weak dollar reality in any case seems remote.

A sharp fall in the dollar or a sharp rise in Treasury yields would not mark the end of the reign of the dollar as the world's premier reserve currency, at least in the near term. Treasury yields were much higher, both in nominal and in real terms, in the 1980s and 1990s when the primacy of the dollar as a reserve currency was probably even more absolute. Currently, there is no viable alternative. The only pretender to the throne, the euro, has been in intensive care since the onset of the euro area sovereign debt crisis at the end of 2009. In the medium term, to be interpreted as the time period needed for the euro area countries to put in place the reforms needed to ensure its survival and prosperity and for the rising powers of the East, China and India, to develop and open up their capital markets, the picture will be different.

## Country Commentary

### United States

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Our updated forecast still anticipates growth averaging near 3% this year and next as a reprieve from rising energy costs is buoying real incomes and confidence as the peak driving season approaches. Supply chain disruptions are slowing factory output and shipments near term but financial conditions thus far remain supportive. Job growth has accelerated and consumer spending in autos and discretionary areas suggests a key element of recovery is on track despite the dip in Q1 growth.

Monetary policy is expected to keep overnight rates unchanged into the first few months of 2012. We still expect the first rate hike around March of next year, preceded by a step-up in reserve-draining operations to underpin a higher rate target. Officials have signaled that reinvestment of MBS redemptions will continue at least for a time beyond the announced June end of net new asset purchases. Management of overnight interest rates is expected to have primacy over the balance sheet once exit strategies begin. Rising headline inflation has prompted greater policy caution but officials still have high hurdles for unwinding accommodation barring a loss of public confidence in low underlying inflation.

Forecasts for inflation have peaked for the time being, now showing some near-term relief from rising costs for energy and commodities. Importantly, the backdrop of continued high unemployment, anemic wage growth, unused capacity and wide profit margins does not support a forecast of spreading price pressures. This setting is expected to hold cyclical pressures on bond yields at bay despite background concerns about fiscal sustainability and possible brinkmanship over new public borrowing authority.

Figure 22. United States — Economic Forecast, 2010-12F

		2010	2011F	2012F	2010	2011				2012		
					4Q	1QF	2QF	3QF	4QF	1QF	2QF	3QF
GDP	SAAR				3.1%	1.8%	3.0%	3.9%	3.8%	2.4%	3.1%	3.0%
	YoY	2.9%	2.7%	3.1%	2.8	2.3	2.6	2.9	3.1	3.3	3.3	3.1
Consumption	SAAR				4.0	2.7	3.0	3.7	3.3	1.5	3.0	3.0
	YoY	1.7	3.1	2.8	2.6	2.8	3.0	3.4	3.2	2.9	2.9	2.7
Business Investment	SAAR				7.7	1.8	6.5	8.6	10.0	8.9	9.0	9.3
	YoY	5.7	7.0	9.0	10.6	9.0	6.5	6.1	6.7	8.5	9.1	9.3
Housing Investment	SAAR				3.3	-4.1	10.1	10.4	10.1	9.9	7.6	9.2
	YoY	-3.0	0.6	9.4	-4.6	-2.5	-5.6	4.8	6.5	10.1	9.5	9.2
Government	SAAR				-1.7	-5.2	2.3	-0.4	-0.7	-1.3	-1.3	-1.3
	YoY	1.0	-0.6	-0.8	1.1	0.2	-0.2	-1.3	-1.1	0.0	-0.9	-1.1
Exports	SAAR				8.6	4.9	6.3	6.4	6.8	6.8	6.5	6.4
	YoY	11.7	6.7	6.6	9.0	7.3	6.7	6.6	6.1	6.6	6.6	6.6
Imports	SAAR				-12.6	4.4	6.7	2.4	5.1	3.9	4.5	5.3
	YoY	12.6	4.1	4.4	11.0	9.2	3.3	-0.1	4.6	4.5	4.0	4.7
CPI	YoY	1.6	2.9	1.7	1.2	2.2	3.3	3.3	2.9	2.0	1.4	1.5
Core CPI	YoY	1.0	1.3	1.5	0.6	1.1	1.3	1.4	1.6	1.5	1.5	1.5
Unemployment Rate	%	9.6	8.8	8.4	9.6	8.9	8.9	8.7	8.6	8.5	8.4	8.4
Gov't Balance (Fiscal Year)	% of GDP	-8.9	-9.2	-7.0								
Assumed WTI Spot Price	US\$	79.4	99.3	99.7	85.0	94.0	103.0	99.8	100.3	99.6	100.1	99.7
Current Account	US\$billion	-470	-504	-490	-453	-529	-497	-493	-499	-494	-492	-492
	% of GDP	-3.2	-3.3	-3.1	-3.0	-3.2	-3.4	-3.5	-3.5	-3.3	-3.2	-3.1
S&P 500 Profits (US\$ Per Share)	YoY	37.8	14.6	7.1	34.2	19.0	15.2	13.3	11.5	8.5	6.9	7.1

Notes: F Citi forecast. YoY Year-to-year percent change. SAAR Seasonally adjusted annual rate

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, I/B/E/S, Treasury Department, Wall Street Journal and Citi Investment Research and Analysis

## Japan

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We have revised down our GDP growth forecast for 2011 significantly to negative territory as data over the past month indicate that economic activity in March fell much more sharply than our earlier expectation right after the earthquake (e.g. industrial production was down 15.5% MoM). Disruption in supply chains is still restraining production markedly. As a result, we expect continued negative GDP growth (-0.8% QoQ) in the current quarter. By demand component, consumer spending and exports will likely fall, while public spending — mostly public consumption at this stage — is expected to rise in the devastated areas.

For the second half of the year, however, we expect a sharp rebound in economic activity. Anecdotal evidence shows that disruption in supply chains will be resolved faster than companies expected earlier. Moreover, a negative impact from power shortages this summer on production is probably limited: first, because TEPCO has revised up its estimate of supply capacity this summer significantly; and second, because manufacturers plan to implement thorough rotating operations and operation at nights and weekends. Meanwhile, reconstruction demand for infrastructure likely will start to materialize later this year, although there is a meaningful risk that the implementation of public works spending will be delayed because of dysfunctional political decision-making under the Kan Administration.

Following the first supplementary budget approved this month, the government likely will propose additional supplementary budget(s) this summer, probably amounting to ¥15 trillion or so (3% of GDP) in order to secure the earthquake-related budgets. However, debate on future tax hikes to fund reconstruction has not progressed much, making consumption tax hikes in the near future quite unlikely. In our view, modest income tax hikes for household and corporate sectors appear more likely. However, in that case, increases in tax revenues would likely be very modest, falling well short of the size of the additional supplementary budget(s). As a result, upward pressures on the JGB yields will probably materialize in coming months. In that case, the BoJ might expand the asset purchase program again to keep interest rates stable.

Figure 23. Japan — Economic Forecast, 2010-12F

		2010			2010	2011					2012		
		2010	2011F	2012F	4Q	1QF	2QF	3QF	4QF		1QF	2QF	3QF
Real GDP	YoY	4.0%	-0.6%	3.2%	2.4%	-0.7%	-1.6%	-0.8%	1.1%		3.0%	4.6%	3.0%
	SAAR				-3.0	-3.7	-3.1	7.0	4.7		3.9	3.0	0.5
Domestic Demand	YoY	2.2	0.6	3.0	2.0	-0.4	0.3	0.5	2.1		3.8	3.8	2.5
	SAAR				-2.7	-3.0	2.4	5.4	3.8		3.5	2.6	0.3
Private Consumption	YoY	1.8	-1.0	1.6	0.6	-0.9	-1.2	-1.7	-0.2		1.0	2.0	1.8
	SAAR				-3.9	-2.2	-1.8	1.3	1.9		2.6	2.1	0.5
Business Investment	YoY	2.1	1.9	5.7	5.4	3.0	0.3	1.3	2.8		5.3	6.9	5.6
	SAAR				0.5	-3.5	-0.1	8.9	6.5		6.2	6.1	3.7
Housing Investment	YoY	-6.3	4.3	12.3	6.1	5.3	3.9	3.8	4.2		6.9	13.5	16.2
Public Investment	YoY	-3.4	0.4	9.5	-13.0	-13.6	-5.5	4.7	18.1		23.3	19.0	4.0
Exports	YoY	23.9	-1.3	5.4	13.1	6.7	-6.2	-4.3	-1.1		-0.2	9.3	6.7
	SAAR				-3.3	2.8	-26.9	15.5	10.3		6.6	4.9	5.3
Imports	YoY	9.7	6.1	4.0	9.8	8.9	6.1	4.0	5.5		4.5	3.7	4.1
	SAAR				-1.3	8.2	5.7	3.6	4.7		3.8	2.6	5.2
CPI	YoY	-0.7	0.5	0.5	0.1	0.0	0.7	0.8	0.6		0.7	0.5	0.5
Core CPI	YoY	-1.0	0.5	0.5	-0.5	-0.2	0.6	1.0	0.8		0.7	0.5	0.5
Nominal GDP	YoY	1.8	-1.9	2.7	0.5	-3.0	-2.9	-2.0	0.2		2.4	4.1	2.6
Current Account	¥ tn	17.2	10.8	11.9	17.3	13.6	7.8	10.4	11.6		11.5	11.9	11.9
	% of GDP	3.6	2.3	2.5	3.6	2.9	1.7	2.2	2.4		2.4	2.5	2.5
Unemployment Rate	%	5.1	4.8	4.4	5.0	4.9	4.8	4.7	4.6		4.5	4.5	4.4
Industrial Production	YoY	16.6	-1.4	7.3	5.9	-2.4	-7.2	0.2	3.9		7.2	12.5	6.2
Corporate Profits (Fiscal Year)	YoY	50.0	-20.0	50.0									
General Govt. Balance (Fiscal Year)	% of GDP	-9.8	-10.3	-8.8									

F Citi forecast. SAAR Seasonally adjusted annual rate. YoY Year-to-year percent change. Corporate profits are TSE-I non-financials consolidated recurring profits.

Source: Citi Investment Research and Analysis

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## Euro Area

GDP growth in 1Q was somewhat stronger (0.8% QQ, 3.3% SAAR) than expected, mainly reflecting upside surprises in the core countries. With upward revisions for the core countries, we are revising up our euro area GDP growth forecast for this year from 1.8% to 2.1%. While we are also revising up our GDP forecast for 2012 from 1.3% to 1.6%, we continue to expect a growth moderation in the euro area. This moderation reflects headwinds from tighter fiscal policy, ongoing private balance sheet repair and increasing interest rates. We also expect that in 2011 and 2012 the divergence between the growth developments in the periphery countries and the core countries will remain significant.

The wide discrepancy in the economic performance also partly explains the uneven developments on the fiscal side. The progress in reducing the deficit is much faster in the core countries — supported by higher GDP growth — than in the periphery countries. However, the average general government deficit ratio in the euro area is likely to decline from 6.0% of GDP in 2010 to 4.3% in 2011 and probably all countries will report smaller deficit ratios compared to last year. And the public debate about the need for debt re-profiling for Greece highlights that even after the approval of the Portuguese rescue package, the sovereign debt crisis is far from being over.

In contrast to many core countries, the ECB is against any form of sovereign debt restructuring or re-profiling because it fears that this would lead to additional problems in the banking sector. This would probably require a widening of the ECB's non-standard measures. However, even without any debt re-profiling, we expect that the ECB will keep its non-standard measures in place for the time being because of the strained situation of the periphery-country banks. We expect that the ECB will extend the full-allotment procedure for all open market operations for another three months in June. But the ECB is likely to go ahead with further rate hikes. Even with somewhat reduced near-term inflationary pressure from the commodity side, we expect the ECB to use the "*strong vigilance*" phrase in June in order to prepare for an increase in all three official rates by 25bp in July. We forecast another rate hike in October and expect the main refi rate at 2.25% by mid-2012 and 2.5% by the end of next year.

Figure 24. Euro Area — Economic Forecast, 2010-12F

					2010	2011				2012		
		2010	2011F	2012F	4Q	1QF	2QF	3QF	4QF	1QF	2QF	3QF
Real GDP	YoY	1.6%	2.1%	1.6%	2.0%	2.5%	1.7%	1.8%	1.8%	1.4%	1.6%	1.6%
	SAAR				1.1	3.4	1.0	1.5	1.5	1.6	1.8	1.7
Final Domestic Demand	YoY	0.4	1.4	1.1	1.0	1.7	1.2	1.3	1.4	0.8	1.0	1.1
Private Consumption	YoY	0.8	1.3	1.2	1.1	1.2	1.3	1.4	1.3	1.2	1.2	1.2
Government Consumption	YoY	0.7	0.3	-0.6	0.6	1.1	0.5	0.0	-0.3	-0.8	-0.6	-0.5
Fixed Investment	YoY	-1.0	2.8	2.5	1.1	3.7	1.7	2.5	3.2	1.6	2.3	2.7
— Business Equipment	YoY	2.5	4.2	4.1	4.9	4.9	3.7	4.2	4.1	3.7	3.7	4.1
— Construction	YoY	-4.2	1.3	1.7	-2.5	1.7	-0.3	1.0	2.8	0.9	1.7	1.9
Stocks (Contrib. to Y/Y GDP Growth)		0.5	0.3	0.1	0.5	0.4	0.1	0.2	0.3	0.1	0.1	0.1
Exports	YoY	11.0	8.1	5.7	11.6	10.8	7.7	7.0	7.0	6.1	5.7	5.6
Imports	YoY	9.1	7.0	4.6	10.7	9.5	6.4	6.1	6.3	4.9	4.6	4.5
CPI	YoY	1.6	2.7	2.2	2.0	2.5	2.9	2.8	2.8	2.4	2.0	2.2
Core CPI	YoY	1.0	1.4	1.5	1.1	1.1	1.7	1.3	1.5	1.5	1.3	1.5
CPI Ex Energy and Food	YoY	1.0	1.5	1.6	1.1	1.3	1.9	1.4	1.6	1.5	1.5	1.9
Unemployment Rate	YoY	10.1	9.8	9.6	10.1	9.9	9.9	9.8	9.7	9.7	9.6	9.5
Current Account Balance	EUR bn	-36.6	-35.5	-42.5								
	% of GDP	-0.4	-0.4	-0.4								
General Government Balance	EUR bn	-550.5	-407.5	-314.9								
	% of GDP	-6.0	-4.3	-3.2								
General Government Debt	EUR bn	7837.2	8264.7	8599.6								
	% of GDP	85.1	86.9	87.4								
Gross Operating Surplus	YoY	3.4	3.1	3.2								

Sources: Eurostat and Citi Investment Research and Analysis

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## Germany

The increase in 1Q GDP, by 1.5% QQ (6.1% SAAR), was even bigger than we expected. While some sentiment indicators signal that GDP growth is likely to slow in the rest of 2011, most indicators remain elevated, suggesting decent GDP growth. With this latest information, we revise up again our 2011 GDP forecast from 3.1% to 3.5%. With indications of stronger domestic demand, we become also more upbeat for 2012. We now expect GDP growth of 2.5% for next year compared to our previous forecast of 2.0%. With higher GDP growth, we also expect a more rapid reduction of the general government deficit. We now expect a deficit ratio of 1.8% of GDP (previously 2.0%) for 2011 and 0.7% (previously 1.0%) for 2012. With little signs of domestic price pressure, we have not changed our inflation forecast and expect that after a further increase in coming months (mainly commodity-price led), inflation will moderate in 2012. Despite these good economic conditions, Chancellor Angela Merkel's coalition – especially the FDP, the junior coalition partner – is in a difficult situation. As a consequence, the political situation in Germany is fragile and political stalemate is likely up to the next general election in 2013.

## France

The increase in French GDP in 1Q by 1.0% QQ (4.0% SAAR) was stronger than expected. While the increase was probably temporarily overstated, economic indicators signal that GDP growth will continue in coming quarters, but probably at a lower pace. However, the overall economic situation looks better than we expected previously and therefore we increase our GDP forecast for 2011 from 1.6% to 2.0% and expect a GDP expansion by 1.7% (previously 1.5%) for 2012. In this more upbeat economic environment, we also reduce our general government deficit forecast. We now expect a deficit ratio of 5.8% of GDP (previously 6.0%) for 2011 and 4.3% (previously 4.5%) for 2012. However, we remain less optimistic than the government on the medium-term growth outlook for growth. Therefore we doubt that the government will be able to achieve the target of a general-government to GDP ratio of 2.0% in 2014 without substantial fiscal tightening.

Figure 25. Germany and France — Economic Forecast, 2010-12F

		Germany			France		
		2010	2011F	2012F	2010	2011F	2012F
Real GDP	YoY	3.5%	3.5%	2.5%	1.4%	2.0%	1.7%
Final Domestic Demand	YoY	1.9	3.1	1.9	0.8	1.7	1.5
Private Consumption	YoY	0.4	2.3	1.9	1.4	1.8	1.5
Fixed Investment	YoY	6.2	7.5	4.2	-1.6	3.1	3.1
Exports	YoY	13.8	11.4	8.7	9.4	5.3	5.3
Imports	YoY	12.4	10.0	8.3	8.3	6.5	3.9
CPI	YoY	1.1	2.6	2.1	1.7	2.3	2.0
Unemployment Rate	%	7.1	6.2	5.9	9.3	8.9	8.7
Current Account	€bn	141.4	143.5	159.3	-41.8	-18.5	-17.7
	% of GDP	5.7	5.5	5.9	-2.1	-0.9	-0.8
General Govt. Balance	€bn	-82.0	-48.1	-17.8	-136.5	-117.6	-90.2
	% of GDP	-3.3	-1.8	-0.7	-7.0	-5.8	-4.3
General Govt. Debt	% of GDP	87.6	86.8	84.8	81.7	84.6	86.0
Gross Trading Profits	YoY	13.4	6.3	6.6	1.1	3.5	4.0

F Citi forecast. YoY Year-to-year growth rate. Note: The German annual figures are derived from quarterly Bundesbank data and adjusted for working days. Forecasts for GDP and its components are calendar adjusted. Sources: Deutsche Bundesbank, Statistisches Bundesamt, INSEE, and Citi Investment Research and Analysis



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## Italy

Q1 GDP surprised slightly on the downside, posting just a 0.1% QQ rise. Export growth decelerated somewhat at the start of 2011 and, together with the end of inventory rebuilding, this has dampened industrial output. Domestic demand remains the major weakness for the economic outlook, as real incomes stagnate also on the back of rising inflation. The fiscal deficit seems on track for another small decline in 2011, after a lower-than-expected reading in 2010. However, public debt is still high and the new version of the Stability and Growth Pact may add pressure on Italy to tighten fiscal policy more than generally expected, creating an additional drag on growth. S&P's decision to put Italy on "negative credit watch" also refocuses the attention on Italy's high debt levels. Political tensions have resurfaced after recent local elections, but we think this should not jeopardize a continuation of the recently-cautious management of fiscal policy.

## Spain

Q1 GDP was lifted by strong exports and a rebound in public consumption – but this latter factor is likely to fall in coming quarters, consistent with the government's sizable consolidation plans. Fiscal tightening is starting to bite, and the large drop in the household saving rate in 2010 leaves little room for a further decline to cushion against fiscal drag. Recent retail sales, job market and construction indicators suggest growth probably is already slowing in Q2. Political resolve on structural reforms (labour market, pension, saving banks) has been impressive so far, but political uncertainty is likely to rise after the defeat of the governing Socialist Party in regional elections. Weaker growth and high uncertainty on banks' recapitalization costs remain important risks for medium-term financial sustainability.

## Greece

The higher 2010 fiscal deficit, by almost 1pp of GDP, and ongoing weakness in tax revenues imply that the 2011 fiscal targets are unlikely to be met. The government has been asked to again step up its fiscal efforts and begin privatizations, but political resistance is increasing and we do not expect that fiscal measures will be enough to restore market confidence and allow normal funding in coming years. We expect the recession to continue at least until end-2012. Chances of a debt rescheduling before 2012 have increased, given the still steep upward trajectory in the debt-to-GDP ratio and growing political support for this option also at the European level.

Figure 26. Italy, Spain and Greece — Economic Forecast, 2010-12F

		Italy			Spain			Greece		
		2010	2011F	2012F	2010	2011F	2012F	2010	2011F	2012F
Real GDP	YoY	1.2%	0.8%	1.0%	-0.1%	0.3%	0.2%	-4.4%	-3.7%	-2.2%
Final Domestic Demand	YoY	0.9	0.4	0.7	-1.2	-1.7	-1.3	-6.0	-5.7	-3.7
Private Consumption	YoY	1.0	0.6	0.4	1.3	-0.8	-1.4	-4.6	-3.9	-2.9
Fixed Investment	YoY	2.4	0.3	2.6	-7.5	-5.3	-0.5	-12.2	-9.0	-5.1
Exports	YOY	8.9	6.4	2.7	10.3	9.9	1.4	4.3	4.4	3.0
Imports	YOY	10.3	7.6	1.6	5.5	2.3	-2.9	-5.0	-6.1	-2.8
CPI	YOY	1.6	2.9	2.7	2.0	3.3	1.6	4.7	3.3	1.5
Unemployment Rate	%	8.4	8.7	8.5	20.1	21.2	21.1	12.5	16.1	17.5
Current Account	€bn	-51.0	-66.3	-69.6	-47.7	-35.8	-23.2	-24.1	-18.1	-12.1
	% of GDP	-3.3	-4.2	-4.2	-4.5	-3.3	-2.1	-10.4	-8.0	-5.5
General Govt. Balance	€bn	-71.2	-64.2	-59.3	-98.6	-74.4	-56.3	-24.2	-21.9	-20.9
	% of GDP	-4.6	-4.1	-3.7	-9.3	-6.9	-5.2	-10.5	-9.9	-9.6
General Govt. Debt	€bn	1843	1907	1966	638.0	744.7	801.0	329	356	376
	% of GDP	119.0	121.0	121.5	60.0	69.0	73.6	142.4	160.2	173.2

F Citi forecast. YoY Year-to-year growth rate. Sources: ISTAT, INE, Haver Analytics, Eurostat, and Citi Investment Research and Analysis



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## UK

The ONS GDP data suggest that the economy went through a flat patch in Q4 and Q1, but business surveys and jobs data suggest that the economy continues to grow. We expect continued modest growth in coming quarters, although it is possible that Q2 growth will be capped by the extra bank holiday for the Royal Wedding. The economy seems to be beginning to rebalance towards net exports, with export volumes growing at their fastest pace for 30 years. Consumer spending and public spending are sluggish.

But this rebalancing is likely to come at the price of a large and extended overshoot of inflation versus the 2% target. We expect CPI inflation to average about 4½% this year, probably staying around 3% in 2012. The inflation overshoot partly reflects the lagged effects of the weak pound plus global inflation, but it also appears that the economy has less spare capacity than the MPC had assumed. Surveys suggest that capacity use in firms is around average and that, with strong cost pressures, firms remain unusually confident in their scope to raise selling prices. So far, the MPC appear unwilling to hike rates, with some members worrying about the modest pace of growth and others worrying that an early rate hike might hinder the necessary rebalancing of the economy. Nevertheless, the *May Inflation Report* projected that the current policy stance (0.5% rates and £200bn QE) will leave inflation above target as far ahead as the MPC are willing to forecast, which implies that rates will need to rise fairly soon if the MPC take the inflation target seriously. We continue to expect the MPC to start hiking in the second half of the year, although the willingness of some MPC members to seek reasons for delay mean that risks are tilted to only one hike in H2 rather than the two we have pencilled in.

Figure 27. United Kingdom — Economic Forecast, 2010-2012F

		2010	2011F	2012F	2010	2011					2012		
					4Q	1QF	2QF	3QF	4QF		1QF	2QF	3QF
Real GDP	YoY	1.3%	1.8%	2.6%	1.5%	1.8%	1.3%	1.3%	2.5%		2.6%	2.7%	2.6%
	SAAR				-2.0	2.0	2.5	2.9	2.7		2.4	2.6	2.8
Domestic Demand (Incl. Inventories)	YoY	2.4	0.5	2.5	2.8	0.2	0.5	0.4	1.0		3.2	2.5	2.3
	SAAR					0.1	-6.1	5.1	2.8		2.7	2.2	2.3
Consumption	YoY	0.8	1.4	1.2	0.2	0.6	1.1	1.5	2.2		1.9	1.1	1.0
	SAAR				-1.1	1.5	4.1	1.5	1.8		0.3	0.6	1.2
Investment	YoY	3.0	-0.1	10.4	5.8	-1.8	-0.5	-1.1	3.0		9.5	11.3	10.9
	SAAR				-7.2	-13.4	5.9	12.3	9.4		10.6	13.1	10.4
Exports	YoY	5.3	7.2	6.9	5.4	9.8	6.1	6.4	6.5		5.0	7.5	7.4
	SAAR				7.1	13.1	-2.2	8.3	7.5		6.6	7.4	8.0
Imports	YoY	8.5	4.3	6.2	9.4	5.1	4.6	4.6	3.0		6.6	6.5	6.0
	SAAR				13.5	-8.2	6.6	7.7	6.8		5.4	5.9	6.0
Unemployment Rate	%	7.85	7.85	7.85	7.9	7.7	7.8	7.9	7.9		7.9	7.9	7.8
CPI Inflation	YoY	3.3	4.6	3.4	3.4	4.1	4.6	4.8	4.7		3.9	3.4	3.2
Merch. Trade	£bn	-99.2	-95.4	-93.9									
	% of GDP	-6.8	-6.3	-5.8									
Current Account	£bn	-36.2	-24.3	-26.6									
	% of GDP	-2.5	-1.6	-1.7									
PSNB	£bn FY	141.4	113.3	83.7									
	% of GDP	-9.6	-7.3	-5.1									
General Govt. Balance	% of GDP	-9.6	-8.5	-6.4									
Public Debt	% of GDP	75.2	80.2	82.4									
Gross Nonoil Trading Profits	YoY	4.3	14.2	9.8									

Note: Fiscal deficit shown excluding financial interventions. F Citi forecast. YoY Year-to-year growth rate. Sources: ONS and Citi Investment Research and Analysis

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With thanks to Frida Sellberg

## Switzerland

Recent surveys suggest that Swiss growth remains strong and broad-based. The SNB already has signalled its concern over medium-term inflation risks and the economy's resilience, plus concern over gains in property prices, probably will prompt the SNB to hike soon, either in Q2 or Q3. Market expectations, which attach only about a 50% probability to a hike by year-end, appear too complacent in our view.

## Sweden

Strong GDP growth is expected in Sweden this year; while monetary policy tightening is likely to dampen consumption of the highly indebted households and we have slightly lowered our 2012 GDP growth forecast (especially consumer spending). CPI was above 3.0% in April, and we expect it to stay above 3% for the rest of the year. Core inflation is, however, likely to stay modest and we still expect three more hikes from the Riksbank in 2011, putting the rate at 2.5% in 4Q.

## Denmark

The Danish recovery remains modest and, with the government continuing to communicate a marked slowdown in spending, we have lowered our public consumption forecast for 2011 and 2012. We, however, forecast a pick-up in investment growth and expect the total economy to show a modest 2.1% growth this year. Nationalbanken is expected to continue following the ECB in terms of rate hikes this year, before widening rate-spreads in 2012 and 2013.

## Norway

Growth in the Norwegian economy is expected to pick up this year, mainly driven by investment and a pick-up in consumption in 2H. The labour market continues to surprise on the upside and we have revised down our unemployment rate forecast to 3.1% this year (3.3% previously). The press statement following Norges Bank's 25bp rate hike in May was slightly on the hawkish side and we expect the next hike to come in 3Q, followed by another one in 4Q, putting the key policy rate at 2.75% year-end. For next year, the rate is likely to reach 4.0%.

Figure 28. Switzerland, Sweden, Denmark and Norway — Economic Forecast, 2010-2012F

		Switzerland			Sweden			Denmark			Norway		
		2010	2011F	2012F	2010	2011F	2012F	2010	2011F	2012F	2010	2011F	2012F
Real GDP <sup>a</sup>	YoY	2.6%	3.1%	2.4%	5.3%	5.0%	3.3%	2.1%	2.1%	2.1%	2.1%	3.2%	3.3%
Final Domestic Demand	YoY	0.8	4.9	3.5	3.6	3.7	2.9	0.7	1.4	1.4	1.9	3.8	3.5
Public Consumption	YoY	-1.6	1.9	1.4	2.3	1.5	0.8	1.1	-0.2	0.2	2.2	2.1	2.1
Private Consumption	YoY	1.7	1.5	1.9	3.5	2.9	2.6	2.2	2.0	2.1	3.6	3.0	3.3
Investment (Ex Stocks)	YoY	4.6	6.6	7.5	6.0	9.6	6.8	-3.5	2.4	1.4	-3.0	9.3	6.4
Exports	YoY	10.1	5.2	6.4	10.4	9.6	5.7	3.7	5.8	3.7	2.9	6.6	5.2
Imports	YoY	6.7	9.0	9.2	12.1	8.2	4.9	2.9	4.3	2.5	8.1	6.9	4.7
CPI (Average)	YoY	0.7	1.5	1.2	1.2	3.1	2.3	2.3	2.4	2.1	2.4	1.8	2.2
Unemployment Rate	%	3.9	2.9	2.1	8.4	7.3	6.4	4.2	4.0	3.8	3.6	3.1	2.9
Current Account	% of GDP	14.3	12.1	10.4	6.3	6.4	6.5	5.4	4.9	4.0	12.9	14.5	16.0
General Govt Balance	% of GDP	1.1	1.3	1.5	0.0	0.4	1.6	-2.7	-2.5	-2.3	9.7	9.6	12.5
General Govt Debt	% of GDP	42	39	37	39.4	36	32	43.6	45.6	45.5	NA	NA	NA

<sup>a</sup> For Norway, mainland GDP. F Citi forecast. YoY Year-on-year growth rate. Sources: National sources and Citi Investment Research and Analysis

## Canada

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The Canadian expansion remains on track, but the outlook is bifurcated. Faster near-term growth, and the likelihood that the economy will return to full capacity by mid-2012, suggest modest tightening in the second half of this year. Real GDP likely will grow at a trend pace in 2011, largely supported by business investment and household expenditures. Supply-chain disruptions stemming from the tragic events in Japan may cut ½% annualized from 2Q output, but should be recovered in the second half of this year. However, economic activity probably will moderate substantially over 2012-13 as government stimulus is unwound and consumer spending conforms to softer income growth. Moreover, CAD appreciation is expected to dampen exports and, if particularly severe, inflation as well. On balance, the uninspiring medium-term outlook points to an extended pause next year. Against this backdrop, interest rate normalization probably will be protracted.

Total inflation remains elevated on account of rising commodity prices and residual effects of Harmonized Sales Tax (HST) implementations last year. Higher food and energy costs will keep headline CPI inflation above the 2% target until the middle of next year. Meanwhile, core inflation remains subdued, reflecting temporary factors: unusual increases in auto prices last year; a spike in tourism costs during the 2010 Winter Olympics; HST-related business tax refund pass-through; and rebates on electricity prices in Ontario. However, diminished economic slack, unwind of HST-effects, and higher core food costs may lift underlying inflation above 2% before year-end.

Risks to the inflation target are two-sided. Upside risks include higher commodity prices and global inflation, as well as a stronger profile for domestic consumer spending. Downside risks include reduced competitiveness amid persistent strength of the Canadian dollar and consumer retrenchment. Global uncertainties pertaining to high private and sovereign debt levels in many advanced economies, geopolitical tensions and the implications for global growth following the earthquake in Japan are also important factors. Risks, though elevated, are balanced, in our view.

Figure 29. Canada — Economic Forecast, 2010-2012F

					2010	2011				2012		
		2010	2011F	2012F	4Q	1QF	2QF	3QF	4QF	1QF	2QF	3QF
Real GDP	YoY	3.1%	2.9%	2.6%	3.2%	2.8%	2.8%	3.1%	2.9%	2.5%	2.7%	2.7%
	SAAR				3.3	4.0	2.0	3.0	2.5	2.6	2.6	2.9
Final Domestic Demand	YoY	4.4	2.7	2.1	4.4	3.5	3.0	2.6	1.9	1.9	2.0	2.1
	SAAR				4.7	1.8	1.8	2.2	1.6	2.1	2.2	2.4
Private Consumption	YoY	3.4	2.0	2.4	3.4	2.2	2.1	2.2	1.5	2.3	2.6	2.4
	SAAR				4.9	-0.5	1.5	3.0	2.3	2.5	2.5	2.3
Government Spending	YoY	5.0	-0.2	-2.3	3.0	2.3	0.7	-0.9	-2.9	-3.3	-3.0	-2.1
	SAAR				3.5	-0.8	-1.9	-4.2	-4.7	-2.1	-0.8	-0.7
Private Fixed Investment	YoY	7.1	8.6	6.7	10.0	8.8	8.6	8.3	8.8	7.6	6.8	6.4
	SAAR				6.1	10.8	8.2	8.3	7.8	6.2	4.9	6.4
Exports	YoY	6.4	8.3	5.7	7.2	8.4	7.6	9.8	7.4	5.6	5.9	5.7
	SAAR				17.1	11.5	4.3	6.7	7.3	4.1	5.7	5.8
Imports	YoY	13.4	6.4	4.1	10.1	9.4	5.7	4.8	5.7	4.0	4.0	4.1
	SAAR				0.5	10.5	4.5	4.0	4.0	3.5	4.5	4.5
CPI	YoY	1.8	2.9	2.1	2.3	2.6	3.3	2.9	2.8	2.5	2.0	2.0
Core CPI	YoY	1.7	1.7	2.1	1.6	1.3	1.5	1.8	2.1	2.2	2.0	2.0
Unemployment Rate	%	8.0	7.5	7.2	7.7	7.8	7.6	7.6	7.2	7.4	7.3	7.3
Current Account Balance	C\$bn	-50.0	-21.2	-1.4	-44.2	-27.7	-21.0	-18.8	-17.3	-8.8	0.3	1.2
	% of GDP	-3.1	-1.2	-0.1	-2.7	-1.6	-1.2	-1.1	-1.0	-0.5	0.0	0.1
Net Exports (Pct. Contrib.)		-3.1	0.1	0.2	4.6	-0.6	-0.5	0.5	0.8	-0.1	0.0	0.1
Inventories (Pct. Contrib.)		0.9	-0.1	0.2	-5.9	3.5	0.5	0.0	0.0	0.3	0.2	0.2
Budget Balance (Fiscal Year)	% of GDP	-2.5	-1.7	-1.0								
Federal Budget Debt	% of GDP	33.8	33.3	32.8								

F Citi forecast. YoY Year-to-year percent change. SAAR Seasonally adjusted annual rate. Sources: Statistics Canada, and Citi Investment Research and Analysis

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## Australia

The extreme weather events of early 2011 have largely passed through the monthly activity data. The RBA's attention is turning back to the implications for inflation from expectations of a further gradual fall in the unemployment rate, rise in mining-related investment and gains in the terms of trade. Even with moderate household consumption growth and expectations of a small decline in Q1 2011 GDP growth, the RBA has raised its forecast for economic activity and underlying inflation over the next few years. With their forecasts now more aligned with Citi's view of the economy, the necessary and sufficient conditions for a further tightening of monetary policy are in place. The Minutes of the most recent RBA Board meeting showed that the current cash rate is no longer considered "appropriate" to ensure inflation remains consistent with the RBA's target. "Higher interest rates were likely to be required" is how inflation will be kept consistent with the target. We believe that the RBA is priming the market for a rate rise in coming months and reiterate our call for an August interest rate increase.

## New Zealand

There are some signs of a recovery in economic activity. Consumer sentiment and business activity have managed to grind out small gains in April and there is evidence of some stabilisation in the unemployment rate in Q1 2011, albeit at a relatively high level. But there is not the critical mass of improvement across a number of leading indicators to suggest that a more solid recovery is underway. Rising commodity prices are a positive sign for the rural sector, but the high NZD is eroding some of these gains and debt reduction remains a priority. The recent Budget showed that the Government sector will not be a stimulus for growth, so we expect the RBNZ to maintain the OCR at an accommodative level in 2011.

Figure 30. Australia and New Zealand — Economic Forecast, 2010-2012F

	Australia			New Zealand		
	2010	2011F	2012F	2010	2011F	2012F
Real GDP <sup>a</sup>	2.7%	2.5%	4.3%	1.4%	1.5%	3.4%
Real GDP (4Q versus 4Q)	2.7	3.4	4.1	0.6	2.9	3.8
Real Final Domestic Demand	3.6	2.8	4.3	2.2	2.3	2.8
Consumption	2.7	2.9	3.1	1.9	1.1	1.9
Govt. Current & Capital Spending	9.1	-0.8	1.4	-2.1	0.3	-1.0
Housing Investment	4.8	4.6	5.0	4.4	3.5	8.8
Business Investment	-0.9	8.1	12.4	0.1	6.8	6.4
Exports of Goods & Services	5.3	0.8	9.1	2.7	1.3	4.2
Imports of Goods & Services	13.2	6.6	9.4	7.9	5.9	3.7
CPI	2.8	3.1	2.7	2.3	4.3	2.9
CPI (4Q versus 4Q)	2.7	3.0	2.8	4.0	3.1	2.6
Unemployment	5.2	4.8	4.2	6.8	6.8	5.8
Merch. Trade, BOP (Local Currency, bn)	16.7	34.1	20.5	-0.61	-1.07	-0.86
Current Account, (Local Currency, bn)	-34.5	-28.4	-52.2	-2.8	-1.3	-11.2
Percent of GDP	-2.6	-2.0	-3.4	-2.3	-0.7	-5.5
Budget Balance <sup>b</sup> (Local Currency, bn)	-57.1	-41.5	-12.3	-6.3	-16.7	-9.7
Percent of GDP	-4.2	-3.6	-1.5	-3.3	-8.4	-4.7
General Govt. Debt (% of GDP) <sup>c</sup>	3.3	5.9	7.2	14.1	20.8	26.2
Gross Trading Profits <sup>d</sup>	12.5	9.1	8.6	NA	NA	NA

BOP Balance of payments basis. CPI Consumer Price Index. F Citigroup forecast. NA Not available. <sup>a</sup>Averaged-based GDP in Australia; Production in New Zealand. <sup>b</sup>Fiscal year ending June. Australia's underlying cash balance. <sup>c</sup>Australia and New Zealand Budget definition and forecasts — debt equals an asset. <sup>d</sup>Company gross operating surplus. Source: Citi Investment Research and Analysis

## China

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China's economy is showing initial signs of a slowdown, in line with our forecast. Industrial production and the PMI both point to a moderation of output growth, as a result of monetary and property tightening, while investment has remained robust to date — benefiting from social housing programs. Power shortages and supply chain disruptions from the Japan earthquake have taken a short-term toll on production. Growth in developed markets also appears to be moderating. We maintain our forecast that China's GDP growth will slow moderately through the rest of the year to 8.8% YoY in 4Q. Sequentially, 2Q may be the weakest quarter.

Inflation pressures have softened and the tightening cycle may be approaching an end. Food prices have shown some stabilization. There is no major disruption in the stock of live hogs and other meat prices are remarkably stable. Though we do not expect significant further weakness in commodity prices, broadly slower growth will likely limit additional imported inflation in the near term. These factors reinforce our view that CPI will likely peak in mid-year, with gradual softening in 2H. Against this backdrop, the authorities would take time to observe the effects of policies and refrain from major new tightening measures. We continue to expect two more rate hikes this year, but the odds are leaning towards just one.

With the exchange rate seen as another means to contain inflation, we believe rapid FX appreciation is becoming less likely. Moreover, after five months of 2% monthly depreciation, the DXY is likely to take a more moderate path as risk appetite turns more modest, although we do not expect a sustained dollar rebound. In the absence of key domestic drivers and international events, we expect the RMB to track the DXY more closely through the summer. As a result, we have scaled back our near-term forecast for RMB appreciation against the USD in 2Q and 3Q.

An inflection point for asset markets may emerge after the recent risk-off trade runs its course. Annual GDP growth is likely to be slower but remain above 9%. Meanwhile, over-tightening is less likely given slower growth and softer inflation momentum. These create a possible inflection point in 2H for risk assets, including equities. Potential catalysts include a somewhat softening policy stance, good summer harvest, falling commodity prices or power tariffs hikes. The key risks are uncertainties over property policy, sustained USD strength and the EMU sovereign crisis.

Figure 31. China — Economic Forecast, 2010-2012F

					2010	2011				2012		
		2010	2011F	2012F	4Q	1QF	2QF	3QF	4QF	1QF	2QF	3QF
Real GDP	YoY	10.3%	9.2%	9.0%	9.8%	9.7%	9.5%	9.1%	8.8%	9.2%	9.0%	9.0%
Real Final Domestic Demand	YoY	10.3	9.7	9.7								
Consumption	YoY	9.0	8.7	9.0								
Fixed Capital Formation	YoY	12.8	11.2	10.5								
Industrial Production	YoY	15.5	13.6	12.5	13.2	14.4	13.0	13.5	14.0	13.0	12.5	12.3
Exports	YoY	31.3	17.7	13.4	24.9	26.4	19.0	15.0	13.0	12.0	12.0	13.0
Imports	YoY	38.9	22.3	15.9	29.5	32.8	23.5	19.0	16.0	14.0	13.0	15.0
Merchandise Trade Balance	\$bn	184.5	153.3	138.7	63.1	-1.0	33.5	60.9	59.9	-9.2	33.2	60.1
FX Reserves	\$bn	2,847	3,300	3,600	2,847	3,045	3,150	3,200	3,300	3,400	3,500	3,575
Current Account	% of GDP	5.2	4.2	3.5								
Fiscal Balance (trailing 4-qr sum)	% of GDP	-1.6	-2.0	-2.0	-1.6	-1.7	-1.7	-1.5	-2.0	-1.7	-1.5	-1.5
General Govt. Debt	% of GDP	20.5	20.4	20.6								
Urban Unemployment Rate	%	4.2	4.0	4.1	4.1	4.1	4.1	4.0	4.0	4.0	4.0	4.0
CPI	YoY	3.3	5.0	4.0	4.7	5.1	5.4	5.1	4.3	3.9	4.1	3.8
Exchange Rate (end period)	CNY/\$	6.60	6.35	6.00	6.60	6.56	6.48	6.43	6.35	6.28	6.20	6.15
1-Yr Deposit Rate (end period)	%	2.75	3.75	3.75	2.75	3.00	3.50	3.75	3.75	3.75	3.75	3.75

Note: F Citi forecast. E Citi estimate. YoY Year-to-year percent change. SAAR Seasonally adjusted annual rate. Sources: Haver Analytics and Citi Investment Research and Analysis

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## India

A key change over the last month is the RBI's recent monetary policy, wherein it raised rates by a higher-than-expected 50bps, aiming to kill the inflation threat, even if it means compromising on growth. This view is captured in its policy statement which says *'high inflation is inimical to sustained growth...bringing (inflation) down, even at the cost of some growth in the short run, should take precedence'*. While the RBI now expects inflation to remain at elevated levels over the next few months, it pegs WPI at 6% for Mar-12. However, we believe this is optimistic and expect inflation to end the year at 7.5%. The likelihood of higher inflation coupled with a clear statement of bringing inflation down at the cost of growth is likely to result in an elongation of the rate tightening cycle. We now expect a further 75bps of tightening, taking policy rates to 8.00% by end-2011 vs. our previous estimate of 7.5%.

On the growth front, while recent developments on project approvals, as seen in the Posco project, are positive, aggressive tightening would hurt investment. We are consequently moderating our view of an investment turnaround. We now expect FY12 GDP to come in at 8.1% YoY, marginally lower than 8.4% YoY growth earlier. Moreover, FY12 will likely be a year of two halves, with 1H GDP possibly in the 7.5-7.8% YoY range; and 2H GDP in the 8.2-8.5% range.

On the fiscal front, it is widely acknowledged that expenditure numbers appear optimistic due to a budgeted 12.5% contraction in subsidies. In addition, the moderation in growth could put some pressure on overall tax collection, which is based on real GDP growth estimates of 9%. This could take the deficit to 5.1% to 5.5% of GDP vs. the government's estimate of 4.6%.

On the external front, the FY11 trade data peg exports touching US\$246bn, up 38% YoY — significantly higher than the government target of US\$200bn. Going forward, a combination of external factors (global growth + MENA risks) coupled with domestic constraints (infrastructure + rates) are likely to temper growth to 19%, making the government's US\$500bn target for FY14 ambitious. Nonetheless, a renewed thrust on exports is positive for opportunities in the engineering, auto, pharma, jewellery and refining space; and also bodes well for the current account. Finally on the INR, our views remain unchanged, we expect trends in the INR to be range-bound with key factors influencing movement being: (1) risk appetite that would facilitate a move in portfolio flows from EMs to DMs; and (2) sustained rise in export growth.

Figure 32. India — Economic Forecast, FY2010/11-2012/13F

		FY 10/11F	FY 11/12F	FY 12/13F
Real GDP	YoY	8.6%	8.1%	8.4%
Final Domestic Demand	YoY	7.6	6.6	8.3
Private Consumption	YoY	8.2	7.1	8.0
Fixed Investment	YoY	8.4	5.4	9.0
Exports	YoY	12.0	16.5	13.0
Imports	YoY	6.3	11.0	8.3
Wholesale Price Index*	YoY	8.6	8.0	6.5
Consumer Price Index	YoY	9.5	7.0	6.0
Unemployment Rate	%	NA	NA	NA
Current Account	US\$ bn	-34.4	-54.3	-51.5
	% of GDP	-2.0	-2.7	-2.2
Consolidated Fiscal Balance	% of GDP	-8.1	-7.9	-7.1
Centre Fiscal Balance	% of GDP	-5.1	-5.1	-4.6
US Dollar Exchange Rate	Average	45.6	44.8	44.8

Note: \* In India, policymakers look at the wholesale price index. Sources: Haver Analytics and Citi Investment Research and Analysis



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## Korea

The upswing in exports and employment continued in April. Exports expanded 25.1% YoY and registered a monthly record of USD49.2bn on the back of high double-digit export growth of petro products, shipbuilding and autos. Overall employment rose 37.9K YoY in April as the manufacturing and service sectors generated 11.6K and 21.8K new jobs respectively. Meanwhile, CPI inflation moderated to 4.2% YoY from 4.7% in March due to lower gasoline prices and — with favorable weather — lower fresh vegetable prices. Import price and producer price inflation both moderated in YoY terms but continued to trend up in MoM terms. We therefore expect CPI inflation to stay above 4% YoY in the near term. The BoK also has noted that inflationary pressures will remain high and that core CPI inflation will outpace headline inflation in 4Q11. In that regard, it was surprising that the BoK decided to hold the policy rate at 3.0% at the May MPC meeting. The BoK attributed its decision to external and domestic uncertainties, which might depress economic growth. However, we think the current pace of economic expansion is steady, and look for 4.6% YoY growth in 2H11. As a result, we expect that demand-pull inflationary pressure will increase further in the coming months. Hence, we maintain our previous call of two more rate hikes in the rest of this year.

## Indonesia

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Strong growth in 1Q 2011, of 6.5% YoY, highlights the resilience of domestic demand, with rising imports softening the contribution of net exports. Inflation has again moderated significantly on the back of seasonally lower food prices, coupled with more imports of rice, that have dealt another negative inflation surprise in April. Nonetheless, the April inflation expectations survey showed an uptick and core inflation remains sticky. With the markets being stable and headline inflation likely to come off on the base effect, we expect BI will be resistant to rate hikes, and will advocate currency appreciation as a disinflation tool. We now only expect one more rate hike this year to 7.0%, but the policy rate should still rise to 7.5% in 2012. Recent balance of payments data are supportive of BI's more tolerant attitude towards rupiah appreciation — the 1Q 2011 current and capital account remained in healthy surplus, gross FDI inflows in 1Q picked up even further from the growing momentum in 4Q 2010, while gross FX reserves reaching a high of \$113.8bn in April gives BI sufficiently comfortable precautionary FX reserves. The government is likely to submit a revised 2011 budget adjusting for higher oil prices, stronger rupiah and lower oil production — we don't anticipate any change to bond issuance plans or raise longer-term fiscal sustainability concerns.

Figure 33. Korea and Indonesia — Economic Forecast, 2010-12F

		Korea			Indonesia		
		2010	2011F	2012F	2010	2011F	2012F
Real GDP	YoY	6.2%	4.3%	4.6%	6.1%	6.5%	6.6%
Final Domestic Demand	YoY	4.8	3.0	4.2	5.2	7.2	7.2
Private Consumption	YoY	4.1	3.5	4.5	4.6	5.4	5.4
Fixed Investment	YoY	7.0	2.8	4.1	8.5	10.7	11.0
Exports	YoY	14.5	8.6	11.5	14.9	11.1	7.3
Imports	YoY	16.9	12.0	13.1	17.3	13.5	9.5
Consumer Price Index	YoY	3.0	4.0	3.4	5.1	6.0	6.6
Unemployment Rate	%	3.7	3.4	3.2	7.1	6.8	6.5
Current Account	US\$ bn	28.2	20.0	14.3	6.3	4.1	0.6
	% of GDP	2.8	1.7	1.1	0.9	0.5	0.1
Fiscal Balance	% of GDP	1.4	0.8	1.0	-0.6	-1.4	-1.5
US Dollar Exchange Rate	Average	1156	1069	1023	9092	8565	8363

Sources: Haver Analytics and Citi Investment Research and Analysis



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## Hong Kong

Economic data are more robust than we forecast, with 1Q GDP much higher than expected at 7.2% YoY on upside surprises from private consumption and exports of goods and services. We believe the fall in investment likely will be temporary, and a further export recovery to advanced economies will likely support 2H growth. Our new 2011 GDP forecast is at 5.8% YoY, up from 4.5% last month. Economic strength, coupled with statistical rebasing and introduction of a Statutory Minimum Wage, will likely continue to keep inflation risks elevated. Our 2011 CPI forecast is thus revised upwards to 5.5% (from 4.5% last month), and we expect that CPI inflation will peak in 3Q. Against such an inflationary backdrop, policymakers continue to focus efforts on increasing land supply, anti-property speculation, enforcing prudential bank lending standards in mortgages and other form of credit. Separately, in line with our strong growth outlook, we think higher tax revenues will support our fiscal surplus forecast upgrade to 2.9% of GDP in FY2011/12 (2.2% forecast last month). The HKD continues to fluctuate near the mid of the trading band, but we expect it to gradually strengthen to the strong end of the band during the rest of the year as risk appetite returns after China's tightening ends.

## Singapore

Early signs are pointing towards a temporary export-led slowdown in growth momentum in 2Q, following the impressive 22.5% QoQ SAAR (4Q: 3.9%), or 8.3% YoY surge in 1Q. Tentative signs of a bottom in the tech cycle, new capacity additions, and resilient domestic and regional demand for services point to a modest pick-up in growth momentum in 2H11. Although headline inflation already peaked in 1Q, the continued tightening of the labour market will keep inflation elevated at above 3% for much of the year. The labour market is likely to remain tight. The PAP's decline in its margin of victory at the 7 May General Elections, along with the elevation of key reformers in the new cabinet, suggests that the recent tightening of foreign worker inflows is unlikely to be meaningfully reversed. Even as the government faces pressure to reduce costs within its control, the structural catch-up in wage levels could still keep inflation structurally higher in the medium term. The MAS will likely maintain its SGD appreciation policy as a result, but the bar for further tightening is probably high. A resurgence in property transactions in April raises the risk of further property measures which, together with likely higher HDB income ceilings, may have spillovers on the mass- and mid-market segments of the private housing market.

Figure 34. Hong Kong and Singapore — Economic Forecast, 2010-12F

		Hong Kong			Singapore		
		2010	2011F	2012F	2010	2011F	2012F
Real GDP	YoY	7.0%	5.8%	5.5%	14.5%	7.0%	5.5%
Final Domestic Demand	YoY	6.2	4.0	4.0	5.5	6.0	6.1
Private Consumption	YoY	6.2	5.2	3.8	4.2	4.9	5.3
Fixed Investment	YoY	7.8	0.8	4.9	5.1	10.1	7.8
Exports	YoY	16.8	10.0	6.3	19.2	5.8	4.4
Imports	YoY	17.3	8.7	5.6	16.6	5.3	4.7
CPI	YoY	2.4	5.5	3.3	2.8	4.2	2.8
Unemployment Rate	%	4.4	3.5	3.5	2.2	2.0	2.0
Current Account	US\$ bn	14.8	22.4	26.8	49.5	45.0	45.9
	% of GDP	6.6	9.1	10.0	22.2	16.5	15.0
Fiscal Balance	% of GDP	4.2	2.9	3.0	0.5	0.0	2.0
US Dollar Exchange Rate	Average	7.77	7.76	7.75	1.36	1.24	1.20

Sources: Haver Analytics and Citi Investment Research and Analysis

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## Russia

We expect GDP growth this year to reach 4.3%, despite the deceleration of growth in 1Q 11 to 4.1%. This reflects our expectations of higher budget spending and private consumption. However, there are risks to this forecast should state companies' investment programs fail to materialize. We see growth of about 3.8% under the low-investment scenario. Gazprom's investment program may be lower in 2011 owing to the 60% increase in the extraction tax on gas. We think forthcoming elections (2011 parliamentary and 2012 presidential) will shape major policy decisions this year. According to the proposed amendments to the budget, Russia will receive RUB1.13tr extra oil revenues in 2011. The Ministry of Finance proposes to reduce the deficit to 1.3% of GDP (from 3.6%). We believe the deficit is likely to be closer to 2% of GDP allowing for higher indexation of public wages in 2H 11. Inflation is also likely to start coming off in 2H owing to ruble appreciation, lower administered price increases and low real wage growth in 1H. Given this and uneven growth statistics in 1Q, we expect the CBR to pause with rate hikes. The basket may weaken moderately to 34.5 in 2H 11 on the back of declining current account surpluses, uncertainty related to the elections and higher budget spending. However, the ruble and Russian assets may rally should the Putin-Medvedev tandem suggest Medvedev for re-election.

## Turkey

In our view, the evidence against the central bank's unorthodox strategy is mounting. Turkey's external performance continues to deteriorate with the 12-month rolling current account deficit reaching US\$60.5bn in March (some 8% of GDP). The marked deterioration in the non-energy current account balance suggests the widening is not just about energy prices. Regarding lending activity, the recent data through May show that annualized credit growth is still running around 35%YoY. Where do we go from here? With the level of OMO stock hovering around TRY50bn, we believe the CBT's strategy is approaching its limits. The amount of liquidity drained through RRR hikes is being replaced by higher OMO funding to ensure that money market rates do not go above the policy rate. This, in turn, does not allow the CBT to tighten liquidity, as the banking system's increased dependence on the central bank overshadows the CBT's instrument independence. All in all, we believe that the CBT's unorthodox strategy, coupled with the pro-cyclical fiscal policy and the absence of meaningful help from the BRSA, leaves the domestic economy vulnerable to sudden stops and confidence reversals that originate from external sources.

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Figure 35. Russia and Turkey — Economic Forecast, 2010-12F

		Russia			Turkey		
		2010	2011F	2012F	2010	2011F	2012F
Real GDP	YoY	4.0%	4.3%	4.1%	8.9%	5.6%	3.8%
Final Domestic Demand	YoY	3.3	8.5	5.7	10.6	6.4	4.4
Private Consumption	YoY	3.0	5.1	5.3	6.6	5.3	4.0
Fixed Investment	YoY	6.1	10.0	10.3	29.9	10.1	6.1
Exports	YoY	7.1	3.5	3.1	3.4	6.8	7.5
Imports	YoY	25.6	18.0	10.0	20.7	9.6	9.0
CPI	YoY	6.9	8.8	7.3	8.6	5.7	6.4
Unemployment Rate	%	7.5	7.5	7.5	11.9	10.1	10.3
Current Account	US\$ bn	71.1	84.6	32.9	-48.4	-65.3	-69.6
	% of GDP	4.8	4.7	1.6	-6.6	-8.5	-8.3
Fiscal Balance	% of GDP	-4.0	-2.2	-2.1	-3.6	-3.2	-3.2
US Dollar Exchange Rate	Average	30.4	28.6	28.8	1.50	1.60	1.62

Sources: Haver Analytics and Citi Investment Research and Analysis

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## Hungary

According to preliminary data, 1Q GDP rose 2.2% YoY s.a. The economy continues to benefit from the impressive performance of the German economy, which supports Hungary's trade surplus. In the coming months, a gradual deterioration in the trade balance is likely on the back of an improvement in domestic demand and stronger imports. The economic recovery should continue in the coming quarters and we expect 2011 GDP growth could reach 3.0% YoY. We expect the acceleration of private consumption during the year will be supported by personal and corporate income tax rate cuts as well as the payout of real yields from the private sector. Growth should be also driven by the restocking process and a gradual recovery in investment, mainly thanks to projects in the automotive industry. Despite the economic recovery, underlying price pressures remain muted and the central bank projects inflation to return to the 3% target within the next two years even in the absence of interest rate hikes. Taking this into account as well as recent appreciation of the forint, we look for stable interest rates (at 6%) until year-end. We see room for forint weakening as fiscal tightening was already discounted by markets, while the interest rate disparity against the Eurozone will likely decline.

## Poland

In April, inflation accelerated further to 4.5%YoY, which is significantly above the central bank's target at 2.5%, mainly because of increased food and fuel prices. However, core inflation also is gradually increasing and it may be fuelled in coming months by accelerating unit labour cost growth. The labour market situation is gradually improving along with recovery of economic growth. Wage pressures may increase further due to high GDP growth (in 1Q probably near 4.5% YoY), elevated inflation and good financial results of enterprises. Increasing inflation and high economic growth were addressed by the MPC in May, which unexpectedly raised interest rates by 25bp. We expect the next step in monetary policy tightening, by 25bp, in July. We see room for an additional 75bp of tightening over the next 12 months. The scale of monetary tightening will depend also on the pace of the budget deficit reduction. The fiscal tightening planned by the government may accelerate the reduction of the general government deficit to about 4% GDP in 2012, i.e. still higher than 2.9% GDP assumed by the government. We expect fiscal tightening will result in a growth slowdown in 2012-13. The current account deficit will likely be revised upwards in the next few weeks, although pressure on the zloty should be offset by the sale of EU funds by the Finance Ministry in the market and privatization.

Figure 36. Hungary and Poland — Economic Forecast, 2010-12F

		Hungary			Poland		
		2010	2011F	2012F	2010	2011F	2012F
Real GDP	YoY	1.2%	3.0%	3.4%	3.8%	4.2%	4.0%
Final Domestic Demand	YoY	-2.8	1.3	3.1	2.1	4.3	4.7
Private Consumption	YoY	-2.1	2.6	3.3	3.2	3.6	4.0
Fixed Investment	YoY	-5.6	1.7	5.0	-2.0	9.1	7.5
Exports	YoY	14.1	10.1	8.1	10.1	7.0	8.0
Imports	YoY	12.0	9.8	8.4	11.5	8.0	10.5
CPI	YoY	4.7	4.3	3.4	2.7	4.2	2.8
Unemployment Rate	%	11.2	10.0	9.5	12.1	11.1	10.0
Current Account	US\$ bn	2.7	1.9	-0.9	-15.9	-30.2	-39.4
	% of GDP	2.1	1.3	-0.6	-3.4	-5.6	-6.3
Fiscal Balance	% of GDP	-4.2	2.5	-3.0	-7.9	-5.7	-4.0
US Dollar Exchange Rate	Average	208	193	188	3.0	2.8	2.6

Sources: Haver Analytics and Citi Investment Research and Analysis

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## Czech Republic

After Czech GDP rose 0.6% QoQ in 1Q11, surpassing our forecast, we made a small upward revision to our GDP growth forecast for 2011 to 2% from 1.9%. We retain our view that stronger German growth this year is beneficial for the Czech recovery, but the recovery is limited by fiscal consolidation. Our upgrade contrasts with the CNB, which cut its 2011 growth forecast to 1.5% from 1.6% initially. We expect the recovery to remain driven by industrial employment, which could ease the negative impact of fiscal consolidation on private consumption. The main downside risk to our forecast would be a larger pass-through of the announced (but not yet approved) hike in the lower VAT rate in January 2012 (by 4%pt), which would hit real disposable income. The gradual recovery is likely to ease the contraction of the adjusted core CPI which is, in our view, the best indicator for the tightening in the CNB's policy rate. However, after the dovish outcome of the CNB May Bank Board meeting, we think the majority of the Board will be strongly persuaded that there is no reason to hasten hiking the policy rate. Hence, we postpone our forecast of the first hike (to 1%) to 3Q, but that is still a quarter earlier than the CNB's indication. This reflects our view of better private consumption, labour market and weaker koruna compared to the CNB.

## Romania

At 1.6% YoY, Romania's 1Q GDP came in considerably stronger than the consensus (0.2%). According to the official flash estimate, GDP grew by 0.6% (SA, QoQ) compared with 0.1% in 4Q 2010. While we need to wait for the detailed data, the stronger-than-expected GDP reading should provide some relief to the government, which has been anxiously waiting to reap the benefits of the ambitious fiscal consolidation and the difficult reform measures. From this standpoint, the favourable GDP print, which bodes well for political stability in the near term, should alleviate pressure on the government to pursue populist policies ahead of the 2012 general elections. Despite the stronger-than-expected 1Q GDP outturn, the country continues to have a large negative output gap. As a result, the 1Q GDP print is not likely to create an additional complication for the NBR, which has already revised its year-end inflation forecast to 5.1% in the new Inflation Report from 3.6%. That upward revision and the Bank's more cautious tone in the May Inflation Report corroborate our view that the NBR is likely to keep rates on hold at 6.25% during the remainder of the year. All in all, developments to date — including the continued improvement in Romania's external performance and the absence of serious valuation problems — supports our expectations of further modest leu appreciation.

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Figure 37. Czech Republic and Romania — Economic Forecast, 2010-12F

		Czech Republic			Romania		
		2010	2011F	2012F	2010	2011F	2012F
Real GDP	YoY	2.3%	2.0%	2.8%	-1.3%	2.0%	4.2%
Final Domestic Demand	YoY	-1.0	1.1	2.3	-4.3	3.3	5.4
Private Consumption	YoY	0.4	0.7	1.2	-1.5	2.6	5.5
Fixed Investment	YoY	-4.6	3.7	4.6	-13.1	6.1	6.3
Exports	YoY	18.0	12.9	11.0	14.3	7.0	5.1
Imports	YoY	18.0	13.8	10.3	12.4	2.3	6.6
CPI	YoY	1.5	2.1	2.8	6.1	6.7	4.0
Unemployment Rate	%	9.0	8.8	8.3	6.9	6.6	6.1
Current Account	US\$ bn	-7.2	-10.5	-10.4	-6.8	-10.1	-12.0
	% of GDP	-3.7	-4.9	-4.3	-4.2	-5.1	-5.4
Fiscal Balance	% of GDP	-4.7	-4.5	-3.4	-6.7	-4.5	-3.0
US Dollar Exchange Rate	Average	19.1	17.5	16.1	3.2	2.8	2.7

Sources: Haver Analytics and Citi Investment Research and Analysis

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## Brazil

Despite the deterioration in the inflation outlook, Copom opted to reduce the pace of interest rate hikes to 25bp (from 50bp), announcing that the total adjustment of interest rates should be “sufficiently prolonged”. Under this context, we now expect two more hikes of 25bp, driving the Selic rate to 12.50%. Regarding CPI inflation, we raised again our 2012 forecast to 5.5% (from 5.1%), based on the assessment that price increases have been showing more persistence than previously expected, amid signs of solid economic growth. We further raise our 1Q11 GDP growth forecast to 1.4% (from 1.1% previously), despite maintaining our 2011 growth forecast at 4%. On external accounts, we maintain our more optimistic view regarding the trade surplus (US\$21 billion) and current account (-US\$53 billion) performances this year, reflecting the favorable impact of still-elevated commodity prices amid a relatively stable real exchange rate. In terms of fiscal fundamentals, higher inflation and solid economic growth tend to support improvement in tax revenues, favoring primary surplus results, which we set to reach 2.7% of GDP this year.

## Mexico

GDP continued its uptrend in 1Q11, growing at 4.6% y/y, slightly below expectations, and by 2.1% at a quarterly annualized rate. Moreover, we expect activity in 2Q11 to slow down because of disruptions associated with the earthquake in Japan which are affecting several sectors, the auto industry in particular. Nevertheless, this slowdown is likely to be temporary and we expect growth in 2H11 to be stronger than we previously anticipated. Thus, we still see overall GDP growth in 2011 at 4.8%. Headline annual inflation has begun to rise; it stood at 3.4% in April after 3.0% in March, driven by commodity-related hikes in food prices. But lower inflation for services and merchandise other than food is helping to offset this performance, and the core rate went on declining, to 3.18% in April from 3.21% in March. A better inflation performance than we expected has led us to revise our year-end headline inflation forecast to 3.8% from 3.9%. Therefore, good inflation results have reinforced perceptions of Mexico as a market with limited inflation risk and of Banxico as a central bank in no rush to hike, and we still see the first 25bp increase in the policy rate taking place in October this year.

Figure 38. Brazil and Mexico — Economic Forecast, 2010-12F

		Brazil			Mexico		
		2010	2011F	2012F	2010	2011F	2012F
Real GDP	YoY	7.5%	4.0%	4.5%	5.5%	4.8%	3.8%
Final Domestic Demand	YoY	8.3	5.7	5.1	4.2	5.2	4.4
Private Consumption	YoY	7.0	5.6	4.1	5.0	4.8	3.8
Fixed Investment	YoY	21.9	7.7	5.7	2.3	8.3	7.7
Exports	YoY	11.5	8.7	6.4	24.3	14.3	11.1
Imports	YoY	36.2	17.2	9.4	22.1	15.3	11.9
CPI	YoY	5.0	6.6	5.5	4.2	3.7	3.9
Unemployment Rate	%	6.7	6.3	6.3	5.4	4.6	4.8
Current Account	US\$ bn	-47.4	-52.9	-70.1	-5.7	-24.2	-30.2
	% of GDP	-2.3	-2.2	-2.7	-0.5	-2.0	-2.4
Fiscal Balance	% of GDP	-2.5	-2.6	-2.5	-2.8	-2.5	-2.0
US Dollar Exchange Rate	Average	1.76	1.61	1.62	12.6	11.8	11.9

Sources: Haver Analytics and Citi Investment Research and Analysis

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## Argentina

With presidential elections approaching (first round in October), the dearth of market-friendly candidates is worrisome. 25 June is the deadline for presidential prospects to confirm their names in the ballot, and the only sure candidate is Ricardo Alfonsín, from the center-to-left Radical Party. Not even the frontrunner, current president Cristina Fernandez Kirchner, has confirmed that she will run for reelection. In the most likely event that she does, poor management of the economy may continue. For this year, we maintain our GDP and inflation forecasts at 7% and 27.5% per year, respectively, as the government will likely maintain highly expansionary fiscal and monetary policies ahead of the election. For next year, Argentina's strong dependence on the commodity sector poses a non-negligible risk of stagflation if external prices lead to growth deceleration and ARS depreciation.

## Venezuela

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Economic data in Venezuela signals that recovery is underway. GDP growth for 1Q11 stood at 4.5% year over year, higher than both the market consensus and our own forecast. Surprisingly, data showed the recovery is led by the private sector. Nonetheless, we expect the government to start playing an even more prominent role in GDP growth figures in the coming quarters. We consider that among the projects with a higher economic and political impact in Venezuela, the housing construction program clearly stands out. Although the better-than-expected economic performance in an environment of ample local excess liquidity should allow the government to rely more on internally generated resources (both tax revenues and domestic debt issuance), we still consider USD-denominated debt issuance is necessary in order to guarantee SITME bond sales of US\$33 million a day. That is why we consider the government and PDVSA will issue at least US\$5 billion throughout the rest of 2011. We do not foresee a situation in which Venezuela has trouble fulfilling payment obligations in 2011 and 2012, as amortization and coupons should represent less than 10% of oil revenues. Nevertheless, over the medium term and assuming President Chavez gets re-elected and policies against private entrepreneurship continue, the macroeconomic imbalances generated by negative investment and an increasing debt profile risk should take its toll on Venezuela's credit performance.

Figure 39. Argentina and Venezuela — Economic Forecast, 2010-12F

		Argentina			Venezuela		
		2010	2011F	2012F	2010	2011F	2012F
Real GDP	YoY	9.2%	7.0%	4.0%	-1.4%	3.5%	3.9%
Final Domestic Demand	YoY	11.6	8.6	4.5	-2.1	5.3	5.4
Private Consumption	YoY	9.0	8.0	4.6	-2.3	5.9	7.4
Fixed Investment	YoY	21.2	9.0	3.6	-4.4	-7.3	-0.9
Exports	YoY	14.6	8.5	5.0	-12.4	5.7	-0.9
Imports	YoY	34.0	20.5	8.0	-4.6	10.1	6.8
CPI	YoY	18.4	27.5	32.5	28.2	26.1	27.0
Unemployment Rate	%	9.3	8.1	7.8	8.5	8.8	6.7
Current Account	US\$ bn	3.6	-0.6	3.8	14.4	31.0	30.5
	% of GDP	1.0	-0.1	0.8	3.7	11.0	8.3
Fiscal Balance	% of GDP	0.2	-0.6	1.0	-6.6	-5.0	-5.0
US Dollar Exchange Rate	Average	3.9	4.1	4.7	2.6	4.3	4.3

Sources: Haver Analytics and Citi Investment Research and Analysis



## Saudi Arabia

Saudization efforts are gathering pace, with a new traffic light system expected to lead to greater enforcement of quotas on local hires. This is not unexpected in light of recent regional unrest, although we maintain our view such policies are best implemented as part of wider labour reform, with the thrust to reduce the gap in pay and conditions between the private and public sector. Recent rises in hiring and public sector wages work contrary to this, in our view. Overall, though, the economic impact on Saudi Arabia from the crisis has been benign, in our view. With our view that oil prices will likely average US\$105 per barrel in 2011, we had already revised up our fiscal surplus expectations to 8.5% of GDP which takes into account an anticipated rise in current expenditure of over 50%, reflecting the measures taken by King Abdullah and a 10% rise in oil production compensating for the loss of Libyan production. This rise in oil output led us to previously raise our 2011 GDP growth forecasts to 7.5%. While comfortably accommodated in the near term, the rise in spending raises the fiscal breakeven oil price to over US\$80 per barrel, potentially leaving public finances exposed to any future oil price fall. The long-anticipated mortgage law is edging closer, and we expect it to pass in the next 3-6 months, reflecting the revived sense of urgency in passing economic reforms aimed at improving socio-economic conditions, in line with the 21 Royal decrees issued on 18 March. The law, when passed, will stimulate the real estate and construction sectors' development and underpins our positive view on GDP growth. We also believe this will support our view that inflationary risks are on the rise particularly as credit growth is likely to increase sharply when the law is passed

## United Arab Emirates

We believe there is a possibility that commercial, investor and tourist activity will be diverted to the UAE from less stable parts of the region and it may benefit from the unrest due to its relative political stability. Indeed, recent data from Ernst & Young show a strong rise in 1Q hotel occupancy and profitability in the UAE as a whole, and Dubai in particular, while Bahrain and Egypt saw a collapse. We expect the external sector to be the main driver of the recovery. Dubai's economy, in particular, is showing signs of a strong external-led recovery with trade, logistics and transportation, along with tourism, responding strongly to the global economic rebound. Political instability in regional competitors may give an extra boost. We expect 2011 growth in Dubai will be close to 5%, rising to over 6% in 2012. In Abu Dhabi, government spending and ongoing megaprojects continue to drive activity, although we think real estate will be a drag on growth for the next 2-3 years due to contagion and substitution effects from Dubai.

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Figure 40. Saudi Arabia and United Arab Emirates — Economic Forecast, 2010-12F

		Saudi Arabia			United Arab Emirates		
		2010	2011F	2012F	2010	2011F	2012F
Real GDP	YoY	3.8%	7.5%	6.3%	4.4%	4.7%	5.1%
Final Domestic Demand	YoY	-0.8	6.4	7.8	1.5	2.5	3.1
Private Consumption	YoY	2.3	5.0	5.0	1.0	1.0	2.0
Fixed Investment	YoY	-5.6	10.0	10.0	5.0	5.0	5.0
Exports	YoY	5.0	13.0	8.0	10.0	13.0	13.0
Imports	YoY	-8.0	10.0	12.0	10.0	15.0	15.0
CPI	YoY	5.4	7.0	8.0	1.5	2.0	2.4
Current Account	US\$ bn	45.0	44.6	45.6	21.6	9.5	8.4
	% of GDP	11.1	10.1	7.5	7.8	3.2	2.6
Fiscal Balance	% of GDP	6.7	8.5	8.2	0.0	0.0	0.0
US Dollar Exchange Rate	Average	3.8	3.8	3.8	3.7	3.7	3.7

Sources: Haver Analytics and Citi Investment Research and Analysis



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## Nigeria

Following a relatively easy victory in the 17 April elections, attention will now focus on the speed with which the new elected president, Goodluck Jonathan, puts together a cabinet and pushes ahead with economic reform, notably efforts to open up the power sector and to reform the oil industry. He is officially sworn into office on 29 May. Growth was strong in Nigeria in 2010, and even if it does slow in 1H 2011 due to the political uncertainty around the elections and lower government spending, we still expect it to remain robust at 6.8% for 2011. Inflation, however, has also remained firmly in double digits and is unlikely to ease substantially in 2011. But, there already are signs that the post-election macroeconomic policy will see a return to more orthodox policies: notably reducing the fiscal deficit while monetary policy becomes more focused on the problem of inflation, rather than the health of the banking system. But, improved fiscal discipline, higher interest rates and oil prices should allow the central bank to maintain naira stability.

## South Africa

Signs of continued solid economic momentum at the start of 2011 keep us confident that growth can be around 3.75-4% this year. Household spending continues to outperform GDP, helped by partial consumer re-leveraging, while improving business confidence suggests greater corporate willingness to re-stock, hire and boost fixed investment than in 2011. Strong commodity prices also provide a windfall to the local economy. However, rising inflation and (eventually) interest rate hikes should trim growth in household spending power, while housing investment is unlikely to recover much and the strong rand keeps weighing on export competitiveness. Thus, growth may lose some momentum later this year and in 2012: we do not expect growth to accelerate further. Higher oil prices are likely to help boost inflation to the top end of the 3-6% target range in late 2011, despite a still-strong rand, but it should stabilize somewhat in 2012. Commodity price gains should keep the current account deficit moderate in 2011, but it should widen again next year as capital spending recovers and net dividend outflows resume their trend rise. We still expect the SARB to start normalizing policy rates upwards in September 2011, but the pace of tightening afterwards should be relatively gradual. Delayed fiscal consolidation, with the budget deficit unlikely to fall in 2011/12, is another reason for monetary normalization.

Figure 41. Nigeria and South Africa — Economic Forecast, 2010-12F

		Nigeria			South Africa		
		2010	2011F	2012F	2010	2011F	2012F
Real GDP	YoY	7.2%	6.8%	6.5%	2.8%	3.8%	3.8%
Final Domestic Demand	YoY	NA	NA	NA	2.8	4.2	4.2
Private Consumption	YoY	NA	NA	NA	4.4	4.5	3.9
Fixed Investment	YoY	NA	NA	NA	-3.7	2.9	5.4
Exports	YoY	NA	NA	NA	4.7	8.8	7.4
Imports	YoY	NA	NA	NA	9.6	10.6	9.1
CPI	YoY	13.7	10.5	10.7	4.1	4.8	5.7
Unemployment Rate	%	NA	NA	NA	25.5	25.7	25.3
Current Account	US\$ bn	14.2	23.7	26.4	-10.0	-12.2	-25.5
	% of GDP	6.1	8.8	8.2	-2.7	-2.9	-5.9
Fiscal Balance	% of GDP	-5.3	-2.4	-2.0	-5.2	-5.0	-4.7
US Dollar Exchange Rate	Average	151	154	153	7.32	6.89	7.38

Sources: Haver Analytics and Citi Investment Research and Analysis

Figure 42. Selected Emerging Market Countries — Economic Forecast Overview, 2010-12F

	GDP Growth			CPI Inflation			Current Balance (% of GDP)			Fiscal Balance (% of GDP)		
	2010	2011F	2012F	2010	2011F	2012F	2010	2011F	2012F	2010	2011F	2012F
<b>Asia</b>	<b>9.1%</b>	<b>7.7%</b>	<b>7.7%</b>	<b>4.3%</b>	<b>5.5%</b>	<b>4.5%</b>	<b>4.0%</b>	<b>3.0%</b>	<b>2.6%</b>	<b>-2.4%</b>	<b>-2.7%</b>	<b>-2.4%</b>
Bangladesh	6.2	6.7	7.0	8.0	6.5	6.0	1.7	1.1	-0.4	-5.0	-4.7	-4.4
China	10.3	9.2	9.0	3.3	5.0	4.0	5.3	4.2	3.5	-1.6	-2.0	-2.0
Hong Kong	7.0	5.8	5.5	2.4	5.5	3.3	6.6	9.1	10.0	4.2	2.9	3.0
India*	8.6	8.1	8.4	8.6	8.0	6.5	-2.0	-2.7	-2.2	-8.1	-7.9	-7.1
Indonesia	6.1	6.5	6.6	5.1	6.0	6.6	0.9	0.5	0.1	-0.6	-1.4	-1.5
Korea	6.2	4.3	4.6	3.0	4.0	3.4	2.8	1.7	1.1	1.4	0.8	1.0
Malaysia	7.2	5.7	6.1	1.7	2.8	3.3	11.8	10.5	9.0	-5.6	-5.5	-5.3
Pakistan	2.5	3.5	5.0	14.0	13.5	12.5	-1.0	-2.7	-3.4	-6.4	-6.1	-5.8
Philippines	7.3	4.8	5.6	3.8	5.2	4.0	4.5	3.0	2.4	-3.7	-3.3	-2.8
Singapore	14.5	7.0	5.5	2.8	4.2	2.8	22.2	16.5	15.0	0.5	0.0	2.0
Sri Lanka	8.0	7.9	7.5	6.0	8.0	6.5	-2.9	-3.8	-4.0	-8.0	-6.8	-5.2
Taiwan	10.8	4.9	5.0	0.9	1.8	2.0	9.4	8.0	8.0	-3.2	-2.5	-2.0
Thailand	7.8	3.7	5.1	3.3	3.9	3.7	4.6	4.2	4.0	-2.0	-2.9	-2.0
Vietnam	6.8	6.0	6.5	9.2	17.3	10.2	-4.7	-5.6	-5.1	-5.6	-5.0	-4.5
<b>Latin America</b>	<b>6.1%</b>	<b>4.7%</b>	<b>4.4%</b>	<b>7.5%</b>	<b>8.4%</b>	<b>8.5%</b>	<b>-1.0%</b>	<b>-1.2%</b>	<b>-1.4%</b>	<b>-2.6%</b>	<b>-2.4%</b>	<b>-2.1%</b>
Argentina	9.2	7.0	4.0	18.4	27.5	32.5	1.0	-0.1	0.8	0.2	-0.6	1.0
Brazil	7.5	4.0	4.5	5.0	6.6	5.5	-2.3	-2.2	-2.7	-2.5	-2.6	-2.5
Chile	5.2	6.3	5.3	1.4	3.3	3.3	1.9	0.2	0.0	-0.3	0.9	1.0
Colombia	4.3	4.7	5.0	2.3	3.3	4.0	-3.1	-2.1	-2.0	-3.6	-3.5	-3.2
Ecuador	2.0	3.5	3.5	3.4	2.8	3.0	-4.7	-3.2	0.0	-3.5	-3.2	-3.3
Mexico	5.5	4.8	3.8	4.2	3.7	3.9	-0.5	-2.0	-2.4	-2.8	-2.5	-2.0
Panama	7.5	8.0	7.0	3.5	6.9	6.8	-11.0	-13.0	-11.2	-1.9	-3.0	-2.0
Peru	8.8	7.1	6.5	1.5	3.2	3.1	-1.5	-2.7	-2.2	-0.8	-0.5	-0.6
Uruguay	7.8	5.8	4.7	6.7	7.4	6.6	1.0	0.4	-1.9	-1.2	-1.1	-1.0
Venezuela	-1.4	3.5	3.9	28.2	26.1	27.0	3.7	11.0	8.3	-6.6	-5.0	-5.0
<b>Europe</b>	<b>4.6%</b>	<b>4.4%</b>	<b>4.0%</b>	<b>6.1%</b>	<b>6.7%</b>	<b>6.0%</b>	<b>-0.2%</b>	<b>-0.7%</b>	<b>-2.3%</b>	<b>-4.9%</b>	<b>-3.0%</b>	<b>-2.9%</b>
Czech Republic	2.3	2.0	2.8	1.5	2.1	2.8	-3.7	-4.9	-4.3	-4.7	-4.5	-3.4
Hungary	1.2	3.0	3.4	4.7	4.3	3.4	2.1	1.3	-0.6	-4.2	2.5	-3.0
Kazakhstan	7.0	6.5	5.2	7.1	8.3	7.0	3.1	4.0	1.9	-2.6	-1.9	-2.1
Poland	3.8	4.2	4.0	2.7	4.2	2.8	-3.4	-5.6	-6.3	-7.9	-5.7	-4.0
Romania	-1.3	2.0	4.2	6.1	6.7	4.0	-4.2	-5.1	-5.4	-6.7	-4.5	-3.0
Russia	4.0	4.3	4.1	6.9	8.8	7.3	4.8	4.7	1.6	-4.0	-2.2	-2.1
Slovakia	4.0	3.4	4.1	1.0	3.8	2.7	-3.4	-4.8	-2.6	-7.5	-5.4	-4.2
Turkey	8.9	5.6	3.8	8.6	5.7	6.4	-6.6	-8.5	-8.3	-3.6	-3.2	-3.2
Ukraine	4.2	4.8	4.8	9.4	8.8	9.0	-2.1	-2.1	-3.6	-8.7	-4.0	-6.2
<b>Africa/Mideast</b>	<b>4.9%</b>	<b>5.7%</b>	<b>5.6%</b>	<b>5.0%</b>	<b>6.1%</b>	<b>6.3%</b>	<b>5.3%</b>	<b>4.9%</b>	<b>4.2%</b>	<b>0.3%</b>	<b>0.5%</b>	<b>1.3%</b>
Bahrain	4.1	1.0	6.0	1.9	2.0	3.0	6.3	6.2	6.3	-1.5	-4.1	-4.9
Egypt	5.1	1.4	3.6	11.1	12.7	12.7	-2.1	-5.4	-3.0	-8.1	-11.3	-8.6
Ghana	6.6	11.9	7.3	10.8	8.6	6.9	-7.2	-7.0	-5.4	-7.9	-6.9	-7.1
Iraq	5.9	10.4	10.4	0.0	4.0	5.0	2.7	0.9	0.7	-3.1	-2.1	-1.2
Israel	4.6	4.3	4.0	2.7	3.8	3.0	3.1	0.9	0.7	-3.0	-2.1	-1.2
Jordan	3.1	3.5	4.6	5.0	5.0	5.0	-4.3	-7.4	-7.0	-5.9	-7.2	-6.8
Kenya	5.3	6.0	6.5	3.9	13.1	10.5	-7.9	-9.3	-7.9	-6.5	-6.4	-5.9
Kuwait	6.2	4.4	4.7	4.4	4.2	5.0	38.1	38.8	39.1	21.7	18.4	14.1
Lebanon	6.0	2.8	3.5	4.0	3.4	4.0	-13.0	-16.7	-11.7	-7.4	-10.8	-8.9
Nigeria	7.2	6.8	6.5	13.7	10.5	10.7	6.1	8.8	8.2	-5.3	-2.4	-2.0
Oman	7.0	4.4	4.1	3.5	3.5	3.0	2.6	3.4	2.9	-1.6	-1.0	-0.9
Qatar	8.7	13.9	10.0	-2.4	3.0	3.0	17.3	16.5	12.9	15.2	14.9	14.4
Saudi Arabia	3.8	7.5	6.3	5.4	7.0	8.0	11.1	10.1	7.5	6.7	8.5	8.2
South Africa	2.8	3.8	3.8	4.1	4.8	5.7	-2.7	-2.9	-5.9	-5.2	-5.0	-4.7
Tanzania	6.9	7.2	7.6	6.2	10.2	9.4	-8.6	-9.5	-10.7	-6.4	-5.5	-5.0
UAE	4.4	4.7	5.1	1.5	2.0	2.4	7.8	3.2	2.6	NA	NA	NA
Uganda	6.9	7.2	7.6	4.1	13.9	8.8	-9.9	-10.6	-9.2	-4.5	-5.1	-3.9
Zambia	7.6	7.2	6.8	8.5	9.3	8.0	3.5	4.7	3.0	-3.3	-3.9	-3.5
<b>Total</b>	<b>7.2%</b>	<b>6.3%</b>	<b>6.2%</b>	<b>5.3%</b>	<b>6.4%</b>	<b>5.8%</b>	<b>2.4%</b>	<b>1.7%</b>	<b>1.2%</b>	<b>-2.6%</b>	<b>-2.3%</b>	<b>-2.0%</b>

\* Note: In India, policymakers look at the wholesale price index. Sources: Citi Investment Research and Analysis.

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Source: Citi Investment Research and Analysis.

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Figure 44. Citi Global Strategy and Macro Team

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## Rates Strategy

Last month we urged caution over short duration positions based on the pace of the sell-off in preceding months and the sharp divergence between the drivers of our fair value models. Since then, the seemingly oversold market conditions have dissipated somewhat; our global rate indicator has fallen almost 20bp and now appears to be finding support around the levels from which the March sell-off commenced. We therefore think it makes sense to begin reducing duration once more, in anticipation of a sharper move higher in yields in the second half of the year. Possible catalysts for this move would be further rate hikes and the end of the Fed's bond purchase program.

Despite the likely change in the relative net supply profiles of the US and Europe that will result from the end of QE, we think any subsequent underperformance of Treasuries against Bunds and Gilts is likely to be short-lived. Policy rates remain the key driver of cross-market spreads and with the ECB hiking rates and the Fed likely to remain on hold until early next year, there is still scope for some further tightening of the UST-Bund spread.

We have become increasingly bearish on gilts of late. The recent volatility in the market suggests that there has probably been some unwinding of congested positioning that had previously been so supportive for the UK market. With real yields close to (or in shorter maturities below) zero, the anticipated impact of fiscal tightening appears to be fully priced. With the recent rally having also compressed inflation breakevens, and with the political risk rising, we think UK Gilts could be one of the worst performing markets over coming months.

Yield curve trading remains challenging. In the short term, we expect the directionality to remain as it has been for some time now; the US being led by the 5-7yr sector, and Europe and the UK being led by 3-5yr maturities. In the longer term, rate hikes should flatten yield curves but with a mix of policy measures in place in the US and the UK and with extreme caution required to nurture the nascent economic recovery, it seems unlikely to us that the pace of yield curve flattening will be sufficient to outpace what is priced into the forwards. In the US, we see the 5yr sector as likely to underperform quite significantly over the next 6-9 months and thus expect curvature trades (selling the belly of the curve against the wings) to perform well if yields rise. In Europe, however, our horizon return forecasts see a much more uniform pattern across the curve which suggests that trading the yield curve is unlikely to be an effective proxy for short duration positions. In the UK, the long end of the curve retains a very high degree of directionality; we therefore expect to see a marked flattening beyond the 5yr point.

EMU spreads remain volatile with the countries that have already requested support continuing to see yields move higher and higher in anticipation of some kind of restructuring, rescheduling or reprofiling of their debt. We note, however, that some of the weaker markets are now pricing a significant probability of such an event and we see far more price risk in the tier two markets (non-AAA markets who have not accessed EFSF funding) where spreads have become negatively correlated to Bund yields. Such correlations are illogical and unsustainable, in our view, as rising yields should be putting further pressure on already challenged fiscal burdens.



Figure 45. Interest Rate and Bond Market Forecast (End of Period), as of 25 May 2011

		Forecast End Period					
	Current	2Q 11	3Q 11	4Q 11	1Q 12	2Q 12	3Q 12
US							
Policy Rate (Fed Funds) End Quarter	0.25	0.25	0.25	0.25	0.50	0.75	1.00
3-Month Libor	0.26	0.28	0.35	0.40	0.80	1.10	1.35
2 Year Treasury Yield	0.53	0.65	0.75	1.00	1.40	1.70	1.90
10 Year Treasury Yield	3.12	3.30	3.35	3.60	3.70	3.85	4.00
30 Year Treasury Yield	4.28	4.40	4.45	4.65	4.70	4.75	4.85
2-10 Year Treasury Curve	259	265	260	260	230	215	210
2 Year Swap Spread (Swap Less Govt.), bp	20	20	25	30	30	35	35
10 Year Swap Spread (Swap Less Govt.), bp	9	10	12	14	16	18	20
30 Year Swap Spread (Swap Less Govt.), bp	-23	-25	-30	-35	-40	-45	-50
30 Year Mortgage Yield	4.55	4.65	4.75	5.10	5.35	5.60	5.75
10 Year Breakeven Inflation	231	240	250	245	240	240	240
Euro Area							
Policy Rate	1.25	1.25	1.50	1.75	2.00	2.25	2.25
3-Month Libor	1.38	1.40	1.60	1.85	2.10	2.25	2.35
2 Year Treasury Yield	1.86	2.00	2.20	2.40	2.50	2.60	2.70
10 Year Treasury Yield	3.06	3.30	3.45	3.65	3.75	3.80	3.90
30 Year Treasury Yield	3.66	3.75	3.90	4.00	4.07	4.15	4.25
2-10 Year Treasury Curve	120	130	125	125	125	120	120
10 Year BTP-Bund Spread	163	160	150	135	125	100	85
2 Year Swap Spread (Swap Less Govt.), bp	49	55	50	50	45	45	40
10 Year Swap Spread (Swap Less Govt.), bp	32	30	32	35	37	40	40
30 Year Swap Spread (Swap Less Govt.), bp	7	9	12	15	20	20	20
10 Year Breakeven Inflation	216	215	230	225	225	220	220
Japan							
Policy Rate	0.10	0.10	0.10	0.10	0.10	0.10	0.10
3-Month Libor	0.20	0.20	0.20	0.20	0.20	0.20	0.20
2 Year Treasury Yield	0.18	0.20	0.25	0.25	0.30	0.35	0.40
10 Year Treasury Yield	1.12	1.25	1.40	1.40	1.60	1.80	1.80
30 Year Treasury Yield	2.09	2.20	2.30	2.30	2.45	2.65	2.65
2-10 Year Treasury Curve	94	105	115	115	130	145	140
2 Year Swap Spread (Swap Less Govt.), bp	19	19	20	20	22	25	25
10 Year Swap Spread (Swap Less Govt.), bp	6	6	7	7	10	12	12
30 Year Swap Spread (Swap Less Govt.), bp	1	2	3	3	5	7	7
10 Year Breakeven Inflation	NA	NA	NA	NA	NA	NA	NA
UK							
Policy Rate	0.50	0.50	0.75	1.00	1.25	1.50	1.75
3-Month Libor	0.82	1.00	1.50	1.75	2.00	2.25	2.50
2 Year Treasury Yield	1.04	1.35	1.75	2.15	2.35	2.55	2.75
10 Year Treasury Yield	3.32	3.60	3.85	4.10	4.25	4.35	4.50
30 Year Treasury Yield	4.23	4.45	4.50	4.55	4.57	4.60	4.62
2-10 Year Treasury Curve	228	225	210	195	190	180	175
2 Year Swap Spread (Swap Less Govt.), bp	55	49	46	44	42	39	37
10 Year Swap Spread (Swap Less Govt.), bp	14	15	10	10	15	20	25
30 Year Swap Spread (Swap Less Govt.), bp	-20	-12	-5	0	5	10	15
10 Year Breakeven Inflation	306	330	345	360	365	370	370
Australia							
Policy Rate	4.75	4.75	5.00	5.25	5.25	5.25	5.25
3-Month Libor	4.92	5.00	5.25	5.50	5.60	5.70	5.75
2 Year Treasury Yield	5.05	5.05	5.35	5.55	5.60	5.75	5.75
10 Year Treasury Yield	5.28	5.60	5.90	6.10	6.10	6.30	6.10
2-10 Year Treasury Curve	23	55	55	55	50	55	35
10 Year Swap Spread (Swap Less Govt.). bp	50	50	55	60	55	55	50

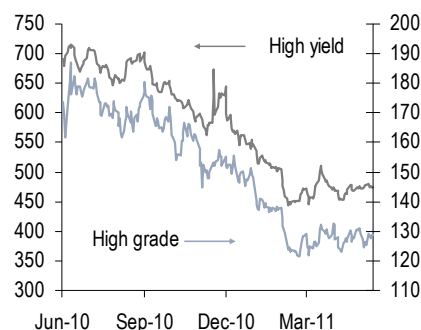
Source: Citi Investment Research and Analysis

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**Figure 46. Hitting the wall**

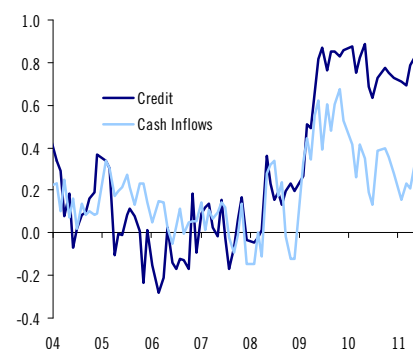
Cash market spreads, bp



Source: Citi Investment Research and Analysis

**Figure 47. Long but with inflows**

-2 very short, +2 very long



Source: Citi Investment Research and Analysis

## Credit Outlook — Pausing for Breath, or Running Out of Steam

The rally in credit has stopped. For the past three months, high-grade and high-yield cash spreads have gone nowhere (see Figure 46). If anything, spreads have inched 17bp wider since hitting a low of 121bp on 21 February. But is this just a pause before the rally resumes, or a sign that we should expect a reversal? For now, we think the pullback has further to go.

### Caught in the slick

Credit has thus far proved more resilient than other asset classes in the correction. While commodities have fallen to their prior lows in March, the dollar is back close to its highs from April, and even equities have fallen a few percent from their peak, credit has barely budged.

While part of this is reflective of credit inflows, at this point we think positions look extremely stretched. Our latest survey shows investors' net exposure to credit still close to the highest we have ever seen (see Figure 47). If the correction across other asset classes continues, we think credit investors will start to fret more about their longs and are liable to trim them, even if their inflows continue.

The critical difference between credit and, say, commodities is to our minds that commodities longs are much more likely to have been in the hands of "fast money", while credit longs are overwhelmingly concentrated with real money at this point. That may indeed make them more resilient, but the scale of the longs gives pause for thought. Of the 97 investors who responded to our latest survey, 75 were long, 18 were neutral, and only 4 short.

### Of balance sheets and buybacks

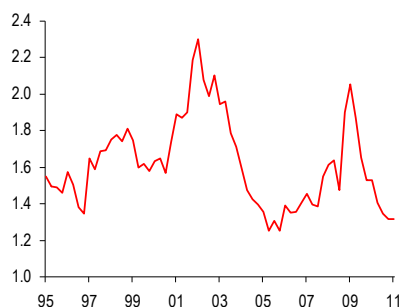
High-grade credit also looks vulnerable thanks to an increase in shareholder-friendly activity. M&A and share buybacks are on the rise. Admittedly the RR Donnelleys at this point are greatly outnumbered by the Microsofts, in which even an \$8bn acquisition makes only a small dent in a \$50bn cash pile, and the desire seems less to consciously lever up the balance sheet and more to try to inspire shareholders into believing that current high levels of profit growth can be sustained in future.

But even if aggregate balance sheets are not yet really deteriorating in investment grade, nor are they likely to get any better. There is a good chance the lows in net debt/EBITDA for this cycle may already have been passed. Aggregate net debt/EBITDA for non-financials in the S&P500 is already within a whisker of prior cycles' lows (see Figure 48). Net debt in the first quarter looks to have risen by 9% annualized. Our economists are expecting 15% EPS growth this year<sup>6</sup>, but that suggests EBITDA growth also of only 9% or so. Next year, EPS seem likely to shrink to 7%, while debt growth if anything seems likely to accelerate. It is possible that the Q1 numbers are just a statistical blip (there was a smaller pick-up in net debt in Q1 last year, which was subsequently reversed), but we doubt it.

<sup>6</sup> See [Inside the S&P 500: Slowing but still growing](#), S. Wieting.

**Figure 48. Already at the lows**

Net debt/EBITDA, S&P500 non-fins\*

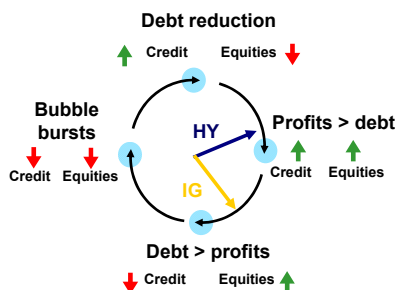


Source: Citi Investment Research and Analysis.

\*Sample of around 290 non-financials from S&P500 for which data were consistently available.

**Figure 49. Nearly time to wake up in IG**

The leverage clock



Source: Citi Investment Research and Analysis

**Figure 50. Don't fight the Fed**

Credit and equities vs Fed purchases

Gain in:	Weeks with purchases	
	>\$10bn	<\$10bn
US BIG (bp)	-265	-46
S&P 500 (cum. %)	37%	6%
S&P 500 (points)	372	42
# of weeks	48	66

Source: Citi Investment Research and Analysis

Putting together the anecdotal information and the statistics, in US high grade, the bondholder-unfriendly stage of the leverage cycle seems only a few quarters away. The pick-up in M&A is US specific (with European companies still being more cautious), and in high yield we are less concerned in any case. But the workings of the leverage clock therefore mean that the underperformance of credit relative to equities, which began in March, is probably only a foretaste of further underperformance to come (see Figure 49). It is not so much that we expect a violent turnaround; it is simply that we see little reason to chase the market here, and quite a few reasons to lighten up.

### As good as it gets — at least versus consensus

Nor is it just in terms of balance sheets that we reckon the past few months have been about as good as it gets. Just eight weeks ago our US economic surprises index, which measures macroeconomic data releases not outright but relative to the consensus, hit a 10-year high. For a series which mean-reverts quite regularly, this was no mean feat. Yet in the subsequent weeks, in spite of the occasional positive surprise like payrolls, the index has plunged into negative territory.

The problem is not so much that we think the economic recovery is stalling. It is that the very strength of the recovery has caused the consensus to upgrade their forecasts to the point where that recovery is priced into markets, where new releases struggle to surprise to the upside, and where investors struggle to justify adding to their existing long positions.

So far, spreads have widened less than the traditional correlation with surprises would suggest. Yet if the negative surprises continue — as we suspect they will, based both on the historical periodicity of the series and the impression that consensus growth expectations have yet to shift downwards — and if other asset classes continue their correction as a result, it seems likely that credit too will be forced to weaken.

### The end of quantitative squeezing

And yet the most obvious reason why we think credit's current resilience is overdone is the imminent end of QE2. Strangely for a factor so obvious, we think its importance is underappreciated. We suspect this is because in the market where the Fed has been directly operating, namely US Treasuries, there is no obvious linkage between yield movements and Fed purchases.

Look at credit and equities and it is another story. In a recent [note](#)<sup>7</sup>, we show that credit and equities rallied fully seven times as much in the weeks when the Fed bought more than \$10bn of securities as in the weeks where the Fed bought less than \$10bn (see Figure 50). Even stripping out the period between QE1 and QE2 (on the grounds that this coincided with European sovereign woes), the effect would still be notable.

It is not so much that we think the end of QE will spark an instant sell-off. Rather, we think the market will be coming off drugs, which meant that sizeable market inflows found simply nothing to buy. If the headlines revert to being positive, then spreads should hold in regardless. But if, as we suspect, they continue to disappoint, investors may find themselves rather shorter of breath than they were when the market was at its peak. For now, we think this rally is running out of steam.

<sup>7</sup> [Do Rate Hikes Matter For Credit?](#), H. Lorenzen, 23 March.

## Global Equity Strategy

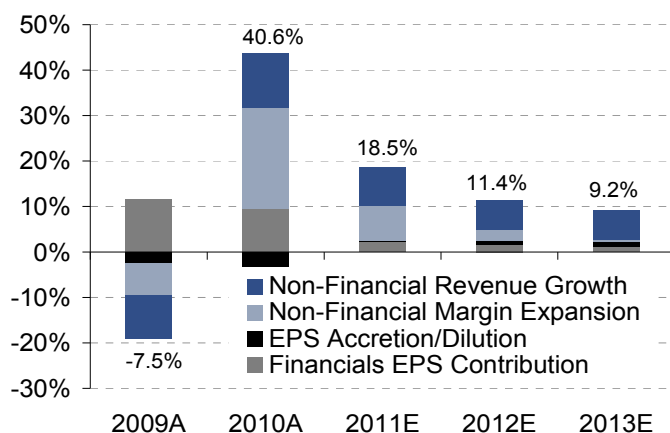
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We remain constructive on equity markets. Our optimistic view is based on reasonable valuations, low interest rates and positive earnings trends. Earnings are where we have been too cautious. It is clear companies are generating faster revenue growth than we originally forecast. This is in part due to a stronger global GDP outlook, but also, corporate revenue leverage to that GDP has increased. Despite the stronger-than-expected revenues, companies continue to be cautious on costs. We think this will continue for some time yet and suggest that global net profit margins are not only sustainable at current high levels, they may even push higher. Current margin concerns look overdone. While the gains from here will likely slow, we don't think they will reverse.

Faster revenue growth and good cost control means we are upgrading our global EPS forecast to 18%, 11% and 9% for 2011-13 (see Figure 51). Our 2011 forecasts are 7-8% higher than originally expected. While we are raising EPS targets, we are also increasing our market targets. Instead of 10-15% total returns, we now believe equity markets will provide total returns of 15-20% over the next 12 months. Our new MSCI ACWI target for the end of 2011 is for 380. This is up from 360 previously (currently 344). Our new targets are entirely consistent with our view that markets will grind higher with EPS. Our initial forecast for the end of 2012 is 420. Still, even with our new targets, we do not think global stock prices will be making new highs, despite new highs in EPS. Importantly, our forecasts do not assume a re-rating

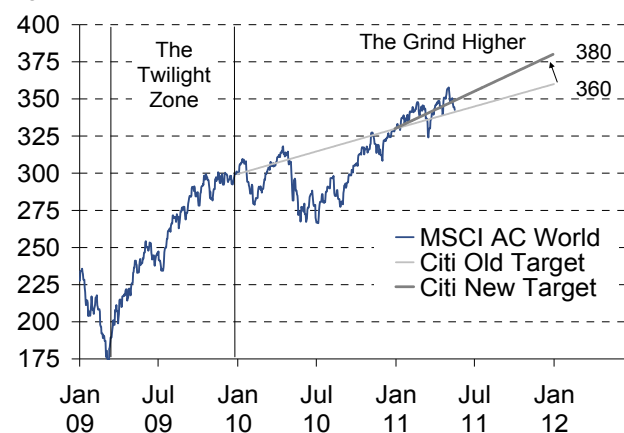
Figure 52 illustrates our forecast and the global price index. The strategy during the Grind Higher phase of the cycle is to not chase rallies too hard but be prepared to buy into dips. This would have served investors well during the sovereign debt concerns last year. This strategy would have also paid off during the sell-off following the Japan earthquake. We think those investors buying now could make gains of about 10% by the end of the year.

Figure 51. Global EPS Growth Drivers (Citi Top-Down Forecasts 2011-13)



Source: Citi Investment Research and Analysis

Figure 52. MSCI AC World (US\$)



Source: Citi Investment Research and Analysis

As the global EPS recovery has developed, we have progressively shifted our preferences towards those stocks, sectors or regions that are generating the best earnings growth and momentum. Earnings momentum strategies tend to outperform in mid-cycle years and underperform around major economic turning points<sup>8</sup>. Given that we do not see another economic turning point soon, we think that an earnings momentum strategy is appropriate right now.

<sup>8</sup> Global Equity Strategist: Earnings Momentum Strategies, 16 September 2009

Our key regional and global sector recommendations are summarised in Figure 53. Recent rotation against EM equities has moved valuations back to a discount. EM economic and EPS momentum remain robust. We stay Overweight. While EM remains our structural growth play, Japan is our recovery play. We are Overweight Japan, where valuations at last look competitive. In the near term, more post-earthquake EPS downgrades seem likely, but we think that the prospect of reconstruction and a weaker yen should support Japanese equities.

We recently downgraded the UK to Neutral. Although valuations look attractive, earnings momentum is fading. Poor EPS growth prospects mean that Europe ex-UK remains Underweight. We stay Underweight Developed Asia (mostly Australia) as a hedge against our EM Overweight. EPS prospects remain good in the US although valuations look slightly expensive. We stay Neutral.

Our belief in the ongoing economic recovery means that our global sector strategy still has a cyclical tilt. We think it is still too early to give up on the recovery trade. Our Overweights (IT, Materials, Industrials) should benefit from a continued recovery in the global economy.

Our Underweights look more mixed. We are Underweight Financials given lacklustre earnings momentum, balance sheet uncertainties and ongoing dilutive equitisation. Telecoms may be cheap but earnings momentum is disappointing. Consumer Staples look relatively expensive and are vulnerable to higher commodity prices and slower consumer spending in the developed markets.

**Figure 53. Regional And Global Sector Recommendations**

Overweight	Neutral	Underweight
Global Emerging Markets	US	Europe ex-UK
Japan	UK	Developed Asia
Overweight	Neutral	Underweight
IT	Utilities	Financials
Materials	Consumer Disc.	Consumer Staples
Industrials	Health Care	Telecoms
	Energy	

Source: CIRA

## Securitized Products Strategy

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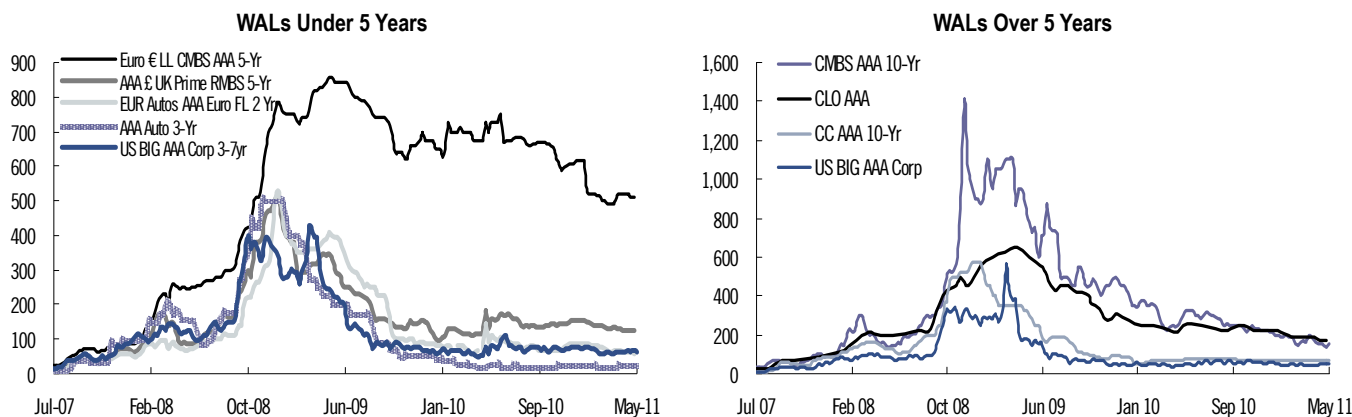
**We expect generic securitized products to remain range-bound. Yet, the market also continues to seek out selective credit intensive opportunities, in keeping with slowly improving fundamentals.** Market participants still lack conviction about the medium- to long-term horizon. This indecision is favoring short and defensive sectors like US consumer ABS, European nonmortgage sectors and US CMBS duper classes.

Investor concerns about a flagging recovery are still sparking an occasional broad-market sell-off. The Treasuries rally in early May, combined with the drop in equity indexes and commodities sell-off, was the latest example. April's strong non-farm payroll report, however, again bolstered confidence. Amid this economic uncertainty, the relative stability of the riskier securitized sectors and the strong momentum in high-quality consumer ABS bodes well. Continued fundamental strengthening offers the markets some lift.

**The market's lack of conviction favors defensive sectors.**

**To be sure, major areas of uncertainty remain, as we highlighted in our last report.** Aside from indecision related to economic recovery, there also have not been major developments to help establish firm views on the macro/geopolitical risks, the timing of a rates increase, or the impact of regulatory changes.

Figure 54. Selected Securitized Products Sectors — Spread Performance, July 07-May 11



Source: Citi Investment Research and Analysis

Source: Citi Investment Research and Analysis

**As such, defensive strategies will likely remain popular.** The biggest challenge for many market players will be procuring allocations for high quality new issue transactions, as the technicals remain challenging. We recommend remaining market weighted in consumer ABS, as it offers elevated credit quality and a relatively short WAL, which offer reasonable stability. We also recommend remaining overweighted in the CMBS sector, where the main opportunities reside in opportunistic bond selection. Core country European ABS also offers possibilities — virtually all sectors look cheap to equivalent US sectors. We favor high quality, short cards and autos.



## Outlook may be more about perception than reality

**Investors with a more bullish view, however, should find comfort in the relative muted reaction of the riskier securitized sectors to the elevated broad-market concerns.** Indeed, the market continues to seek yield-improving ideas. There are several factors that should support the bullish view. Our economists state that concerns about a new slowing in the pace of recovery likely have been overplayed.<sup>9</sup>

## Despite short-term jitters, rates next big move should be higher

**On the rates front, the uncertainty should have only a slight adverse impact on securitized products.** Many rates investors may have been caught on the wrong side of the recent drop in Treasury yields. 10-YR Treasury yields have fallen by over 50bp since the peak in early February. But our rates strategists stress that the next meaningful moves in rates should still be higher, not lower.<sup>10</sup> As such, we hypothesize that a rate rise could actually attract new investors to increase their securitized products allocations or persuade inactive investors to return to the sector.

## Expected regulatory revisions create much uncertainty in the interim

**The regulatory front, however, remains somewhat in flux.** Despite a reassuring overall flexible approach, the few surprises in the risk retention rules proposal stirred up quite a bit of anxiety in the markets over the past few weeks (especially for CMBS and Non-Agency RMBS).<sup>11</sup> A lack of formal regulatory public communication has exacerbated the uncertainty. There is good reason to expect that several key provisions in the final risk retention regulations will look quite different from those contained in the rules proposal released in late March. Much of the confusion revolved around the premium capture cash reserve account requirement. On the positive side, ASF noted that regulators may even believe that they have miswritten the provision. As such, this only reinforces our expectation that this requirement will be revised in the final rules, as we noted right after the rules were published.<sup>12</sup>

Regulators are likely to revise the premium capture account provision, leading to much uncertainty until the final rules are out.

From this perspective, the regulators' apparent awareness of the market concerns and confusion over this provision is encouraging. At the same time, ironically, the growing expectation that the provision might look quite different in the final rules adds even more uncertainty in the interim.

Figure 55. Sector Relative Value and Asset Allocation Recommendations — Selected Sectors, May 2011

Sector	Strategist Recommendation	Spreads Relative to Long-Term Averages	Comments
CABS	0	Fair	Remain market weighted. To outperform, buy subordinate credit cards and autos. We also like certain off-the-run senior sectors, including dealer floorplan, private label credit card, equipment, auto lease and first cash flow private student loans.
CMBS	+1	Cheap	Most CMBS sectors are still wide of their year-end 2011 spread targets and should continue to trend tighter over the remainder of the year. Generic legacy dupers are attractive to single-A and triple-B cards on a nominal basis, as well as on the basis of spreads adjusted for downside volatility.
CLO	+1	Cheap	CLOs remain cheap compared to other securitized products, as well as to corporates.
Agency MBS	+1	Cheap	We recommend a conditional long position in current-coupon MBS versus 10-YR Treasuries. Current versus historical relationship to broader market factors currently judge current-coupon MBS as cheap. Net supply decreased dramatically in April, another positive technical for the basis. In the rally scenario, mortgages will likely underperform; structure convexity hedges for protection.
European Securitized Products	+1	Cheap to Fair	Recommend overweighting core country sectors. Short cards and autos are defensive and have more tightening potential. We also like UK BTL, CMBS, UK prime RMBS. Portuguese bank covered bonds offer better value than Irish bank covered bonds. Look for spreads to outperform

Source: Citi Investment Research and Analysis

<sup>9</sup> See "Comments on Credit – Perceptions Outran Reality," Citi, May 6, 2011.

<sup>10</sup> See "US Rates: Surprise! Lower Yields," Citi, May 6, 2011.

<sup>11</sup> "Risk Retention: Expected Revisions Create Much Uncertainty in the Interim," Citi, April 29, 2011.

<sup>12</sup> "Retention Rules Feature Much Flexibility and a Few Surprises," Citi, April 1, 2011.

## Citi Commodities Outlook and Price Forecasts

### Market Commentary

*This market commentary has been prepared by a member of the Institutional Clients Group of Citi. The information in this communication is not intended to constitute "research" as that term is defined by applicable regulations.*

\*\* For specific trade ideas associated with this sector review, please contact the contributors listed at the back of this section

*This section is a summary of the May issue of our Citi Commodity Price Forecasts (published on 12 May) which was the last issue of Citi Commodity Price Forecasts in this format. From next month, we are pleased to announce that Edward Morse will be heading a new Commodity Research Group and will therefore be responsible for elaborating Citi's official commodity forecasts. Please contact your sales representatives at Citi to make sure you receive the new products as they emerge.*

- We have revised down our 0-3m forecasts to \$110/bl for Brent and to \$100/bl for WTI. Renewed concerns about US growth, rising US crude oil inventories and stretched speculative long positioning support our revisions. Ongoing tension in the MENA region will likely remain a bullish factor over the medium term. Our 6-12m forecasts are still bullish vs. spot and forwards.
- Our US natural gas forecast is for a further correction near term and gradual increase in prices over the medium and long term. We expect the declines in the US onshore natural gas rig count to continue, eventually causing output to top out late this year and to begin a downward trend thereafter.
- We see base metals making most gains in 0-3m, as the market regains confidence after early May's sharp correction. We suspect that the highs of the current cycle (set in February) will not be exceeded. LME metals record highs could be revisited in H2 provided China does not tighten excessively.
- Gold prices are likely to reach \$1550/oz in 0-3m supported by ongoing risk aversion (e.g. EMU sovereign crisis, MENA tension) and rising inflation. However, the gradual removal of monetary stimulus by major central banks is likely to weigh on gold prices over 6-12m. We expect silver prices to weaken and, thus, the gold/silver ratio to rise gradually having reached historically low levels in early May.
- We retain our overall bullish outlook for bulk commodities. Our 0-3 month coking coal price target remains at \$330/t (supported by some initial settlements of 2Q11 contract prices around \$330/t). We have also maintained our forecast of the thermal coal price for JFY 2011-12 at \$130/f FOB. We have trimmed our 0-3 month iron ore spot forecast to \$180/t. The threat of severe power shortages curtailing steel output (and thus iron ore demand) should prevent prices moving much higher from current levels.
- Corn prices could experience further falls 0-3m, but we expect them to recover medium term based on historically low US corn inventories. The decline in corn prices should keep wheat prices stable vs. spot, but they could rally further in 6-12m due to smaller European and North American crop prospects.
- Soybean prices are expected remain elevated near term and to rise further in 6-12m as US ending stocks remain at historically low levels and Chinese imports rebound. We also expect higher soybean oil prices in the medium term due to robust demand for biodiesel and from China.

## Citi Commodity Price Forecasts

These forecasts are a joint venture between Citi's commodities, equities, global macro strategy and futures research groups. Under normal circumstances, we expect to present Forecasts on a monthly schedule although we may offer intra month updates if circumstances dictate.

While these forecasts should be considered the best guide to Citi's short to medium term views on the outlook for the prices of the commodities covered, individual analysts within various teams may offer separate trade ideas in spot, options or futures when this seems appropriate for technical, tactical or strategic reasons. These groups may also offer in depth demand and supply analyses periodically.

Figure 56. Citi Commodity Price Forecasts

		Market data			Forecasts			Returns*	
		spot	3m Fwd	12m Fwd	0-3 mos	6-12 mos	5 years	3 mos rtn	12 mos rtn
Energy									
WTI Crude	USD/bbl	95.9	96.7	99.1	100.0	110.0	100.0	3.4%	11.0%
Brent Crude	USD/bbl	110.6	109.6	107.8	110.0	120.0	100.0	0.3%	11.3%
NYMEX Natural Gas**	USD/mmBtu	4.23	4.21	4.71	4.10	4.50	5.50	-2.6%	-4.6%
Base Metals									
LME Aluminium	USD/mt	2601	2570	2664	2675	2775	2500	4.1%	4.2%
LME Copper	USD/mt	8537	8520	8731	9250	9750	7500	8.6%	11.7%
LME Lead	USD/mt	2272	2296	2292	2450	2600	1850	6.7%	13.4%
LME Nickel	USD/mt	23960	24557	24360	26000	28000	16250	5.9%	14.9%
LME Tin	USD/mt	28950	29110	29175	30000	31000	17000	3.1%	6.3%
LME Zinc	USD/mt	2104	2156	2193	2250	2450	2200	4.3%	11.7%
Precious Metals									
Gold	USD/oz	1484	1486	1512	1550	1450	1050	4.3%	-4.1%
Silver	USD/oz	32.9	33.1	35.4	35.0	33.0	16.0	5.8%	-6.8%
Bulk Commodities									
Contract prices***:									
Hard Coking Coal (benchmark Asia)	USD/t	225**	n/a	n/a	330	300	220	n/a	n/a
Thermal Coal (benchmark Asia, FOB)	USD/t	95**	n/a	n/a	130	130	105	n/a	n/a
Iron Ore Fines (Brockman, FOB)	USD/t	137**	n/a	n/a	172	167	83	n/a	n/a
Iron Ore Spot (TSI)	USD/t	180	170	155	180	175	100	5.6%	13.2%
Agriculture									
CME Corn****	USDbu	668	640	628	650	675	500	1.6%	7.4%
CME Wheat****	USDbu	728	790	885	775	825	650	-1.8%	-6.8%
CME Soybeans****	USDbu	1322	1307	1308	1375	1500	1350	5.2%	14.7%
CME Soybean Oil****	USDbu	56.0	56.2	57.7	58.0	63.0	60.0	3.3%	9.2%
Freight									
Baltic Dry Index		1320	n/a	n/a	1475	1700	2400	n/a	n/a
Capesize Rates	USD/day	6012	9675	12464	8500	10500	16000	-12.1%	-15.8%
Panamax Rates	USD/day	14206	12013	12556	12000	12000	14000	-0.1%	-4.4%

\* Returns are relative to forwards

\*\* Natural Gas: to avoid seasonality, the 3m fwd shown is the average of NG1 to NG3 and the 12m fwd shown is the average of NG7 to NG12

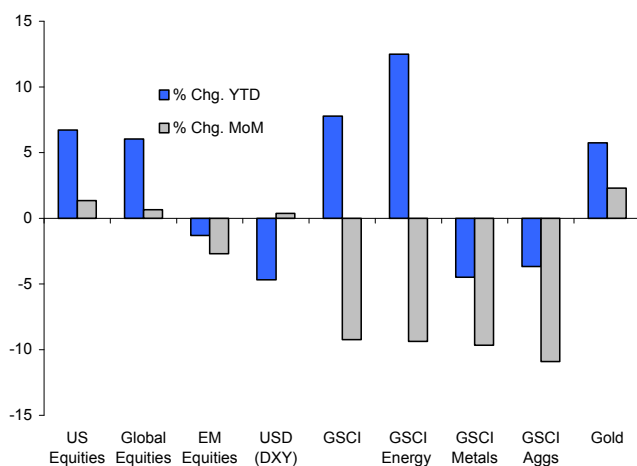
\*\*\*Iron ore and coking coal are quarterly contracts. Thermal coal is an annual contract based on the Japanese financial year.

\*\*\*\*We use front contract prices for the agricultural commodities, instead of spot (cash) prices. Forecasts refer to those front contracts

Source: Citi Investment Research and Analysis

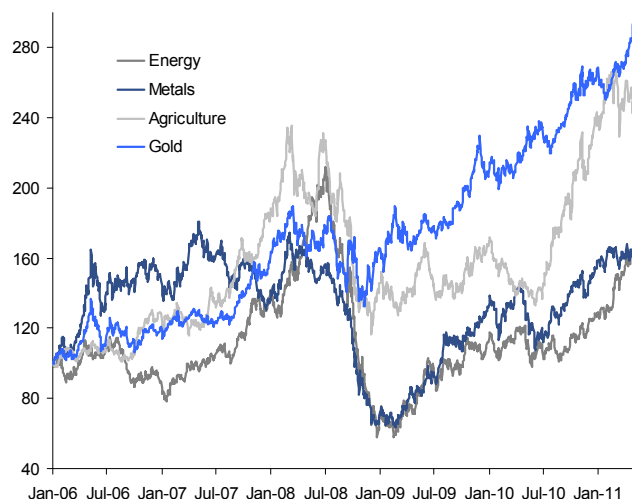
Commodity prices fell 9% over the last month (and are up 8% YTD), having rallied by 20% in 2010, according to the S&P GSCI Spot (see Figure 57 and Figure 58). Movements in commodity prices are mainly driven by current and expected supply and demand balances, financial flows into different commodity complexes and the global macroeconomic outlook. In the text that follows we discuss the likely influence of these factors on the future path of commodity prices over the short term (0-3 months), the medium term (6-12 months) and the long term (5 years out). We start the discussion with the macroeconomic outlook.

Figure 57. Market Movements: Equity Prices, Commodity Prices and the USD



Sources: Citi and Bloomberg

Figure 58. GSCI Commodity Indices and Gold Prices

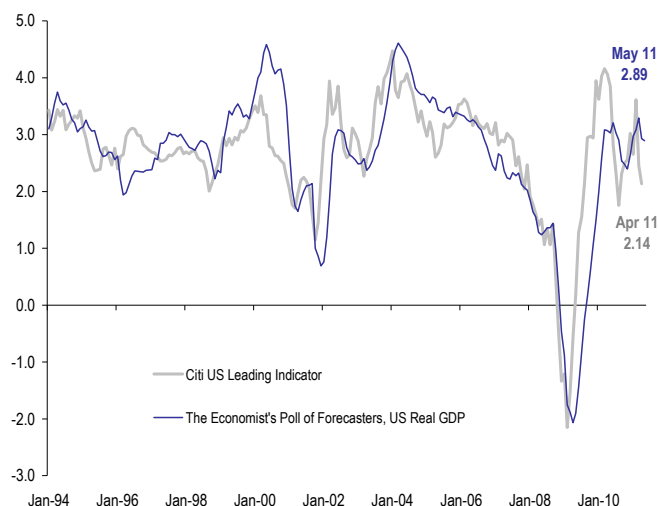


Sources: Citi and Bloomberg

Most commodity prices, along with other risk assets, have experienced significant corrections in early May. The main drivers of this bout of risk aversion appear to be renewed concerns about the strength of the US economy, the upcoming end of QE2 and slightly weaker April activity data in China. These corrections contrast with the remarkable resilience of markets in March and April when the global economy was faced with the headwinds Japan's natural disaster, turmoil in the MENA region and renewed concerns about the EMU periphery.

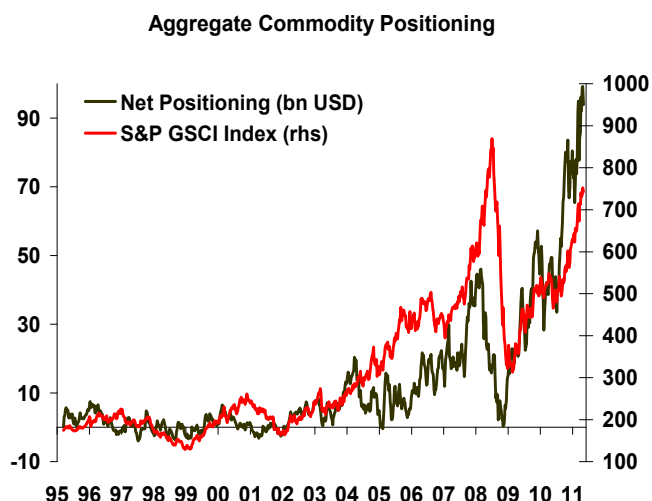
Within the commodity complex, the correction was led by crude oil prices which fell by more than 10% in the first week of May. Some signs of economic weakness in the US economy, as summarised by the recent fall in our leading indicator of consensus growth forecasts, are posing risks to crude oil demand and other commodities more generally (see Figure 59). Another factor that amplified the sharp fall in some commodity prices is the fact that net long speculative positioning remains historically high, especially in the case of crude futures contracts (see Figure 60 and crude oil section).

Figure 59. US Leading Indicator of Consensus Growth Forecasts (%)



Sources: Citi and Bloomberg

Figure 60. Aggregate Commodity Positioning (USD bn) and Commodity Prices



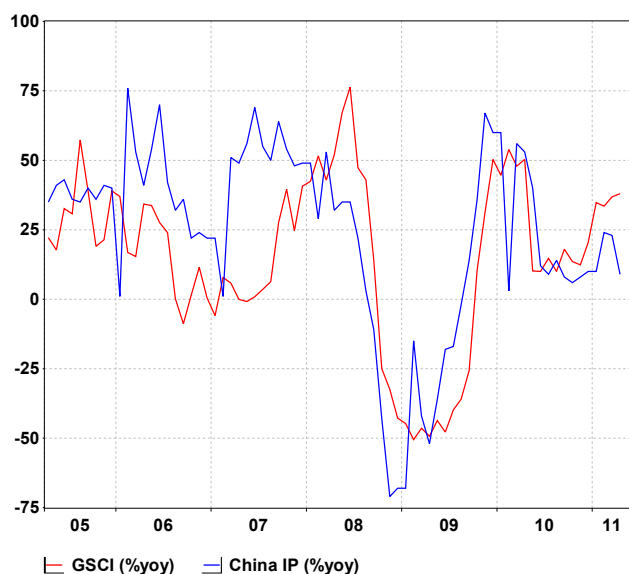
Sources: Citi and Bloomberg

In the emerging world, economic activity remains robust. Our economists continue to expect EM growth to exceed 6% in 2011. EM Asia, and China in particular, is the key engine of EM growth. Chinese growth remains strong (GDP growth 9.7% YoY in Q1) and continues to be an important support for commodity prices. However, the latest available monthly activity indicators (e.g. industrial production growth was 13.4% YoY in April vs. 14.8% in March) show that the authorities are gradually engineering a slowdown (see Figure 61). The Chinese authorities are trying to tame inflation by tightening monetary policy using various tools, including interest rates, reserve requirements and the exchange rate. However, Chinese inflation remains high (5.3% YoY in April) due to higher commodity prices (especially food and energy prices) and also due to strong final demand for final goods and services. Weaker activity data and persistently high inflation are making global investors more concerned about the likely negative impact of further tightening measures on the demand for commodities from China.

An important support for commodity prices generally over the past few months has been a weakening USD (see Figure 62). The prospective end of Fed QE2 in June and/or a period of more pronounced risk aversion could help the USD strengthen. But we continue to believe that periods of USD strength are likely to be relatively short-lived as we expect a high current account deficit in the US; diversification of USD holdings by central banks and oil exporters; and renewed outflows into EM, to weaken the USD over the medium term.

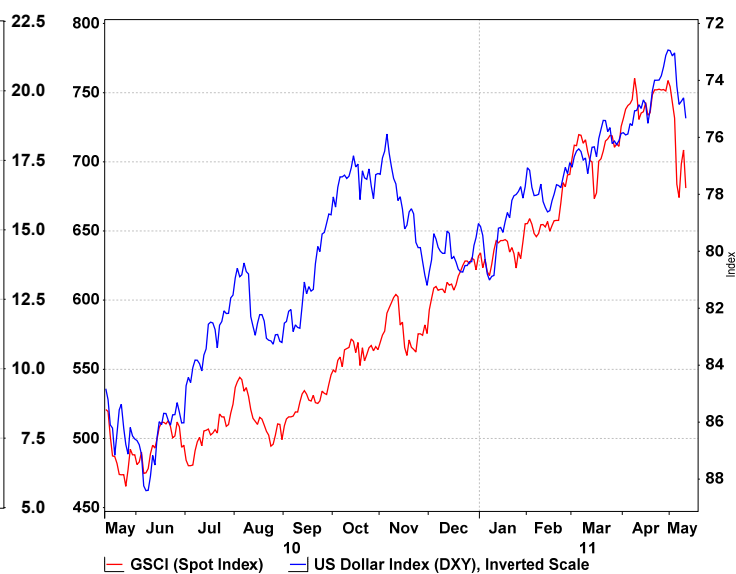
All of the factors mentioned above (US growth concerns, the end of QE2 and the prospect of tightening in the emerging and the developed world) are likely to keep investors nervous about outright risk taking. As such, we expect risk aversion to remain elevated in the near term. Commodity prices are therefore vulnerable in this environment, especially given that being long commodities is a consensus position. However, there are several factors that are likely to continue supporting commodity prices over the medium and long term. These include the ongoing global recovery with strong EM growth; a weak USD and the prospect of higher demand for commodities for inflation protection.

Figure 61. Chinese Industrial Production and Commodity Prices (%yoy)



Sources: Reuters Ecowin

Figure 62. Commodity Prices (GSCI Spot) and the USD



Sources: Reuters Ecowin

In terms of specific commodities, both WTI and Brent prices have experienced sharp corrections in early May. Renewed concerns about the strength of US and Chinese demand for crude oil and higher US oil inventories are the likely triggers of the correction. Downside risks persist, but significant falls from early May levels are likely to be limited. Indeed, tension in the MENA region hasn't abated and is likely to continue over the medium term. We therefore expect prices to remain broadly stable near term, but are still bullish in 6-12m both versus spot and forwards.

Following recent price falls, we expect base metals prices to make only modest gains over the next 0-3m, given the headwinds associated with the end of QE2, likely weaker US growth and tighter monetary policy in EM. However, the complex could revisit cycle highs over medium term given strong EM physical demand and buoyant investor demand. Gold prices are likely to remain strong in the near term, given the ongoing macro risks mentioned above. However, over the medium term, gold prices could ease somewhat, as the support from ultra-loose US monetary policy will be less evident.

Finally, corn prices could experience further falls in the short term, but we expect them to recover over the next 6-12m based on historically low US corn inventories. The decline in corn prices should keep wheat prices stable vs. spot, but they could rally further in 6-12m due to smaller European and North American crop prospects. We are still constructive on the outlook for the bulk commodities, with thermal and coking coal prices still supported by the lingering effect of the floods in Eastern Australia. Finally, spot iron ore prices should remain around current levels, given the threat of severe power shortages curtailing steel output (and thus iron ore demand) over the coming months.



## Contributors

\*\* *Citi Commodity Price Forecasts* is a joint venture between Citi's commodities, equities, global macro strategy and futures research groups. The analysts listed below have contributed to these forecasts in one form or another.

Figure 63. Commodity Price Forecasts Contributors

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Source: Citi Investment Research and Analysis

† This author is not an independent research analyst and may have knowledge of the Firm's positions and/or the Firm's interest in one or more of the securities referenced herein

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## Citi Foreign Exchange Forecasts

### Market Commentary

*This market commentary has been prepared by a member of the Institutional Clients Group of Citi. The information in this communication is not intended to constitute "research" as that term is defined by applicable regulations.*

\*\* For specific trade ideas associated with this sector review, please contact the contributors listed at the back of this document

- Risk aversion, and a correction in commodity prices, may extend a short-term USD rally over 0-3 months. "Risk on", carry and commodity backed currencies would correct and USD and JPY outperform.
- Assuming current events represent a mid-cycle slowdown rather than a double dip, however, we forecast a resumed USD downtrend over 6-12 months as reserve managers continue to diversify away from the greenback. AUD, GBP and EUR should be the G10 outperformers.
- EM currencies are also likely to show broad appreciation vs. forwards in the medium term. Key drivers should be some combination of high carry, strong macro fundamentals, ongoing inflationary pressures and a rebound in commodity prices. PLN, CZK, HUF, BRL, MYR and KRW should be the EM biggest winners.
- Assuming longer term USD depreciation resumes, CNY appreciation should continue as part of policy efforts to stem rising inflation boosting other EM Asian currencies.

*These forecasts are a joint venture between Citi's foreign exchange, global macro and technical strategy groups and our developed and emerging markets economists. Under normal circumstances, we expect to present Forecasts on a monthly schedule although we may offer intra month updates if circumstances dictate.*

*While these forecasts should be considered the best guide to Citi's short to medium term views on the outlook for the exchange rates covered, individual analysts within various strategy teams may offer separate trade ideas in spot, forward, options or futures when this seems appropriate for technical, tactical or strategic reasons.*

Figure 64. Citi Foreign Exchange Forecasts

		Market data			Forecasts			Returns**	
		spot	3m Fwd	12m Fwd	0-3 mos	6-12 mos	long-term	3 mos rtn	12 mos rtn
<b>G10</b>									
Euro	EURUSD	1.40	1.40	1.39	1.35	1.50	1.38	-3.6%	8.2%
Japanese yen	USDJPY	82	81	81	81	85	87	-0.6%	4.7%
British Pound	GBPUSD	1.62	1.62	1.61	1.59	1.72	1.75	-1.7%	7.2%
Swiss Franc	USDCHF	0.88	0.88	0.88	0.91	0.91	1.01	3.4%	3.1%
Australian Dollar	AUDUSD	1.06	1.04	1.01	1.01	1.10	0.90	-3.2%	9.2%
New Zealand Dollar	NZDUSD	0.79	0.78	0.77	0.76	0.79	0.63	-3.0%	2.8%
Canadian Dollar	USDCAD	0.98	0.98	0.99	0.99	0.93	0.95	1.0%	-5.9%
Dollar Index*	DXY	76.09	76.24	76.79	78.28	72.60	77.02	2.7%	-5.5%
<b>G10 Crosses</b>									
Japanese yen	EURJPY	114	114	113	109	128	120	-4.2%	13.2%
Swiss Franc	EURCHF	1.24	1.23	1.22	1.23	1.36	1.40	-0.3%	11.5%
British Pound	EURGBP	0.87	0.87	0.86	0.85	0.87	0.79	-1.9%	0.9%
Swedish Krona	EURSEK	8.93	8.96	9.04	9.05	8.80	8.80	1.0%	-2.6%
Norwegian Krone	EURNOK	7.86	7.89	7.96	7.90	7.80	7.80	0.2%	-2.0%
Norwegian Krone	NOKSEK	1.14	1.14	1.14	1.15	1.13	1.13	0.8%	-0.7%
Australian Dollar	AUDNZD	1.34	1.33	1.31	1.33	1.39	1.43	-0.2%	6.3%
Australian Dollar	AUDJPY	86	85	82	82	94	78	-3.8%	14.3%
<b>Asia</b>									
Chinese Renminbi	USDCNY	6.50	6.48	6.39	6.45	6.24	6.05	-0.5%	-2.4%
Hong Kong Dollar	USDHKD	7.78	7.77	7.76	7.76	7.75	7.75	-0.2%	-0.1%
Indonesian Rupiah	USDIDR	8583	8707	9030	8546	8400	8300	-1.9%	-7.0%
Indian Rupee	USDINR	45.3	46.0	48.1	44.8	45.2	44.0	-2.6%	-6.0%
Korean Won	USDKRW	1098	1106	1121	1080	1030	1000	-2.3%	-8.1%
Malaysian Ringgit	USDMYR	3.06	3.08	3.14	3.02	2.89	2.80	-2.0%	-8.1%
Philippine Peso	USDPHP	43.4	43.6	43.7	42.7	42.0	41.4	-2.0%	-4.0%
Singapore Dollar	USDSGD	1.25	1.25	1.25	1.24	1.21	1.17	-0.6%	-2.9%
Thai Baht	USDTHB	30.4	30.6	30.9	29.9	29.8	29.4	-2.2%	-3.6%
Taiwan Dollar	USDTWD	28.9	28.8	28.2	28.6	28.5	27.8	-0.8%	0.9%
<b>EMEA</b>									
Czech Koruna	EURCZK	24.5	24.5	24.4	24.7	23.6	23.2	0.9%	-3.2%
Hungarian Forint	EURHUF	270	273	279	270	273	278	-1.1%	-2.3%
Polish Zloty	EURPLN	3.95	3.97	4.04	3.95	3.85	3.60	-0.5%	-4.7%
Israeli Shekel	USDILS	3.52	3.54	3.59	3.50	3.40	3.35	-1.1%	-5.2%
Russian Ruble	USDRUB	28.4	28.7	29.6	28.9	28.2	30.3	1.0%	-4.9%
Russian Ruble Basket		33.5	33.8	34.8	33.5	34.5	35.5	-0.9%	-0.8%
Turkish Lira	USDTRY	1.60	1.63	1.72	1.62	1.61	1.66	-0.6%	-6.4%
South African Rand	USDZAR	6.98	7.07	7.39	6.85	7.10	8.20	-3.2%	-3.9%
<b>LATAM</b>									
Brazilian Real	USDBRL	1.62	1.64	1.74	1.60	1.60	1.65	-2.6%	-8.3%
Chilean Peso	USDCLP	467	472	486	470	470	475	-0.5%	-3.3%
Mexican Peso	USDMXN	11.7	11.8	12.2	11.7	11.8	12.2	-0.8%	-3.0%
Colombian Peso	USDCOP	1815	1824	1845	1815	1800	1850	-0.5%	-2.4%

\* The DXY forecasts are implied from the forecasts of the constituent crosses.

\*\* Returns are relative to forwards

Source: Citi Investment Research and Analysis

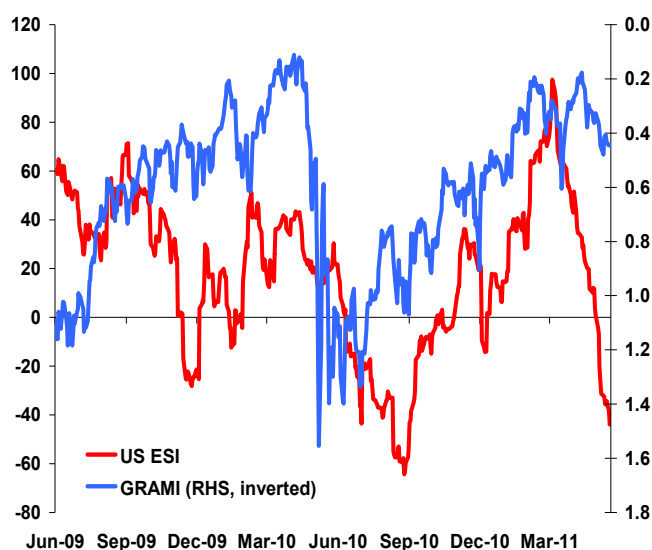
## Overview

Latest CFTC data show significant short positioning in USD persists even after the correction in the USD in May. This suggests the rally in the USD may go further. An additional support for the USD is the generalised reduction in risk appetite reflecting recently weaker US economic data (our US economic surprise index is sharply lower — Figure 65) and signs from leading indicators that this mid-cycle correction in growth expectations is not over yet. Also, the end of QE2 effectively puts the Fed in the intermezzo phase — not easing but not tightening. Typically, the USD rallies a little in this part of the cycle though it often gives back the gains once the Fed starts to raise rates (Figure 66). Lower commodity prices are also part of the story. Usually correlated with a stronger USD, lower energy, food and metals prices tend to lower headline inflation rates, and therefore rate expectations, in countries where Central Bank policy is fixated on headline CPI (EMs and the Euro Area). In countries focused more on core pressures (US, UK too?), the currency could benefit from an implied change in interest rate differentials.

Longer term, though, we think that the bear market in the USD remains intact. Reserve managers remain structurally long USD and keen to diversify where they can and these flows into other currencies (EUR mainly) probably dominate traditional investor flows driven by policy and cyclical indicators. Absent a more sustained correction in the cycle (double dip) or maybe a new tax measure (HIA2), we see USD weakness returning over the 6-12 months horizon. The 40-year trend is your friend.

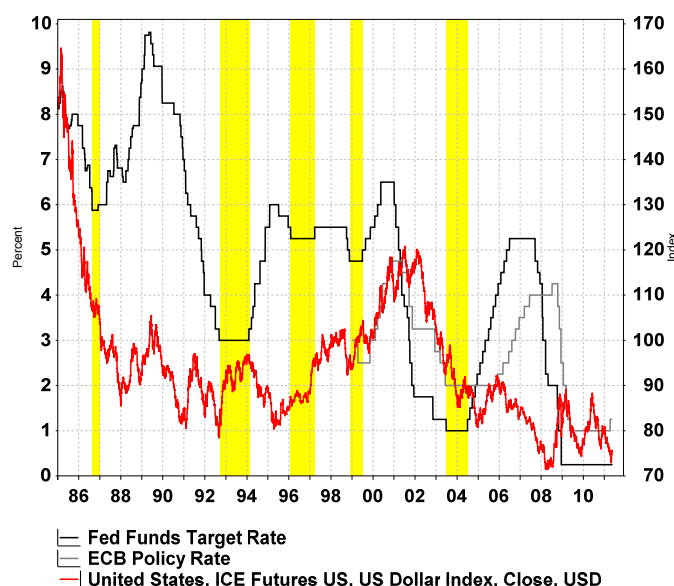
According to our 6-12 months forecasts, AUD, GBP and EUR are the big winners in the G10 arena. JPY and to a lesser extent CHF remain significant funding currencies and underperform, aided in the case of CHF (but not JPY) by significant overvaluation. In the EM world, the biggest winners are CEEMEA currencies (partly driven by the expected EUR rebound) with PLN, CZK and HUF slightly ahead of BRL in LATAM. Best in Asia are MYR, KRW and IDR.

Figure 65. US Economic Surprise Index Falls Hurting Risk Appetite



Source: Citi and Bloomberg

Figure 66. DXY Usually Rallied With the Fed "On Hold"



Source: Reuters EcoWin

## G10 Exchange Rates

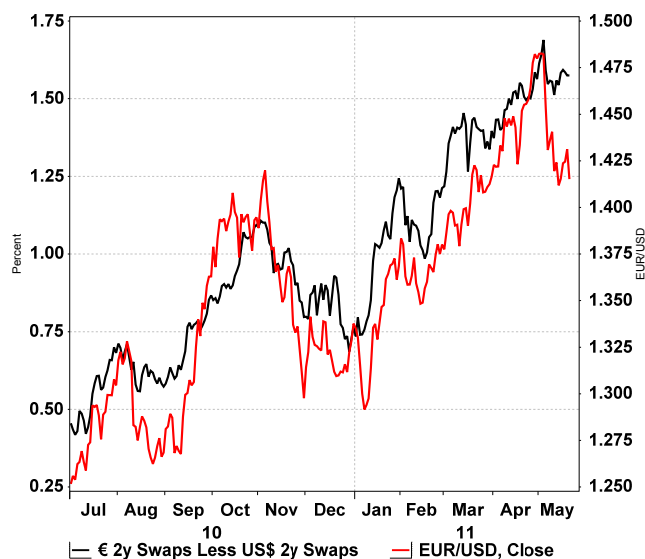
### EUR/USD — Short-term correction due to cross currents, medium term upside

Having reached almost 1.50 in early May, EUR/USD has subsequently corrected back to a low so far just above 1.40 before bouncing. We think lower commodity prices, reduced risk appetite, some easing in EUR less US rate differentials and ongoing periphery concerns may yet see EUR/USD pull back to the medium-term trend around 1.35 over the next couple of months. But, longer term, we expect USD trend weakness to persist.

In our view, the main drivers of the 26% trough to peak appreciation in EUR/USD after June 2010 have been rate differentials (Figure 67). An important factor here has been the separation of policy towards the periphery countries' debt problems (liquidity and bailout funds) from policy rate expectations. So long as this separation seems sustainable, and ECB tightening is expected, the EUR will remain mainly bid over the longer term. One key here is Spain. When the "periphery 3" bond yields are rising, but Spanish yields are stable, the EUR remains solid. But when contagion threatens Spain too, the EUR weakens (Figure 68).

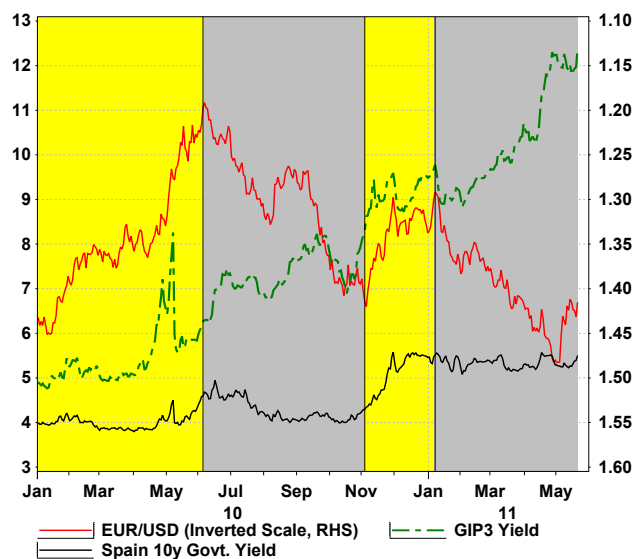
We think this is because markets doubt that the ECB can press ahead with normalising policy rates if Spain becomes embroiled in the periphery crisis. In this context, the "news" that Greece will have trouble coming back to the market for funding in 2012 has apparently not unsettled the Spanish bond market so far, probably because this had been patently obvious for some time. We think European politicians will provide new loans to Greece to tide the sovereign over to 2013, or maturities on debt roll-overs will be voluntarily extended. Either way, it is not clear that this alone should generate contagion to Spain and to the EUR.

Figure 67. EUR/USD vs. EUR Less US 2y Swap Rate Differentials



Source: Reuters Ecowin

Figure 68. EUR/USD vs. Greece, Ireland, Portugal Average 10y Yield and Spanish 10y Yield

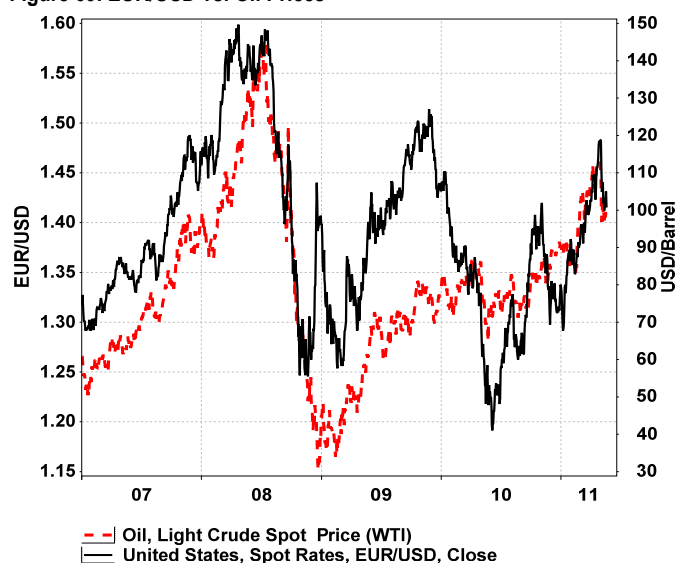


Source: Reuters Ecowin

Another factor that may change rate differential expectations is the path of commodity prices. As Figure 69 shows, oil prices and EUR have been correlated for some time and oil prices are now in mid-correction. We think the drivers for the oil price/ EUR/USD correlation are mainly reserve diversification (higher oil price, higher reserves of oil producers, more EUR buying) and asymmetric rate expectations. As Figure 70 highlights, EUR 2y swap rates tend to track headline inflation (but US 2y rates track core). As a result, lower oil prices tend to generate lower headline inflation and a sharper drop in 2y rates in Europe than in the US. Over the next couple of months, we expect somewhat impaired risk appetite to persist as QE2 comes to an end. This could mean lower commodity prices, increased financial volatility and, most likely, some more downside in EUR/USD.

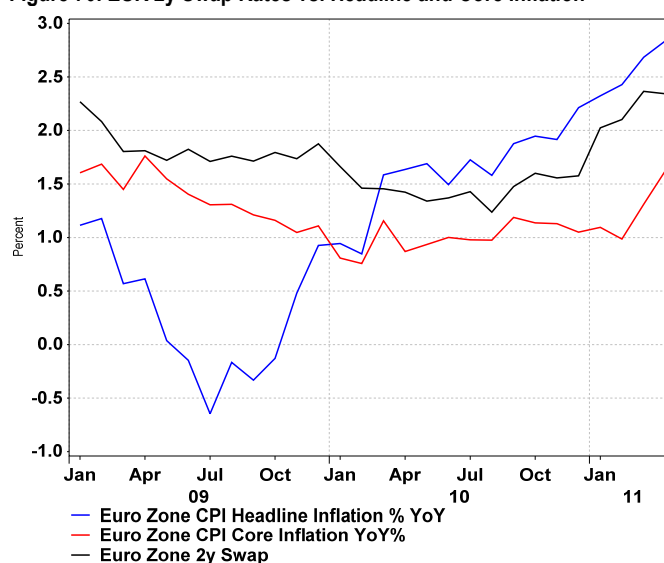
Since this seems more mid-cycle correction than double dip, however, it is periphery pressure and Spain's position that remains the bigger risk to our bullish medium-term EUR/USD forecast. Our projections foresee a return to the end-2009 highs around 1.50 over the next 6-12 months.

Figure 69. EUR/USD vs. Oil Prices



Source: Reuters EcoWin

Figure 70. EUR 2y Swap Rates vs. Headline and Core Inflation



Source: Reuters EcoWin

## Yen — USD/JPY range bound short term

USD/JPY has been effectively range-bound for around eight months (except immediately after the earthquake in March) and our forecasts anticipate this continuing short term.

On the downside, the market may well continue to believe that selling below 80 is risky given the risk of (further) official intervention to sell JPY against an unfavourable macro background in the Japanese economy. On the upside, the drivers of a trend rise in USD/JPY, particularly a bear flattening in the US yield curve, continue to be absent.

According to our regressions, current rate differentials and USD/JPY are exactly in line (Figure 71). Other, broader, models we run suggest that there may be some limited upside for the rate in the 80-85 range. But for a more significant move higher, Figure 72 suggests that the US yield curve may need to bear flatten, reducing the hedged bond yield pick up that Japanese investors can get in the UST market and thus making it more likely that bond purchases overseas are left unhedged.



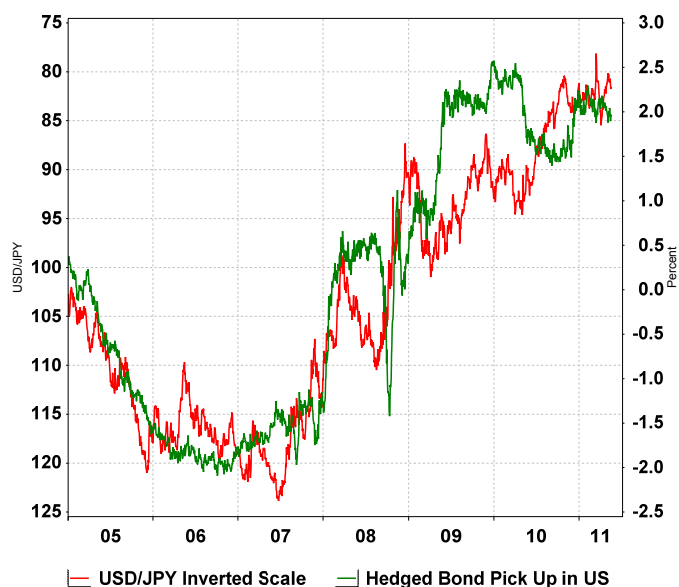
Over the 0-3 months horizon, weaker risk appetite and no Fed action on flattening the curve are JPY positives and should keep USD/JPY close to current levels. Over 6-12 months, Citi forecasts show the Fed beginning to raise rates and this could generate some upside in USD/JPY to the top of the range or even a little higher as the cost of hedging overseas bond portfolios rises. Our long-term fair value WERM estimate is now around 87 and for the “long-term” horizon we forecast, we think that USD/JPY will establish a new range of 85-90.

Figure 71. USD/JPY vs. Fitted Regression Based on 2y Rate Diff



Source: Reuters EcoWin and Citi

Figure 72. USD/JPY vs. 10y Government Bond Spread Less 3m LIBOR Spread (Both US Less Japan)



Source: Reuters EcoWin and Citi

## Dollar bloc — AUD correction was overdue

In a recent joint research note between Citi's Australian economists and Macro Strategy Group<sup>13</sup>, the four main drivers of AUD strength over the past year were identified as : (i) commodity price gains/ terms of trade; (ii) Australia's links with EM Asia, especially China; (iii) carry/ RBA policy; and (iv) risk appetite and easy money/ liquidity.

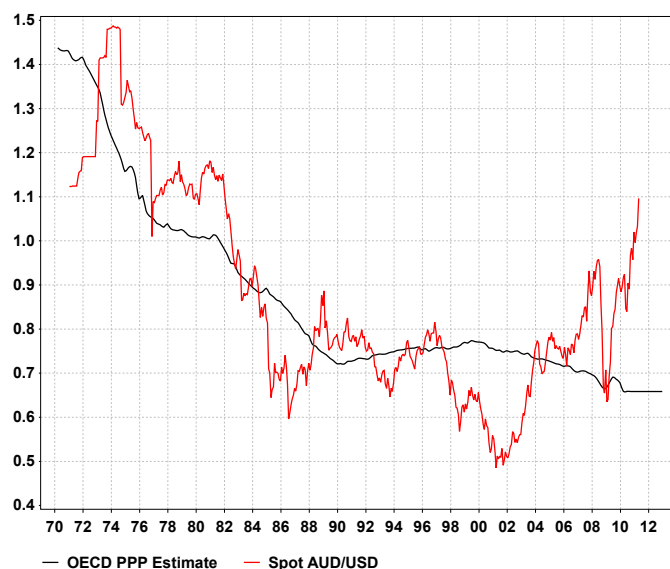
These drivers pushed spot AUD/USD all the way to 1.1 by early May. On our calculations, at that point AUD was around 30% overvalued relative to Citi's WERM fair value level. However, it is extremely unlikely that AUD returns to this long-term real exchange rate equilibrium anytime soon. Boosted by terms of trade gains, positive carry and links to Asia's economic boom, the AUD will likely remain overvalued in this sense for a significant time in the same way that it was undervalued for a long time in the late 1990s when resource sectors in general were out of vogue (e.g. see Figure 73).

That said, even relative to the underlying drivers, AUD seemed a bit frothy by early May and regressing spot on the underlying drivers listed above we still find AUD to be around 5% too high (Figure 74). As such, AUD is, we think, vulnerable to a further pull back to about 1.01 over the 0-3 months horizon.

<sup>13</sup> See [Unstoppable? AUD Outlook and Implications, 3 May 2011](#)

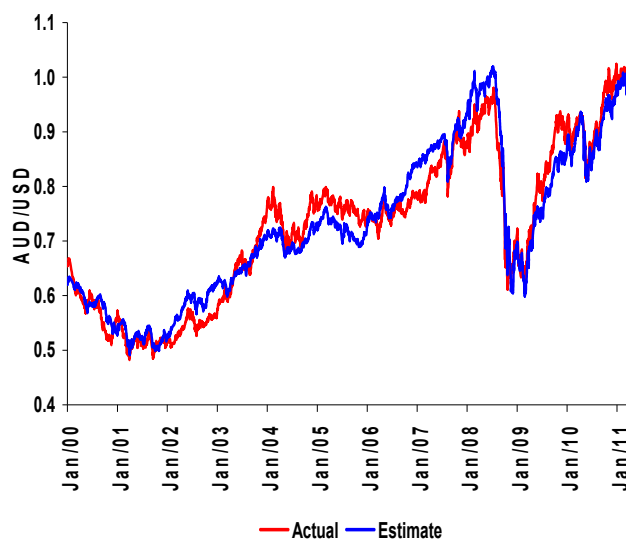
Longer term, we think AUD can make new gains and reach the 1.10 highs again. In the second half of the year, Citi economists expect the RBA to re-start rate hikes suspended at the end of last year with the recent upside surprise on underlying CPI an important incentive. Australia is in the middle of a multi-year investment boom in resource extraction with nearly full employment and excess capacity limited. This should mean that Australian economic growth and real interest rates remain higher than the average of other G10 countries, terms of trade remain robust and the link between Asian economic growth and the AUD remains strong.

Figure 73. AUD/USD vs. OECD PPP Estimate



Source: Reuters EcoWin

Figure 74. AUD Regressed on Four Key Drivers



Source: Citi and Bloomberg

USD/CAD has been trending steadily lower since a year ago. Corrections along the way have been limited and have never threatened the main downtrend, even including the latest correction from a low around 0.95 to a recent high near 0.98. This might change if oil prices continue to correct lower as the CAD-oil price link remains close (Figure 75). Furthermore, speculative long positions still seem relatively large in the CAD. Our forecasts suggest some further limited near-term upside in USD/CAD over 0-3 months and a return to parity should not be ruled out.

Longer term, though, we remain constructive CAD and think a new range of 0.93-0.95 can be reached and sustained. For now, there is little signal from rate differentials with the US (Figure 76). However, Citi economists forecast around 125bp of tightening over the 2011 Q3 to 2012 Q1 period, with the first hike probably in July. This will surely be faster than in the US and a decent bit faster than what is currently priced in markets – both positive for CAD over the 6-12 months horizon if commodity prices are then recovering again.

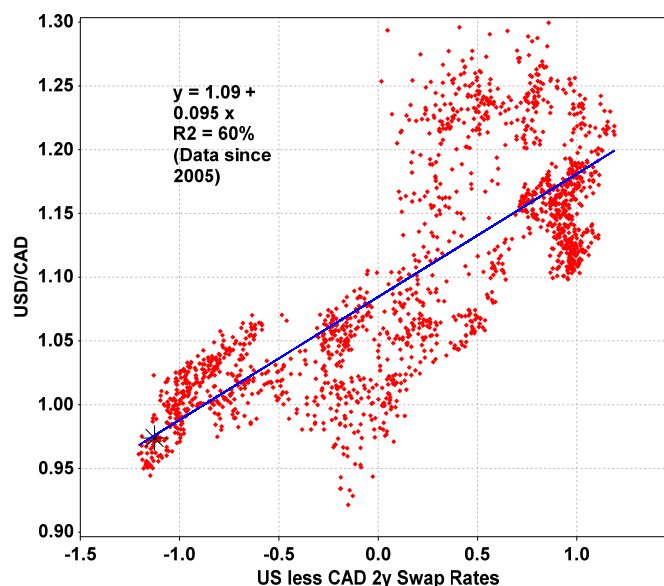
Finally, the NZD has also corrected back from new highs early in May. Our forecasts assume this correction proceeds further over 0-3 months as risk appetite remains impaired and commodity prices soft but there is a recovery over 6-12 months. We expect NZD to lag CAD and, especially, AUD over the long term.

Figure 75. Oil Prices vs. CAD



Source: Reuters EcoWin

Figure 76. USD/CAD vs. 2y Swap Rate Differentials



Source: Reuters EcoWin

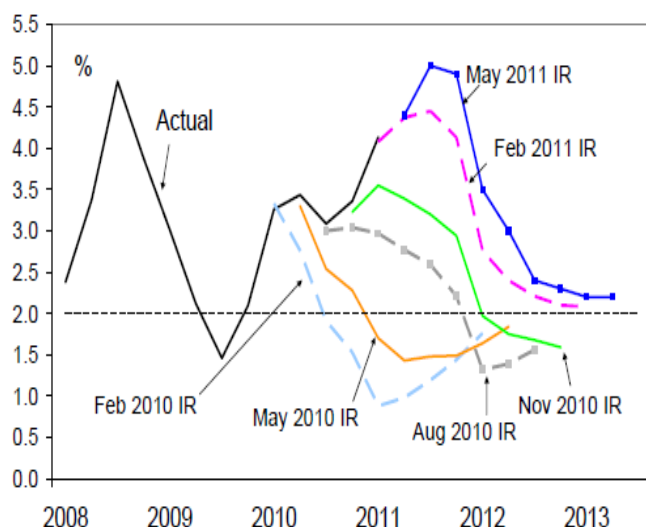
## European Crosses

### GBP — Bank of England should be hiking

Sterling is still trading mainly sideways against the average of the USD and EUR (Figure 78). A positive for the GBP is that it looks cheap. Our WERM fair value estimates are GBP/USD 1.74 and EUR/GBP 0.71. This cheapness shows up in a general perception that the UK is now a lower-cost centre than historically. One or all of several phenomena usually follow from this. Exports rise, the currency appreciates or the inflation rate accelerates. For now, we are getting more of the first and last mainly because the MPC continue to allow above-target inflation to persist (Figure 77) without raising interest rates. We think that real appreciation is inevitable in the medium term as the UK economy emerges “re-balanced” in the long term with a lower fiscal deficit, current account surplus and lower consumption/higher exports investment. But the danger for our relatively bullish GBP view and forecasts is that the MPC will allow all this real appreciation to come via inflation.

For now, we assume that policymakers don’t completely risk inflation credibility and forecast a rather flat medium- to long-term path for EUR/GBP meaning that sterling first loses and then regains ground against the USD in line with our EUR/USD view.

Figure 77. MPC Inflation Projections and Outturns



Source: Bank of England Inflation Report, Citi

Figure 78. GBP vs. Average of USD and EUR



Source: Bloomberg

## Scandis — About right

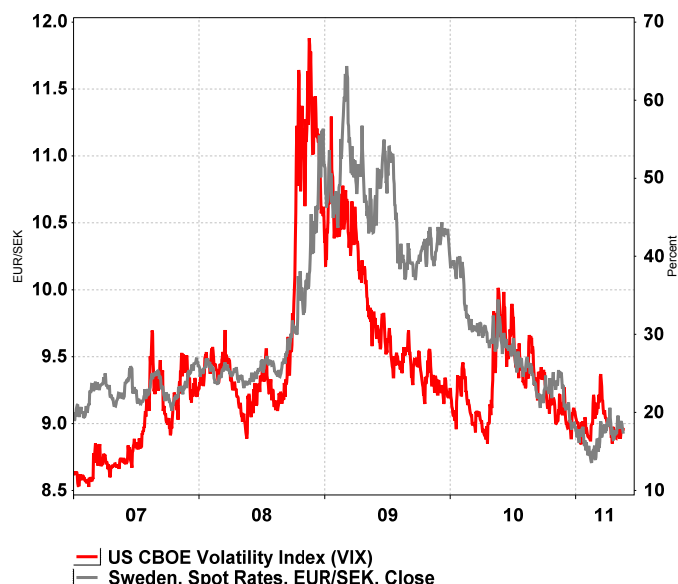
EUR/SEK has bottomed out since February/March this year, in part simply reflecting that the spot rate had reached much more fundamentally justified levels. In addition, the high-beta nature of Swedish stocks means that SEK tends to be a “risk on” currency and the recent correction in risk appetite has also played a role (Figure 79). We find it hard to hold strong opinions on the EUR/SEK cross now. Our 0-3 months forecast reflects, as elsewhere, lower risk appetite and there is a further rise in EUR/SEK towards 9.05 pencilled in the forecast.

However, longer term, this correction is reversed and the cross should move lower again in line with medium-term value around 8.80. Sweden’s economy still seems reasonably robust with 5% real GDP growth likely in 2011. As a result, Citi economists expect a further gradual normalisation of monetary policy with policy rates reaching 2.5% by end-2011 and 3.5%+ by the end of next year. Over the next 12 months, our rate forecasts are broadly in line with market expectations, meaning little net impact in FX markets, though our 2012 H2 rate views, if realised, may surprise markets to the upside.

In Norway, EUR/NOK has been in a relatively volatile sideways trading range this year. The 7.70-8.15 range has actually contained an awful lot of the EUR/NOK price action since 2005, with the exception of the sharp move higher in 2008 that was probably driven by a similarly sharp fall in oil prices that year (Figure 80). Since we think risk appetite pulls back near term, oil prices could pull back too. There may be upside for EUR/NOK over 0-3 months.

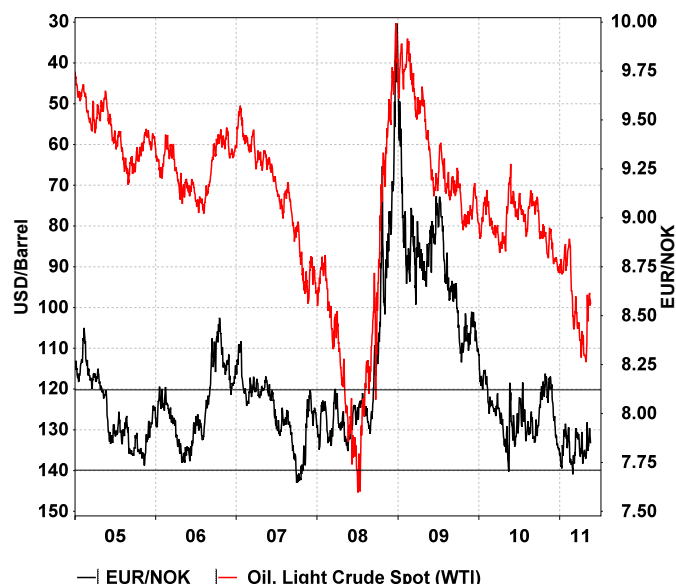
Over 6-12 months, assuming better risk appetite and a commodity price recovery, EUR/NOK may move lower again, aided by higher rates from the Norges Bank (Citi expects two 25bp hikes this year following the hike announced this month). However, we see the downside for the cross as limited. Our WERM fair value estimate for the cross is 7.77.

Figure 79. EUR/SEK vs. VIX



Source: Reuters EcoWin

Figure 80. EUR/NOK vs. Crude Oil Price



Source: Reuters EcoWin

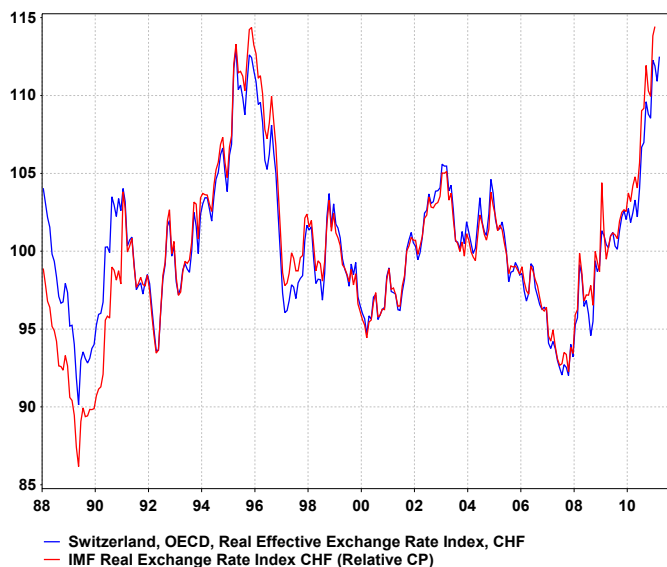
## CHF — Overvalued but could strengthen more short term

In contrast to SEK and NOK, we think CHF is significantly overvalued longer term vs. the EUR. Figure 81 and Figure 82 make the point. The former shows the real effective exchange rate is off the charts to the strong side (our WERM EUR/CHF estimate is 1.41). The latter suggests that on a rate differential basis, EUR/CHF could be above 1.50.

That said, the Swiss economy is doing surprisingly well. Although Swiss business surveys lag those in Germany, Switzerland is probably outperforming the EMU average and our economists see enough absolute strength to call for rate hikes this year, probably in Q2 or Q3. We have to admit that this economic strength is surprising given the apparently penal level that the exchange rate has reached. Furthermore, another surprise is that the CHF continued to trade strongly in the “risk on” period from August to April. We suspect, but cannot prove in the data, that capital flight both from MENA and EMU periphery countries may be a factor behind the CHF strength. (Another factor is the ongoing problem related to CHF denominated mortgages in Hungary.) Whatever the cause, the trading pattern suggests there is a serious risk that EUR/CHF takes another leg lower short term, especially in a “risk off” environment. We forecast 1.23 over 0-3 months.

Longer term, our forecasts follow our assessment of value. CHF is simply too strong to be sustainable in the long run, in our view, and we forecast a gradual erosion of this over-valuation in the context of higher rates across the global economy, resumed risk appetite and carry trading, and a weaker USD.

Figure 81. Real Effective CHF at Multi Year Highs



Source: Reuters EcoWin

Figure 82. EUR/CHF (Red) vs. Regression on 2y Swap Rate Differentials

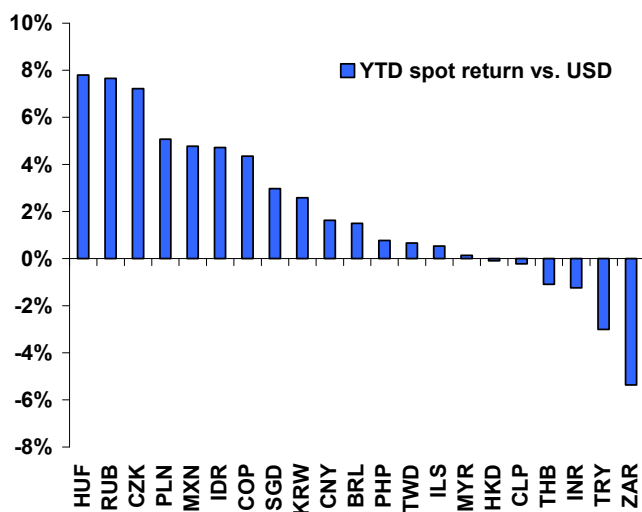


Source: Reuters EcoWin

## EM Exchange Rates

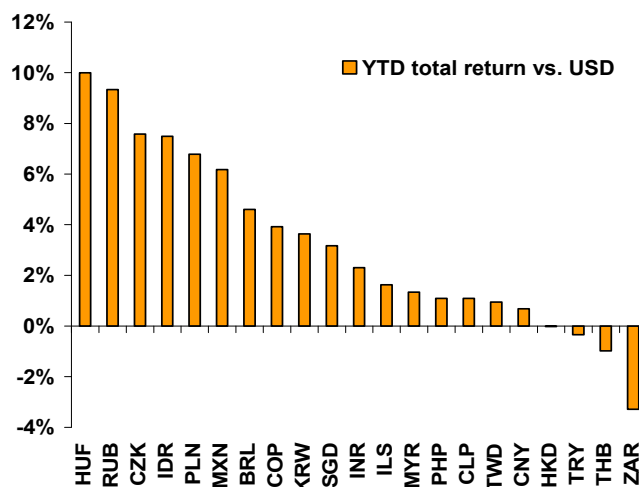
In line with our view of a further rebound in DXY near term and weak risk appetite, we don't expect much upside in spot EM currencies in the next three months. Most EM crosses vs. USD have been weaker since April as DXY has rallied and global risk assets have experienced a soft patch. In fact, EM spot returns vs. USD have been mixed year-to-date even if total returns have been positive in most cases given high carry (Figure 83 and Figure 84).

Figure 83. EM Spot Returns vs. USD (YTD)



Source: Citi and Bloomberg

Figure 84. EM Total Returns vs. USD (YTD)



Source: Citi and Bloomberg

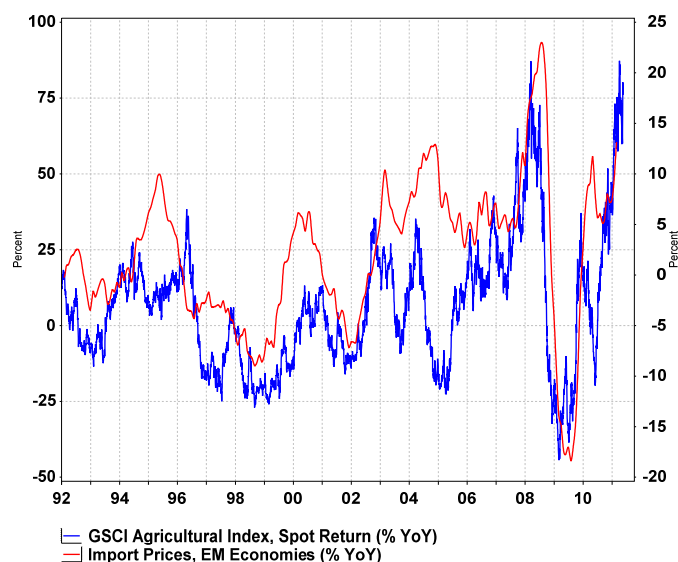


In the medium to longer term, EM Asian currencies should continue their trend appreciation against the USD. In some cases, returns vs. forwards over 6-12m are likely to be in the high single digits. The picture is perhaps more mixed in CEEMEA and Latam, but in these regions as well we generally expect good medium-term performance vs. forwards, especially for the CEE3 and BRL.

One of the more pertinent issues in the EM world today is the willingness of policymakers (or lack thereof) to tolerate greater exchange rate appreciation to tame inflation. Underlying inflationary pressures still seem strong in many EM countries (Figure 85) even if recent CPI prints have produced a mixed set of surprises. In reality, countries with a strong external balance are those most able or most likely to tolerate nominal appreciation as a means to fighting inflation. Indonesia falls into this category. Limited effectiveness of other inflation fighting tools is also a factor. This is one reason why steady CNY appreciation seems the most probable course.

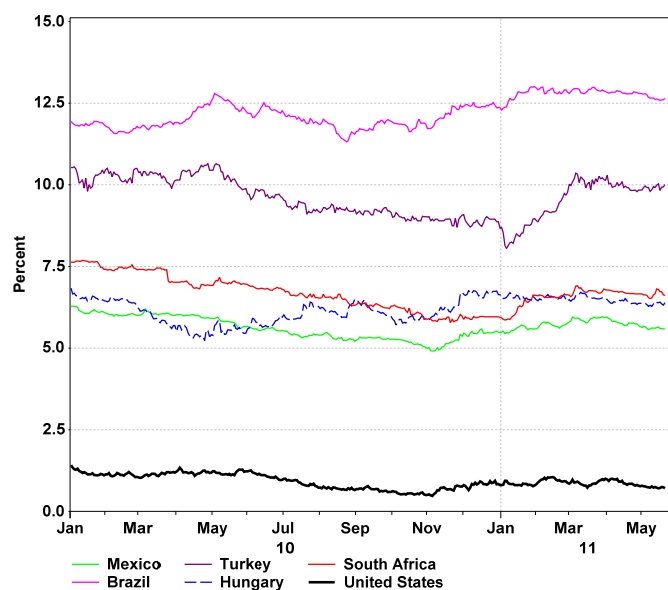
Another key factor impacting the outlook for several EM currencies is the appeal of high carry in an environment where short-term rates are likely to stay low in the major G10 countries for the rest of this year. BRL stands out as an obvious beneficiary and so does TRY (Figure 86). Thus, while we continue to hold reservations about the underlying fundamentals in some of these countries, high carry currencies are likely to post good performance vs. forwards over a 6-12m horizon. The main common risk here, in our view, is a much sharper correction in global risk appetite, for example, due to a sharper mid-cycle slowdown in global economic activity than currently anticipated.

Figure 85. Agricultural Prices and EM Import Price Inflation



Source: Reuters EcoWin

Figure 86. Selected EM and US 2y Swap Rates



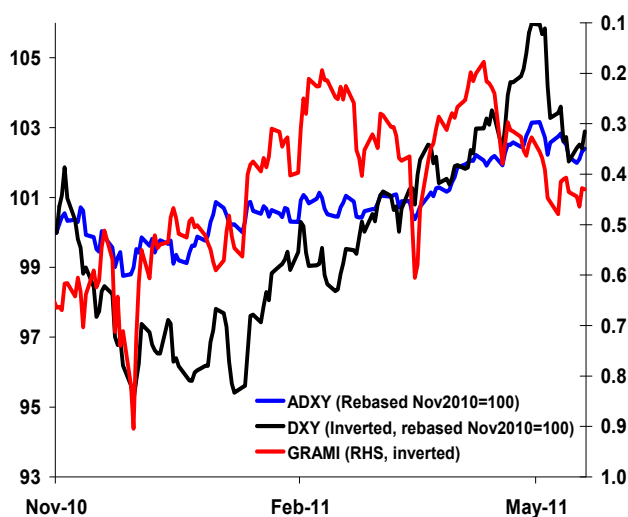
Source: Reuters EcoWin

## EM Asia — Robust growth and inflationary pressures support appreciation

Ongoing high economic growth and related inflationary pressures in EM Asia remain key underlying supports for longer-term appreciation of many currencies in the region. Of course, global factors figure prominently in the mix, notably broader USD dynamics and commodity price inflation. On both counts, our medium-term views also support trend nominal appreciation of regional currencies.

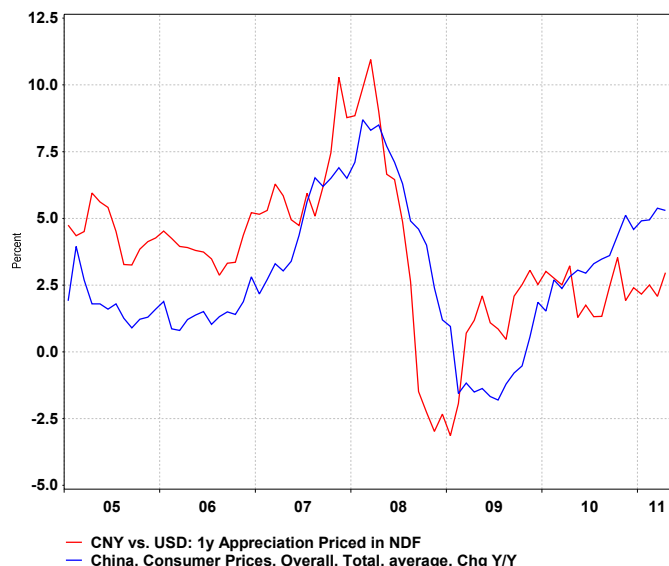
At the same time, we are bullish DXY near term, which suggests that many EM Asian currencies could struggle to make gains in the next few months. A strong DXY rally, especially if combined with higher risk aversion, would pose a risk to our 0-3m EM Asia forecasts, particularly for the higher-beta currencies. Nevertheless, the ADXY Index held up fairly well during the DXY rally earlier this month (Figure 87) as USD/CNY rose only slightly. Moreover, the path of CNY itself could be an important driver of currencies in the region.

Figure 87. ADXY, DXY and Citi GRAMI



Source: Citi and Bloomberg

Figure 88. China: CPI Inflation (yoy) and CNY 1y Appreciation in NDF



Source: Reuters EcoWin

In the case of China, we continue to expect CNY gradually to appreciate vs. USD for the rest of this year, but the near-term pace may be considerably weaker as markets come to terms with slower Chinese and global growth. More importantly, commodity prices have corrected, and when combined with moderating domestic demand, this has somewhat eased inflation risks that have been a principal driver of CNY appreciation expectations (Figure 88). Also, a higher DXY would by itself probably restrain CNY appreciation.

However, we suspect that the easing in inflation worries and the growth slowdown are both temporary. Citi is still bullish on many commodities complexes over the medium term and our forecasts have DXY resuming its downward trend after the current retreat from risk runs its course. Thus, we expect to see the pace of appreciation pick up again, perhaps later this year.

On the theme of inflation risk, we have turned more bullish on IDR in the medium term as there are increasing signs that Bank Indonesia is more tolerant than we earlier thought on using FX appreciation as a means for disinflation. In this light, IDR performed relatively well in the recent USD rally. Improving gross FDI inflows and resilient portfolio flows continue to underpin the country's ability to use the currency as a policy tool. As long as a structural allocation into EM debt persists, we don't see a significant catalyst for material outflows from IDR government bonds. Moreover, FX reserves have now reached a historic high and sufficient to cover more than 2x short-term debt by remaining maturity — this should give BI sufficient ammunition to temper any volatility if global risk appetite continues to wane. KRW is expected to be one of the top performers in the region in the next 6-12m. A wider trade surplus — Citi economists recently revised up their 2011 forecast of the trade surplus to reflect an upswing in auto, shipbuilding, and petro/chemical exports — and inflows to the Korean bond market should be key supports. In the near term, the currency is unlikely to make big gains, like elsewhere in the region, but we don't expect USD/KRW to overshoot much on the high side since the authorities would likely intervene to control import price inflation.

High inflation is particularly a problem in India. However, we think INR is more likely to trade sideways, as it mostly has since last November, rather than resume the gradual downtrend begun in 2009. While the RBI has recently surprised the market on rate hikes, the country continues to run a current account deficit and a large fiscal deficit. Citi economists don't expect a whole lot of improvement on either front before end-2012. High carry is a positive, though, and so we still predict decent gains vs. the forwards in 6-12m.

Inflation is also a factor in the outlook for SGD and MYR. With a tightening of foreign worker inflows into Singapore to be sustained, the resulting wage pressures may push inflation structurally higher for some time. Thus, the MAS is likely to maintain its SGD appreciation policy into the foreseeable future. Over the medium term, however, MYR appreciation should resume in line with the SGD. We believe Bank Negara would welcome a gradual appreciation of the MYR towards 2.90 levels by year-end. A gradual strengthening of the currency could help tame imported inflation, and incentivise structural reforms.

We are still positive on THB and PHP over the medium term, although gains vs. the forwards are likely to be limited in the next 12m. The BoT would likely accommodate stronger baht appreciation in 2H11 if risk appetite strengthens accompanied by strong offshore portfolio investment flows. We also expect a reduced political risk premium after the July elections. In the Philippines, the country's structural external surplus should remain intact. In addition to a rebound in risk appetite, local macro prospects and the policy rate outlook support USD/PHP ending FY11 at around 42.

Similarly, we don't see much upside in TWD. Inflation has been less of a problem in Taiwan and the government seems keen for TWD to stabilize going forward following the trend lower in USD/TWD since September last year. A stronger DXY and lower risk appetite should alleviate appreciation pressures in the short run. The risk to our medium-term forecast is probably to the downside in the cross based on a rebound in growth momentum in 2H and particularly if other currencies in the region such as KRW post strong gains.

## CEEMEA — Weaker EUR poses near-term risk but CEE3 outperform LT

The CEE3 currencies should trade sideways in the short run as the EUR comes under further pressure against the USD. Unless commodity prices stage a strong rebound in the next few months, appreciation pressures on RUB and ZAR will likely be limited, especially if broader risk appetite remains subdued. The latter would also constrain upside for TRY.

Relative to the forwards, PLN is likely to be the best performing CEE3 currency over 6-12m. Privatization flows and improvement in risk appetite should be supportive. But PLN also has some clear downside risks which adds uncertainty to our forecast: the fiscal deficit remains at a high level and political risk may increase ahead of parliamentary elections later this year. Moreover rating agencies keep warning that Polish ratings may be under pressure if there is no significant fiscal consolidation after the elections.

In the short term, CZK is likely to trade slightly weaker compared to current levels. Again, this reflects the DXY rally and risk reduction/ higher risk aversion and also the dovish outcome of the latest CNB meeting. Further out, however, we anticipate renewed strength based on a solid trade surplus, a robust fiscal stance and the CNB at least keeping pace with ECB rate hikes.

HUF should be the weakest of the CEE3 in the medium term. Most of the planned fiscal tightening seems to be already discounted by the market and we see room for a further short-term correction in HUF along with a DXY rally and higher risk aversion. And yet, even if risk appetite improves later this year, we think the forint should be negatively affected by a decreasing interest rate differential vs. the euro zone and other CEE economies. Nonetheless, high carry should help medium-term performance and roughly offset the expected depreciation in spot.

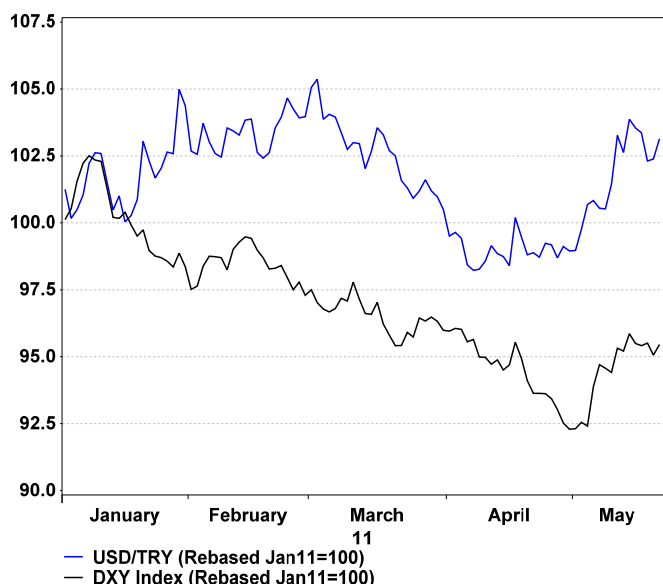
TRY should continue to perform poorly in the short term if the DXY continues to rise as forecast (Figure 89). The lira also continues to be vulnerable to the noticeable widening in the current account gap and the deterioration in the quality of external financing. High carry is certainly a positive, and thus TRY will likely muddle through later this year, thereby posting decent returns vs. the forwards.

We believe the ruble basket has limited potential to appreciate from the current level. In fact, we expect the basket to weaken gradually due to: (i) a narrowing current account surplus due to rising imports; (ii) seasonal capital outflows in 3Q; and (iii) uncertainty related to parliamentary elections in December. But we expect RUB downside to be limited by central bank intervention, especially as we get close to the elections. A sharp rebound in oil prices clearly represents a downside risk to our RUB forecasts (Figure 90).

Aggressive monetary tightening by the Bank of Israel should provide support to ILS over the medium term, although USD/ILS is likely to rise near term against a backdrop of broader USD strength. The market has gone too far, we think, in moderating its view about how many rate hikes will be needed. Further evidence of inflationary pressures in the next couple of months, which we think likely, will bring the market back towards pricing in more rate hikes.

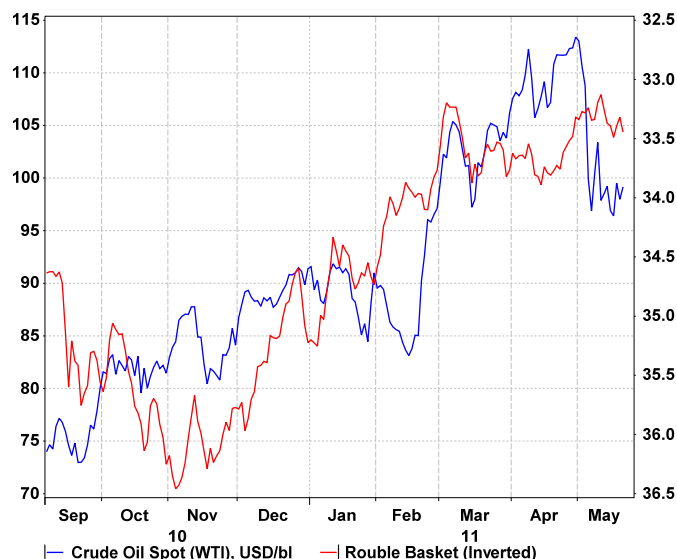
ZAR has been one of the biggest underperformers in EM this year, including during this latest USD rally. We think the rand can reverse some of this loss in the near term and should be one of the better EM currencies in 0-3m. Strong short-term flow dynamics from FDI, portfolio flows and exporter dollars should be positive drivers. Over the medium to longer term, however, ZAR needs to weaken to reflect inflation and productivity differentials. High carry means that ZAR may, however, still beat forwards.

Figure 89. TRY vs. DXY



Source: Reuters EcoWin

Figure 90. RUB and Oil Prices



Source: Reuters EcoWin

## Latam — High carry to drive BRL outperformance

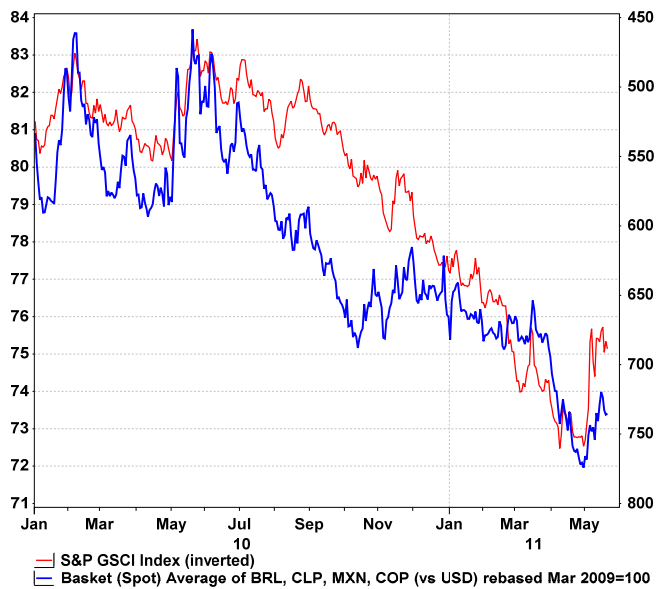
As in the other EM regions, the main Latam currencies are likely to trade mostly sideways in the near term. But Latam currencies are unlikely to make longer term gains in spot as well. Citi expects a decent rebound in commodity prices before year-end, which by itself would be supportive of further nominal exchange rate appreciation. However, the correction in commodity prices has been bigger than fall in Latam currencies (Figure 91) and upside potential is limited by twin current account and fiscal deficits in Brazil, Colombia and Mexico.

Nonetheless, high carry suggests that most Latam currencies should perform well relative to the forwards over 6-12m. In particular, BRL should be one of the top EM performers in total return terms in both the short and medium term. High carry is a major positive. Moreover, Brazilian inflation remains stubbornly high, and so further rate hikes are likely within the next year. A rebound in commodity prices would also provide medium-term support. But increasing current account deficits should act as a constraint on BRL upside, as should the ongoing poor fiscal position.

Mexico continues to grow at a relatively fast pace; the local authorities have continuously reiterated their commitment to a free-floating exchange rate; fiscal fundamentals are robust; and carry is attractive. All these factors should help USD/MXN continue to trade around the 11.6-11.7 level in coming months. The potential for a sharper correction in risk assets and rebound in DXY suggests the risks to the cross are skewed more to the upside in the near term.

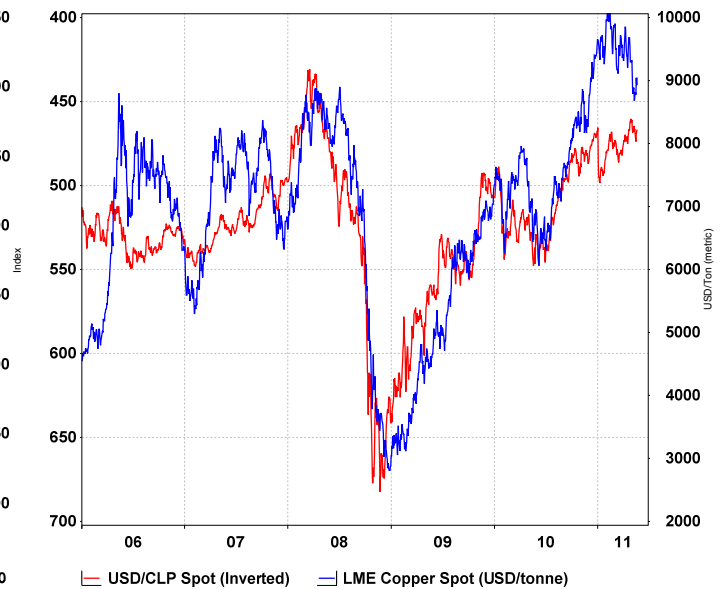
CLP is likely to trade around the 470 level in the next year. Citi expects a rebound in copper prices, which would be a support to the currency (Figure 92). However, the USD/CLP is trading near previous intervention triggering levels, and although we do not expect the central bank to increase direct purchases, we do not rule out further measures on the FX front if USD/CLP were to come under further pressure. We also expect USD/COP to trade around current levels in the short term, yet we see some downside in the medium term driven by strong macro fundamentals.

Figure 91. Latam Currencies vs. S&P GSCI Index



Source: Reuters Ecowin

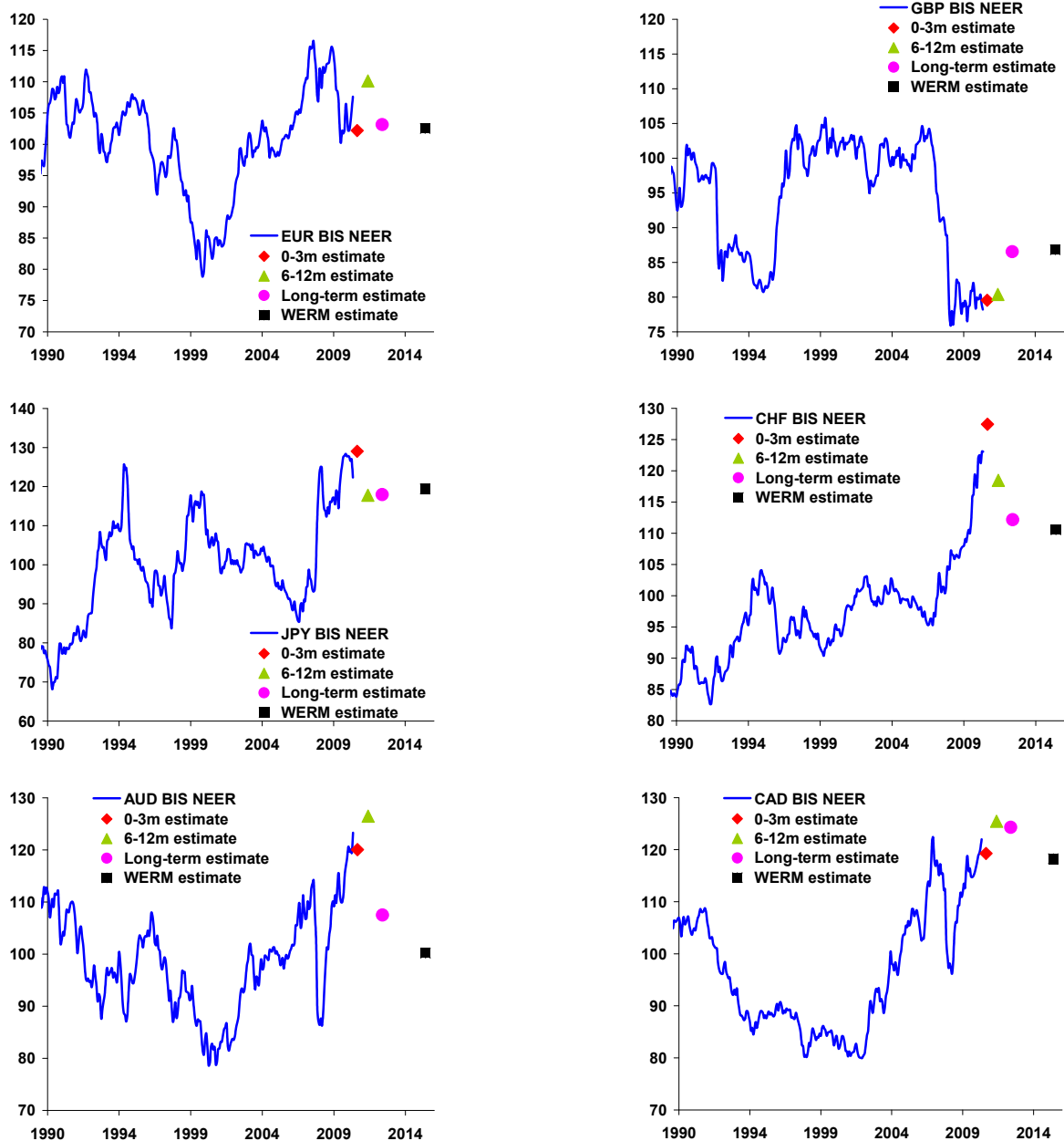
Figure 92. USD/CLP (inverted) vs. Copper Spot Price



Source: Reuters Ecowin



Figure 93. Implied Path — BIS Nominal Exchange Rates



Source: BIS, Bloomberg and Citi

## Citi Foreign Exchange: Forecasts

### Contributors

*\*\* Citi Foreign Exchange: Forecasts is a joint venture between Citi's foreign exchange, global macro and technical strategy groups and our developed and emerging markets economists. The analysts listed below have contributed to these forecasts in one form or another.*

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Source: Citi Investment Research and Analysis

Figure 95. Citi Quarterly Interpolated Forecasts

	Currency	Spot	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
<b>G10-US Dollar</b>											
Euro	EURUSD	1.40	1.38	1.37	1.42	1.47	1.49	1.46	1.43	1.40	1.38
Japanese yen	USDJPY	82	81	82	83	84	85	86	86	87	87
British Pound	GBPUSD	1.62	1.61	1.61	1.65	1.70	1.73	1.73	1.74	1.74	1.75
Swiss Franc	USDCHF	0.88	0.89	0.91	0.91	0.91	0.92	0.95	0.97	1.00	1.02
Australian Dollar	AUDUSD	1.06	1.04	1.02	1.05	1.08	1.08	1.03	0.98	0.93	0.90
New Zealand Dollar	NZDUSD	0.79	0.78	0.76	0.77	0.78	0.77	0.73	0.69	0.65	0.63
Canadian Dollar	USDCAD	0.98	0.98	0.98	0.96	0.94	0.93	0.94	0.94	0.95	0.95
Dollar Index*	DXY	76.09	76.98	77.43	75.46	73.62	73.03	74.11	75.22	76.34	77.06
<b>G10 Crosses</b>											
Japanese yen	EURJPY	114	112	112	118	124	127	125	123	121	120
Swiss Franc	EURCHF	1.24	1.23	1.25	1.29	1.33	1.36	1.37	1.38	1.39	1.40
British Pound	EURGBP	0.87	0.86	0.85	0.86	0.87	0.86	0.84	0.82	0.80	0.79
Swedish Krona	EURSEK	8.93	8.98	9.02	8.93	8.85	8.80	8.80	8.80	8.80	8.80
Norwegian Krone	EURNOK	7.86	7.87	7.89	7.85	7.82	7.80	7.80	7.80	7.80	7.80
Norwegian Krone	NOKSEK	1.14	1.14	1.14	1.14	1.13	1.13	1.13	1.13	1.13	1.13
Australian Dollar	AUDNZD	1.34	1.33	1.34	1.36	1.38	1.40	1.41	1.41	1.42	1.43
Australian Dollar	AUDJPY	86.1	84.3	83.4	87.4	91.2	91.9	88.1	84.3	80.5	78.1
<b>EM Asia</b>											
Chinese Renminbi	USDCNY	6.50	6.48	6.43	6.35	6.28	6.20	6.15	6.10	6.05	6.05
Hong Kong Dollar	USDHKD	7.78	7.77	7.76	7.75	7.75	7.75	7.75	7.75	7.75	7.75
Indonesian Rupiah	USDIDR	8583	8600	8500	8450	8400	8400	8350	8300	8300	8300
Indian Rupee	USDINR	45.3	44.5	45.0	45.3	45.5	45.0	44.5	44.0	44.0	44.0
Korean Won	USDKRW	1098	1080	1060	1040	1030	1030	1020	1010	1000	1000
Malaysian Ringgit	USDMYR	3.06	3.06	2.98	2.90	2.92	2.86	2.84	2.80	2.80	2.80
Philippine Peso	USDPHP	43.4	43.0	42.5	42.0	42.3	41.9	41.5	41.0	41.4	41.4
Singapore Dollar	USDSGD	1.25	1.26	1.23	1.20	1.22	1.20	1.19	1.17	1.17	1.17
Thai Baht	USDTHB	30.4	30.0	29.9	29.8	29.9	29.8	29.5	29.4	29.4	29.4
Taiwan Dollar	USDTWD	28.9	28.8	28.5	28.2	28.5	28.5	28.2	28.2	27.8	27.8
<b>EM Europe</b>											
Czech Koruna	EURCZK	24.50	24.58	24.55	24.18	23.81	23.56	23.46	23.36	23.26	23.19
Hungarian Forint	EURHUF	270	270	270	271	272	274	275	276	277	278
Polish Zloty	EURPLN	3.95	3.95	3.94	3.90	3.87	3.82	3.76	3.70	3.64	3.60
Israeli Shekel	USDILS	3.52	3.51	3.49	3.45	3.42	3.39	3.38	3.37	3.36	3.35
Russian Ruble	USDRUB	28.4	28.6	28.8	28.6	28.3	28.4	28.9	29.5	30.0	30.3
Russian Ruble Basket	RUB	33.5	33.5	33.6	34.0	34.3	34.6	34.9	35.1	35.4	35.5
Turkish Lira	USDTRY	1.60	1.61	1.62	1.62	1.61	1.62	1.63	1.64	1.65	1.66
South African Rand	USDZAR	6.98	6.93	6.88	6.97	7.05	7.21	7.49	7.77	8.04	8.26
<b>EM Latam</b>											
Brazilian Real	USDBRL	1.62	1.61	1.60	1.60	1.60	1.61	1.62	1.63	1.64	1.66
Chilean Peso	USDCLP	467	468	470	470	470	471	472	473	474	478
Mexican Peso	USDMXN	11.7	11.7	11.7	11.7	11.8	11.8	11.9	12.0	12.1	12.2
Colombian Peso	USDCOP	1815	1815	1813	1808	1803	1805	1818	1830	1843	1853

\* The DXY forecasts are implied from the forecasts of the constituent crosses.

Source: Citi Investment Research and Analysis

Figure 96. Citi Annual Forecasts

	Currency	Spot	2011*	2012*	2013*	2014*	2015*
<b>G10-US Dollar</b>							
Euro	EURUSD	1.40	1.40	1.46	1.38	1.37	1.37
Japanese yen	USDJPY	82	82	85	87	87	87
British Pound	GBPUSD	1.62	1.62	1.72	1.74	1.74	1.73
Swiss Franc	USDCHF	0.88	0.91	0.94	1.01	1.02	1.03
Australian Dollar	AUDUSD	1.06	1.04	1.04	0.90	0.87	0.85
New Zealand Dollar	NZDUSD	0.79	0.77	0.75	0.63	0.62	0.62
Canadian Dollar	USDCAD	0.98	0.97	0.94	0.95	0.97	0.99
Dollar Index**	DXY	76.10	76.43	73.99	76.95	77.51	77.90
<b>G10 Crosses</b>							
Japanese yen	EURJPY	114	115	125	120	119	119
Swiss Franc	EURCHF	1.24	1.27	1.36	1.40	1.41	1.41
British Pound	EURGBP	0.87	0.86	0.85	0.79	0.79	0.79
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Norwegian Krone	EURNOK	7.86	7.86	7.80	7.80	7.79	7.77
Norwegian Krone	NOKSEK	1.14	1.14	1.13	1.13	1.13	1.13
Australian Dollar	AUDNZD	1.34	1.35	1.40	1.42	1.40	1.38
Australian Dollar	AUDJPY	86.1	85.2	88.9	78.3	75.7	73.7
<b>EM Asia</b>							
Chinese Renminbi	USDCNY	6.50	6.45	6.18	6.00	5.80	5.60
Hong Kong Dollar	USDHKD	7.78	7.76	7.75	7.75	7.75	7.75
Indonesian Rupiah	USDIDR	8583	8565	8363	8350	8150	8050
Indian Rupee	USDINR	45.3	44.8	44.8	44.4	44.0	42.0
Korean Won	USDKRW	1098	1069	1023	1000	975	970
Malaysian Ringgit	USDMYR	3.06	2.99	2.86	2.80	2.74	2.64
Philippine Peso	USDPHP	43.4	42.7	41.7	41.0	41.0	41.3
Singapore Dollar	USDSGD	1.25	1.24	1.20	1.17	1.16	1.15
Thai Baht	USDTHB	30.4	30.0	29.6	29.5	29.3	29.7
Taiwan Dollar	USDTHB	28.9	28.7	28.4	28.0	28.0	28.0
<b>EM Europe</b>							
Czech Koruna	EURCZK	24.50	24.46	23.55	23.20	23.12	23.05
Hungarian Forint	EURHUF	270	270	274	278	279	279
Polish Zloty	EURPLN	3.95	3.95	3.79	3.60	3.56	3.53
Israeli Shekel	USDILS	3.52	3.48	3.39	3.36	3.37	3.39
Russian Ruble	USDRUB	28.4	28.6	28.8	30.2	30.2	30.2
Russian Ruble Basket	RUB	33.5	33.7	34.7	35.4	35.3	35.1
Turkish Lira	USDTRY	1.60	1.60	1.62	1.65	1.64	1.62
South African Rand	USDZAR	6.98	6.89	7.38	8.32	8.92	9.50
<b>EM Latam</b>							
Brazilian Real	USDBRL	1.62	1.61	1.61	1.66	1.71	1.76
Chilean Peso	USDCLP	467	471	471	481	506	531
Mexican Peso	USDMXN	11.7	11.8	11.9	12.3	12.5	12.8
Colombian Peso	USDCOP	1815	1827	1814	1857	1891	1924

\*Averages of end-quarter data shown in quarterly interpolation table.

\*\* The DXI forecasts are implied from the forecasts of the constituent crosses.

Source: Citi Investment Research and Analysis

## Appendix A-1

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