

APAC Developed Markets Rates Strategy

Men at Work Down Under Supporting Higher Yields

- The Aussie market has had a rougher ride this week as sentiment has continued to shift regarding the RBA policy outlook. The bearish re-pricing of the front-end, given added momentum by the latest employment report, has moved both the curve and cross-market spreads.
- We think this opens fresh opportunities in OIS space in terms of flattening trades. However, we are cautious regarding short-term swap tenors, such as 1y1y, which can set at much higher levels before the turn in the policy cycle. We book profits on ACGB curve flatteners, which have reached target.
- We are more comfortable holding cross-market risk, although the re-pricing in the AUD front-end has reflected in near-term underperformance. Looking forward, the most likely catalyst for a break higher in global yields will be stronger US growth. In our view it makes sense to retain a long AUD versus USD exposure as a medium-term strategy.
- Chinese policy risks still favour holding insurance trades like 1x2 ratio receiver spreads on mid-curve tails like 5y. We have also taken profit on our long TCV 22 ASW position to fade the seasonally high end-of-quarter flows by domestic banks.
- The 10-year sector on the JGB curve is likely to outperform the 5-year sector and the super-long sector in the case of a dramatic expansion of long-term JGB purchase by the BOJ. We stay wary of headline risks leading to the April BOJ board meeting.

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

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Figure 1. Strategy Summary Table

APAC Developed Markets	View	Strategies
Direction	Outright duration looks unattractive reflecting improved prospects for global growth.	Neutral on duration. Seller of rallies in ACGBs.
Yield Curve	AUD curve still looks directional (bear steepening). Ample scope for NZD rate hike expectations to increase following a lift in NZ business conditions and outlook.	Conditional 2s-10s AUD bear steepeners. Scale into NZD 9m 1y-2y swap steepeners.
Cross-market	Long AUD vs USD and CAD. Cross-market trades should also benefit from falling AUD versus USD yield betas.	Receive AUD rates vs USD, eg 5y5y swap or bonds. Also, long 10y ACGB vs CAN. Sell 6m10yr AUD payers into USD payers.
Spreads	Neutral on spreads due to end-of-quarter effects. Tightness of European SSA spreads vulnerable to downgrades risks for the UK and Netherlands. Lower bank demand for wholesale funding and an abundant supply of central bank liquidity should cap funding spreads.	Neutral on spread product. Bias is to hold Renten over EIB. End-of-quarter reporting by domestic banks supports receiving AUD/NZD FX-OIS basis.
Inflation	AUD BEIs expected to hold within tight ranges in line with the RBA outlook. The latest price indicators favour a mild short bias.	Prefer receiving fixed in 10y ZCS closer to 3.00%.
Volatility	Gamma looks to have found a base and now looks better medium-term value than vega on selected tenors. Add low-cost bullish structures for near-term insurance given the cheapness in volatility. Also look to add low-cost medium-term bearish positions in the gamma sector.	Sell AUD vega to buy gamma on 10yr tails. Enter a 1x2.1 +25bps wide receiver spread in AUD 3m5y. Scale into 1x1 +25bps wide ATM+75bps payer spreads in AUD 1y1y.

Source: Citi Research

APAC Developed Markets

Australia and New Zealand Rates Strategy

A rougher ride for local bond markets

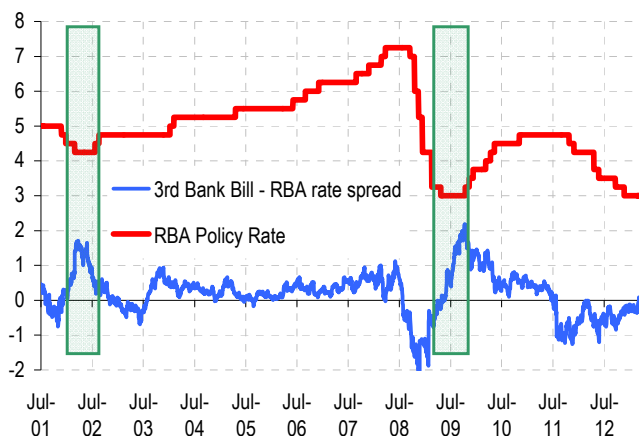
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This week we have seen US markets take further evidence of economic strength in stride, with strong Treasury bond auction results seeing 10yr Notes failing to break through 2.08% resistance (reflecting lighter investor positioning) and a range-trading pattern persisting in Bunds, as political risks remain to the fore in some non-core markets (the tightening trend in core-non core EMU spreads has clearly lost momentum and may well reverse in our view). However, local markets have had a rougher ride as sentiment has continued to shift regarding the RBA policy outlook.

The re-pricing of the front-end has moved both the curve and cross-market spreads. Here we assess these dynamics and conclude that while the front-end of the OIS curve now looks worth receiving (on a spread basis), there is ample scope for short-end forwards to set at higher yield levels at this stage of the policy cycle. As we discuss below, the underperformance of AUD on a cross market basis is consistent with the relative pricing in STIR spreads; here we think that further US underperformance will be conditional on both a stabilization of RBA policy rate expectations and a progressive pricing for a reversal in Fed policy (possibly by mid 2015 if the US economy continues to pick up). Both are likely in our view and a long Aussie versus US trade continues to make good sense as a medium-term trading strategy.

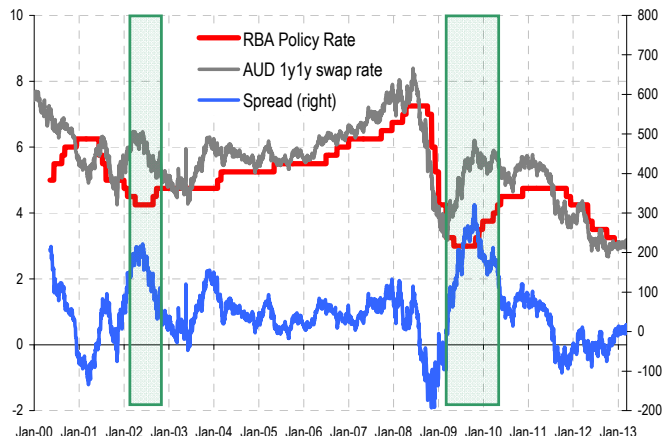
The recent shift in perceptions over the outlook for RBA policy has occurred even though local market economic data has been mixed and there are genuine reasons to question the resilience of growth in China: we note the near 14% y/y drop in Chinese energy production in Feb and the recent weakness in Chinese equity prices, for example. Recent domestic data has revealed disappointing business confidence (NAB business confidence came in weaker than expected) but with consumer confidence registering some modest improvements— see [Business Still Not Happy; Test Will Be Whether Confidence Converts Into Spending](#). Most surprising has been the outsized jump in February employment (+71k) which our economists' dismiss as being an inaccurate barometer of labour market strength. However, this has clearly served as a catalyst to push the bond market (and the front-end in particular) into a higher yield trading range. Regardless of the accuracy of the headline employment data, our economists do believe that the unchanged unemployment rate raises the bar to a further policy easing unless there are clearer signs of economic moderation or greater risks offshore down the line (see [A Funny Thing Happened on the Way to the \(Labour Market\) Forum](#) and our discussion on Chinese policy risks below.

Figure 2. Short-end pricing versus RBA policy rate



Source: Citi Research

Figure 3. AUD forwards versus RBA policy rate cycle



Source: Citi Research

In Figure 2 and Figure 3 we show the historical context of short-term AUD rate tenors against the policy cycle. We assume that the market is right in thinking that the RBA is now in the late stages of its easing cycle. Again, the most significant risk to this view is a much sharper slowdown in China. The first chart shows the spread between the 3rd bank bill contract (currently Dec) and the policy rate, which has already moved back into positive territory (currently around +10bp). It is unlikely that the very short-end of the AUD curve will sell off more sharply while there is still some residual easing expectation priced into the curve. In our view we are still some considerable distance from a point in time where the market could conceivably justify pricing in a turn in the cycle within a short time frame (i.e. within a 6-9m time span). In terms of current OIS pricing, there is now only around 12bp of residual RBA easing priced in over the remainder of 2013 (and the cycle), or which around 4bp is priced in over the next two RBA meetings (which seem increasingly likely to produce unchanged policy outcomes). We think that paying May OIS versus a long position in October OIS, at a spread of -8bp offers an attractive proposition (note that we have recently taken profits on a June-Dec OIS flattener prior to the recent front-end correction – see *Tradesheet* for details)

Trade: Pay May 2013 OIS versus October OIS at a spread of -8bp. Target -25bp. Stop +2bp.

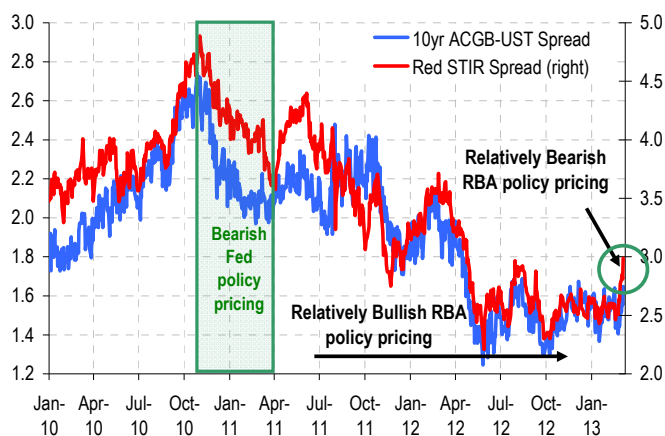
By contrast we see that there is an historical precedent for much higher short-term forwards, such as 1y1y and 1y2y even before the end-of-cycle easing has taken place. In the previous cycle 1y1y traded more than 300bp over the cash rate, making the current 35bp premium look very tame indeed (see chart). For those investors looking for short-end retracement trades we suggest looking at new receiver spread positioning in these tenors (we presented a table of receive side structures in last week's publication and refresh our thoughts on mid-curve tenors below), but we would avoid front-end flattening strategies beyond the 2013 OIS curve, as discussed (Note that we are choosing to book a 76c profit on one of our legacy receiver fly recommendations this week, which is motivated by the fact that the recent correction in short-end yields has pushed us much closer to the maximum payout level on the trade, which had been previously been over reached – see our *Closed Trades* section for full details).

Cross- market pricing is mirroring policy rate expectations still

ACGBs have underperformed on a cross-market basis, consistent with the re-pricing that has taken place in the STIR market. In terms of benchmark 10yr bonds, Bunds have been the notable out performer this week but we would not even contemplate fading the move vs ACGBs given the persistent risks surrounding Italy. Below we show the consistent relationship between ACGB-UST spreads and relative policy rate expectations. Figure 4 highlights periods when the main driver of this spread relationship has been the Fed and when, more recently, the RBA has been the dominant force. Given recent market pricing, it is clear that the Fed is still the silent partner in this relationship and we should expect cross market spreads in the near-term to mostly reflect further shifts in RBA policy rate expectations rather than changing views on the Fed (this may need to await clarification of US fiscal risks, further strong payroll outturns and quite likely some communication suggesting a reduced pace of Fed assets purchases in the second half of the year, possibly confirmed in the July HH testimony)

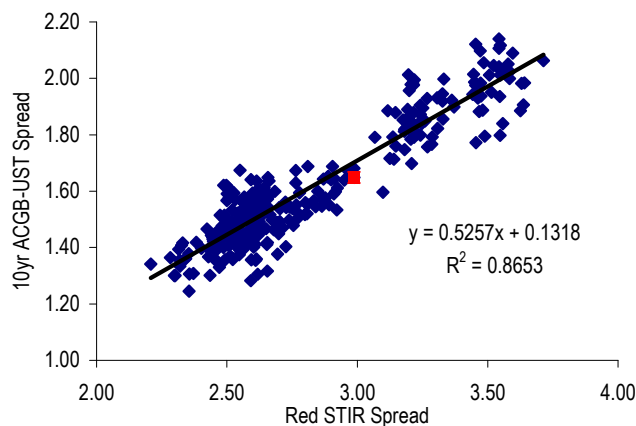
Presently, 10yr UST-ACGB spreads in the mid 160bp area look quite fairly priced given the move in the AUD stir curve but we retain our view that ACGBs should outperform strongly over the medium-term, particularly once the US money market curve begins to seriously contemplate the prospect of Fed tightening, which our economists envisage might occur by mid 2015 on the basis of continuing improvement in the US economy (and this prospect should be reflected in STIR spreads in our model).

Figure 4. Cross market spreads – reflecting policy rate risk



Source: Citi Research

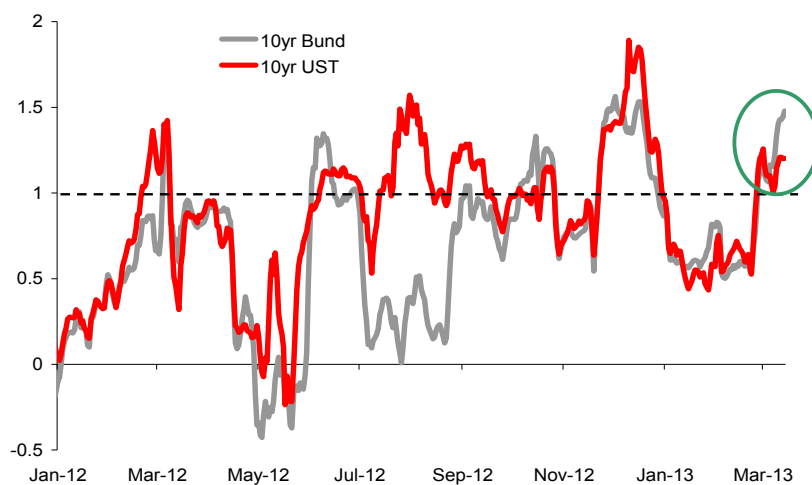
Figure 5. 10yr ACGB-UST spreads vs STIR spreads (Jan 2012 to date)



Source: Citi Research

Although red and green pack STIR spreads are quite capable of pricing in a more bearish AUD rate outlook well before the trough in a policy rate cycle (akin to our previous comments on AUD 1y1y), we are less concerned about holding cross market risk given that the most likely catalyst for a break higher in AUD term yields is likely to be driven out of the US. Our one note of caution for the immediate time frame is that yield betas between AUD and US rates markets are once again very elevated (even more so versus Bunds), which might suggest that any spread compression will need to wait for a stabilization of RBA policy rate expectations or could come about as a result of a consolidation phase for risk assets.

Figure 6. 1m yield betas: 10yr ACGBs versus USTs and Bunds (weekly changes)



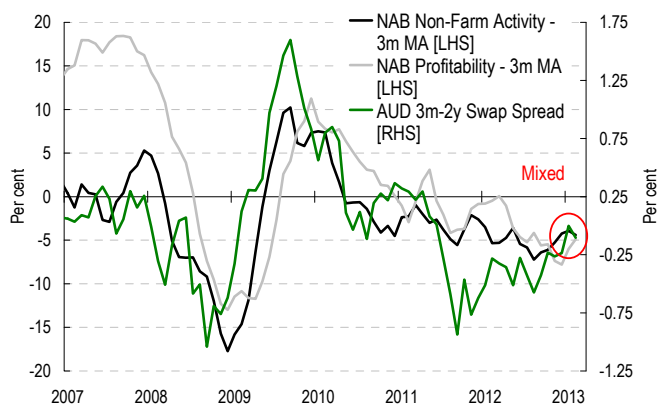
Source: Citi Research

Trade Update – Seek protection against China risks, Cautious on semis

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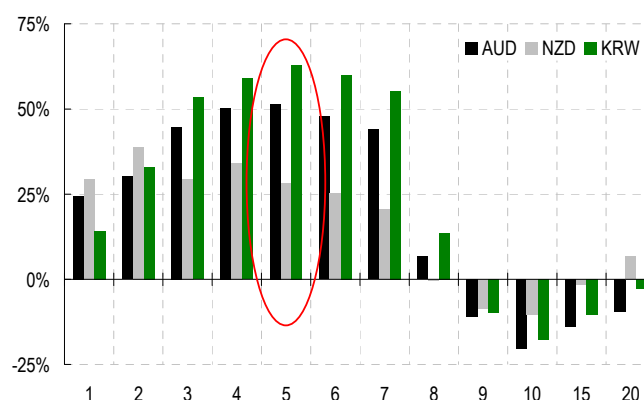
Although the growth outlook in Australia has stabilised, we still consider it to be susceptible to downside risks offshore particularly from China. This was highlighted in the February NAB survey of non-farm business conditions which showed a decline in firms' profitability particularly in the mining and wholesale sectors. We also constructed our own proprietary activity indicators based on the difference between 'forward orders' and 'stocks'. As we can see in Figure 7, our activity indicators have tended to track the steepness of the STIR curve which we proxy by the AUD 3m-2y swap spread. For the month of February our activity index declined on a trend basis with 'forward orders' falling across all sectors except for the finance/business/property sector. Indeed, the drag on our activity indicator was greatest in wholesaling with forward orders declining and stocks increasing. This gives up some of the earlier strength in January attributed to the mining sector and Lunar New Year activity in China.

Figure 7. AUD 3m-2y Swap Spread vs Activity Indicators



Source: Citi Research, Bloomberg

Figure 8. 6m correlation between CNY swaps and selected G10 swaps based on weekly swap changes across tenor

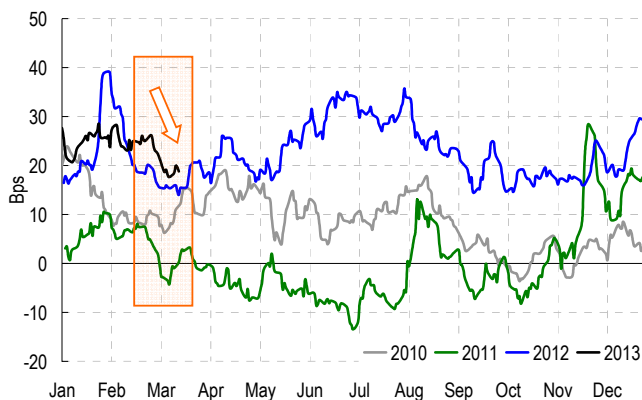


Source: Citi Research, Bloomberg

Reformist policies from the new Chinese leadership are likely to heighten uncertainty over fixed-asset investment which has been a crucial driver of demand for Australian exports like iron ore and coal. For example, the State Council recently announced it would 'corporatise' the Ministry of Railway's commercial operations by integrating it into China Railway Corporation which will now become responsible for issuance of construction orders (see [China Railways - MoR Abolished and Dissolved into Administrative & Operational Bodies](#)). We expect increased competition for train manufacturing and network construction to impact negatively on the volume and price of commodity inputs demanded. Indeed, the government restructuring raises major questions over the viability of future railway investment projects. Many of these are unprofitable which could prove to be too high a hurdle for private sector participation given the hefty construction costs. We think insurance trades make sense for AUD yields which are most sensitive in the belly to China risks. This is illustrated in Figure 8 which shows the 6m correlation between CNY swaps and selected G10 swaps based on weekly swap changes. Over the last 6m the 5y tenor in AUD has displayed the highest correlation to CNY rates exceeding 50% which is significant compared to other China proxies like KRW and NZD. 1x2 ratio receiver spreads in tails like 5y remain attractive given the low upfront premium (see *Tradesheet* for details).

In semis we remain cautious but still see value in holding QTC debt over NSWTC based on the medium-term ratings outlook. However, Q2 is likely to provide better opportunities to re-enter as it marks the beginning of the new Japanese fiscal year. In [Bond Voyage?](#) we highlighted the seasonal Q1 outperformance of semis on ASW as domestic banks bolster liquid asset holdings for semi-annual reporting purposes (see Figure 9). As we approach the end of Q1 we look to fade this seasonality and have decided close our long TCV 22s ASW position for a +7bps gain. Amongst the semis we favour an underweight exposure to WATC which we think is best expressed by selling WATC 21s against buying TCV 22s for a +10bps yield pickup (see [Best Not Necessarily in the West](#) and *Tradesheet* for details). Uncertainty around the funding and costs of the newly elected WA government's policy platform is likely to raise the spectre of more negative ratings action. There is a high risk of underperformance based on key budgetary performance metrics considered by the major ratings agencies which we think could force ratings agencies to act on their negative outlook assessment of WA (currently rated triple-A).

Figure 9. Approximate TCV 10y ASW Margin



Source: Citi Research, Bloomberg

Figure 10. WATC 21-TCV 22 Yield Spread



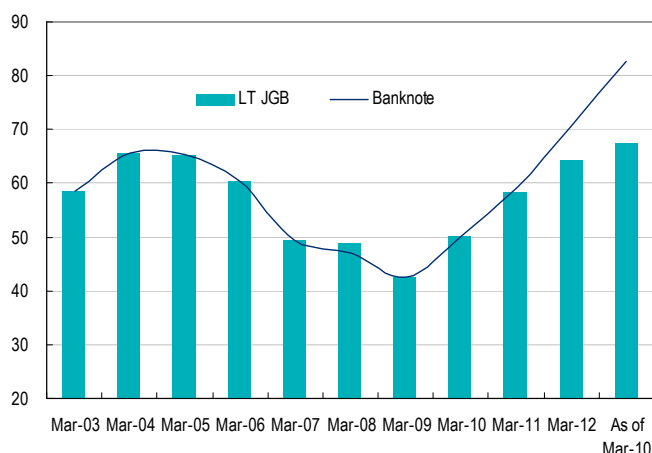
Source: Citi Research

Japan Rates Strategy

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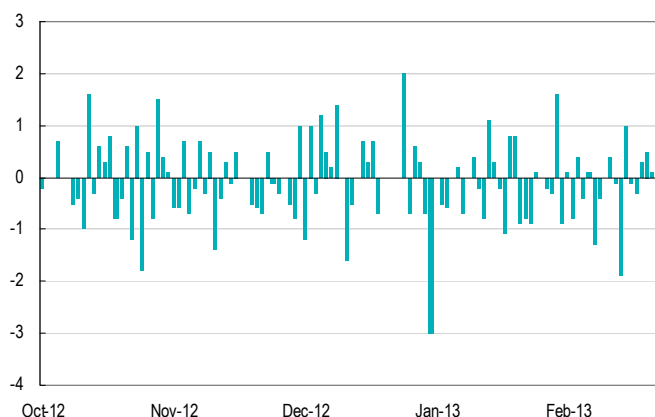
The Banknote rule, which is a cap for long-term JGB outstanding in the BoJ's balance sheet (Figure 11), is recently on the discussion table as it concerns the feasibility of the BoJ's additional purchases of long-term JGBs. Currently, the BoJ buys long-term JGBs via two avenues: Asset Purchase Program (APP) that was set up as part of a comprehensive easing in 2010, and the so-called *Rimban* that is part of money market operations and adjusted according to the required money supply in response to economic growth.

Figure 11. Banknote rule and JGB holdings [Via Rimban, ¥trn]



Source: BoJ, Citi Research

Figure 12. Daily Changes of 5Y JGB Yield [bp]

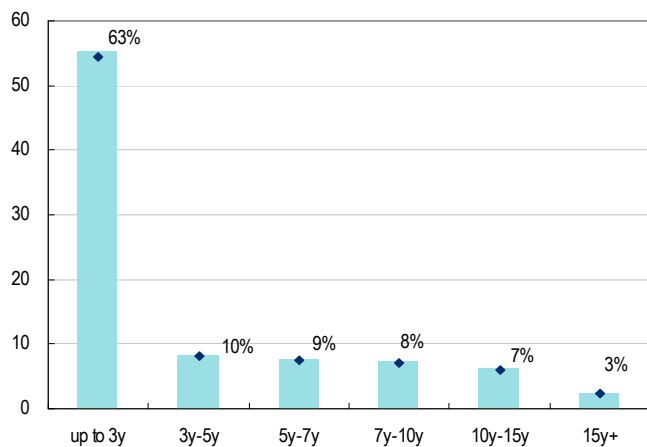


Source: Bloomberg, Citi Research

Under Shirakawa's leadership, the BoJ adhered to the Banknote rule and reiterated that the Bank's long-term JGB purchases should not be mistaken for fiscal financing. The next BoJ governor will likely adopt bold monetary easing measures such as the extension of bond maturities purchased under APP. The current targeted maturities are between 1-3 years, the yields of which are well anchored by the BoJ's policy duration effect that penetrates up to 5yr sector. The magnitude of yield changes in this tenor has been within +/-2bps for the past 6 months except for one day in January on the back of IOER cut expectations and aggressive T-Bill purchase operations by the BoJ (Figure 12). The BoJ's large-scale operation within a limited maturity segment (Figure 13) could distort the term structure of bonds held by domestic investors and reduce liquidity. The 2-3yr tenor of JGB is the core portfolio maturity of Japanese banks as it is close to the average maturity of liabilities. The BoJ pointed out in the financial system report in October 2012 that 'interest rate risk has been rising at regional banks and shinkin banks reflecting the increase in JGB investment.' We suspect such outcome stems from the BoJ's policy schemes. In the case that the maturity of long-term JGB purchases under APP is extended, the scheme of APP will have little meaning difference from the Rimban operation where the largest proportion of purchase falls in the maturity between 1-10 years.

One proposal would be consolidating the two operations into one based on the Rimban framework. Risk asset purchases currently conducted under APP can be separately considered as fund supplying operations in a similar manner but not necessarily within one program box. The policy focus of the next BoJ management is likely to be transcendent in the magnitude of easing compared to the Shirakawa's era.

Figure 13. BoJ's JGB Holding by Maturity Segment [¥ trn as of end-Feb]



Source: BoJ, Citi Research

Figure 14. 5x5Y vs 10x10Y Forward Swaps[%]



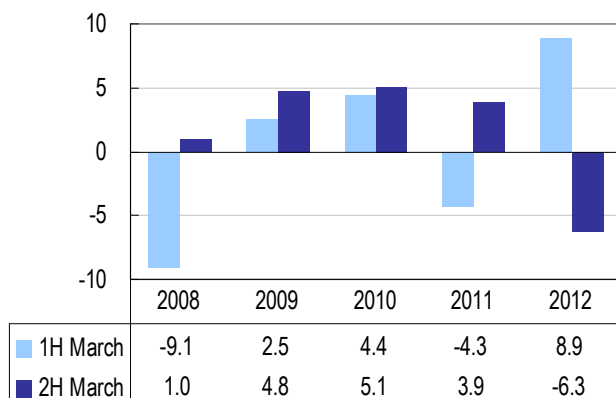
Source: Bloomberg, Citi Research

If the banknote rule is lifted and the size of Rimban operation is increased, we expect the long-term sector to outperform versus medium- and super-long JGBs. Even if the maturity segment is to be revised from the current one under Rimban, large proportion of JGB purchases by the BoJ will be up to the long-term sector, considering amount outstanding and market liquidity. The first monetary policy meeting under the new BoJ leadership team is scheduled on April 3-4, and there is a possibility of an emergency meeting as early as the last week of March, immediately after the appointment of the next governor and deputies. The scheme revision could be a likely option.

Market expectations for 'bold monetary easing' persist and sporadic market correction is well supported by dip buyers. In the forward curves, steepening trend since early March has reversed in the last few days (Figure 14). A series of key JGB auctions this month has also been digested. We therefore close our current strategy of paying 5yr forward 5yr swap rates, as a precaution to an emergency meeting being held this month. The initial cost was 1.24% and we loss-cut at 1.18%.

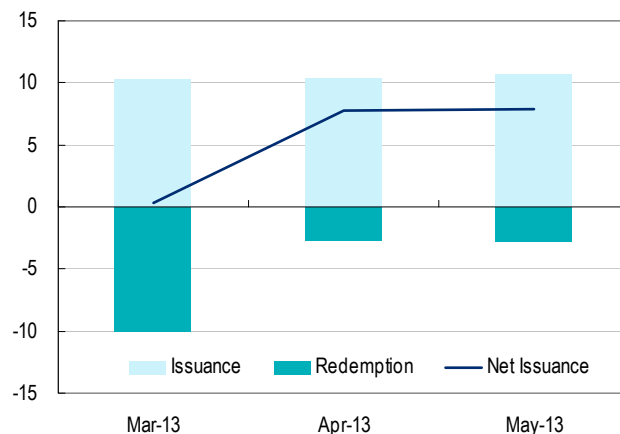
There is a general view that tight supply-demand will cause interest rates to decline in March, but a look at the yield on 10yr JGBs over the past five years shows that this is not the case (Figure 15). In fact, 10yr JGB yields have often risen in the second half of March. This may be because investors are wary of increase in interest rates early in the new fiscal year, expecting profit taking at that time. Last year, however, the reverse was true. Yields declined significantly in the second half of the month, partly in reaction to rapid increase in the first half. This year, yields rose quickly in the first half of March, mainly in the super-long sector. Few investors will have reason to sell JGBs through the end-March, when FY2012 ends. And given the big gains in Japanese equities, they do not need to realize profits on JGBs to cover the appraisal losses. However, JGBs yields have declined as they price in monetary easing of "a new dimension," despite the facts that the BoJ is yet to act. As the market appears to be anticipating significant monetary policy action, we think it will be vulnerable to comments by BoJ officials and stay wary of headline risks.

Figure 15. Changes of 10yr JGB Yield in March [bp]



Source: Citi Research

Figure 16. Net JGB Issuance [Issuance-Redemption, ¥ trn]



Source: BoJ, MoF, Citi Research

Many investors will likely be contemplating selling JGBs to realize profits early in the next fiscal year, when the BoJ is likely to implement further easing under its new leadership. What happens after that is the problem. Whether investors choose to realize profits at the same time as reshuffling portfolios will depend upon their outlook for the market in the following month. There could be problems with May JGB auctions, as there are concerns regarding market liquidity for 10yr auctions around the time of the Golden Week holidays. And auctions of 20yr, 30yr and 40yr bonds will coincide for the first time, on top of deteriorating supply-demand balance in April and May (Figure 16). If there is a shift to risk on sentiment, latent demand for JGBs is likely to weaken as investors' risk tolerance rises due to the view that the yen will weaken and Japanese equities will rise. The morning edition of the February 21 Nikkei reported that the Government Pension Investment Fund will review its asset allocation in FY2013, and will be considering lowering the weighting of bonds and raising the weighting of Japanese equities. If the report is accurate, the asset allocation could change as early as H2 FY2013. Out of consideration for the impact on markets, the GPIF is likely to make the changes gradually. Decline in fiscal discipline is also of concern. The Abe government had planned to draft a "big-boned" policy around June, and this is expected to outline a medium- to long-term path to fiscal consolidation. We think it will be difficult for the government to push policies that are likely to hurt voters, such as cuts to social welfare benefits and public works spending, before the Upper House election on July 21. This is likely to stimulate expectations for an increase in JGB yields.

Tradesheet

New Trades: Pay AUD OIS May2013 versus Oct2013 at a spread of -8bp. Target -25bp. Stop +2bp.

Closed Trades: Buy ACGB 2023 vs 2020 reached target with a profit of **+10 bps**.

Take profit on AUD 1y2y 75bp wide 1/2/1 receiver fly for a gain of **+76 c**.

Take profit on buy TCV 2022 on ASW for a profit of **+7 bps**.

Stopped out of buy AUD 23s vs CAN 22s with a loss of **-21 bps**.

Close out pay JPY 5y5y with a loss of **-6 bps**.

Figure 17. Record of Open Trades

Country	Trade	Levels	Publication Date	
AUD	Buy TCV 6% Oct 2022. Sell WATC 7% Jul 2021.	Open 10bp Current 9.7bp P&L -0.3bp Target -6bp Stop 18bp	APAC DMRS 11 March 2013	
Cash Curve	Buy TCV 6% Oct 2022 at 4.22% Sell WATC 7% Jul 2021 at 4.13%			
AUD	Buy AUD 1y1y payer spread	Open 3.2c Current 5c P&L 1.8c Target 24c Stop 0c	APAC DMRS 22 February 2013	
Volatility	Buy 1 x AUD 1y1y 3.79% strike payer Sell 1 x AUD 1y1y 4.04% strike payer			
NZD	NZD 9m fwd 1y2-y steepener	Open 17bp Current 21bp P&L 4bp Target 34bp Stop 0bp	APAC DMRS 07 February 2013	
Swap Curve	Receive NZD 9m1y Pay NZD 9m2y			
AUD	AUD 1y fwd 2y-10y conditional bear steepener	Open 0 Current -34bp P&L -34bp Target 150bp Stop -50bp	APAC DMRS 07 February 2013	
Volatility	Sell 4.17 x AUD 1y2y ATM payer (3.26% strike) Buy 1 x AUD 1y10y ATM payer (4.29% strike)			
AUD	Buy AUD 3m5y 1x2.1 receiver spread	Open 0.2c Current 7.6c P&L 7.4c Target 115c Stop -57c	APAC DMRS 07 February 2013	
Volatility	Buy 1 x AUD 3m5y ATM receiver (3.54% strike) Sell 2.1 x AUD 3m5y 25bp OTM receiver (3.292% strike)			
AUD	Buy QTC 6% Feb 2018. Sell QTC 6% Sep 2017	Open 11bp Current 10bp P&L 1bp Target 3bp Stop 15bp	APAC DMRS 17 January 2013	
Cash Curve	Buy QTC 6% Feb 2018 @ 3.65% Sell QTC 6% Sep 2017 @ 3.54%			
AUD/USD	Receive AUD 5y5y. Pay USD 5y5y	Open 177bp Current 165.44bp P&L 11.6bp Target 140bp Stop 200bp	APAC DMRS 28 November 2012	
Cross-market	Receive AUD 5y5y Pay USD 5y5y			
AUD/USD	Sell 1.11 x AUD 6m10y 4% payer. Buy 1 x USD 6m10y ATM payer	Open 0c Current -26.4c P&L -26.4c Target 210c Stop -70c	APAC DMRS 22 November 2012	
Cross-market	Sell 1.11 x AUD 6m10y 4% payer Buy 1 x USD 6m10y ATM payer			
AUD	Sell AUD 3m3y 50bp wide strangle. Buy 1y3y 50bp OTM receiver	Open 0c Current 4.36c P&L 4.36c Target 180c Stop -85c	APAC DMRS 27 September 2012	
Volatility	Sell AUD 3m3y 50bp wide strangle (2.75% and 3.25% strike) Buy AUD 1y3y 50bp OTM receiver (2.64% strike)			

Source: Citi Research

Appendix

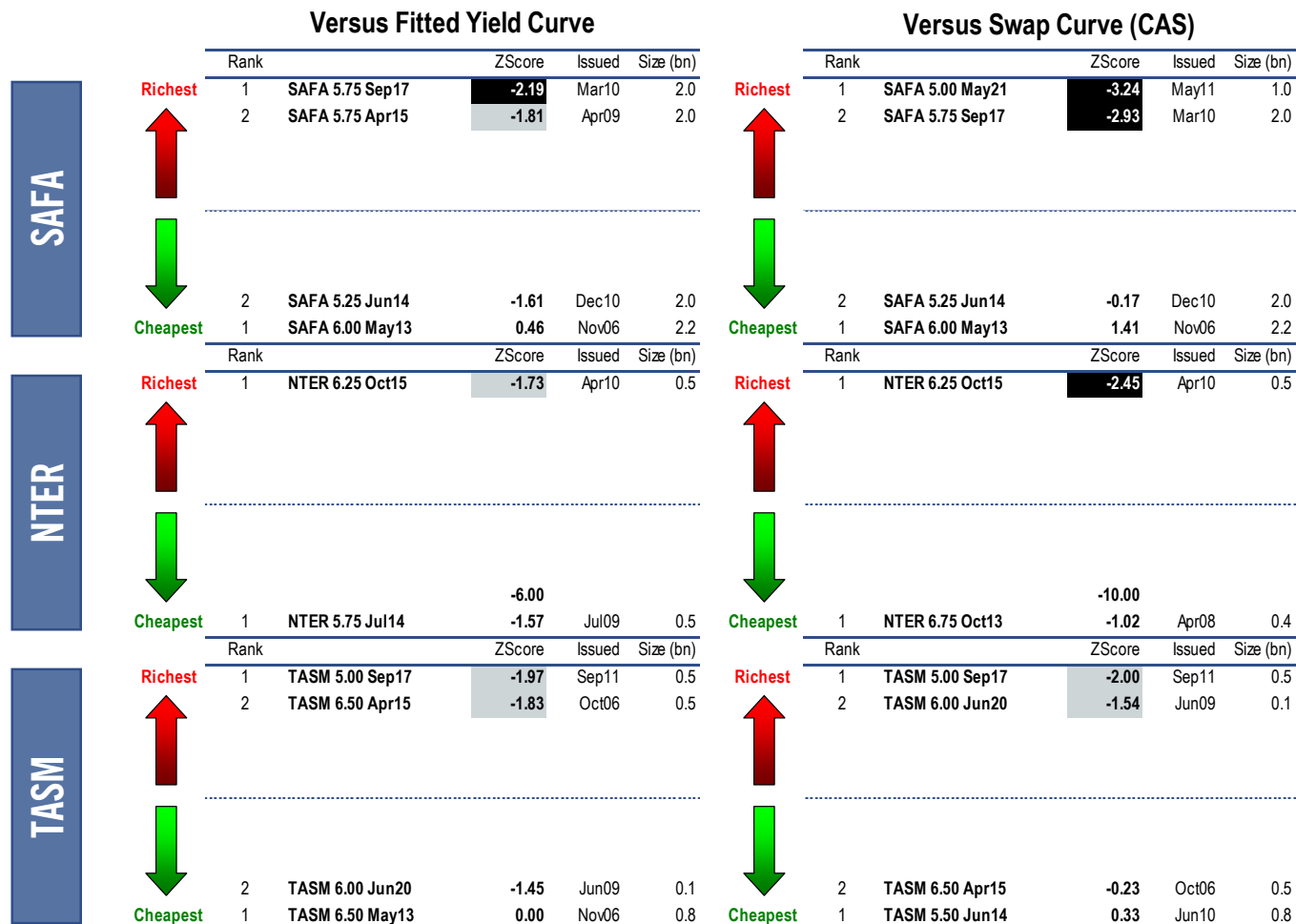
Figure 18. Australia relative value by sector

Versus Fitted Yield Curve							Versus Swap Curve (CAS)						
		Rank		ZScore	Issued	Size (bn)			Rank		ZScore	Issued	Size (bn)
ACGB	<div>Richest</div> <div>↑</div>	1	AUT 5.50 Apr23	-1.65	Apr11	3.2	<div>Richest</div> <div>↑</div>	1	AUT 3.25 Apr29	-1.12	Oct12	3.3	
		2	AUT 4.50 Apr20	-1.63	Apr09	14.5		2	AUT 4.75 Apr27	0.08	Oct11	3.3	
		3	AUT 4.75 Jun16	-1.40	Jun10	11.0		3	AUT 2.75 Apr24	0.24	Apr12	0.0	
		4	AUT 3.25 Apr29	-0.88	Oct12	3.3		4	AUT 5.50 Apr23	0.43	Apr11	3.2	
		5	AUT 4.75 Oct15	-0.57	Apr11	2.2		5	AUT 5.75 Jul22	0.76	Jan10	7.4	
	<div>↓</div> <div>Cheapest</div>	5	AUT 4.50 Oct14	0.83	Apr10	9.2	<div>↓</div> <div>Cheapest</div>	5	AUT 6.25 Apr15	1.31	Apr02	14.1	
		4	AUT 5.25 Mar19	0.90	Sep05	13.9		4	AUT 4.50 Oct14	1.63	Apr10	9.2	
		3	AUT 6.50 May13	1.51	May00	16.7		3	AUT 6.50 May13	1.64	May00	16.7	
		2	AUT 5.75 Jul22	1.90	Jan10	7.4		2	AUT 6.25 Jun14	1.64	Jun08	11.9	
		1	AUT 4.25 Jul17	2.71	Jul11	0.0		1	AUT 5.50 Dec13	1.91	Dec09	9.3	
NSW	<div>Richest</div> <div>↑</div>	1	NSW 6.00 Apr15	-1.77	Apr11	2.0	<div>Richest</div> <div>↑</div>	1	NSW 6.00 Apr16	0.06	Oct09	1.0	
		2	NSW 6.00 Apr16	-1.74	Oct09	1.0		2	NSW 6.00 May30	0.14	May10	0.2	
		3	NSW 5.50 Mar17	-1.72	Mar06	3.3		3	NSW 6.00 Apr15	0.23	Apr11	2.0	
		4	NSW 5.50 Aug13	-1.68	Feb10	5.0		4	NSW 6.00 May20	0.24	Nov09	4.5	
		5	NSW 6.00 Feb18	-1.53	Feb11	4.3		5	NSW 6.00 Feb18	0.27	Feb11	4.3	
	<div>↓</div> <div>Cheapest</div>	5	NSW 6.00 Mar22	-0.76	Sep11	0.6	<div>↓</div> <div>Cheapest</div>	5	NSW 5.00 Aug24	0.50	Feb12	0.9	
		4	NSW 6.00 May23	-0.38	May07	2.6		4	NSW 5.50 Aug13	0.51	Feb10	5.0	
		3	NSW 6.00 May30	-0.25	May10	0.2		3	NSW 6.00 Jun20	0.71	Jun09	1.1	
		2	NSW 5.00 Aug24	0.19	Feb12	0.9		2	NSW 2.75 Jul14	0.95	Jul12	0.5	
		1	NSW 5.25 May13	0.29	May09	0.6		1	NSW 5.25 May13	1.22	May09	0.6	
QTC	<div>Richest</div> <div>↑</div>	1	QTC 6.00 Apr16	-1.67	Apr10	5.1	<div>Richest</div> <div>↑</div>	1	QTC 6.50 Mar33	-2.58	Mar08	0.7	
		2	QTC 6.00 Feb18	-1.58	Feb11	4.4		2	QTC 6.00 Apr16	-2.43	Apr10	5.1	
		3	QTC 6.00 Oct15	-1.56	Oct10	6.9		3	QTC 6.25 Feb20	-2.35	Feb10	5.9	
		4	QTC 6.25 Feb20	-1.51	Feb10	5.9		4	QTC 5.50 Jun21	-2.30	Jun11	1.5	
		5	QTC 6.00 Jul22	-1.44	Jan11	3.8		5	QTC 6.00 Jul22	-2.26	Jan11	3.8	
	<div>↓</div> <div>Cheapest</div>	5	QTC 5.75 Nov14	-1.43	Nov09	7.8	<div>↓</div> <div>Cheapest</div>	5	QTC 6.00 Oct15	-1.67	Oct10	6.9	
		4	QTC 6.50 Mar33	-1.43	Mar08	0.7		4	QTC 5.75 Jul24	-1.26	Jan11	1.1	
		3	QTC 5.50 Jun21	-1.41	Jun11	1.5		3	QTC 5.75 Nov14	-0.86	Nov09	7.8	
		2	QTC 6.00 Aug13	-1.29	Feb02	3.3		2	QTC 6.00 Aug13	0.72	Feb02	3.3	
		1	QTC 5.75 Jul24	-0.92	Jan11	1.1		1	QTC 6.00 Aug13	1.24	Aug10	3.5	
TCV	<div>Richest</div> <div>↑</div>	1	TCV 5.75 Nov16	-1.85	Nov04	3.5	<div>Richest</div> <div>↑</div>	1	TCV 5.75 Nov16	-0.42	Nov04	3.5	
		2	TCV 5.50 Nov18	-1.55	Nov08	3.0		2	TCV 5.50 Nov18	-0.11	Nov08	3.0	
		3	TCV 6.00 Jun20	-1.24	Jun09	3.4		3	TCV 6.00 Jun20	0.07	Jun09	3.4	
		4	TCV 4.75 Oct14	-1.13	Apr03	4.0		4	TCV 6.00 Oct22	0.13	Oct03	3.1	
	<div>↓</div> <div>Cheapest</div>	4	TCV 6.00 Oct22	-0.82	Oct03	3.1	<div>↓</div> <div>Cheapest</div>	4	TCV 5.50 Nov26	0.16	May11	0.6	
		3	TCV 5.50 Nov26	-0.05	May11	0.6		3	TCV 5.50 Dec24	0.57	Jun10	2.3	
		2	TCV 6.50 Mar33	0.00	Sep10	0.1		2	TCV 6.50 Mar33	1.10	Sep10	0.1	
		1	TCV 5.50 Dec24	0.23	Jun10	2.3		1	TCV 4.75 Oct14	1.17	Apr03	4.0	
	WATC	<div>Richest</div> <div>↑</div>	1	WATC 7.00 Apr15	-1.77	Oct06	2.6	<div>Richest</div> <div>↑</div>	1	WATC 6.00 Oct23	-0.15	Mar05	0.2
			2	WATC 8.00 Jul17	-1.63	Jan01	2.5		2	WATC 7.00 Oct19	-0.09	Apr01	1.8
3			WATC 7.00 Oct19	-1.55	Apr01	1.8	3		WATC 7.00 Jul21	0.01	Jul02	0.8	
<div>↓</div> <div>Cheapest</div>		3	WATC 5.50 Apr14	-1.40	Apr10	1.9	<div>↓</div> <div>Cheapest</div>	3	WATC 8.00 Jul17	0.04	Jan01	2.5	
		2	WATC 7.00 Jul21	-1.39	Jul02	0.8		2	WATC 7.00 Apr15	0.11	Oct06	2.6	
		1	WATC 6.00 Oct23	-0.99	Mar05	0.2		1	WATC 5.50 Apr14	1.36	Apr10	1.9	

ZScore calculated using 6M history
2y,5y,7y,10y,20y,30y denote the OTR bonds
Analytics as of 13-Mar-13

Source: Citi Research

Figure 19. Australia relative value by sector



ZScore calculated using 6M history
2y,5y,7y,10y,20y,30y denote the OTR bonds
Analytics as of 13-Mar-13

Source: Citi Research

Figure 20. Australia relative value by maturity

		Versus Fitted Yield Curve					Versus Swap Curve (CAS)				
		Rank		ZScore	Issued	Size (bn)	Rank		ZScore	Issued	Size (bn)
AUS 1-3	Richest	1	TASM 6.50 Apr15	-1.83	Oct06	0.5	1	NTER 6.25 Oct15	-2.45	Apr10	0.5
		2	SAFA 5.75 Apr15	-1.81	Apr09	2.0	2	QTC 6.00 Oct15	-1.67	Oct10	6.9
		3	QTCX 6.00 Oct15	-1.78	Apr03	0.6	3	NTER 5.75 Jul14	-1.16	Jul09	0.5
		4	NSW 6.00 Apr15	-1.77	Apr11	2.0	4	QTC 5.75 Nov14	-0.86	Nov09	7.8
		5	WATC 7.00 Apr15	-1.77	Oct06	2.6	5	SAFA 5.75 Apr15	-0.79	Apr09	2.0
	Cheapest	5	TCV 4.75 Oct14	-1.13	Apr03	4.0	5	AUT 4.75 Oct15	1.23	Apr11	2.2
		4	AUT 4.75 Oct15	-0.57	Apr11	2.2	4	AUT 6.25 Apr15 (2y)	1.31	Apr02	14.1
		3	AUT 6.25 Jun14	0.04	Jun08	11.9	3	WATC 5.50 Apr14	1.36	Apr10	1.9
		2	AUT 6.25 Apr15 (2y)	0.67	Apr02	14.1	2	AUT 4.50 Oct14	1.63	Apr10	9.2
		1	AUT 4.50 Oct14	0.83	Apr10	9.2	1	AUT 6.25 Jun14	1.64	Jun08	11.9
AUS 4-7	Richest	1	SAFA 5.75 Sep17	-2.19	Mar10	2.0	1	SAFA 5.75 Sep17	-2.93	Mar10	2.0
		2	TASM 5.00 Sep17	-1.97	Sep11	0.5	2	QTC 6.00 Feb18	-2.24	Feb11	4.4
		3	ACT 5.50 Jun18	-1.72	Jun11	0.3	3	ACT 5.50 Jun18	-2.18	Jun11	0.3
		4	NSWX 5.50 Mar17	-1.72	Mar06	1.6	4	TASM 5.00 Sep17	-2.00	Sep11	0.5
		5	NSW 5.50 Mar17	-1.72	Mar06	3.3	5	QTCN 6.00 Sep17	-0.65	Sep06	4.6
	Cheapest	5	QTCX 6.25 Jun19	-1.32	Jun09	4.6	5	NSWX 5.50 Mar17	0.48	Mar06	1.6
		4	AUT 5.50 Jan18 (5y)	-0.10	Jul10	8.3	4	AUT 5.25 Mar19	1.04	Sep05	13.9
		3	AUT 6.00 Feb17	0.31	Feb04	14.5	3	AUT 5.50 Jan18 (5y)	1.09	Jul10	8.3
		2	AUT 5.25 Mar19	0.90	Sep05	13.9	2	AUT 6.00 Feb17	1.24	Feb04	14.5
		1	AUT 4.25 Jul17	2.71	Jul11	0.0	1	AUT 4.25 Jul17	1.26	Jul11	0.0
AUS 8-10	Richest	1	SAFA 5.00 May21	-1.76	May11	1.0	1	SAFA 5.00 May21	-3.24	May11	1.0
		2	QTC 6.00 Jul22	-1.44	Jan11	3.8	2	QTC 5.50 Jun21	-2.30	Jun11	1.5
		3	QTC 5.50 Jun21	-1.41	Jun11	1.5	3	QTC 6.00 Jul22	-2.26	Jan11	3.8
		4	WATC 7.00 Jul21	-1.39	Jul02	0.8	4	WATC 7.00 Jul21	0.01	Jul02	0.8
	Cheapest	4	TCV 6.00 Oct22	-0.82	Oct03	3.1	4	TCV 6.00 Oct22	0.13	Oct03	3.1
		3	NSW 6.00 Mar22	-0.76	Sep11	0.6	3	NSW 6.00 Mar22	0.38	Sep11	0.6
		2	AUT 5.75 May21	-0.27	May07	12.8	2	AUT 5.75 Jul22	0.76	Jan10	7.4
		1	AUT 5.75 Jul22	1.90	Jan10	7.4	1	AUT 5.75 May21	0.85	May07	12.8
AUS >10	Richest	1	AUT 5.50 Apr23 (10y)	-1.65	Apr11	3.2	1	QTC 6.50 Mar33	-2.58	Mar08	0.7
		2	QTC 6.50 Mar33	-1.43	Mar08	0.7	2	QTC 5.75 Jul24	-1.26	Jan11	1.1
		3	WATC 6.00 Oct23	-0.99	Mar05	0.2	3	AUT 3.25 Apr29	-1.12	Oct12	3.3
		4	QTC 5.75 Jul24	-0.92	Jan11	1.1	4	WATC 6.00 Oct23	-0.15	Mar05	0.2
		5	AUT 3.25 Apr29	-0.88	Oct12	3.3	5	AUT 4.75 Apr27	0.08	Oct11	3.3
	Cheapest	5	TCV 5.50 Nov26	-0.05	May11	0.6	5	AUT 5.50 Apr23 (10y)	0.43	Apr11	3.2
		4	TCV 6.50 Mar33	0.00	Sep10	0.1	4	NSW 6.00 May23	0.46	May07	2.6
		3	NSW 5.00 Aug24	0.19	Feb12	0.9	3	NSW 5.00 Aug24	0.50	Feb12	0.9
		2	TCV 5.50 Dec24	0.23	Jun10	2.3	2	TCV 5.50 Dec24	0.57	Jun10	2.3
		1	AUT 2.75 Apr24	0.63	Apr12	0.0	1	TCV 6.50 Mar33	1.10	Sep10	0.1

ZScore calculated using 6M history
2y,5y,7y,10y,20y,30y denote the OTR bonds
Analytics as of 13-Mar-13

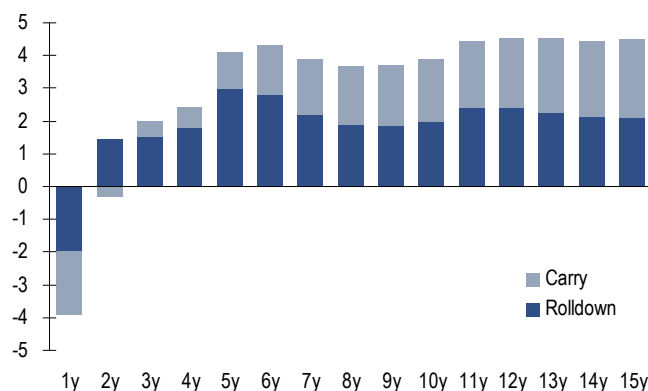
Source: Citi Research

Figure 21. 3M carry in AUD swaps¹

Fwd / Tenor	1Y	2Y	3Y	4Y	5Y	6Y	7Y	8Y	9Y	10Y	12Y	15Y	20Y	25Y	30Y
SPOT	- 4.5	3.8	6.4	6.3	6.4	6.4	6.2	5.9	5.5	5.3	5.0	4.2	3.3	2.7	2.4
3M	- 2.0	4.6	6.3	6.4	6.5	6.4	6.1	5.8	5.4	5.4	5.0	4.2	3.2	2.7	2.4
6M	3.7	8.2	8.0	8.0	7.8	7.4	6.9	6.5	6.0	6.2	5.4	4.7	3.6	3.0	2.7
9M	7.6	10.1	8.8	8.4	8.0	7.5	7.0	6.6	6.1	6.3	5.4	4.7	3.5	3.0	2.7
1Y	10.0	10.4	8.9	8.3	7.9	7.5	6.9	6.4	6.1	6.2	5.3	4.6	3.4	2.9	2.6
2Y	11.3	8.7	8.3	7.7	7.2	6.6	6.1	5.7	6.0	5.4	4.7	4.1	2.9	2.5	2.2
3Y	6.1	6.7	6.6	6.1	5.6	5.1	4.8	5.2	4.6	4.2	3.7	3.2	2.1	1.8	1.7
4Y	7.3	6.9	6.3	5.4	4.9	4.6	5.0	4.4	4.0	3.6	3.3	2.6	1.7	1.5	1.4
5Y	6.5	5.8	5.1	4.4	4.0	4.7	4.0	3.5	3.2	2.9	2.7	1.9	1.3	1.1	1.0
6Y	5.0	4.3	3.9	3.4	4.3	3.6	3.1	2.7	2.5	2.4	2.1	1.2	0.8	0.7	0.6
7Y	3.6	3.3	3.1	4.2	3.4	2.7	2.4	2.2	2.1	2.0	1.5	0.7	0.5	0.4	0.4
8Y	3.0	2.8	4.6	3.3	2.6	2.2	2.0	1.9	1.8	1.6	0.9	0.3	0.2	0.2	0.1
9Y	2.7	5.4	3.5	2.5	2.1	1.8	1.8	1.6	1.4	1.1	0.4	0.0	- 0.0	- 0.0	- 0.0
10Y	8.2	4.0	2.6	1.9	1.6	1.6	1.5	1.2	0.9	0.4	- 0.1	- 0.2	- 0.2	- 0.2	- 0.2

Source: Citi Research

Figure 22. 3M carry profile of ACGB²



Source: Citi Research

Figure 23. 3M carry table of ACGB

ACGB	Carry	Rolldown	Total
1y	-1.9	-2.0	-3.9
2y	-0.3	1.4	1.1
3y	0.5	1.5	2.0
4y	0.6	1.8	2.4
5y	1.1	3.0	4.1
6y	1.5	2.8	4.3
7y	1.7	2.2	3.9
8y	1.8	1.9	3.7
9y	1.8	1.8	3.7
10y	1.9	2.0	3.9
11y	2.0	2.4	4.4
12y	2.1	2.4	4.5
13y	2.2	2.3	4.5
14y	2.3	2.1	4.4
15y	2.4	2.1	4.5

Source: Citi Research

¹ Sectors with carry more than 5bp is highlighted in green while the carry less than 5bp is highlighted in red.

² ACGB carry profile and table is calculated from the relative value curve and it may vary from individual bonds given the repo rate.

Figure 24. 3M carry in NZD swaps³

Fwd / Tenor	1Y	2Y	3Y	4Y	5Y	6Y	7Y	8Y	9Y	10Y	12Y	15Y	20Y
SPOT	7.6	9.2	10.3	9.9	9.7	9.0	8.6	7.9	7.4	6.9	5.5	4.5	4.1
3M	9.1	9.9	10.2	10.1	9.6	9.1	8.4	7.9	7.4	6.9	5.4	4.5	4.1
6M	11.9	11.1	10.6	10.1	9.5	9.0	8.3	7.7	7.3	6.6	5.2	4.4	4.0
9M	12.4	11.3	10.6	10.1	9.4	8.9	8.1	7.5	7.1	6.3	5.0	4.3	3.9
1Y	10.3	11.1	10.4	9.8	9.1	8.6	7.8	7.3	6.8	6.0	4.7	4.2	3.7
2Y	11.9	10.4	9.6	8.9	8.2	7.4	6.8	6.3	5.5	4.7	3.8	3.6	3.1
3Y	8.9	8.4	7.7	7.2	6.5	5.9	5.4	4.6	3.8	3.2	2.8	2.8	2.4
4Y	7.9	7.1	6.6	5.7	5.2	4.7	3.8	2.9	2.4	2.1	2.1	2.1	1.8
5Y	6.3	5.9	5.0	4.4	3.9	3.0	2.1	1.5	1.3	1.3	1.5	1.5	1.2
6Y	5.3	4.2	3.7	3.2	2.2	1.2	0.7	0.5	0.5	0.7	1.0	0.9	0.7
7Y	3.1	2.9	2.5	1.3	0.3	- 0.2	- 0.3	- 0.2	0.1	0.4	0.6	0.5	0.3
8Y	2.7	2.2	0.7	- 0.5	- 1.0	- 1.0	- 0.8	- 0.4	- 0.0	0.2	0.2	0.2	0.1
9Y	1.7	- 0.4	- 1.6	- 2.0	- 1.9	- 1.4	- 0.9	- 0.5	- 0.2	- 0.1	- 0.1	- 0.1	- 0.1
10Y	- 2.5	- 3.4	- 3.4	- 2.9	- 2.1	- 1.4	- 0.8	- 0.4	- 0.3	- 0.3	- 0.3	- 0.3	- 0.3

Source: Citi Research

³ Sectors with carry more than 5bp is highlighted in green while the carry less than 5bp is highlighted in red.

Figure 25. Japan relative value by maturity

		Versus Fitted Yield Curve					Versus Swap Curve (YYS)				
JGB Maturity	Rank	#	Issued	Size (¥tn)	ZScore	Issued	Rank	#	Issued	Size (¥tn)	ZScore
JGB 2-7	Richest	1	#301 1.50 Jun19	4.31	-2.07	Jun09	1	#302 1.40 Jun19	2.25	Jul09	-3.27
		2	#302 1.40 Jun19	2.25	-2.02	Jul09	2	#301 1.50 Jun19	4.31	Jun09	-3.19
		3	#325 0.10 Feb15	2.70	-1.98	Feb13	3	#303 1.40 Sep19	4.65	Sep09	-2.78
		4	#298 1.30 Dec18 (7y)	4.00	-1.90	Jan09	4	#300 1.50 Mar19	2.28	May09	-2.77
		5	#297 1.40 Dec18	2.11	-1.85	Dec08	5	#299 1.30 Mar19	3.87	Mar09	-2.73
	Cheapest	5	#287 1.90 Jun17	2.40	1.84	Jul07	5	#271 1.20 Jun15	2.51	Jul05	0.18
		4	#286 1.80 Jun17	4.39	1.86	Jun07	4	#89 0.40 Jun15	4.97	Jun10	0.18
		3	#105 0.20 Jun17	2.50	2.09	Jun12	3	#90 0.30 Jun15	2.76	Aug10	0.18
		2	#104 0.20 Mar17	2.50	2.47	May12	2	#95 0.60 Mar16	2.42	Mar11	0.21
		1	#103 0.30 Mar17	2.50	2.50	Mar12	1	#96 0.50 Mar16	4.81	Apr11	0.21
JGB 7-10	Richest	1	#323 0.90 Jun22	2.30	-1.61	Jun12	1	#56 2.00 Jun22	0.91	Jun02	-2.85
		2	#60 1.40 Dec22	1.12	-1.52	Feb03	2	#57 1.90 Jun22	0.97	Aug02	-2.82
		3	#319 1.10 Dec21	2.44	-1.47	Dec11	3	#315 1.20 Jun21	4.66	Jun11	-2.80
		4	#56 2.00 Jun22	0.91	-1.42	Jun02	4	#60 1.40 Dec22	1.12	Feb03	-2.73
		5	#322 0.90 Mar22	2.53	-1.38	May12	5	#317 1.10 Sep21	2.31	Sep11	-2.70
	Cheapest	5	#45 2.40 Mar20	0.87	1.60	Jan00	5	#54 2.20 Dec21	0.90	Feb02	-1.22
		4	#320 1.00 Dec21	5.05	1.92	Jan12	4	#53 2.10 Dec21	0.85	Dec01	-1.22
		3	#52 2.10 Sep21	0.72	2.59	Oct01	3	#326 0.70 Dec22	2.64	Dec12	-1.21
		2	#54 2.20 Dec21	0.90	2.73	Feb02	2	#47 2.20 Sep20	0.69	Jul00	-1.07
		1	#53 2.10 Dec21	0.85	2.74	Dec01	1	#45 2.40 Mar20	0.87	Jan00	-0.78
JGB 10-15	Richest	1	#97 2.20 Sep27	1.66	-1.23	Sep07	1	#70 2.40 Jun24	1.44	Jun04	-2.77
		2	#66 1.80 Dec23	0.71	-1.14	Feb04	2	#66 1.80 Dec23	0.71	Feb04	-2.71
		3	#96 2.10 Jun27	0.94	-1.10	Aug07	3	#71 2.20 Jun24	0.68	Aug04	-2.68
		4	#61 1.00 Mar23	1.21	-0.99	Apr03	4	#68 2.20 Mar24	0.68	Apr04	-2.63
		5	#99 2.10 Dec27	2.64	-0.91	Dec07	5	#87 2.20 Mar26	0.96	May06	-2.62
	Cheapest	5	#89 2.20 Jun26	1.00	0.09	Aug06	5	#98 2.10 Sep27	1.04	Nov07	-2.35
		4	#92 2.10 Dec26	2.71	0.11	Dec06	4	#64 1.90 Sep23	1.24	Oct03	-2.34
		3	#95 2.30 Jun27	1.77	0.12	Jun07	3	#93 2.00 Mar27	1.15	Mar07	-2.31
		2	#93 2.00 Mar27	1.15	0.31	Mar07	2	#62 0.80 Jun23	1.07	Jun03	-2.30
		1	#63 1.80 Jun23	1.00	0.47	Aug03	1	#63 1.80 Jun23	1.00	Aug03	-2.28
JGB 15-20	Richest	1	#2 2.40 Feb30	0.30	-0.85	Feb00	1	#120 1.60 Jun30	1.37	Aug10	-2.51
		2	#141 1.70 Dec32 (20y)	1.27	-0.78	Dec12	2	#4 2.90 Nov30	0.50	Nov00	-2.51
		3	#100 2.20 Mar28	1.84	-0.64	Mar08	3	#5 2.20 May31	0.37	May01	-2.51
		4	#122 1.80 Sep30	1.29	-0.31	Oct10	4	#121 1.90 Sep30	2.40	Sep10	-2.49
		5	#127 1.90 Mar31	1.11	-0.23	May11	5	#122 1.80 Sep30	1.29	Oct10	-2.49
	Cheapest	5	#107 2.10 Dec28	1.04	1.38	Dec08	5	#109 1.90 Mar29	1.20	Mar09	-2.13
		4	#117 2.10 Mar30	2.56	1.59	Apr10	4	#107 2.10 Dec28	1.04	Dec08	-2.11
		3	#116 2.20 Mar30	1.51	1.64	Mar10	3	#140 1.70 Sep32	1.25	Sep12	-2.11
		2	#114 2.10 Dec29	2.35	1.76	Dec09	2	#102 2.40 Jun28	1.04	Jun08	-2.09
		1	#115 2.20 Dec29	1.18	1.79	Feb10	1	#141 1.70 Dec32 (20y)	1.27	Dec12	-1.43
JGB >20	Richest	1	#21 2.30 Dec35	0.78	-2.46	Jan06	1	#18 2.30 Mar35	0.94	Apr05	-2.43
		2	#19 2.30 Jun35	0.72	-2.26	Jul05	2	#16 2.50 Sep34	0.64	Oct04	-2.37
		3	#20 2.50 Sep35	0.66	-2.25	Oct05	3	#17 2.40 Dec34	0.78	Feb05	-2.37
		4	#18 2.30 Mar35	0.94	-2.24	Apr05	4	#19 2.30 Jun35	0.72	Jul05	-2.36
		5	#22 2.50 Mar36	0.77	-2.10	Apr06	5	#15 2.50 Jun34	0.93	Aug04	-2.36
	Cheapest	5	#11 1.70 Jun33	0.58	0.90	Jul03	5	#32 2.30 Mar40	2.52	Mar10	-2.16
		4	#10 1.10 Mar33	0.53	0.96	May03	4	#35 2.00 Sep41	3.01	Sep11	-2.16
		3	#35 2.00 Sep41	3.01	1.04	Sep11	3	#28 2.50 Mar38	1.77	Apr08	-2.16
		2	#36 2.00 Mar42	0.79	1.27	Mar12	2	#36 2.00 Mar42	0.79	Mar12	-2.15
		1	#37 1.90 Sep42 (30y)	0.75	1.29	Sep12	1	#37 1.90 Sep42 (30y)	0.75	Sep12	-1.91

ZScore calculated using 6M history
2y,5y,7y,10y,20y,30y denote the OTR bonds
Analysis as of 13-Mar-13

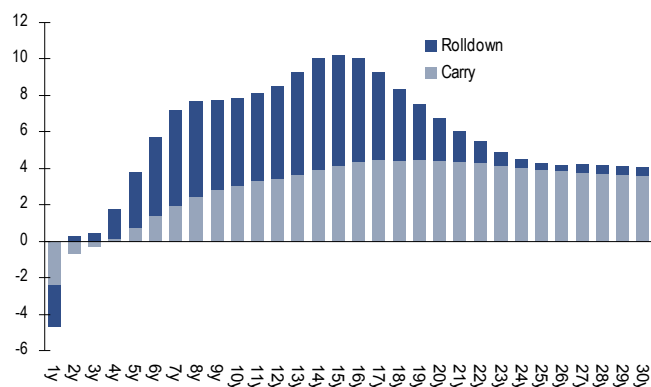
Source: Citi Research

Figure 26. 6M carry in JPY swaps⁴

Fwd / Tenor	1Y	2Y	3Y	4Y	5Y	6Y	7Y	8Y	9Y	10Y	12Y	15Y	20Y	25Y	30Y	40Y
SPOT	- 6.8	- 2.1	- 0.4	1.2	2.9	4.4	5.9	6.7	7.3	7.8	8.2	8.3	6.3	4.7	4.0	3.4
6M	- 3.5	- 1.3	0.5	2.1	3.7	5.3	6.4	7.1	7.8	8.1	8.3	8.2	6.2	4.5	3.9	3.4
9M	- 4.6	- 1.7	0.4	2.1	3.9	5.5	6.5	7.2	7.7	7.9	8.3	7.9	5.9	4.4	3.8	3.3
1Y	0.3	1.3	2.5	4.0	5.5	6.9	7.6	8.1	8.4	8.6	8.9	8.3	6.1	4.6	4.1	3.5
2Y	2.2	3.7	5.2	6.8	8.2	8.8	9.3	9.6	9.6	9.7	9.7	8.5	6.1	4.7	4.2	3.6
3Y	5.1	6.7	8.4	9.8	10.2	10.5	10.7	10.7	10.6	10.6	10.2	8.5	6.1	4.7	4.4	3.7
4Y	8.3	10.0	11.3	11.5	11.6	11.7	11.5	11.4	11.3	11.1	10.1	8.3	5.8	4.7	4.3	3.6
5Y	11.7	12.9	12.6	12.5	12.4	12.1	11.9	11.8	11.5	11.0	9.6	7.7	5.4	4.4	4.1	3.4
6Y	13.9	12.8	12.5	12.3	12.0	11.8	11.7	11.3	10.7	10.1	8.7	6.7	4.7	4.0	3.7	3.1
7Y	12.0	12.2	12.0	11.7	11.6	11.5	11.2	10.6	9.8	9.1	7.6	5.8	4.0	3.5	3.2	2.7
8Y	12.4	12.2	11.7	11.5	11.4	11.1	10.5	9.7	8.8	8.0	6.5	4.8	3.3	3.1	2.8	2.3
9Y	12.0	11.3	11.2	11.2	10.9	10.2	9.3	8.3	7.5	6.7	5.3	3.8	2.7	2.5	2.3	1.9
10Y	10.7	10.8	11.0	10.6	9.9	8.8	7.8	6.9	6.1	5.3	4.1	2.8	2.1	2.0	1.8	1.5
12Y	11.3	10.4	9.2	7.8	6.6	5.5	4.6	3.8	3.1	2.6	1.6	0.9	0.9	0.9	0.8	0.7
15Y	3.5	2.5	1.6	0.9	0.3	- 0.2	- 0.7	- 1.0	- 1.3	- 1.5	- 1.6	- 1.3	- 0.7	- 0.6	- 0.5	- 0.4
20Y	- 3.2	- 3.3	- 3.5	- 3.5	- 3.5	- 3.4	- 3.2	- 2.9	- 2.6	- 2.2	- 1.6	- 1.1	- 0.8	- 0.7	- 0.6	- 0.5
25Y	- 2.9	- 2.4	- 1.9	- 1.3	- 0.8	- 0.3	- 0.0	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
30Y	2.1	2.0	1.9	1.7	1.5	1.4	1.2	1.1	1.0	1.0	0.8	0.7	0.5	0.5	0.4	0.3

Source: Citi Research

Figure 27. 6M carry profile of JGB⁵



Source: Citi Research

Figure 28. 6M carry table of JGB

JGB	Carry	Rolldown	Total
1y	-2.4	-2.3	-4.7
2y	-0.7	0.3	-0.4
3y	-0.3	0.4	0.1
4y	0.2	1.6	1.8
5y	0.8	3.0	3.8
6y	1.4	4.3	5.7
7y	2.0	5.2	7.2
8y	2.5	5.2	7.7
9y	2.8	4.9	7.8
10y	3.1	4.8	7.8
20y	4.4	2.3	6.7
30y	3.5	0.5	4.0

Source: Citi Research

⁴ Sectors with carry more than 5bp is highlighted in green while the carry less than 5bp is highlighted in red.

⁵ JGB carry profile and table is calculated from the relative value curve and it may vary from individual bonds given the repo rate.

Appendix A-1

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