

**Global Economics Team:**

Coordinators of this publication

**Joachim Fels**

[Joachim.Fels@morganstanley.com](mailto:Joachim.Fels@morganstanley.com)

+44 (0)20 7425 6138

**Manoj Pradhan**

[Manoj.Pradhan@morganstanley.com](mailto:Manoj.Pradhan@morganstanley.com)

+44 (0)20 7425 3805

**Spyros Andreopoulos**

[Spyros.Andreopoulos@morganstanley.com](mailto:Spyros.Andreopoulos@morganstanley.com)

+44 (0)20 7677 0528

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Global

## The Global Monetary Analyst Reversing Excessive Excess Reserves

Excess reserves on central bank balance sheets are at elevated levels. In the US, they are set to cross US\$1 trillion, and are likely to rise to US\$1.2 trillion by early 2010. Why have excess reserves stayed so high? Commercial banks are likely hoarding cash as a precaution against liquidity and regulatory risk, but they also face very little demand for bank credit. Interest on reserves compensates commercial banks for holding reserves, reducing incentives to move that cash elsewhere...for now. In a recovering economy, liquidity risks could abate quite quickly and banks could start seeing better lending opportunities as suitable borrowers return to the market. Lending out of excess reserves could then push up money supply, raising inflation risks. Ironically, commercial banks are most likely to find suitable borrowers just as central banks start to tighten on the back of a sustainable recovery, lowering the impact of rate hikes.

p 2

### Central Bank Watch

<b>US:</b> Fedspeak: Roadmap for the Exit	p 8
<b>Japan:</b> Three Years of Deflation Outlook?	p 9
<b>UK:</b> Still in Recession	p 9
<b>Sweden:</b> Repo Rate and Profile Confirmed	p 10
<b>Russia:</b> CPI Still Down	p 10
<b>Turkey:</b> Diverging Views – Market and CBT	p 11
<b>Israel:</b> Rates on Hold – What's Next?	p 11
<b>South Africa:</b> Policy Rate Unchanged	p 12
<b>AXJ:</b> Rate Hike Cycle Coming	p 12
<b>China:</b> Recovery on Track, but Not Overheating	p 13
<b>India:</b> RBI Takes First Step Towards 'Exit'	p 13
<b>Hong Kong:</b> September CPI Lifted	p 14
<b>Korea:</b> 3Q GDP Much Better than Expected	p 14
<b>Brazil:</b> Policy Rate on Hold	p 15

### Key Central Bank Risk Events

Date	Country	Event
29 Oct	Brazil	CB minutes
29 Oct	New Zealand	Rate decision: expect on hold
30 Oct	Japan	Rate decision: expect on hold; outlook report
03 Nov	Euro Area	Rate decision: expect on hold
03 Nov	Australia	Rate decision: expect 25bp hike
03 Nov	Romania	Rate decision: expect 50bp cut
04 Nov	United States	Rate decision: expect on hold
04 Nov	Norway	Dep Gov Qvigstad speech
04 Nov	Indonesia	Rate decision: expect on hold
05 Nov	UK	Rate decision: expect on hold
05 Nov	Sweden	Gov. Ingves before Riksdag Finance Committee
05 Nov	Czech Rep.	Rate decision: expect on hold
05 Nov	Peru	Rate decision: expect on hold
06 Nov	Colombia	Monetary Policy minutes

### What's Changed?

	Forecast Changes Since Last Week
<b>UK</b>	GDP: -4.6, 1.1% in '09, '10 (prev. -4.2, 1.5%)
<b>Norway</b>	Policy rates: 1.5, 3.5% end '09, '10 (prev. 1.75, 3.75%)
<b>Russia</b>	CPI: 8, 10% in '10, '11 (prev. 9.5, 11%)
<b>Australia</b>	Policy rates: 3.75, 4% end-1Q10, 4Q10 (prev. 3.5, 3.75%)
<b>Romania</b>	Policy rates: 8, 6.5, 6.5% end '09, '10, '11 (prev 7.5, 6, 6%)
<b>Korea</b>	Policy rates: 3.5, 4.5% end-4Q10, 4Q11 (prev. 3, 4%)

### Where Do We Differ Most from the Market?

<b>Fed</b> likely to keep rates lower for longer than markets expect (p 16)
<b>BoJ</b> likely to cut rates; markets expect no cut (p 16)
<b>RBA</b> likely raise rates by less than markets expect (p 18)
<b>RBNZ</b> likely to keep rates lower than markets expect (p 18)

**For important disclosures, refer to the Disclosures Section, located at the end of this report.**

October 28, 2009  
The Global Monetary Analyst

## Reversing Excessive Excess Reserves

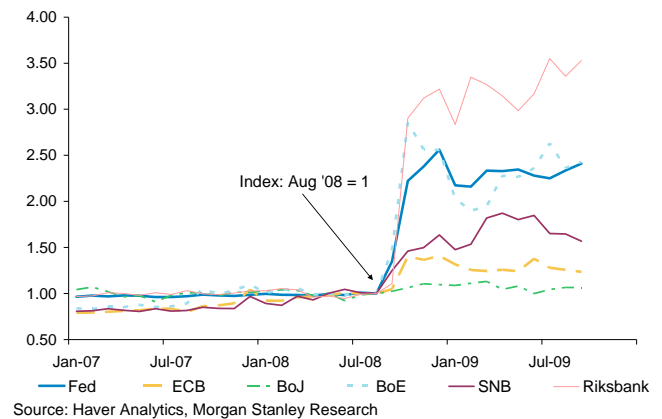
Manoj Pradhan (44 20) 7425 3805

- Excess reserves on central bank balance sheets are at elevated levels. In the US, they are set to cross US\$1 trillion, and are likely to rise to US\$1.2 trillion by early 2010.
- Why have excess reserves stayed so high? Commercial banks are likely hoarding cash as a precaution against liquidity and regulatory risk, but they also face very little demand for bank credit. Interest on reserves compensates commercial banks for holding reserves, reducing incentives to move that cash elsewhere... for now.
- In a recovering economy, liquidity risks could abate quite quickly and banks could start seeing better lending opportunities as suitable borrowers return to the market.
- Lending out of excess reserves could then push up money supply, raising inflation risks. Ironically, commercial banks are most likely to find suitable borrowers just as central banks start to tighten on the back of a sustainable recovery, lowering the impact of rate hikes.

Excess reserves on the Fed's balance sheet will soon cross the US\$1 trillion mark. Our US economics team expects the combination of more QE asset purchases, smaller further decreases in passive QE and the wind-down of the Supplemental Financing Program (SFP) of the Treasury to drive excess reserves in the US to US\$1.2 trillion by January 2010 (see [US Economics: FedSpeak: Roadmap for the Exit](#), October 26, 2009). And balance sheets and reserves in other countries are at elevated levels too (see Exhibit 1 and page 7 for our *Central Bank Balance Sheet Monitor*). Confronted with such massive amounts, even the normally straightforward task of draining excess reserves is no longer a simple task for central banks. While they retain so many excess reserves which are earning very low interest, commercial banks could well turn some of these reserves to lending when better opportunities show up later in the recovery, or purchase assets, pushing yields lower. More lending would lead to an increase in money supply, raising inflation risks. Ironically, commercial banks are most likely to find willing and suitable borrowers just as central banks start to tighten on the back of a sustainable recovery, lowering the impact of rate hikes.

Exhibit 1

### QE Central Bank Balance Sheets (Index: Aug 08 = 1)



**QE created a surge in excess reserves:** In September 2008, central banks opened up liquidity facilities to alleviate the stress from frozen fixed income markets. These operations resulted in the build-up of 'excess reserves' (ER) and an expansion in central banks' balance sheets. In the past, such a build-up in ER would have been 'sterilised' by central banks by selling government securities. This time around, however, that was not done for two reasons. First, we have argued that central banks have pursued QE with the intention of increasing the growth of money, given near-zero policy rates, while more ER would push overnight rates lower. Second, the sheer size of the increase in ER relative to the size of government securities held by or available to the Fed that could be used to drain reserves was at least partly responsible for central banks not being able to drain excess reserves (see Keister & McAndrews (2009), Haubrich & Lindner (2009)). Under these extenuating circumstances, the Fed even turned to the Treasury for assistance and the Supplemental Financing Program was created to help drain ER (see box on page 3 for details on how the SFP worked and how its wind-down will push up excess reserves).

**But why have excess reserves stayed so high? Could be a supply-side issue...** Tautologically, commercial banks are holding on to excess reserves because they cannot put the funds to better use. However, this does not help us in identifying whether supply or demand is the source of the problem. While reserves may be higher than required by regulators, banks may not consider them 'excessive' in an economic sense, as argued by Friedman and Schwartz (1963).

## The Coming Surge in US Excess Reserves

Our US economics team expects excess reserves on the Fed's balance sheet (B/S) to expand from US\$987 billion now to about US\$1.2 trillion by early 2010. With passive QE<sup>1</sup> programmes already ratcheted down to a significant extent, the US\$350 billion of active QE yet to come along with the wind-down of the Treasury's Supplementary Financing Program (SFP) from its November 2008 peak of US\$589 billion to US\$15 billion are the reasons for this expected surge. In this box, we try to explain how QE creates excess reserves and how the wind-down of the SFP facility means that excess reserves are likely to increase.

The Fed's passive and active QE policies since September 2008 and early 2009, respectively have resulted in a massive expansion of its balance sheet. In the process of taking on illiquid assets via liquidity programmes (passive QE) or MBS/agency debt/USTs through outright purchase (active QE – see "QE2", [The Global Monetary Analyst](#), March 4, 2009, for more on this distinction), the Fed issued 'cash' by crediting the reserve account of commercial banks. Since the increase in reserves was over and above that required by regulation, the so-called 'excess reserves' account of commercial banks increased due to these programmes. The process of creation of excess reserves is best explained by the T-accounts below:

Exhibit B1

### QE Creates Excess Reserves

A	Fed	L	A	Comm. Bank	L
QE Asset +200			QE Asset -200		
	Reserves +200		Reserves +200		

Source: Morgan Stanley Research

In mid-September 2008, the US Treasury created the SFP "at the request of the Federal Reserve", under which the Treasury can auction Treasury bills that will "provide cash for use in the Federal Reserve initiatives". Under the SFP, the Treasury sold T-Bills at a special auction open to institutions already accessing the Fed's liquidity facilities. Proceeds from the auction were paid out of excess reserves and into the Treasury's account at the Fed (see Exhibit B2). On the Fed's balance sheet, this simply amounts to a transfer of funds between excess reserves and the Treasury's deposit.

<sup>1</sup>We define passive QE programmes as liquidity programmes where financial institutions rather than the Fed determined how rapidly the balance sheet would grow. Active QE takes the form of programmes to purchase assets outright, giving the Fed better control over the increase in the balance sheet. See "QE2", [The Global Monetary Analyst](#), March 4, 2009, for more details.

Exhibit B2

### SFP Helped Manage Fed's Balance Sheet

A	Fed	L	A	Comm. Bank	L
	Reserves - 50		Reserves -50		
			SFP Bills +50		
	Treasury Dep + 50		A US Treasury L		
			Acc @ Fed +50	SFP Bills +50	

Source: Morgan Stanley Research

On a net basis (see Exhibit B3 – the net transaction of Exhibits B1 and B2), however, it is almost like the Fed and the Treasury jointly financed the liquidity programmes started in September 2008. The SFP effectively helps the Fed to drain excess reserves by the amount of the T-Bills auctioned.

Exhibit B3

### Net Transactions from Exhibits B1 and B2

A	Fed	L	A	Comm. Bank	L
QE Asset +200			QE Asset -200		
	Reserves +150		Reserves +150		
			SFP Bills +50		
	Treasury Dep + 50		A US Treasury L		
			Acc @ Fed +50	SFP Bills +50	

Source: Morgan Stanley Research

The severity of the downturn, however, led to the Fed to pursue a US\$1.75 trillion active QE programme starting January 2009, which made the SFP contribution relatively less vital, given the size of this programme. On the fiscal side, issuance needs for the massive US\$787 billion fiscal package and the dramatic cyclical fall in tax revenues led the Treasury to wind down the SFP facility to US\$15 billion in order to avoid breaching the debt ceiling. In the event that Congress raises the debt ceiling, the Treasury could re-issue T-Bills to assist the Fed in mopping up excess reserves.

Effectively, this would mean that, as T-Bills mature, the funds from redemption are placed back in excess reserves. As of now, there are US\$65 billion of SFP bills left, US\$50 billion of which will be wound down. The SFP wind-down has thus already contributed to an increase in excess reserves and will continue to do so until the desired US\$15 billion size for the programme is achieved. The much bigger impact on reserves going forward will be the US\$291 billion of MBS securities and US\$58 billion of agency debt that the Fed will purchase as it completes its active QE programme.

October 28, 2009  
The Global Monetary Analyst

Commercial banks could be hoarding this cash with a 'precautionary motive', much as consumers increase savings when uncertainty around their income stream increases. This would be a problem on the supply side of the loanable funds market.

Feedback from our money market desk in London provides some interesting insights into the supply side of the argument. First, the interbank market no longer functions as it used to. Lending up to maturities of 3 or 6 months has been replaced by overnight lending or up to a maximum of 30 days, and that too only among select institutions. Absent an interbank market from days gone by, it is little wonder that banks are electing to hold assets in the form of ER. Second, financial institutions still seem to be wary of risks other than liquidity risk. The risk of a possible downturn in the economy and asset prices thereby adversely affecting their balance sheets cannot be ruled out, while there are also risks that regulation could require these institutions to hold more liquid positions in the near future. Until there is some resolution of uncertainty on both of these fronts, it seems that the precautionary motive for holding ER will remain in place.

**...but it could also be the lack of demand for bank credit:** It could also, however, be that banks simply do not have enough demand for bank credit – a demand-side problem. Most likely, it is a combination of both supply and demand factors. We have argued before that credit lags the recovery as lending standards slowly relax and borrowers slowly re-enter the market as their income and revenue streams become less uncertain, or show outright improvement.

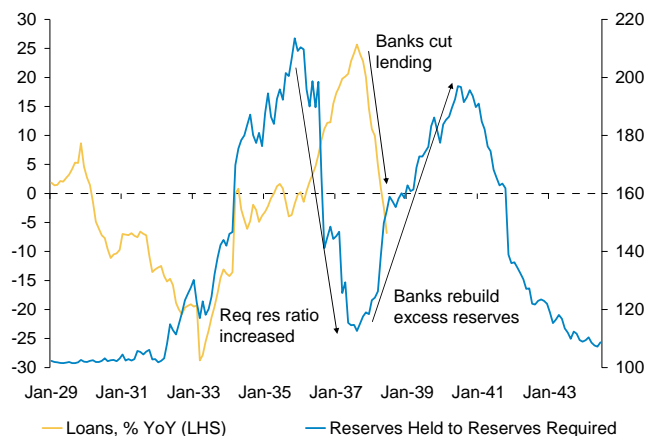
**Reserves earn interest...even at the Fed:** Another reason why excess reserves have stayed elevated is that commercial banks earn interest on reserves (even at the Fed, which started this practice in October 2008). Particularly in the US where, prior to October 2008, ER would have received no interest, commercial banks would be strongly incentivised to move those funds elsewhere. Now, ER earn the policy rate<sup>2</sup>, which is more attractive than low front-end rates on government yield curves. Further, commercial banks – having already purchased a lot of government bonds – are possibly reluctant to add to these positions, given an impending economic recovery. Part of the regulatory risk that we mention previously is that banks could be asked to hold more risk-less assets on their balance sheets. This process is already in motion in the UK, where banks are likely to hold more liquid assets (see [Regulation-Driven Demand](#), Laurence Mutkin, October 9, 2009).

<sup>2</sup>There are differences among various central banks to be careful about. At the ECB, excess reserves earn 75bp of interest, 25bp below the policy rate.

Researchers at the Federal Reserve argue that the build-up of ER is almost exclusively the result of central bank policy<sup>3</sup> and should not be seen as a reflection of the lending behaviour of commercial banks (see Keister & McAndrews, *Why Are Banks Holding So Many Excess Reserves?* July 2009). The implication seems to be that a reversal of central bank policy will result in a painless resolution of the ER issue. If so, the argument is not convincing. If the decision to hold assets in the form of ER is the result of a desire to hoard cash by commercial banks, then an attempt by the central bank to reduce ER without a change in the underlying preferences of commercial banks could lead to a decrease in lending. This was costly for the Fed in the 1930s when higher reserve requirements led commercial banks to cut lending.

Exhibit 2

## Banks Cut Lending in 1937-38 to Replenish Excess Reserves



Source: NBER, Morgan Stanley Research

**Will managing excess reserves prove difficult?** Central banks can drain/reduce ER in a variety of ways. The old-fashioned tool of requiring banks to hold a higher proportion of their demand deposits as reserves is unlikely to be used. The disastrous policy of raising the Required Reserve Ratio by the Fed in 1936 and 1937 was "an important contributing factor and perhaps even the most important factor" that led to the recession of 1937-38 (Mayer & Cargill (2004) – see Exhibit 2). Rather, our US team expects that draining reserves in the US will likely be executed through a combination of reverse repo operations<sup>4</sup>, term deposits and incentives via the interest rate

<sup>3</sup>Their argument relates to the US but it can be extended to other economies as well.

<sup>4</sup>The Fed will sell securities to counterparties only to repurchase them later – the difference in selling and buyback prices effectively determining the repo rate. The Fed would then roll these transactions into another set of sale/repurchase agreements on maturity.

October 28, 2009  
The Global Monetary Analyst

on excess reserves. Please again see *Fedspeak: Roadmap for the Exit* for a discussion of the nuances of these operations. At the ECB, control of liquidity and reserves would likely be done through reverse tenders (at the traditional short maturity or for longer ones) or by issuing debt certificates (i.e., central bank bonds). The latter remains an option at the ECB's disposal, though it has not been used yet. The BoE has arguably already taken steps to cut 'excess' reserves<sup>5</sup> by lower offerings in weekly open market operations. Going forward, the BoE could reduce offerings in its long-term open market operations or even issue short-term BoE bills.

**Interest on reserves helps central banks manage reserves...** Keister & McAndrews and others have argued that the important step of paying interest on reserves allows the Fed to separate its interest rate policy from its policy objectives regarding the monetary base (reserves plus currency in circulation). In simple terms, if central banks kept raising the interest rate paid on reserves in line with policy rates, commercial banks would be less inclined to move ER elsewhere. In theory, central banks could well carry a large quantity of ER on their balance sheets even as policy rates are raised, without these reserves spilling over into the real economy.

**...but the argument is far from watertight:** There is clearly significant merit to this argument, but it does not seem to be as comprehensive as its proponents would suggest. For one thing, banks have traditionally earned profits via the maturity mismatch between short-term liabilities and long-term assets with the benefit of an upward-sloping yield curve. Why they should then prefer to keep over US\$1 trillion in the form of risk-free assets when (probably) better risk-adjusted returns are available in a recovering economy is not clear to us. Federal Reserve staff themselves believe that commercial banks could re-deploy some of the cash on their balance sheets into securities or loans (as per the FOMC September minutes). Further, non-price objectives (e.g., market share) are likely quite strong in an environment where the Great Recession and events in the housing and credit markets have created very distinct groups of winners and losers among commercial banks. In a nutshell, central banks may have all the tools they need at their disposal, but will need to count on the one factor that is not under their control: the willingness of commercial banks to play along.

**Do ER then pose any risk to policy or the macroeconomy?** If central banks manage the process of draining ER efficiently or set the right incentives to control the movement of ER, then clearly even a large stock of reserves poses little risk to the macroeconomy. However, like many of the dilemmas facing central banks today, such a balanced exit is far from a foregone conclusion. In an earlier note (see "Growing Pains", [The Global Monetary Analyst](#), September 23, 2009), we highlighted that central banks have looked through the initial stages of the recovery, waiting until the recovery is sustainable and inflation expectations turn up before they hike policy rates. A sustainable recovery is also when borrowers are likely to return to the market, providing commercial banks with alternative lending opportunities for the stockpile of ER. The risk is that commercial banks could seize these opportunities, expanding credit at a time when central banks are trying to reign in their über-expansionary policies somewhat, thereby rendering their efforts less effective.

Second, the spillover of these ER into the real economy via lending will likely lead to an increase in the money supply, pushing inflation risks higher. As Keister & McAndrews themselves note, "while lending by banks does not change the total level of reserves in the banking system, it does affect the composition of that total between required and excess reserves"<sup>6</sup>. As lending out of ER increases, deposit creation and money creation will also be stepped up. The increase in demand deposits and money supply means that the level of required reserves that banks have to hold will rise. Thus, required reserves will increase at the expense of ER. As money supply has continued to increase during the recent past, so have required reserves. Lending out of ER will exacerbate both trends. Meltzer (2009) and Feldstein (2009) have also voiced concerns about these risks to inflation from inflated ER.

Of all the policy dilemmas that confront central banks, reining in excess reserves likely worries them the least, given their experience and control in managing their own balance sheet. However, the smooth transition that they likely assume is not a done deal, in our view. We have suggested that the biggest risk going forward is stronger-than-expected growth in the next few quarters (see "'Up' with 'Swing'", [The Global Monetary Analyst](#), September 16, 2009). Both the supply of and demand for bank credit in such a scenario could conspire to lay to rest the best laid plans of central banks.

<sup>5</sup>The BoE no longer classifies reserves in required and excess categories.

<sup>6</sup>If all loans create deposits at banks (i.e., there are no 'leakages'), then required reserves increase to exactly offset the decrease in excess reserves.



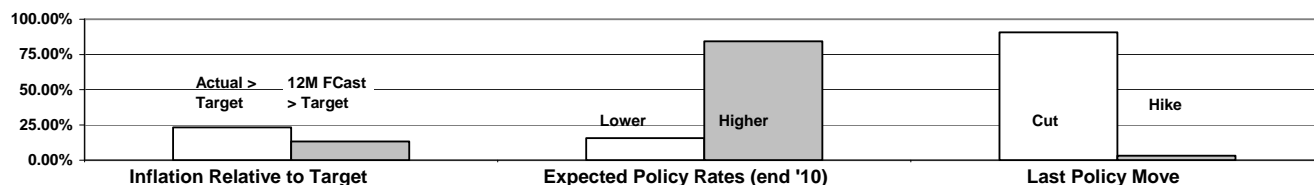
# Inflation Target Monitor & Next Rate Move

Global Economics Team. Contact: Manoj.Pradhan@morganstanley.com

	Inflation target	Latest Month	12M MS FCast	Next Rate Decision	Current Rate	Market Expects (bp)	MS Expects (bp)	Risks to our call
United States	1.7-2.0% PCE Price Index	1.3%	1.7%	04 Nov	0.125	2	0	Rates on hold, but language should firm soon
Euro Area	< 2% HICP (u)	-0.3%	0.8%	03 Nov	1.00	2	0	EONIA still allowed below refi rate
Japan	0-2% CPI (u)	-2.4%	-1.1%	30 Oct	0.10	0	0	Special measures may be lifted to facilitate corp. financing
United Kingdom	2% CPI	1.1%	2.2%	05 Nov	0.50	-4	0	Central case 'QE ends' is now closer call
Canada	1-3% on CPI	-0.9%	1.7%	08 Dec	0.25	8	0	Persistent CAD strength may augment d'side growth risks
Switzerland	<2% CPI (u)	-0.9%	0.4%	10 Dec	0.25	6	0	-
Sweden	2.0% CPI	-1.6%	1.3%	16 Dec	0.25	2	0	Riksbank to stay on hold longer
Norway	2.5% CPI	1.2%	1.8%	16 Dec	1.50	15	0	A hike
Australia	2-3% over the cycle	1.3%	1.0%	03 Nov	3.25	29	25	50bp hike
New Zealand	1-3% CPI	1.7%	1.8%	29 Oct	2.50	1	0	Very low risk of a cut
Russia	none	10.7%	10.5%	-	10.00	0.0	0	-
Poland	2.5% (+/- 1%) CPI	3.8%	2.2%	25 Nov	3.50	-	0	-
Czech Republic	3.0% (+/-1%) CPI	0.0%	2.4%	05 Nov	1.25	-24	0	More easing possible in near term
Hungary	3.0% CPI	5.0%	3.0%	23 Nov	7.00	-89	-50	Watch HUF and risk appetite
Romania	3.5 (+/-1%) CPI	4.9%	3.1%	03 Nov	8.00	-	-50	-
Ukraine	none	15.0%	12.9%	-	10.25	-	-	-
Turkey	7.5% CPI end '09	5.3%	6.3%	19 Nov	6.75	0	-25	-
Israel	1-3% CPI	2.8%	2.0%	23 Nov	0.75	-	25	Bol might keep rates on hold
UAE	-	-	8.6%	-	1.00	-	-	-
South Africa	3-6% CPI	6.1%	5.7%	17 Nov	7.00	-1	0	ZAR strength seen as sustainable; prompts further easing
China	-	-0.8%	-0.6%	-	5.31	-	0	Balanced risk
India	6.5% WPI	1.2%	2.4%	29 Jan	4.75	-	25	Growth weaker than expected
Hong Kong	-	0.5%	0.0%	-	0.50	-	0	Premature US tightening upon global inflation uptick
Korea	2.5-3.5% CPI	2.2%	2.8%	12 Nov	2.00	-	0	Rising risks of early rate hike in 4Q09
Taiwan	-	-0.9%	-1.0%	16-23 Dec	1.25	-	0	Rate hike possible on excessive liquidity
Singapore	1.5% (long-term CPI) (u)	-0.4%	0.4%	Oct	0.68	-	NA	Changes in the FFTR and SGD appreciation pace
Indonesia	4.5% +/- 1.0%	2.8%	4.8%	04 Nov	6.50	-	0	Evenly balanced
Malaysia	-	-2.0%	0.5%	24 Nov	2.00	-	0	Evenly balanced
Thailand	0.5-3.0% core CPI	-1.0%	-1.2%	02 Dec	1.25	-	0	Evenly balanced
Brazil	4.5% +/- 2.0% IPCA	4.3%	4.3%	09 Dec	8.75	0	0	Rate hike seems a matter of time
Mexico	3% +/-1% CPI	4.9%	3.5%	27 Nov	4.50	0	0	Inflationary impact of tax reform
Argentina	15.5-24.2% M2 growth	6.2%	10.5%	NA	10.50	-	-	-
Chile	3% +/-1% CPI	-1.1%	2.6%	12 Nov	0.50	0	0	CB hinted tightening may start in 2Q10
Peru	2% +/-1% CPI	1.2%	3.2%	05 Nov	1.25	0	0	-
Colombia	5% +/-0.5% CPI	3.2%	3.8%	20 Nov	4.00	0	0	Strong currency leading to more easing

(u) = unofficial

Notes: Inflation numbers in red indicate values above target; MS expectations in red (green) indicate our rate forecasts are above (below) market expectations;



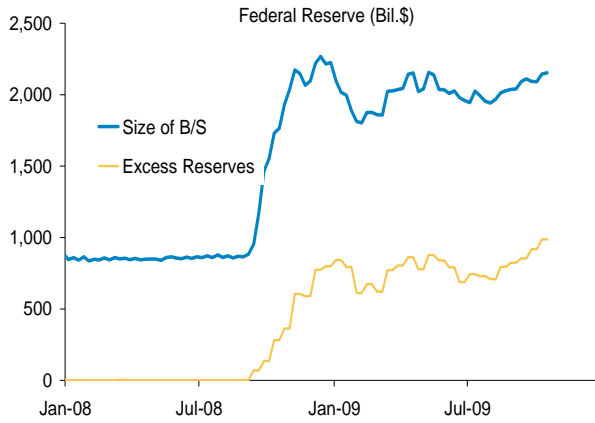
Source: National Central Banks, Morgan Stanley Research

Notes: (u) = unofficial target; Interest rate expectations are implied by overnight indexed swap (OIS) curves and may differ from those implied by other instruments; where adequate OIS data are not available, FRAs, foreign exchange swaps, and/or interbank cash rate futures are used; due to varying risk premia (such as liquidity, basis, credit, term, reserve management, calendar turns, etc.), these figures should be used as estimates only; where such instruments are not available, we have inserted our best guess of what markets expect based on consensus estimates.

# Central Bank Balance Sheet Monitor

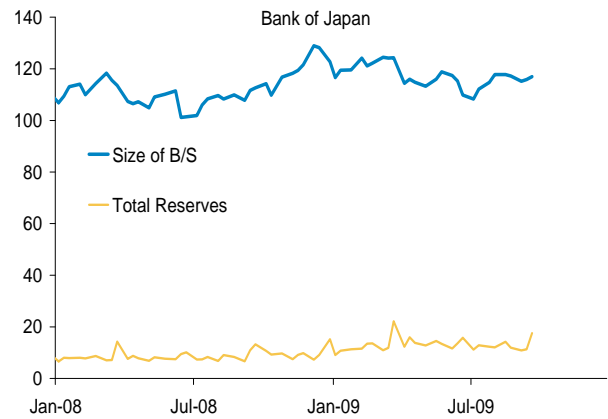
Global Economics Team. Contact: [Manoj.Pradhan@morganstanley.com](mailto:Manoj.Pradhan@morganstanley.com)

## US



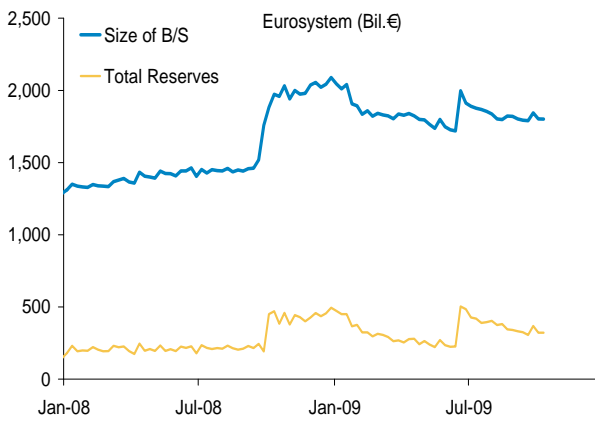
Source: Haver Analytics

## Japan



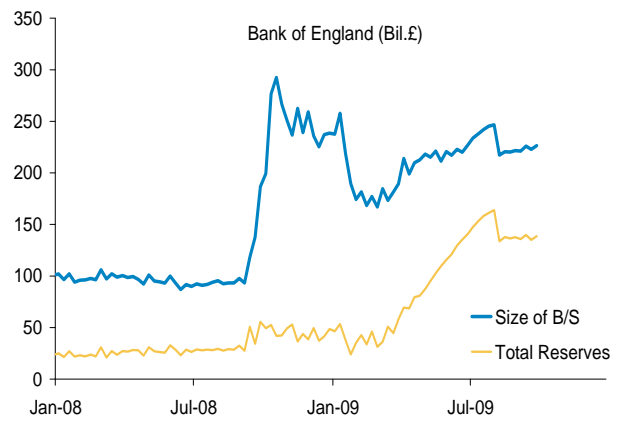
Source: Haver Analytics

## Europe



Source: Haver Analytics

## UK



Source: Haver Analytics

## What's New This Week?

<b>US:</b> Fedspeak: Roadmap for the Exit .....	p 8
<b>Japan:</b> Three Years of Deflation Outlook? .....	p 9
<b>UK:</b> Still in Recession .....	p 9
<b>Sweden:</b> Repo Rate and Profile Confirmed .....	p 10
<b>Russia:</b> CPI Still Down .....	p 10
<b>Turkey:</b> Diverging Views Between Market and CBT ...	p 11
<b>Israel:</b> Rates on Hold as Expected – What's Next? ....	p 11
<b>South Africa:</b> Policy Rate Unchanged.....	p 12
<b>AXJ:</b> Rate Hike Cycle Coming .....	p 12
<b>China:</b> Recovery on Track, but Not Overheating .....	p 13
<b>India:</b> RBI Takes First Step Towards 'Exit' .....	p 13
<b>Hong Kong:</b> September CPI Lifted.....	p 14
<b>Korea:</b> 3Q GDP Much Better than Expected .....	p 14
<b>Brazil:</b> Policy Rate on Hold .....	p 15

## US: Fedspeak: Roadmap for the Exit

Richard Berner (1 212) 761 3398  
David Greenlaw (1 212) 761 7157

**Three areas of uncertainty:** Communication is more critical than ever for the Fed as it contemplates exit strategies from an ultra-accommodative stance. Clarity will help to reduce uncertainty about the Fed's view of the outlook, how and when the Fed will unwind its stance, and what the exit process may mean for financial markets.

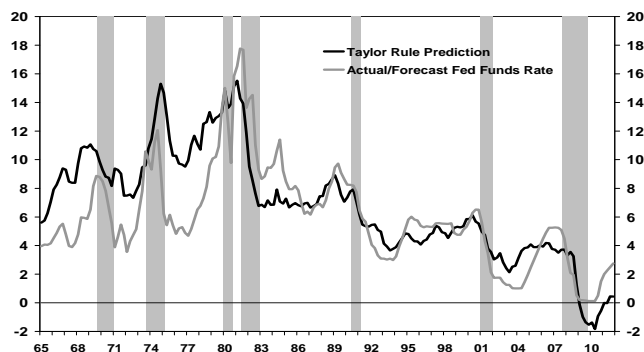
**Three aspects of communication:** First, officials can update the economic outlook, risks to it, and how they will react. Second, they can try to lay out the exit game plan and identify exit tools. Third, they can say what they do and do not know about the exit process, given that they and market participants are in uncharted waters.

**Outlook risks and reaction function:** The Fed's baseline outlook has probably improved since late June, but there is uncertainty about the strength and sustainability of recovery, and even more dispersion around the inflation outlook. With 'core' inflation low and still declining, we expect that officials will keep policy accommodative through mid-2010.

**Tools to use:** We assume that the Fed will not sterilize rising excess reserves until it is ready to begin the exit, and that raising rates will come last. Questions abound: How will the Fed use reverse RPs to drain excess reserves? Will it need other tools such as accepting term deposits or selling assets? Will paying interest on reserves work?

**Uncertain market impact:** Related questions are unanswered. Will banks deploy cash assets into securities or loans, reducing market rates and expanding credit supply? Will the interest rate on excess reserves become the policy rate, at least for a while? What will be the impact on market funding rates of conducting large reverse RP operations?

## US: Taylor Rule: Improving Financial Conditions Raise the Forecast Funds Rate



Source: Federal Reserve Board, Morgan Stanley Research



October 28, 2009  
The Global Monetary Analyst

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## Japan: Three Years of Deflation Outlook?

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Takehiro Sato (81 3) 5424 5367

**The semiannual Outlook Report on October 30:** The main areas to watch for in the report are: 1) the F3/12 outlook at its first unveiling; 2) if the BoJ still see three years of deflation in its official price outlook; 3) if the BoJ continues to stress downside risks in its risk assessment; and 4) if it will review or even discontinue measures to support corporate finances. We conclude that the central bank will continue to emphasize downside risks and express a very cautious outlook for prices. We expect this to heighten the market view that an exit strategy is unlikely to come until 2011. We also expect a review of measures to support corporate finances to be pushed back until November. If a decision is taken to persist with the measures beyond January 2010 – this needs to be done at the December MPM meeting at the latest – we think that given the difficulty of building a consensus with the political and bureaucratic establishments, they could well be extended to end-March.

**Policy duration approach gains ground as deflation outlook lengthens:** Like F3/11, we expect the BoJ's outlook for prices in F3/12 to be far below the 0% minimum required for an "understanding of price stability". Such a forecast would, we believe, contain a message about future policy commitment. Namely, that until it is possible to see the core CPI approaching the 0% minimum for an "understanding of mid/longer-term price stability", market expectations for an exit strategy remaining on the shelf are likely to give fresh and powerful impetus to the policy duration effect, as seen during past QE (particularly after exit conditions were quantified in October 2003).

**Policy and market implications:** Admittedly, the prospect of further easing that we foresee has lessened since this May, following consecutive BoJ upward revisions to its current view on the economy and relative stabilization of the stock and FX markets. However, as wage deflation impacts extensively on prices in general, the BoJ stance – viewed as hesitant to tackle deflation head-on – becomes more vulnerable to criticism. Further, Japan's desire as the leading nation to execute an exit strategy sooner rather than later is attracting tough talk from overseas investors about the lack of coherence in its macro policy. That is, in addition to credit market considerations, the BoJ could still pursue additional easing if, say, the employment situation worsens and stiffens political pressure. In that event, measures might include expanding QE or re-adopting a policy duration approach. With a seemingly unavoidable big increase in JGB issuance due to the large F3/10 tax revenue shortfall, destabilization of the JGB market could even result in further expansion of JGB purchases.

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## UK: Still in Recession

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Melanie Baker (44 20) 7425 8607

Cath Sleeman (44 20) 7425 1820

**Disappointment on 3Q GDP:** The preliminary estimate of 3Q GDP growth, at -0.4%Q, (again) came in well below our own and consensus forecasts (of +0.2%Q). The unexpected weakness was primarily due to a contraction in services, where we had expected an expansion. This now makes the decision for the MPC on whether or not to extend QE a much closer call, although we stick to our expectation that QE won't be extended. We would caution about jumping to the conclusion that QE will now be extended 'for sure'.

**Reducing our full-year GDP forecast:** We wouldn't be surprised to see the 3Q GDP number revised up a bit in the coming quarters, but it would take a very large revision to bring output back in line with our previous central forecast. All else equal, the October 23 data leave our full-year 2009 GDP estimate at -4.6%, from -4.3% previously.

**Looking ahead to 4Q:** We expect stronger growth, partly as households bring forward spending in anticipation of a VAT rate cut reversal. At this stage, we do not see a reason to change our forecasts for quarter-on-quarter GDP growth in the quarters ahead (especially before seeing the expenditure details), but the carried-over growth (or rather lack of growth from last week's data) leaves our 2010 full-year GDP forecast at only 1.1%, from 1.5% previously.

**Implications for the BoE:** Year-on-year GDP growth came in at -5.2%Y, which compares to a central BoE forecast (from the August Inflation Report) of -4.6%Y. This release therefore increases the risks that the MPC decides to extend QE in November. When the MPC extended QE in August, this also followed a GDP growth 'disappointment'. The 3Q GDP growth picture now looks worse than the MPC anticipated in its August projections, but the 'degree of undershoot' versus its forecast is less severe this time around.

**We stick to our central forecast of no QE extension at the November meeting,** but we continue to think that communication around this decision will be very careful, leaving the door open for resuming QE if the MPC feels that it is necessary. If it does extend QE, our central case would be for a smaller extension than that seen in August, so £25 billion rather than £50 billion.

## Sweden: Repo Rate and Profile Confirmed

Elga Bartsch (44 20) 7425 5434

**As expected, the Riksbank left interest rates unchanged at 0.25% on October 22:** This follows a holding operation in September. As before, the Riksbank forecasts that it intends to keep rates at 0.25% until autumn 2010. Contrary to our expectations, there were no revisions to the repo rate profile, only an extension to 2012, when the repo rate is expected to hit 4% at year-end. The phase of ultra-low rates envisaged by the Riksbank is somewhat longer than what we pencil in. Based on our assessment that Sweden has one of the strongest recovery stories, we see a gradual tightening starting in mid-2010 (see [Nordic Glimmers of Hope](#), May 29, 2009).

**The Riksbank has also decided to offer new loans to the banks at a fixed rate and a maturity of 11 months:** This decision was on a knife-edge. With three objections, only the casting vote of Governor Ingves pushed it through. It follows a similar decision at the September meeting and essentially mimics the ECB's one-year tender operations. Before September, such loans were offered at a variable rate. Back in September, both Wickman-Parak and Nyberg did not view additional loans as necessary. Monetary policy counterparties, including restricted ones, will be offered loans through an auction held on November 2. As before, the minimum bid rate for the auction will be the repo rate with an addition of 0.15pp.

**There were four dissenters:** As before, Svensson voted for a further interest rate reduction that would bring the repo rate down to zero. He also advocated rates to be kept at that level for a year. Meanwhile, Wickman-Parak and Nyberg, who had already entered a reservation against the base case forecast in September, believed that the repo rate would need to be raised earlier than is forecast in the new Monetary Policy Report. The basis of their dissenting views on the repo rate profile is a more optimistic view on the economic recovery than the majority of the Executive Board members. As two out of six members continue to call for earlier tightening, we see little reason at this stage to alter our call for the tightening in Sweden to start in mid-2010. Finally, Oeberg entered a reservation against further fixed-rate loans being offered.

**Since the September update, the Riksbank has raised growth estimates,** and now expects GDP to rise 2.5% in 2010 and a further 3.4% in 2011 (considerably stronger than our own growth forecast). The employment forecast was also revised upwards slightly, and unemployment is now seen slightly lower. The SEK is expected to be unchanged in 4Q09, compared with the previous forecast. After this, the krona will appreciate slightly more than was forecast before. Inflation is expected to be somewhat, lower, primarily as a result of lower energy prices and slightly higher productivity growth.

## Russia: CPI Still Down

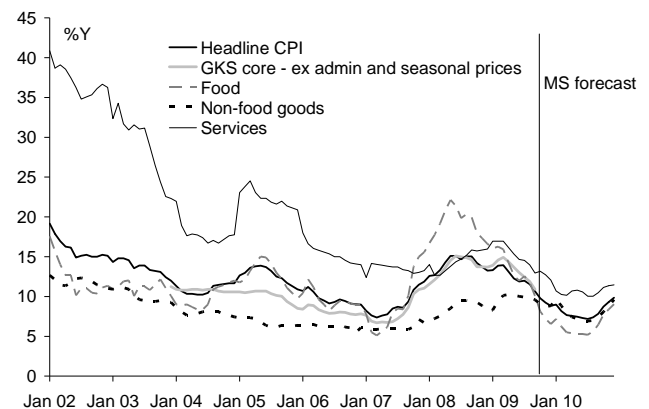
Oliver Weeks (44 20) 7677 6302

Signs of the near-term growth rebound we expect are increasing, yet we still see significant room for further falls in CPI and rates.

**CPI inflation was flat yet again in the third week of October:** Some of this reflects unusually warm weather and continuing unseasonal falls in fresh food prices (fruit and vegetables were down another 1.6% on the week), but we think that underlying inflationary pressure also remains weak. Year-on-year CPI should fall to single-digits already in October and in our view will be below 9.0% by year-end, and below 8.0% by March. Unofficial forecasts by CBR officials are moving down rapidly but so far are not below 10.0%Y for year-end and likely have further to go. Our forecast remains for another 200bp of policy rate cuts by March (see [Russia: Near-Term Plenty](#), October 9, 2009), with risks on the downside as pressure from capital inflows continues.

**Pressure to keep lowering rates:** CBR Deputy Governor Melikyan's comments on the continuing deterioration in credit conditions underline the pressure to keep lowering rates. Earlier in the week, the CBR's Simanovsky reported that the top 20 banks had restructured 26% of loans outstanding as of September 1, loans which can continue to be reported as performing. Given that Sberbank reports restructuring 11.1% of its portfolio and accounts for a third of all lending, average levels of restructured loans among the top 19 banks would appear to be in the region of 35%.

## Russia: CPI and Morgan Stanley Forecasts



Source: Rosstat, Morgan Stanley Research estimates

October 28, 2009  
The Global Monetary Analyst

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## Turkey: Diverging Views Between the Market and the CBT

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Tevfik Aksoy (44 20) 7677 6917

**More easing priced in:** The CBT, after easing the policy rate by another 50bp to 6.75% in October, signaled that the pace of the cuts in the upcoming months could be lower (i.e., 25bp decrements). This was exactly what we expected, as we believe that the easing is likely to come to an end soon. Our base case terminal policy rate forecast for this year stood at 6.50%, which we kept unchanged after the last MPC meeting (but we acknowledged that more cuts could easily be possible).

**Dovish statements having less impact on the market:** The CBT's ultra-dovish stance had been digested by the market for some time, and the impact of the sporadic comments by the various members of the MPC had been creating a lesser effect on market pricing behavior (in the past the tendency would be to push bond yields lower on the expectation that the carry spread would widen). As the most recent CBT expectations poll showed, market participants expect the overnight rate to ease to 6.37% in the next three months. This essentially suggests that the market does not share the CBT's view and sees minor room to be left on the easing front.

**Inflation to remain low in the near term, but a rise is almost inevitable:** Currently, there is almost no demand pressure on prices and it is likely that it will be absent for some time, which should help 12-month trailing inflation to ease below 5% in October and November (see [Turkey: Inflation to See Sub-5% in the Months Ahead](#), October 5, 2009). Our projections show that the annual rate might ease to 4.3% and more or less stay there until December. Indeed, even if October monthly inflation comes out at 1.7%M (our forecast), the base-year effect would assure that inflation declines to a new historical low. That said, we expect inflation to gradually rise from then on, especially on the back of the base year effects, rising energy prices and then the one-off tax rate adjustments in January.

**To fall or not to fall behind the curve:** Meanwhile, various measures of growth had been signaling a gradual recovery, and consumer confidence indices had also broadly been suggesting an overall improvement. Once these indicators start signaling robust growth, which we believe could happen starting January 2010, inflation expectations are likely to rise faster. Our concern is that the CBT might fall behind the curve at some point, which could add to the risk premium. At that point, the CBT might have to address the issue by tightening more than it would have to otherwise. We maintain our view that the CBT will hike rates by 150bp in 2010, but clearly this expectation will be a function of how low rates will be cut to and how quickly the impact of the recovery on prices emerges.

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## Israel: Rates on Hold as Expected – What's Next?

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Tevfik Aksoy (44 20) 7677 6917

**The Bank of Israel kept the policy rate unchanged at 0.75% as expected on October 26:** According to the post-rate-setting meeting statement, there was almost no noticeable change in the rhetoric in comparison to the previous statement. Essentially, the current rate of 0.75% is seen to be striking the balance between inflation and growth according to the Bol. The Bol seems to be rather comfortable with the expectation that inflation will ease to the mid-range of the target band once the one-off effects disappear. Especially on the inflation front, the consensus and Morgan Stanley views are in line with that of the Bol. However, it should be noted that the inflation expectations are based on the anticipation that the Bol will hike in a timely manner and remain ahead of the curve so that any price pressures stemming from the recovery are kept at bay. The Bol, on the other hand, stresses that the uncertainties surrounding a healthy pick-up in growth remain.

**We expect 25-50bp of hikes by year-end:** While the statement mentions no specific point about the currency, we believe that the appreciation pressures for the shekel were still a significant part of the rate consideration. We will wait to judge for that when we see the minutes of the meeting in November. At the last rate-setting meeting, Governor Stanley Fischer kept rates on hold despite the suggestion of a 25bp increase by three out of the four members of the committee. Since then, inflation surprised on the downside and the budget results had been in favour of disinflation, essentially justifying the decision. On the other hand, the 2Q growth figure had been revised down to 0.8%Q (saar) from the initial 1%, affirming the slow recovery story. Looking forward, we will be watching the inflation and growth-related data closely as well as the behaviour of the currency in order to keep or revise our expectations regarding the policy rate outlook. As it is, we expect the Bol to hike rates by 25-50bp by year-end and a further 150bp in 2010.

October 28, 2009  
The Global Monetary Analyst

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## South Africa: Policy Rate Unchanged

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Michael Kafe, CFA (27 11) 507 0891  
Andrea Masia (27 11) 507 0887

**The MPC opted to leave the policy repo rate unchanged at 7% on October 22**, following its two-day meeting. On the whole, the MPC's central inflation forecasts have improved marginally – compared to the previous meeting – mainly as a result of changes to its currency assumptions. While the MPC believes that there is no immediate threat to inflation from the recent rise in oil prices, and that the positive output gap is likely to continue to restrain price pressures for some time, it is nevertheless concerned about the high level of wage settlements this year, and the substantial electricity tariff increases (a trebling of electricity tariffs over the next three years) requested by Eskom.

### **Inflation to fall back within target band in 2Q10:**

Importantly, the central forecast of the SARB continues to indicate that, on a sustainable basis, inflation should fall back within the inflation target band in 2Q10, and remain within the band until the end of 2011. This is in line with our forecasts. However, we note with interest that the MPC was at pains to stress that its current forecast assumes an electricity tariff increase of 25%, and not the 45% annual increase that Eskom has asked for. Also, the statement alleges that the exchange rate of the rand continues to provide downside pressure on inflation. However, as the SARB's model assumes the exchange rate as exogenous, we believe that it is reasonable to expect possible currency weakness in 2010/11 to pose further upside risks to the inflation outlook.

**SARB comfortable with current policy rate:** Finally, the concluding paragraph of the MPC statement makes it clear that the risks to the inflation outlook have not changed markedly since the last MPC meeting, hence the decision to keep rates on hold. Further, the MPC makes it clear in its final sentence that it does not intend to tweak the policy rate unless the inflation outlook changes "materially". We believe that the use of the word 'materially' is meant to indicate to the market that the SARB intends to maintain stable policy rates for most of the forecast horizon. This is in line with our view that policy tightening is unlikely to commence before 1Q11, and at odds with market pricing of a rate hike as early as mid-2010.

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## AXJ: Rate Hike Cycle Coming, but a Long Way Before It Becomes Restrictive

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Chetan Ahya (65) 6834 6738  
Sumeet Kariwala (91 22) 2209 7929

**A different cycle for AXJ this time:** Unlike in the previous two cycles, Asia has had a distinct lead in the current global recovery cycle. Indeed, production levels in AXJ are already well above the peak levels seen in February 2008, whereas EU and US production are 17% and 13% below peak levels, respectively as of August 2009. Unlike in the previous cycles, the key factor driving recovery is domestic demand – particularly household consumption spending on discretionary items, residential property and government spending on infrastructure and handouts.

**India and Korea to go first:** We expect India and Korea to hike first in January 2010 by 25bp each. Indeed, we can argue that technically India has already moved ahead of Korea as the RBI has initiated the first step in the quarterly monetary policy review towards 'exit' by discontinuing several unconventional liquidity support measures that were taken immediately post the unfolding of the credit crisis last year (see page 13). Note that both the Indian and Korean central banks have been relatively hawkish in the past, and both countries have witnessed a surprise in growth data recently.

**How do we read these rate hikes?** We see this as a trend towards normalization. The short-term real interest rate on core inflation in the region is very low at an average of 1.6% even as IP has accelerated to 7.6%Y. We expect the weighted average policy rate in the region to rise to 5.7% by end-2011, compared with 4.4% as of end-2009, as core inflation is still very low with capacity utilization not at levels where it starts adding pressure. Moreover, as the recovery has been largely driven by the strong policy response, central banks will be conscious of this fact in their pace and timing of tightening.

**We see upside risk to our growth and policy rate forecasts:** The two key factors to watch in the context of the rate outlook are the trend in exports and commodity prices. September data for China and Korea, the two largest exporters in the region, have been very strong. If this trend is maintained, there would be upside risks to our growth estimates. A rise in exports would further give comfort that autonomous demand is recovering and encourage policymakers to quicken the pace of tightening. Similarly, we would also watch commodity prices. AXJ remains a big importer of commodities. Oil prices also tend to influence food prices and food is a big part of the consumption basket, weighing on inflation expectations.

October 28, 2009  
The Global Monetary Analyst

## China: Recovery on Track, but Not Overheating

Denise Yam, CFA (852) 2848 5301  
Qing Wang (852) 2848 5220  
Katherine Tai (852) 2848 8191  
Steven Zhang (86 21) 2326 0029

**The Chinese economy expanded by 8.9%Y in 3Q09, which was considered robust yet not overheating:** The underlying breakdown showed that growth was still primarily driven by policy-driven capex, but a recovery in private sector investment is underway, while an export rebound is imminent.

**Upstream deflation easing faster than expected:** Producer and raw materials purchasing price indices showed an uptick in September, narrowing year-on-year deflation more substantially than forecast. PPI fell 7%Y (-7.9% in August), while RMPPI fell 10.1% (-11.4%). On a seasonally adjusted basis, both indices sustained sequential gains for the fourth straight month, by 0.8%M (+0.8% in August) and 0.7%M (+1%), respectively. Although the faster-than-expected ease in upstream deflation and the ongoing rapid monetary expansion are fuelling fears for high inflation next year, we are not too concerned at the current juncture, as we argue that broad money growth is currently biased upwards by a shift in household financial asset allocation, while the output gap from weak exports should help to contain inflation pressure in the next 12 months.

**Policy implications:** Although the State Council gave a cautiously optimistic assessment of the current economic situation and struck a less dovish policy tone at a meeting held on October 21, the policy message is broadly unchanged, namely to carry on “proactive fiscal policy and appropriately loose monetary policy” with a view to maintaining continuity and stability. The notable change in language compared to previous statements was the new reference to “managing inflation expectations” as a policy objective during the remainder of the year. In our view, the authorities are unlikely to resort to a rate hike, RRR hike or renminbi appreciation to “manage inflation expectations” as it stands, given that current inflation remains low and the economic recovery has just started to gain momentum. Rather, we suspect that the authorities may more likely resort to verbal intervention to ease the public concern about potential inflation, aided by less frequent adjustment to the prices that are still regulated by the government. These changes in policy tone are broadly in line with our expectations. Therefore, our policy call remains unchanged: the current policy stance should remain broadly unchanged towards year-end and turn neutral at the beginning of 2010 as the pace of new bank lending creation normalizes from about Rmb10 trillion in 2009 to Rmb7-8 trillion in 2010. We believe that policy tightening in the form of a base interest rate hike, RRR hike or renminbi appreciation is unlikely until 2H10.

## India: RBI Takes First Step Towards ‘Exit’

Chetan Ahya (65) 6834 6738  
Tanvee Gupta (91 22) 2209 7927

**No change in policy rates, but indication that reversal is beginning:** The Reserve Bank of India, in its quarterly monetary policy review, left policy rates unchanged as per market and our expectations. However, the RBI also gave a clear indication that the monetary policy reversal is beginning.

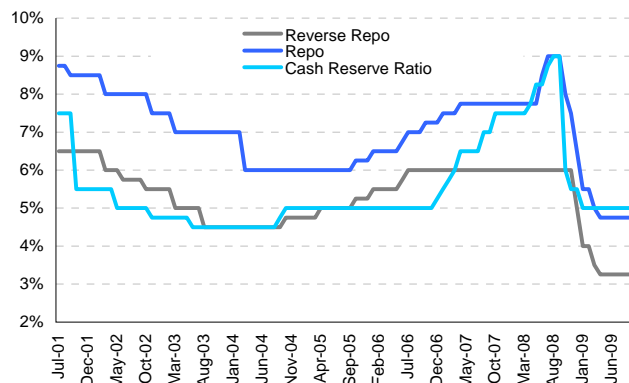
**We maintain our view that the RBI will lift policy rates by 25bp in January 2010:** By then, we believe that the central bank will have adequate comfort in the pace of recovery. However, we do not believe that this potential rate hike is likely to derail the recovery, as we see this increase in policy rates as a move towards normalization rather than tightening that hurts growth.

**Partial reversal in liquidity support measures:** The monetary policy statement noted that the RBI is initiating the first step towards ‘exit’ by discontinuing several unconventional liquidity support measures that were taken immediately after the credit crisis unfolded last year. The liquidity available through these measures was about US\$19 billion.

**Prudential norms tightened:** The RBI tightened provisioning norms for loans to the commercial real estate sector classified as standard assets. The RBI now requires banks to maintain a loan loss coverage ratio of 70% by September 2010. Earlier, there were no specific loss coverage requirements for banks and, as a result, the coverage rate varied between 30% and 90% across banks.

For more details, see [India EcoView](#), October 28, 2009.

## India: Policy Rate Movement



Source: RBI, CEIC, Morgan Stanley Research



October 28, 2009  
The Global Monetary Analyst

## Hong Kong: September CPI Lifted by Fiscal Concession Expiry

Denise Yam, CFA (852) 2848 5301

**September CPI was +0.5%Y due to expiry of the electricity bill subsidy:** After dipping into negative territory for three months, CPI inflation hopped back to +0.5%Y in September (-1.6% in August), but this was primarily due to the distortion from the expiry of the electricity bill subsidy in the month. Specifically, the HK\$300 per bill per month subsidy had been slashing the utilities index by around 40%Y over the past year. Although unused subsidy amounts for low electricity users are carried over to the coming months, the expiry of this measure resulted in a 23.4%Y jump in the utilities index, contributing a 2.3pp increase to the headline inflation rate. Netting out the distortion by all fiscal concessions currently in effect (i.e., waiver on property rates and public housing rent, electricity bill subsidy, and waiver on the levy on foreign domestic helpers), underlying deflation remained unchanged for the third straight month, at 0.3%Y.

**Economic recovery brings about pricing power:** The sound recovery in domestic consumer demand is enabling stronger pricing power in goods and services, such as clothing and footwear (+4.5%Y in September versus +2% in August). Although the year-on-year change in private housing costs continued to ease on the base effect (+0.9% in September versus +2% in August), the index level is certainly showing signs of bottoming

**Only a short and shallow deflation episode, with upside risks to our CPI forecasts:** While the pace of disinflation during 1H09 exceeded our expectations, deflation has so far been milder than forecast in recent months. This again highlights the sensitivity of Hong Kong's economic activity to shocks and the tendency to over- or undershoot, as the volatility of asset markets, which are large relative to the size of the economy, exacerbates cyclical fluctuations. We have argued repeatedly that the current deflation episode will be much shallower and shorter than that experienced during the painful economic restructuring in 1998-2003, in light of fundamental differences in the Hong Kong economy between now and then. Nevertheless, the stronger-than-expected rebound in asset markets this year has brought about a robust recovery in consumer demand and hence pricing power, posing upside risks to our CPI forecasts for this year and next, both at 0% currently.

## Korea: 3Q GDP Much Better than Expected

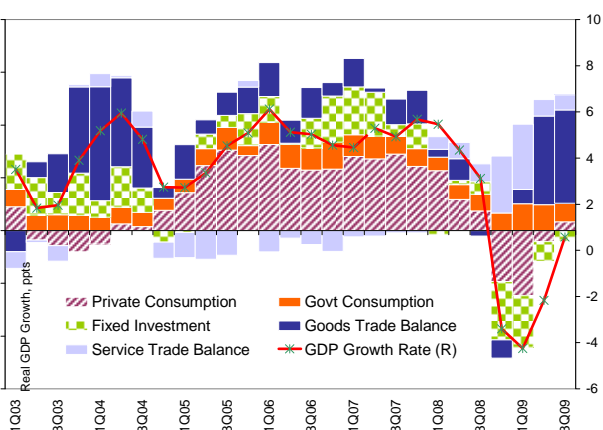
Sharon Lam (852) 2848 8927

Katherine Tai (852) 2848 8191

**Korea 3Q09 GDP came out much stronger than expected:** Although our forecasts were already at the highest end, Korea's 3Q09 GDP still beat expectations by a wide margin. 3Q real GDP growth came in at +0.6%Y (Morgan Stanley: +0.3%; consensus: -0.3%), compared to -2.2% in 2Q. This means that the economy has already climbed back to the pre-crisis level. On a seasonally adjusted QoQ basis, 3Q growth was +2.9% (Morgan Stanley: +2.1%; consensus: +1.9%), even higher than +2.6% in 2Q. The stronger sequential growth in 3Q is the biggest upside surprise as it indicates that Korea's recovery has extended beyond global restocking in 2Q. It also defies concerns of slowing government expenditure in 2H, as the pick-up in the private sector has been more than enough to offset the smaller government supports.

**We expect a 25bp rate hike in January, but December hike cannot be ruled out:** We maintain our GDP forecasts at -0.5% in 2009 and +5% in 2010 (versus consensus at -0.8% and +4%, respectively), yet we may see some upward revisions from consensus again. These data are very encouraging and may stir up speculation for imminent rate hikes again. We maintain our base case scenario for a first hike of 25bp in January, but do not rule out the possibility of a hike in December. We expect the policy rate to reach 3.5% by end-2010 from the current 2%, which should still be accommodative enough to support the economy.

## Korea: Growth Resilience Prevailed into 3Q09



Source: Bank of Korea, CEIC, Morgan Stanley Research



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## Brazil: Policy Rate on Hold

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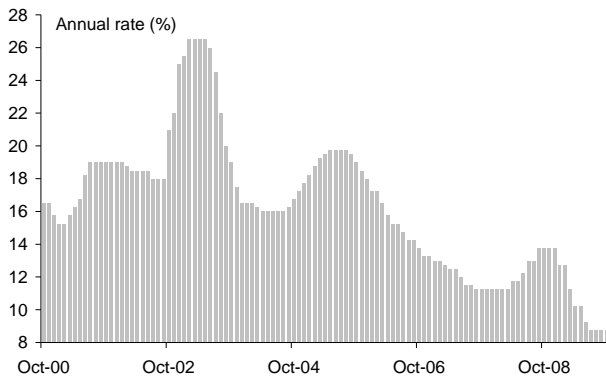
Marcelo Carvalho (55 11) 3048 6272

**Policy rates were kept on hold, with no change in the policy statement:** The COPOM kept rates unchanged at 8.75% on October 21, as universally expected. It was a unanimous vote, in an unusually quick decision – normally the announcement comes out later in the evening. The accompanying statement was exactly identical to the previous one (September), when the COPOM went on hold. The statement is therefore ‘neutral’ relative to the previous one, but seems ‘dovish’ in the sense that some market players looked for a more hawkish tone, in light of recent market pricing in the local yield curve. Exactly as before, the statement indicates that the COPOM takes into account the monetary policy easing implemented since January, on the one hand, and the slack in the economy, among other factors, on the other hand. The COPOM continues to say that the current level of policy rates is consistent with a benign inflation outlook. All eyes will now focus on the COPOM minutes, to come out next Thursday (October 29).

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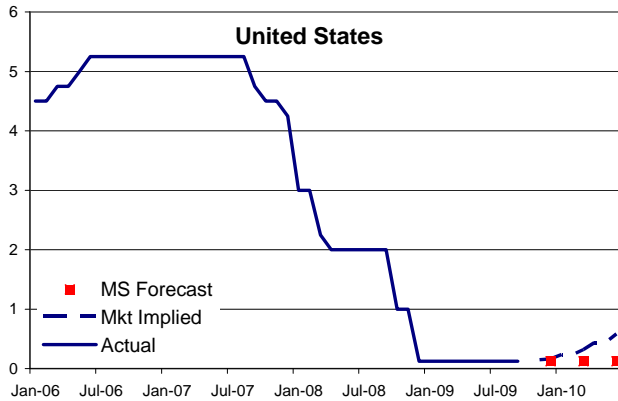
## Brazil: Selic Rate

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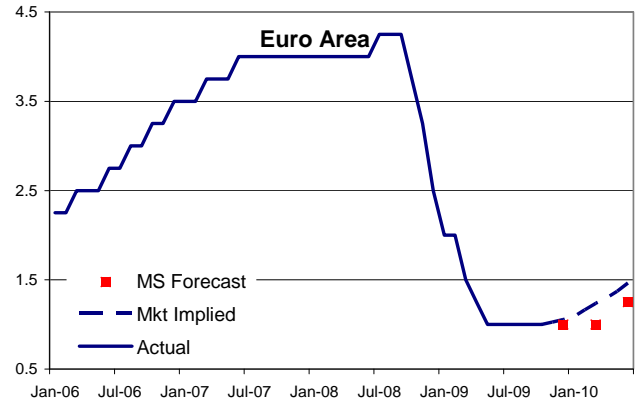


Source: BCB, Morgan Stanley Latam Economics

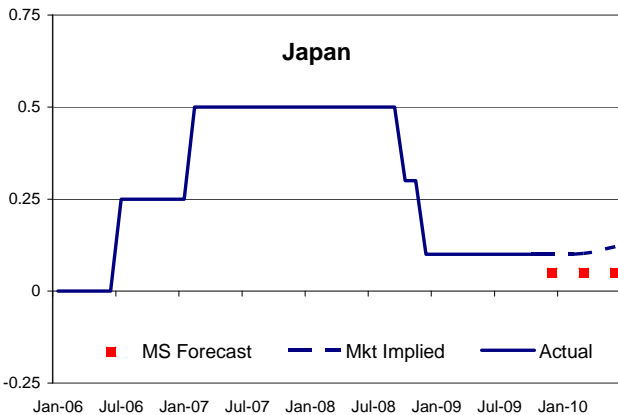
## Monetary Policy Outlook – Morgan Stanley versus Markets



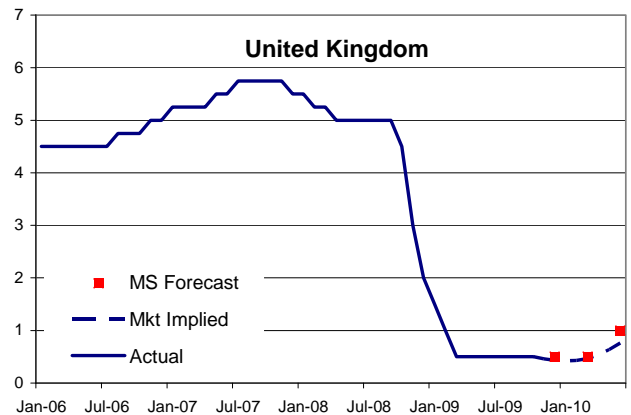
- We see the Fed waiting a bit longer before raising rates, but moving more quickly when it begins.
- We expect the Fed to start draining excess reserves early in 2010, and to start signaling that shift soon.



- EONIA likely to stay below refi for a while longer as liquidity spigots remain wide open.
- Considerable upside risks to the ECB staff projections of 0.2% GDP growth in 2010 could trigger shift in tone.



- We continue to expect interest rate policy to be eased slightly in 4Q09 as the policy rate is revised to a band of 0-0.10% (0.05% midpoint).
- A reintroduction of the policy duration commitment is the most likely option in the midst of deflation. The BoJ may recommit to sustaining present accommodative measures.

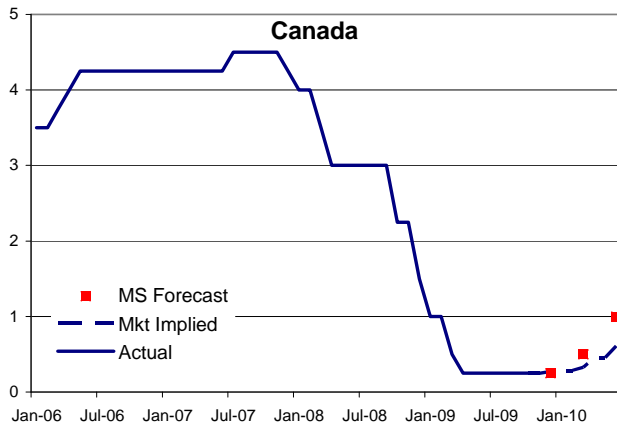


- We think that the MPC will start raising rates in around the middle of 2010. This seems to be largely priced in.
- Fiscal policy announcements will likely complicate decisions on timing/pace.

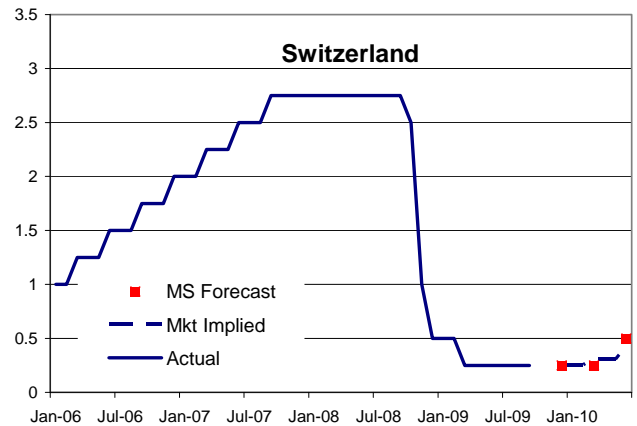
Source: National Central Banks, Morgan Stanley Research

Notes: (u) = unofficial target; Interest rate expectations are implied by overnight indexed swap (OIS) curves and may differ from those implied by other instruments; where adequate OIS data are not available, FRAs, foreign exchange swaps, and/or interbank cash rate futures are used; due to varying risk premia (such as liquidity, basis, credit, term, reserve management, calendar turns, etc.), these figures should be used as estimates only; where such instruments are not available, we have inserted our best guess of what markets expect based on consensus estimates.

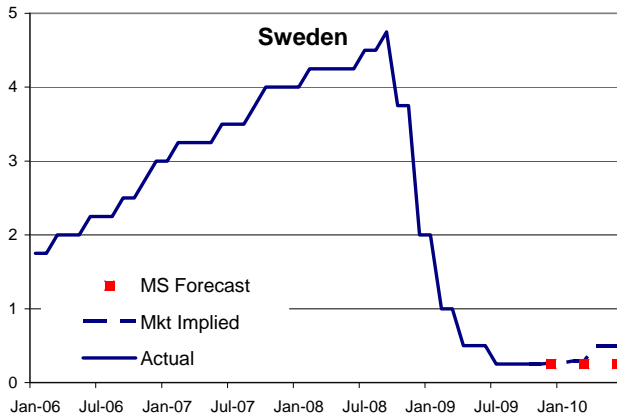
## Monetary Policy Outlook – Morgan Stanley versus Markets



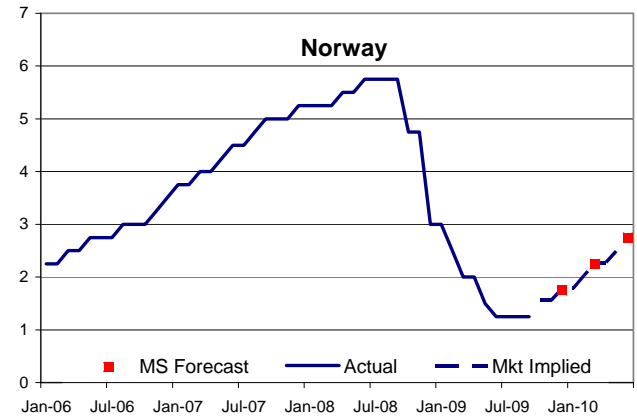
- There has been a significant improvement in the domestic and global outlook, making the BoC more comfortable to shift from the emergency policy stance.
- Given rising wages and higher commodities, inflation may prove to be a bigger threat than the BoC currently perceives.



- SNB unlikely to withdraw stimulus prematurely – we expect a first rate hike only around the middle of next year.
- With the SNB still concerned about downside economic and financial risks, Swiss-type QE via FX purchases is likely to continue for now.



- Riksbank's easing cycle in terms of interest rates has most likely reached its trough now.
- Watching the dissenting votes on the Executive Board closely for indications of a shift in consensus.

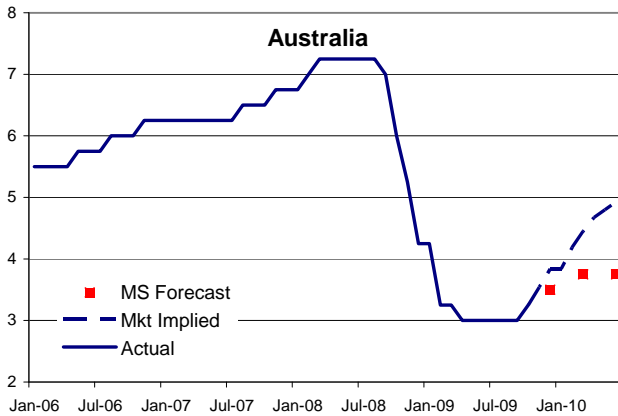


- NB has indicated measured pace of rates increases...
- ...which presents downside risks to our forecast.

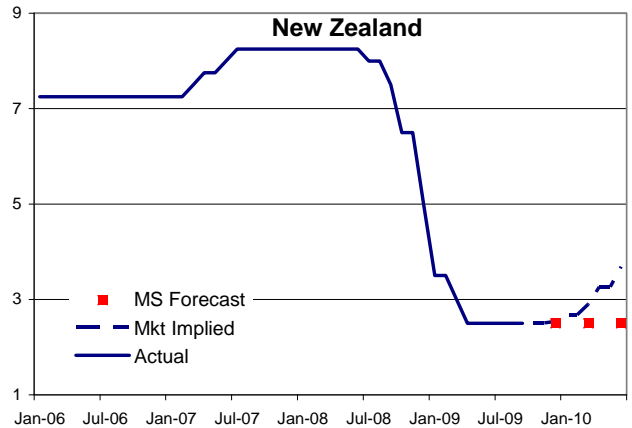
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Notes: (u) = unofficial target; Interest rate expectations are implied by overnight indexed swap (OIS) curves and may differ from those implied by other instruments; where adequate OIS data are not available, FRAs, foreign exchange swaps, and/or interbank cash rate futures are used; due to varying risk premia (such as liquidity, basis, credit, term, reserve management, calendar turns, etc.), these figures should be used as estimates only; where such instruments are not available, we have inserted our best guess of what markets expect based on consensus estimates.

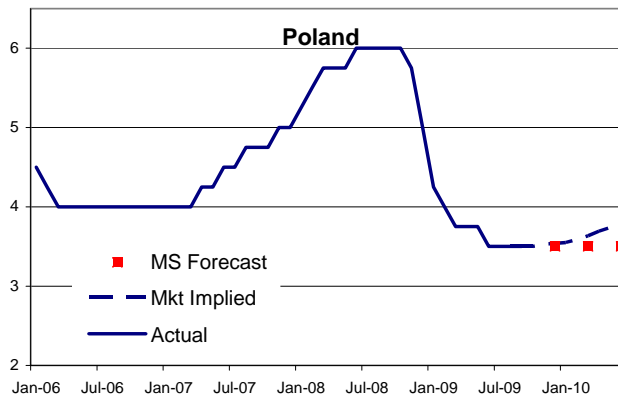
## Monetary Policy Outlook – Morgan Stanley versus Markets



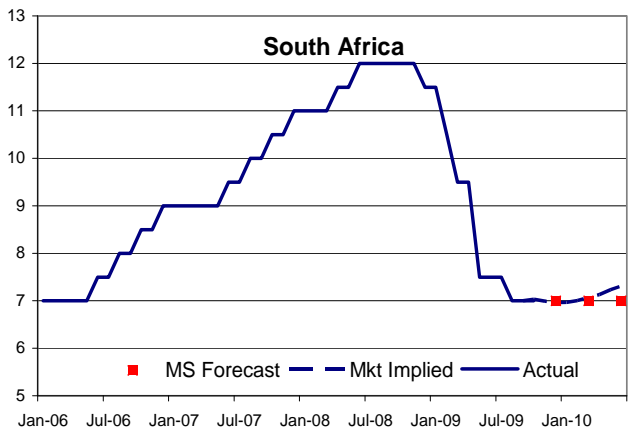
- RBA statement was more hawkish than we expected, so we now expect another hike in November.
- Market looking for aggressive normalisation of rates in 2010. This seems a stretch, but less so than we had thought.



- Market assessment of the risk of an earlier increase in the OCR is justified, particularly if data keep surprising to the upside.
- RBNZ guidance has policy rates at or below 2.5% through the latter half of 2010, but this is conditional on inflation.



- MPC has turned dovish, though less so recently.
- Zloty weakness could slow rate cuts.



- We expect policy rates to remain at current levels through 2010.
- Risks of double-dip recovery or exaggerated ZAR strength, prompting policy easing.

Source: National Central Banks, Morgan Stanley Research

Notes: (u) = unofficial target; Interest rate expectations are implied by overnight indexed swap (OIS) curves and may differ from those implied by other instruments; where adequate OIS data are not available, FRAs, foreign exchange swaps, and/or interbank cash rate futures are used; due to varying risk premia (such as liquidity, basis, credit, term, reserve management, calendar turns, etc.), these figures should be used as estimates only; where such instruments are not available, we have inserted our best guess of what markets expect based on consensus estimates..

October 28, 2009  
The Global Monetary Analyst

## Global Monetary Policy Rate Forecasts

Global Economics Team

	Current	4Q09	1Q10	2Q10	3Q10	4Q10	1Q11	2Q11	3Q11	4Q11	Last change (bps)	Since peak/trough (bp)	Since Dec 06 (bp)
United States	0.125	0.125	0.125	0.125	0.50	1.50	2.00	2.25	2.50	2.75	-87.5 (16/12/08)	-512.5	-512.5
Euro Area	1.00	1.00	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	-25 (07/05/09)	-325	-200
Japan	0.10	0.05	0.05	0.05	0.05	0.05	0.25	0.25	0.25	0.25	-20 (19/12/08)	-40	-40
United Kingdom	0.50	0.50	0.50	1.00	1.75	2.25	2.25	2.50	2.75	3.00	-50 (05/03/09)	-525	-450
Canada	0.25	0.25	0.50	1.00	1.75	2.25	2.50	2.75	3.00	3.25	-25 (21/04/09)	-425	-400
Switzerland	0.25	0.25	0.25	0.50	1.00	1.50	1.75	2.00	2.25	2.50	-50 (11/12/08)	-250	-175
Sweden	0.25	0.25	0.25	0.25	0.50	0.75	1.25	1.75	2.25	2.75	-50 (21/04/09)	-450	-275
Norway	1.50	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	+25 (28/10/09)	-425	-125
Australia	3.25	3.50	3.75	3.75	4.00	4.00	4.00	4.50	4.75	5.25	+25 (07/10/09)	+25	-300
New Zealand	2.50	2.50	2.50	2.50	3.00	3.50	3.75	4.00	4.00	4.00	-50 (29/04/09)	-575	-475
Russia	10.00	8.75	8.00	8.00	8.50	9.00	10.00	11.00	11.50	12.00	-50 (29/09/09)	-275	-75
Poland	3.50	3.50	3.50	3.50	3.75	4.00	4.25	4.50	4.50	4.50	-25 (24/06/09)	-250	-50
Czech Republic	1.25	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.00	-25 (06/08/09)	-250	-125
Hungary	7.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	-50 (29/09/09)	-400	-50
Romania	8.00	8.00	7.50	7.00	6.50	6.50	6.50	6.50	6.50	6.50	-50 (29/09/09)	-225	-50
Turkey	6.75	6.50	6.50	6.50	7.25	8.00	9.25	9.75	9.75	9.75	-50 (15/10/09)	-1075	-900
Israel	0.75	1.25	1.75	2.50	2.75	2.75	3.25	3.50	3.75	4.00	+25 (24/08/09)	-350	-275
UAE	1.00	1.00	1.00	1.00	1.50	2.50	3.00	3.50	4.00	4.25	-50 (28/01/09)	-425	-425
South Africa	7.00	7.00	7.00	7.00	7.00	7.00	8.00	8.00	8.00	8.00	-50 (13/08/09)	-500	-200
China	5.31	5.31	5.31	5.31	5.58	5.85	5.85	5.85	5.85	5.85	-27 (23/12/08)	-216	-81
India	4.75	4.75	5.00	5.50	6.00	6.25	6.50	6.50	6.75	6.75	-25 (21/04/09)	-425	-250
Hong Kong	0.50	0.50	0.50	0.50	1.00	2.00	2.50	2.75	3.00	3.25	-100 (17/12/08)	-625	-625
Korea	2.00	2.00	2.50	3.00	3.25	3.50	3.75	4.00	4.25	4.50	-50 (12/02/09)	-325	-250
Taiwan	1.25	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.00	-25 (18/02/09)	-238	-150
Singapore	0.68	0.70	0.70	0.80	1.00	1.30	1.55	1.80	2.05	2.30	-	-	-
Indonesia	6.50	6.50	6.50	7.25	8.00	8.50	8.50	8.50	8.50	8.50	-25 (03/08/09)	-300	-325
Malaysia	2.00	2.00	2.00	2.00	2.50	3.00	3.00	3.00	3.00	3.00	-50 (24/02/09)	-150	-150
Thailand	1.25	1.25	1.25	1.25	2.25	3.25	3.75	3.75	3.75	3.75	-25 (08/04/09)	-250	-375
Brazil	8.75	8.75	8.75	9.25	10.00	11.00	12.00	12.00	12.00	12.00	-50 (22/07/09)	-500	-450
Mexico	4.50	4.50	4.50	4.50	4.50	4.50	5.25	6.00	6.00	6.00	-25 (17/07/09)	-375	-250
Chile	0.50	0.50	0.50	0.50	0.75	1.75	3.25	4.50	4.50	4.50	-25 (09/07/09)	-775	-475
Peru	1.25	1.25	1.25	1.75	3.25	4.75	5.25	5.25	5.25	5.25	-75 (06/08/09)	-525	-525
Colombia	4.00	4.00	4.00	4.00	4.75	5.50	5.50	5.50	5.50	5.50	-50 (25/09/09)	-600	-550
<b>Global Policy Rate</b>	2.2	2.1	2.1	2.2	2.6	3.0	3.3	3.5	3.7	3.8			
std. deviation	3.1	2.7	2.6	2.6	2.6	2.7	2.8	2.8	2.8	2.8			
# countries above	14	13	15	16	17	17	17	18	20	19			
# countries below	18	19	17	16	15	15	15	14	12	13			
<b>G10 Policy Rate</b>	0.5	0.5	0.5	0.7	1.0	1.6	1.9	2.1	2.3	2.6			
std. deviation	1.0	1.1	1.2	1.3	1.3	1.3	1.3	1.4	1.5	1.6			
# countries above	3	3	3	5	6	5	6	6	6	7			
# countries below	6	6	6	4	3	4	3	3	3	2			

Source: National Central Banks, Morgan Stanley Research  
Note: Global policy rates are GDP weighted averages of national policy rates

October 28, 2009  
The Global Monetary Analyst

## Global GDP and Inflation Forecasts

	GDP			CPI		
	2009E	2010E	2011E	2009E	2010E	2011E
<b>GLOBAL</b>	<b>-1.2</b>	<b>3.7</b>	<b>3.7</b>	<b>1.9</b>	<b>2.9</b>	<b>3.3</b>
<b>G10</b>	<b>-3.4</b>	<b>1.9</b>	<b>2.1</b>	<b>0.0</b>	<b>1.4</b>	<b>1.8</b>
United States	-2.5	2.7	2.8	-0.4	2.1	2.5
Euro Area	-3.7	1.2	1.2	0.4	1.3	1.5
Germany	-4.9	1.7	1.4	0.4	1.0	1.3
France	-1.8	1.7	1.4	0.1	0.9	1.6
Italy	-4.5	1.2	1.2	0.8	1.1	1.4
Spain	-3.6	-0.7	0.8	-0.1	0.8	1.2
Japan	-5.9	0.8	1.0	-1.3	-1.0	-0.4
United Kingdom	-4.6	1.1	1.6	2.1	2.5	1.8
Canada	-2.4	2.7	3.7	0.8	2.1	2.1
Sweden	-4.8	1.8	2.4	-0.2	1.2	1.6
Australia	0.6	1.8	4.5	1.4	1.3	2.4
<b>Emerging Markets</b>	<b>1.5</b>	<b>6.1</b>	<b>5.6</b>	<b>4.3</b>	<b>4.5</b>	<b>4.9</b>
<b>CEEMEA</b>	<b>-6.2</b>	<b>3.4</b>	<b>2.7</b>	<b>8.7</b>	<b>7.4</b>	<b>7.9</b>
Russia	-8.5	4.0	2.5	11.8	8.0	10.0
Poland	1.4	2.8	2.2	3.5	2.6	2.3
Czech Republic	-4.5	2.1	1.5	1.1	1.7	2.1
Hungary	-6.4	0.7	1.4	4.3	4.2	3.0
Romania	-7.8	1.6	1.2	5.5	3.6	3.8
Ukraine	-15.0	4.5	2.5	16.3	12.5	11.0
Turkey	-5.2	3.5	4.2	6.2	6.6	5.7
Israel	0.2	2.7	3.1	3.3	2.9	2.4
UAE	-4.7	2.2	3.9	-0.5	0.9	2.3
South Africa	-1.7	2.7	3.4	7.2	5.9	5.5
<b>Asia ex Japan</b>	<b>5.5</b>	<b>8.0</b>	<b>7.3</b>	<b>2.2</b>	<b>3.4</b>	<b>4.0</b>
China	9.0	10.0	8.5	-0.6	2.5	3.5
India	5.9	7.9	7.6	10.1	6.4	6.2
Hong Kong	-3.8	2.5	3.5	0.0	0.0	2.0
Korea	-0.5	5.0	4.3	2.8	3.3	3.0
Taiwan	-6.0	2.2	3.5	-1.0	0.5	2.0
Singapore	-3.5	4.0	4.5	0.4	0.8	1.0
Indonesia	4.4	5.5	6.3	4.8	6.0	6.2
Malaysia	-3.5	4.3	4.8	0.5	1.5	1.7
Thailand	-3.5	4.3	4.8	-1.2	3.3	2.8
<b>Latin America</b>	<b>-2.6</b>	<b>3.3</b>	<b>3.3</b>	<b>6.4</b>	<b>6.0</b>	<b>5.9</b>
Brazil	0.0	4.8	3.5	4.9	4.4	5.0
Mexico	-7.0	2.4	2.9	5.4	3.5	3.6
Chile	-1.4	3.8	4.0	1.1	1.7	2.4
Peru	1.8	4.4	5.5	3.4	2.7	3.0
Colombia	-0.9	2.6	3.8	4.5	3.8	3.8
Argentina	-4.4	1.0	3.0	5.7	5.4	5.7
Venezuela	-1.9	1.3	1.8	27.4	34.7	28.6

Source: National Statistics Offices, IMF, Morgan Stanley Research estimates

Note: Figures in parenthesis indicate the country's or region's weight (in %) in global GDP, using PPPs.



## Global Economics Team

Richard Berner &amp; Joachim Fels, Co-heads of Global Economics

### Global Fixed Income Economics

Joachim Fels	Global	<a href="mailto:Joachim.Fels@morganstanley.com">Joachim.Fels@morganstanley.com</a>	+44 (0)20 7425 6138
Manoj Pradhan	Global	<a href="mailto:Manoj.Pradhan@morganstanley.com">Manoj.Pradhan@morganstanley.com</a>	+44 (0)20 7425 3805
Spyros Andreopoulos	Global	<a href="mailto:Spyros.Andreopoulos@morganstanley.com">Spyros.Andreopoulos@morganstanley.com</a>	+44 (0)20 7677 0528

### Americas

Richard Berner	US	<a href="mailto:Richard.Berner@morganstanley.com">Richard.Berner@morganstanley.com</a>	+1 212 761-3398
David Greenlaw	US	<a href="mailto:David.Greenlaw@morganstanley.com">David.Greenlaw@morganstanley.com</a>	+1 212 761-7157
Ted Wieseman	US	<a href="mailto:Ted.Wieseman@morganstanley.com">Ted.Wieseman@morganstanley.com</a>	+1 212 761-3407
David Cho	US	<a href="mailto:David.Cho@morganstanley.com">David.Cho@morganstanley.com</a>	+1 212 761-0908
Gray Newman	Latam	<a href="mailto:Gray.Newman@morganstanley.com">Gray.Newman@morganstanley.com</a>	+1 212 761-6510
Marcelo Carvalho	Brazil	<a href="mailto:Marcelo.Carvalho@morganstanley.com">Marcelo.Carvalho@morganstanley.com</a>	+55 11 3048-6272
Luis Arcentales	Chile, Mexico	<a href="mailto:Luis.Arcentales@morganstanley.com">Luis.Arcentales@morganstanley.com</a>	+1 212 761-4913
Daniel Volberg	Argentina	<a href="mailto:Daniel.Volberg@morganstanley.com">Daniel.Volberg@morganstanley.com</a>	+1 212 761-0124
Giuliana Pardelli	Venezuela	<a href="mailto:Giuliana.Pardelli@morganstanley.com">Giuliana.Pardelli@morganstanley.com</a>	+55 11 3048-6195

### Europe & South Africa

Elga Bartsch	Euro Area, ECB, Germany	<a href="mailto:Elga.Bartsch@morganstanley.com">Elga.Bartsch@morganstanley.com</a>	+44 (0)20 7425 5434
Daniele Antonucci	Italy, Spain	<a href="mailto:Daniele.Antonucci@morganstanley.com">Daniele.Antonucci@morganstanley.com</a>	+44 (0)20 7425 8943
Melanie Baker	UK	<a href="mailto:Melanie.Baker@morganstanley.com">Melanie.Baker@morganstanley.com</a>	+44 (0)20 7425 8607
Cath Sleeman	UK	<a href="mailto:Cath.Sleeman@morganstanley.com">Cath.Sleeman@morganstanley.com</a>	+44 (0)20 7425 1820
Oliver Weeks	Russia, Kazakhstan, Ukraine	<a href="mailto:Oliver.Weeks@morganstanley.com">Oliver.Weeks@morganstanley.com</a>	+44 (0)20 7677 6302
Tevfik Aksoy	Turkey, MENA	<a href="mailto:Tevfik.Aksoy@morganstanley.com">Tevfik.Aksoy@morganstanley.com</a>	+44 (0)20 7677 6917
Mohamed Jaber	MENA	<a href="mailto:Mohamed.Jaber@morganstanley.com">Mohamed.Jaber@morganstanley.com</a>	+44 (0)20 7677 8189
Pasquale Diana	Poland, Hungary, Czech, Slovakia	<a href="mailto:Pasquale.Diana@morganstanley.com">Pasquale.Diana@morganstanley.com</a>	+44 (0)20 7677 4183
Michael Kafe	South Africa, Nigeria	<a href="mailto:Michael.Kafe@morganstanley.com">Michael.Kafe@morganstanley.com</a>	+27 11 507 0891
Andrea Masia	South Africa	<a href="mailto:Andrea.Masia@morganstanley.com">Andrea.Masia@morganstanley.com</a>	+27 11 507 0887
Alina Slyusarchuk	Russia, Kazakhstan, Ukraine, Baltics	<a href="mailto:Alina.Slyusarchuk@morganstanley.com">Alina.Slyusarchuk@morganstanley.com</a>	+44 (0)20 7677 6869

### Asia

Robert Feldman	Japan	<a href="mailto:Robert.Feldman@morganstanley.com">Robert.Feldman@morganstanley.com</a>	+81 3 5424 5385
Takehiro Sato	Japan	<a href="mailto:Takehiro.Sato@morganstanley.com">Takehiro.Sato@morganstanley.com</a>	+81 3 5424 5367
Takeshi Yamaguchi	Japan	<a href="mailto:Takeshi.Yamaguchi@morganstanley.com">Takeshi.Yamaguchi@morganstanley.com</a>	+81 3 5424 5387
Qing Wang	Greater China	<a href="mailto:Qing.Wang@morganstanley.com">Qing.Wang@morganstanley.com</a>	+852 2848 5220
Denise Yam	China, Hong Kong	<a href="mailto:Denise.Yam@morganstanley.com">Denise.Yam@morganstanley.com</a>	+852 2848 5301
Sharon Lam	Korea, Taiwan	<a href="mailto:Sharon.Lam@morganstanley.com">Sharon.Lam@morganstanley.com</a>	+852 2848 8927
Steven Zhang	China, Hong Kong	<a href="mailto:Steven.Zhang@morganstanley.com">Steven.Zhang@morganstanley.com</a>	+86 21 2326 0015
Katherine Tai	China, Hong Kong, Korea, Taiwan	<a href="mailto:Katherine.Tai@morganstanley.com">Katherine.Tai@morganstanley.com</a>	+852 2848 8191
Chetan Ahya	ASEAN, India	<a href="mailto:Chetan.Ahya@morganstanley.com">Chetan.Ahya@morganstanley.com</a>	+65 6834 6738
Deyi Tan	Singapore, Malaysia	<a href="mailto:Deyi.Tan@morganstanley.com">Deyi.Tan@morganstanley.com</a>	+65 6834 6703
Shweta Singh	ASEAN	<a href="mailto:Shweta.Singh@morganstanley.com">Shweta.Singh@morganstanley.com</a>	+65 6834 6739
Tanvee Gupta	India	<a href="mailto:Tanvee.Gupta@morganstanley.com">Tanvee.Gupta@morganstanley.com</a>	+91 22 2209 7927

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**The Americas**

1585 Broadway  
New York, NY 10036-8293  
United States  
Tel: +1 (1)212 761 4000

**Europe**

20 Bank Street, Canary Wharf  
London E14 4AD  
United Kingdom  
Tel: +44 (0)20 7425 8000

**Japan**

4-20-3, Ebisu,  
Shibuya-ku,  
Tokyo 150-6008, Japan  
Tel: +81 (0)3 5424 5000

**Asia/Pacific**

1 Austin Road West  
Kowloon  
Hong Kong  
Tel: +852 2848 5200