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Australia Banks

Markets and Treasury: a closer look

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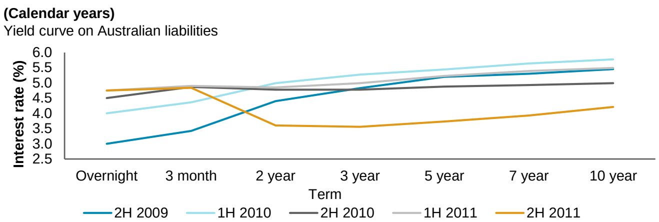
Executive Summary: The Markets and Treasury Landscape

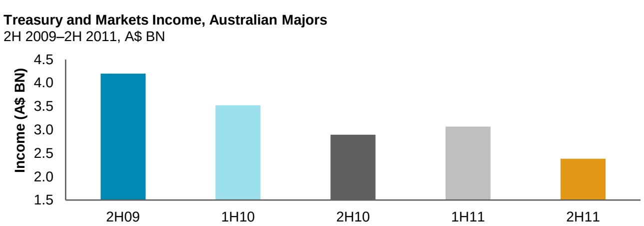
What Are Treasury and Markets Operations?

Markets and Treasury activities represent a significant business line in Australian majors' banking operations, historically with relatively high returns on equity. Markets businesses involve sales, trading and market-making in securities markets products, while Treasury activities incorporate a broad range of risk management activities with P&L impact. The profitability of these activities can be volatile, primarily driven by macroeconomic factors, market outcomes and market volatility.

Exhibit 1
Impact of Yield Curve Slope on Treasury and Markets Income



Source: Datastream data, Oliver Wyman analysis

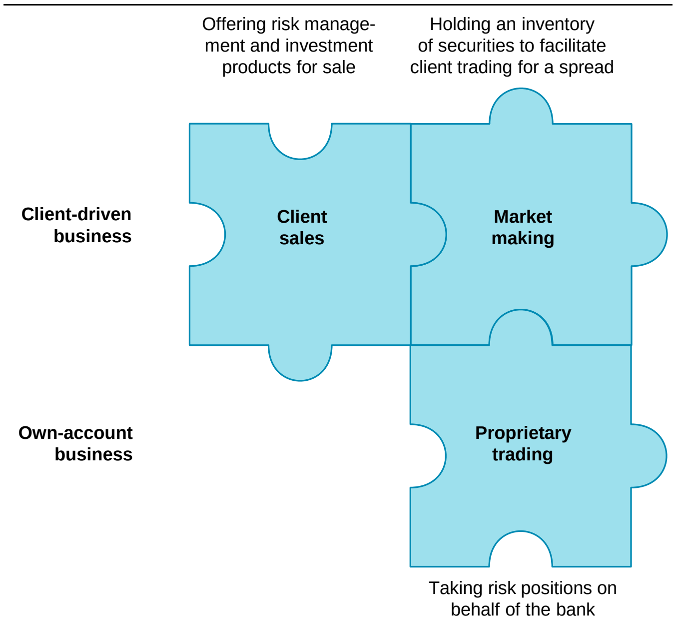


Source: Datastream data, Company data, Oliver Wyman analysis

Markets Businesses

The Markets businesses of major Australian banks focus primarily on fixed-income products, which include interest rates, FX, credit, and commodities. Corporates form the largest client segment. The performance of the Markets business was especially strong in 2009, driven by high margins and volumes and a favourable yield curve environment. The years 2010 and 2011 were much more challenging for Australian fixed income products with revenue pool contractions of ~20-30% in calendar 2010 and up to ~15% in 2011.

Exhibit 2
Revenue-generating Activities of Markets Operations

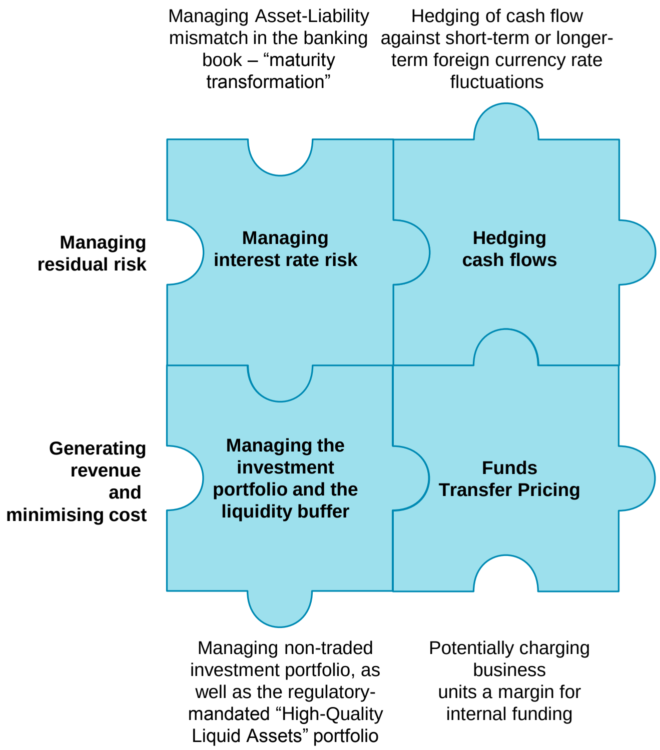


Source: Oliver Wyman

Treasury Businesses

Income from Treasury functions for Australian majors is volatile because of the focus on managing the aggregate risk positions arising from the banks' activities. Therefore, Treasury profitability is heavily driven by the nature of the banks' assets and liabilities, as well as by interest rate movements and hedging decisions made by Treasury. The institutional design of the Treasury function also affects how it generates profits, and whether these profits are attributed to the Treasury function or reallocated to the business units.

Exhibit 3
Revenue-generating Activities of Treasury Operations



Source: Oliver Wyman

The Outlook and Expected Responses

Macroeconomic conditions, especially the ongoing volatility in global markets, will continue to present challenges for these businesses in the short term, although there are opportunities to benefit from longer-term structural shifts.

Regulatory change is likely to bring about a paradigm shift for the Markets businesses as more stringent capital and liquidity requirements could render some products unprofitable and significantly affect client demand, especially from other financial institutions.

Banks will probably seek to respond to the new regulatory regime by changing their business mix, optimizing the efficiency of financial resources and reducing operating costs. In a market with limited top-line growth, those that adapt best to this new environment should still be able to generate revenue and profit growth by outperforming peers and establishing more efficient businesses.

Structure of Oliver Wyman/Morgan Stanley Joint Report

In **Sections 1 and 2,** Oliver Wyman lays out the key business drivers for Markets and Treasury operations and their effects on profitability. These sections form a primer for investors, group centre staff, and other non-specialists seeking to 'unpack' these complex businesses and to understand how evolution in the external environment may affect their performance.

In **Section 3,** Oliver Wyman addresses the outlook for the Markets and Treasury businesses of the major Australian banks over the coming years and lays out opportunities for value creation by responding to the key challenges for the industry. We aim this section at investors wishing to identify the likely characteristics of future winners and losers in these businesses, as well as bank management teams seeking to position their businesses for the new market environment.

Section 4 of this report details trends in Markets and Treasury income at the major banks over the past four years, based on analysis performed by Morgan Stanley Research. It also highlights the differences in outcomes in Markets sales, Markets trading and Treasury.

In **Section 5,** Morgan Stanley Research compares the performance of the individual banks over the past four years and examines the differences in revenue mix.

Section 6 presents Morgan Stanley Research's forecasts for Markets and Treasury income of the major banks from FY12E to FY14E.

Sections 4 to 6 reflect the analysis and views of Morgan Stanley Research, not Oliver Wyman and are available on request from Morgan Stanley

Section 1: Key Activities and Drivers of Markets Businesses

Markets businesses mostly comprise client-sales and market-making activities, with limited proprietary trading.

Profitability is primarily driven by macroeconomic factors, market outcomes and volatility.

Major banks focus mostly on interest rates, FX and credit. Corporates form the largest client segment.

2009 was a particularly strong year, driven by high margins and volumes and a favourable yield curve environment.

2010 and 2011 were much more challenging with the revenue pool declining 20-30% in 2010 and up to 15% in 2011.

Important but Volatile Income Source

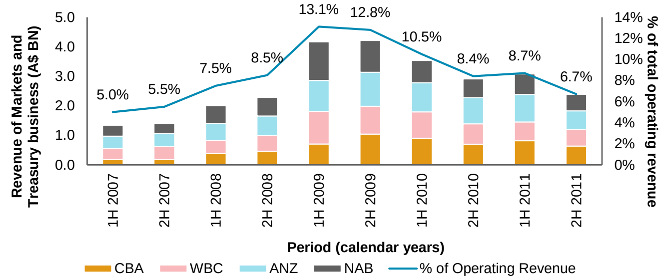
Markets and Treasury activities represent a significant business line in Australian majors' banking operations: Markets businesses involve sales, trading and market-making in securities markets products, while Treasury activities incorporate a broad range of risk management activities with P&L impact. Markets businesses typically sit within Wholesale or Institutional Banking divisions, while Treasury is typically located within the group centre.

Although volatile, these operations can be countercyclical. As shown in Exhibit 4, they increased their profits during the global financial crisis in 2008-2009, and helped smooth overall group earnings, although their performance has deteriorated recently.

Exhibit 4

Major Banks: Markets and Treasury Income (A$BN)

Australian majors (A$ BN)



Source: Public disclosures and analysis

Australian major banks' Markets businesses comprise sales and trading activities and debt capital markets (DCM) operations. The sales and trading revenues of banks are complex. Markets businesses trade securities and derivatives in various asset classes (primarily currencies, interest rates and bonds) on behalf of clients or on the bank's own account. This business comprises three fundamental types of activities, illustrated in Exhibit 5.

The majority of the major banks' Markets revenues comes from client sales activities, followed by market-making. While practices vary across the market, the majors typically adopt conservative approaches, engaging in relatively limited proprietary trading. However, proprietary trading can contribute a disproportionate share of Markets profits because of its light staffing requirements compared with client sales and market-making, which require larger teams to sustain them.

DCM operations centre on the issuance of client firms' debt securities to the market, typically based on the majors' corporate banking relationships with these firms. DCM activities tend to be more transparent because the bond issues are tracked in a number of publicly available sources, and league tables show relatively comprehensive information on each bank's performance and scale of activities.

Exhibit 5
Major Banks' Markets Businesses: Key Activities and Performance Drivers

Client Sales	Market making	Proprietary trading
Activities	**Activities**	**Activities**
• Structuring and offering for sale markets products to clients for risk management (e.g. derivatives in currency, rates or commodities) as well as investment purposes	• Holding a limited portfolio of securities on balance sheet as inventory to facilitate client trading and charging a spread • Facilitating client access to execute trades in the capital markets	• Taking position in the market by holding and actively trading market products for the bank's own account
Performance drivers	**Performance drivers**	**Performance drivers**
• Client coverage • Client demand • Structuring capabilities	• Execution capabilities • Risk appetite • Market volatility	• Trading skill • Risk appetite • Market volatility
Revenue share for major banks	**Revenue share for major banks**	**Revenue share for major banks**
• 60–80%	• 10–35%	• 5–15%

Source: Oliver Wyman observations

Drivers of Profitability

Markets businesses typically operate with high levels of fixed costs, including staff and technology infrastructure expense. Consequently, their profits are highly sensitive to revenue changes caused by macroeconomic factors and price movements in securities markets.

Macroeconomic factors and market outcomes

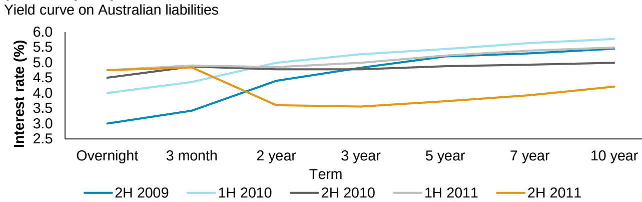
Macroeconomic factors, such as economic growth and the shape of the yield curve, have a strong influence on revenues in Markets businesses. A growing economy stimulates increased debt issuance, and drives demand for Markets products. A steep yield curve, where long-term interest rates are significantly higher than short-term interest rates, can also generate profit opportunities for Markets businesses (especially in interest rates trading), while a flattening yield curve, as experienced in Australia since late 2010, can be associated with depressed profitability of Markets businesses', as shown in Exhibit 6.

Other market factors, such as equity indices and foreign exchange rates, also play a significant role in the overall performance of Markets businesses. A bull market in securities and increased risk appetite from investors generally have a positive effect on the revenue of Markets businesses overall.

An analysis of the revenues of Markets businesses globally reveals that these market and macroeconomic drivers are responsible for 60-90% of the volatility of revenues. Exhibit 7 highlights the correlations observed globally between the key macro drivers and major Markets business lines.

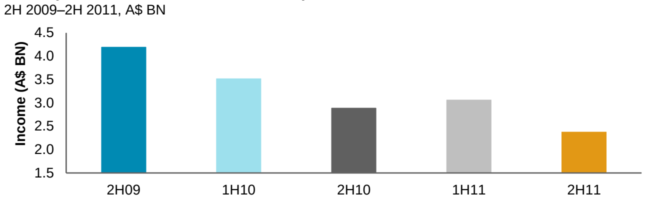
Exhibit 6
Impact of Yield Curve Slope on Treasury and Markets Income

(Calendar years)
Yield curve on Australian liabilities



Source: Datastream data, Oliver Wyman analysis

Treasury and Markets Income, Australian Majors
2H 2009–2H 2011, A$ BN



Source: Datastream data, Company data, Oliver Wyman analysis

Exhibit 7
Drivers of Markets Revenues

	Driver	Cash equity	Equity Derivatives	Prime Brokerage	Rates & FX	Credit & ABS	Commo-dities	DCM
Market drivers	Equity indices	Strong positive	Strong positive	Weak positive				
	Equity volumes	Weak positive	Weak positive	Weak positive				
	Interbank spread				Weak positive			
	Credit spread					Weak negative		Weak negative
	Oil price						Strong positive	
	FX rate				Weak positive			
Macro-economic drivers	GDP				Weak positive	Weak positive		Strong positive
	Interest rates							Weak negative
	Yield curve				Strong negative	Weak negative		

Relationship: Strong positive; Weak positive; Strong negative; Weak negative

Source: Public data, IMF, Dealogic, Global Insight, Oliver Wyman analysis

Market Volatility

Beyond the absolute levels of macro and market factors, their volatility is also important to revenue generation. Volatility can have different impacts on the various parts of a Markets business.

Client sales activities benefit from increased demand for hedging products (derivatives in interest rates, FX and commodities) when corporate and investor clients seek protection from volatility. Demand also increases from some buy-side clients (e.g. asset managers, hedge funds), which may see opportunities in the turbulent conditions or may seek to exit positions. However, slowdowns may follow periods of volatility as cautious investors keep cash on the sidelines.

Proprietary trading operations (where banks hold own-account positions in securities) and market-making (where banks hold inventories of securities to facilitate client purchases) are also affected by volatility. While volatility of securities prices presents a profit opportunity (particularly if there is a strong directional trend), it can also cause significant losses when banks are on the wrong side of market movements, for example, during abrupt, unanticipated periods of volatility and sharp index movements such as in August 2011.

Volatility can also have a negative effect on DCM, with debt issuance often grinding to a halt when periods of heightened uncertainty reduce liquidity and investor risk appetite.

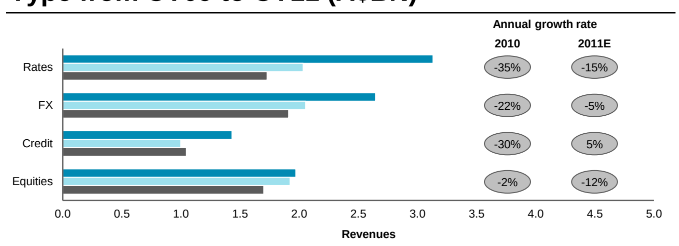
Range of Products Offered

Markets businesses offer products to customers within two major categories:

- Fixed Income
  - Foreign exchange
  - Interest rates
  - Credit (primary debt issuance and secondary markets trading)
  - Commodities
- Equities
  - Cash equities
  - Equity derivatives

The majors derive almost all of their Markets revenue from fixed income and DCM products. In contrast, their involvement in equities is very limited, unlike global universal banks or commercial banks in markets such as Canada. In Australia, DCM is dominated at the top end of the client size spectrum by foreign investment banks and universals, along with Macquarie, and, for smaller clients, by local boutiques and brokers.

Exhibit 8
Australian Sales and Trading Revenues by Product Type from CY09 to CY11 (A$BN)



Note: Includes Australia and New Zealand market revenues for local and global banks, and all client segments
Source: Oliver Wyman proprietary data, estimates and analysis

In terms of product performance, Markets businesses in Australia have shown volatile results over the past few years. They enjoyed a bumper year across products in calendar 2009 because of three key factors:

- Increased volatility in offshore markets, driving volumes;

- Higher spreads, due to capacity withdrawal by foreign players and increased volatility;
- A steeper yield curve and interest rate movements, leading to gains on the securities held as inventories to facilitate market-making and in proprietary trading.

However, the positive external factors of 2009 were reversed during 2010, with stabilizing market conditions, decreasing volatility and a series of rate rises. Furthermore, competition increased as Australia's position as a relatively strong performer among developed world economies contributed to an increased supply of overseas capital to support sales and trading activities and to aggressive hiring. The ensuing spread erosion and overcapacity encumbered some players with cost bases that proved onerous in the sluggish conditions of 2011.

The first half of calendar 2011 was mixed. Improving global growth prospects narrowed trading margins, but some asset classes, such as credit, performed well. However, the extreme volatility in 3Q inflicted sizeable losses on banks' positions and sharply reduced demand for primary debt issuance and liquidity in secondary market trading.

Bank performance was generally stronger in the last months of 2011, with client sales in particular performing well, although trading conditions remained difficult, especially in credit markets.

The broad decline since 2009 is observable throughout the market, although there are some differences at the product-level, as shown in Exhibit 8 and Exhibit 9.

Exhibit 9

Performance of Markets Products, CY2009-11: Some variation by product

Product	2009	2010	2011
Rates	• Trading gains due to reduced short-term interest rates • Robust client flows and margins	• Significant reductions in trading gains as yield curve flattens and spreads narrow	• Modest pickup on 2010 in 1H. Significant trading book losses for some players in Q3 • Big sales pick up in Q4
FX	• Gains due to volatility from GFC and recovery	• Modest client flows with activity spikes driven by Eurozone deterioration and FX appreciation • Spreads narrowing and back to pre-crisis levels	• Bifurcated market with players with strong e-platforms performing well but others struggling • Big sales pick up in Q4 and trading gains from directional volatility
Credit	• Post-crisis balance sheet rebuilding by banks	• Gains from bonds and credit products due to normalising market conditions • Continued reduced demand due to overseas solvency concerns	• 1H increase in DCM issuance, reversed in Q3 due to volatility • Some gains in credit trading in 1H reversed during volatility in Q3 • Mixed quarter across players in Q4
Equities	• Reduced client flows dampen growth, but gains on inventory positions	• Stagnant growth, as increased volume is met with reduced margins	• Continued decline in revenues following stagnant volume and reduced risk appetite in Q4

Source: Oliver Wyman analysis

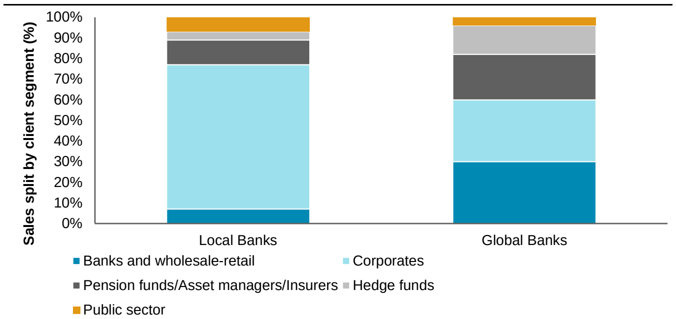
Client Base: Local Corporates Form the Core

Local corporate clients, both large blue chips and mid-sized corporations, form the core client segment for Australian majors' Markets businesses as shown in Exhibit 10. This skew in client focus is evident in the composition of fixed-income revenues across client segments.

In addition to local corporates, the Australian majors focus on local investors with mostly longer-term investment horizons, including large superannuation funds, investment managers, and local and regional governments. Buy-side clients, while predominantly served by the global banks, have been increasingly relevant for the local majors as their asset bases and hedging needs have grown.

Exhibit 10

Australian Fixed Income Sales by Client Segment



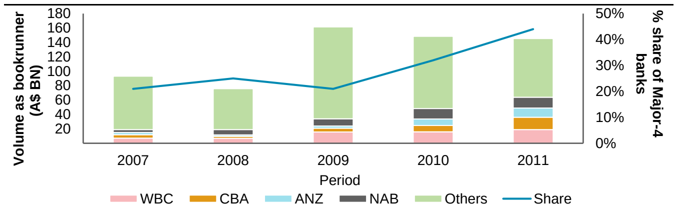
Source: Oliver Wyman proprietary data, estimates and analysis
Note: Includes rates, FX, credit, commodities

Australian majors leverage their existing lending relationships with local corporations to generate revenue in Markets products, from hedging to debt issuance. The power of these relationships is apparent in the Australian majors' success in debt capital markets (DCM). The increase in bond issuance following the global financial crisis was disproportionately captured by local players, as shown in Exhibit 11. Their combined share of DCM issuance increased from ~20% pre-crisis to almost 50% during the first half of calendar 2011. This was driven by stronger franchise focus, the growing importance of balance sheet availability (i.e. lending appetite) in overall client relationships and the deepening product capabilities of the majors.

Exhibit 11

Australian DCM Volume from CY2007 to CY2011:

Local players capture disproportionate share



Note: Excludes government securities, money market issuance and issuance of own debt
Source: Dealogic

Heavy Competition in Markets Businesses

Markets businesses are among the most heavily contested banking operations in Australia, with competitors ranging from small boutiques to leading global banks. Australian majors face competitors with varied business models and sources of competitive advantage. Leading foreign universals have a significant local footprint and try to use their execution capabilities for competitive advantage over a wide range of products, particularly fixed income. On the other hand, smaller boutique firms take advantage of their local relationships and niche industry expertise (e.g. in the mid-cap resources sector). Product specialists such as Travelex also compete in specific business lines. Exhibit 12 depicts the various business models observed in the Australian market.

Within their core fixed income operations, Australian majors face the most substantial competitive challenge from the foreign universal and investment banks. Some of these have maintained or even increased their investments in Australia post the global financial crisis while some, particularly European players, withdrew capacity in 2011.

These banks bring large global platforms, strong structuring and product capabilities (including in Australian and New Zealand dollars where the majors focus) and strong technology capabilities. They can leverage their technology infrastructure in products such as FX, where execution capabilities are critical, and maintain profitability from scale benefits even as margins contract as a result of increased competitive pressure. This creates an imperative for the local banks to invest in technology to ensure their trading systems and infrastructure keep pace.

Over time, these foreign players may represent a challenge to Australian majors' relationship-driven businesses across the client spectrum, using their cost advantage and capabilities to gain further scale. They have so far been successful in penetrating the large corporate and financial institution segments but are yet to penetrate as far down as the mid-tier of the corporate client spectrum.

Major universal banks are not the only threat to Australian majors' existing corporate client relationships. Some Tier 2 universals are also increasingly using their balance sheet and transaction banking capabilities to establish relationships in selected parts of the market, though the pressure from their Eurozone exposures limits their ability to commit capital to Australia for expansion. While European banks building relationships based on longer tenor lending appetite have historically been the main players in this space, liquidity-rich Asian banks are increasingly emerging in this category.

Exhibit 12

Competitor Business Models

Level of onshore footprint	1 **Boutiques and Independents**	2 **Tier 2 foreign banks**	3 **Leading foreign I-Banks**	4 **Leading foreign universals**	5 **Local Banks**
Example competitors	• Gresham • Greenhill Caliburn • Bell Potter • Austock	• BNPP • HSBC • Nomura	• UBS • GS • CS	• DB • JPM • Citi • BAML	• Macquarie • Westpac • ANZ • Commonwealth • NAB
Business model	• Small to mid-sized brokerage or advisory operations with equity focus	• Relatively light on-shore Markets capabilities with mixed product focus • Some European players withdrawing capacity • Increasing Asian bank interest	• More focused in equities and derivatives • Some on-shore trading/structuring capabilities, with deep global liquidity and footprint	• Large local market teams, particularly in fixed income products • Aggressive build-out of flow rates and FX, with some appetite for Credit	• Historically leading in flow FX and rates driven by strong relationships • Relatively minor players in equities, except Macquarie

Source: Oliver Wyman proprietary data, estimates and analysis

Section 2: Key Activities and Drivers of Treasury Businesses

Treasury focuses on managing the aggregate risk positions arising from a bank's activities.

Core activities include: (1) managing interest rate risk arising from duration mismatch; (2) managing the investment portfolio and the liquidity buffer; (3) hedging FX risk; (4) managing funds transfer pricing.

Profitability is primarily driven by interest rate movements, hedging positions and performance of the investment portfolio.

The institutional design of the Treasury function determines whether revenues are retained or reallocated to the business units.

Substantial but Volatile Revenue Contribution

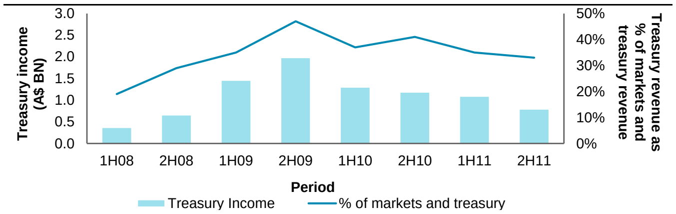
Australian majors' Treasury units are not client-facing businesses. Although often run as cost centres, their activities, particularly in management of interest rate risks, add value to banks in important ways and can be associated with substantial but volatile revenues.

As shown in Exhibit 13, in 2009-10, the revenues of Australian majors' Treasury functions contributed 40-50% of combined Treasury and Markets revenues, up sharply from less than 30% in 2008. These units benefited from having substantial interest-rate exposures that were well positioned for the downward movements in short-term interest rates from late 2008. They also repositioned well against continued rate rises from mid-2009, and thus maintained their contribution to overall bank profitability. They are, however, vulnerable to losses during periods of substantial market volatility, such as that experienced during 3Q of calendar 2011.

Earnings of Treasury functions are volatile because they manage the bank's aggregate risk-taking in interest rates, liquidity and FX. Thus, the volatility of the Treasury's own earnings frequently and intentionally offsets volatility in the business lines, thereby reducing the overall volatility of the bank's profits.

Exhibit 13

Australian Majors Treasury Income (A$BN): Managing aggregate risk-taking causes volatility



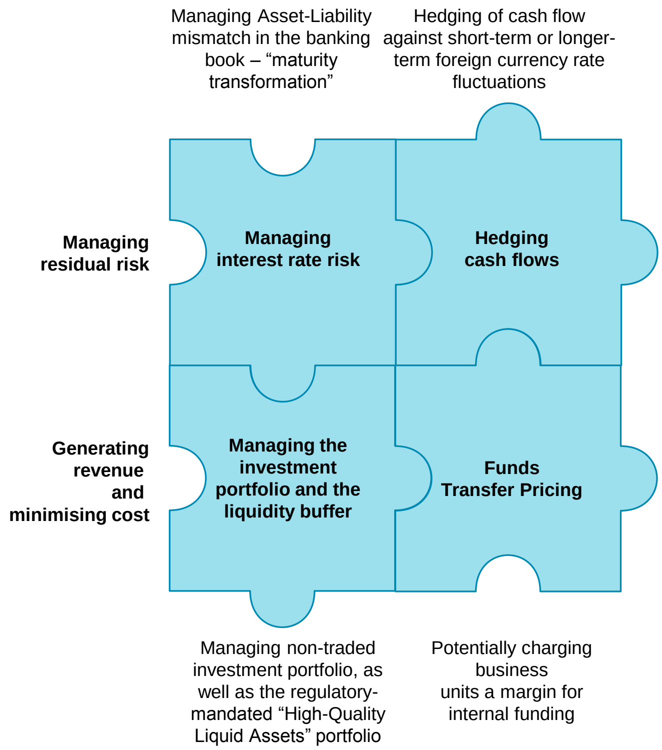
1. ANZ treasury assumed to be the same proportion of markets income as the average of the other majors during 2008–2009
Source: Statutory accounts; Oliver Wyman analysis

Key Sources of Revenues

Where do these revenues come from? Treasuries are essentially centralised repositories for some of the key risks run by the business units of the bank, in particular, the interest rate risk on the banking book and, to a lesser extent, other risks, such as FX. For example, Treasuries take on the maturity gaps generated by the short-term deposit gathering and long-term mortgage lending activities of the retail bank. They then hedge some of these risks in the market and hold the remainder on the balance sheet. Alongside this, they perform functions such as managing the investment portfolio and liquidity buffer.

In short, revenue-generating activities of Australian banks' Treasury operations can be grouped in four major areas, as shown in Exhibit 14.

Exhibit 14
Revenue-generating Activities of Treasury Operations



Source: Oliver Wyman

In the following sub-sections, we explain each activity in more detail and outline the profit drivers.

Managing Interest Rate Risk

Banks' core lending businesses are involved in maturity transformation. They borrow money at short maturities, via deposits or wholesale market funding, and lend money for longer maturities, via mortgages or corporate loans. This mismatch between the maturities of assets (long-term loans) and maturities of liabilities (deposits and short-term borrowing) gives rise to interest rate risk: the risk that short-term interest rates will rise relative to long-term interest rates.

Treasury units are responsible for managing this risk. They do this by providing funds to the business units consistent with their assets' maturity profile, and ensuring that the resulting group-level mismatch in maturities is within the bank's appetite for interest rate risk, by raising funds in required maturities or engaging in hedging activities.

Compared with similar operations of global peers, interest rate risk management operations of Treasury functions in Australian majors tend to be small. Australian majors are exposed to relatively limited interest rate risk because most of their assets are variable rate, especially residential mortgages. This is reflected in the low regulatory capital allocation to this risk type, in that the interest rate risk on the banking book represents less than 5% of Australian majors' regulatory capital consumption. While not required to allocate regulatory capital specifically for interest rate risk, banks in environments where long-dated fixed-rate mortgages are more common, such as the US market, hold more interest rate risk.

The yield curve and its movements are the most significant driver of the revenues generated from this activity. A steep yield curve means a higher margin between short-term borrowing and longer-term lending, and can yield significant revenues for banks running a "mismatch" in the maturity of assets and liabilities. Treasury divisions benefited from the steep yield curve that followed the RBA's relaxation of rates during 2009. During 2010 and 2011, however, the continuing flattening of the yield curve reduced the revenues available from mismatching and depressed the overall Treasury revenues of the Australian major banks. Likewise, interest rate falls and rises, whether at the short-end, the long-end, or across the curve, will generate one-off gains and losses depending on the positioning of a bank's maturity mismatch.

Managing the Investment Portfolio and the Liquidity Buffer

Banks often hold substantial investment portfolios on their books. These are typically managed by Treasury units, and income derived from these portfolios form part of Australian majors' Treasury income. Their purpose is to deploy excess funds, provide easy access to liquidity if needed and diversify sources of income. In Australia, these portfolios tend to be modest in size and low yielding.

Nearly two-thirds of the Australian majors' investment portfolios consist of government securities or securities with maturities of less than one year. They contribute only a small portion of total Treasury and Markets income because of their small size and low yields. This is not likely to change given that the cost of capital and wholesale funding is increasing, capital surpluses are being reduced by higher regulatory minimum requirements, and markets are increasingly volatile.

Banks hold a subset of their investment portfolios as liquidity buffers for risk management and to meet regulatory requirements. Regulations on global liquidity risk management emerging after the global financial crisis mandate all banks to meet stringent requirements in terms of the size and composition of these liquidity portfolios relative to liabilities falling due. In Australia, only Commonwealth and other government securities and balances held at the RBA qualify as assets for these liquidity portfolios. Given the shortage of government bonds in Australia, banks are required to cover their shortfall in liquid assets through a liquidity facility with the RBA. This liquidity facility is (1) subject to payment of a market-based commitment fee, now set at 15 basis points; and (2) secured with assets eligible for repurchase transactions with the RBA under normal market operations (e.g. AAA-rated mortgage-backed securities and long-term bank debt rated BBB+ or higher).

The high-quality assets that banks will need for their liquid assets portfolios have yields below bank funding costs and therefore represent a revenue drag for Treasury. Likewise, accessing the RBA liquidity facility will represent an additional cost, although likely a modest one once spread across the entire balance sheet.

Liquidity risk management will thus be an increasing cost for the banks' Treasuries over the next few years. Complying with the new rules will also require banks to invest in new technology to measure requirements for liquid asset holdings.

Cash Flow Hedging

The cash flows of Australian banks are also subject to risks arising from movements in foreign exchange rates. Their Treasury operations manage this risk by engaging in targeted hedging activities.

The extent of these hedging operations depends on the banks' exposure to foreign markets and foreign exchange, as well as their appetite for holding this exposure. The Treasury functions of Australian major banks, for example, typically hedge back their earnings from their New Zealand subsidiaries into Australian dollars.

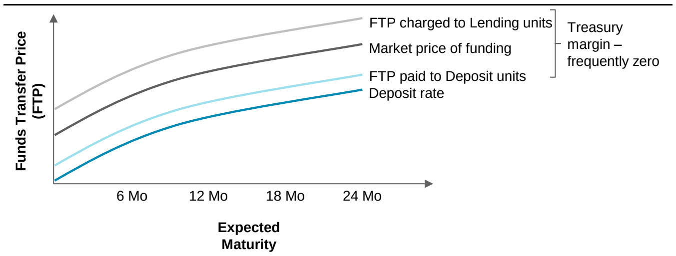
Hedging operations are generally conducted via forward sales of future foreign exchange cash flow or via purchase of options. The purpose of these hedging operations is to reduce volatility of group-wide profits. Yet, depending on the fluctuations in foreign exchange rates, they create volatile revenue or losses for Treasury operations.

Managing Funds Transfer Pricing

Treasury functions are responsible for managing the overall funding of the bank. They raise funds in the money market and transfer them, along with funds from the deposit- gathering businesses, to the lending business units. They charge a "transfer price" for these funds, based on the term of the funding, liquidity of the assets, and other drivers. In some banks, Treasury functions operate as a profit centre and charge a margin on top of the funds transfer price, which generates revenue for the Treasury business unit. In Exhibit 15, we provide an example of the spread capture model of Treasury pricing.

Exhibit 15

Illustration of Funding's Transfer Pricing



Source: Oliver Wyman

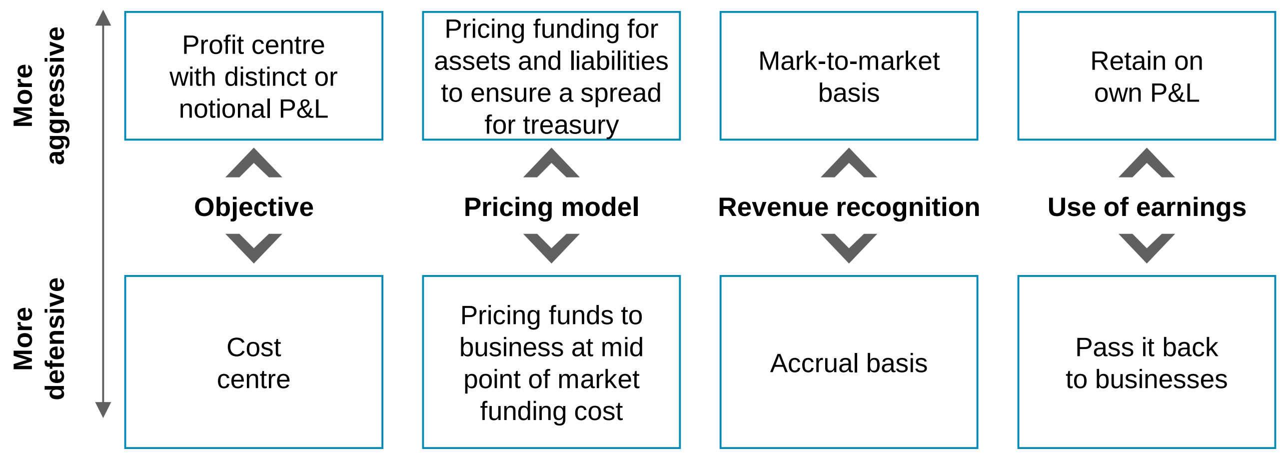
Drivers of Profitability

Treasury profits are driven by the impact of interest rate changes on the retained maturity position in the bank, which results from the bank's structural funding position, as well as Treasury's tactical hedging positions. Returns and losses on the investment portfolio also contribute to Treasury profitability.

In addition to these factors, the institutional design of a Treasury unit influences the revenues generated from its activities and the accounting structure. In Exhibit 16, we outline some of the most common Treasury design choices affecting profit contribution.

Exhibit 16

Design Choices Affecting Profit Contribution of Treasury Functions



Source: Oliver Wyman

Section 3: The Outlook and Expected Responses

Changes in both the economic environment and regulations will affect Markets and Treasury revenues.

Short-term cyclical changes and longer-term structural shifts in the macroeconomic environment will present both risks and opportunities.

Changes in regulations will have a fundamental impact on the product economics in the Markets business.

Regulation will also impact client segment focus. Asset managers and funds will become relatively more attractive, while banks, hedge funds, and insurance companies will be hit harder. The core corporates segment will be less affected.

Banks will need to respond by changing their business mix, improving efficiency of financial resources, and managing costs.

The outlook for the profitability of Treasury and Markets operations is dominated by two key factors: (1) macro conditions; and (2) the impact of regulation. In this section, we discuss each in detail and outline potential responses for the Australian majors. We focus our analysis on Markets rather than Treasury activities, as these will be subject to more significant strategic pressures, are more straightforward to assess in terms of performance drivers and outcomes, and are more susceptible to observable exogenous factors, as opposed to the hedging or position-holding decisions that drive Treasury performance.

Changing Economic Environment Presents Challenges and Opportunities

After a relatively benign start to 2011, the second half saw a marked decline in market sentiment and macroeconomic outlook in the developed world, driven by concerns about sovereign debt and associated risk for financial institutions. The diminished risk-taking and trading appetite had a severe negative effect on conditions for Markets businesses. While sentiment has improved in early CY 2012, the outlook still appears precarious.

Over the short and longer term, this macroeconomic backdrop will create unusual challenges and opportunities for Australian majors' Markets and Treasury operations:

Cyclical Changes (short-term):

The likelihood of significant monetary policy-driven improvement to trading conditions will remain limited. While monetary policy is easy globally, concerns about inflation and overheating in a two-speed-economy may constrain the RBA's flexibility to respond to macroeconomic challenges. A stable-to-downward trajectory in rates will also dampen client demand for rates products from sales and trading operations.

Ongoing volatility in global markets, caused by concerns about growth rates and sovereign debt, can be a double-edged sword for the banks, providing opportunities for outsized gains or losses. In the short term, gains from credit spreads narrowing look likely to boost results, but the outlook for later in the year is not so clear.

Structural Shifts (longer-term):

Ongoing de-leveraging of households and governments globally, and sluggish credit growth in Australia, will likely limit client demand for DCM and sales and trading products, many of which are purchased as hedges against interest rate or FX risks associated with borrowings. Increased focus on de-leveraging would also reduce investor appetite for risk and suppress trading activities.

The impact of a two-speed-economy will be uneven between Australian majors and their competitors:

- The "higher-geared" resources giants with global operations already have established relationships with foreign banks and easy access to global funding markets. Australian majors will face severe competition for business with these clients and will require strong linkages into this sector to prosper.
- On the other hand, the "lower-gear" sectors of manufacturing and services, which include most of the mid-market corporates, form the backbone of Australian majors' client base.

The mandated Superannuation Guarantee flows of funds into the buy-side, along with risk-appetite and demography-driven reallocations from equity into fixed income assets, will sustain the growth of opportunities in this sector for the local majors, in our view.

Overall, the macro environment presents a challenging outlook for the Markets businesses of the Australian majors over the short term. However, opportunities to benefit from longer-term structural shifts in the two-speed-economy and increased Superannuation fund flows mean that the picture is not entirely bleak.

New Regulations Mean Fundamental Changes

Following the global financial crisis, regulators internationally have launched the broadest reform of the financial system since the aftermath of the Great Depression. Australian majors' operations in Markets and other businesses will be fundamentally changed by these regulations through deteriorating product economics, increasing operational complexity and a changing strategic landscape.

The immediate impact of regulation will be on product economics as regulations drive up the cost of financial resources. This will happen in four main ways:

- ***Higher risk weighted assets*** for some products, particularly counterparty credit exposures and securitisation.
- ***Increased capital required*** as a percentage of risk-weighted assets.
- ***More stringent definition of capital,*** deducting several instruments from eligible capital and disallowing the use of other instruments, raising the overall cost of capital.
- ***More stringent liquidity requirements,*** requiring more expensive longer-term funding.

Most of these regulations have been promulgated by the Basel Committee at a global level. Their precise impacts in Australia will depend on the Australian Prudential Regulation Authority's (APRA) application of the new requirements, which was not fully finalised as of the time of writing. However, the proposals put forward so far by APRA allow us to identify specific areas that will be affected by the regulation, as outlined in Exhibit 18.

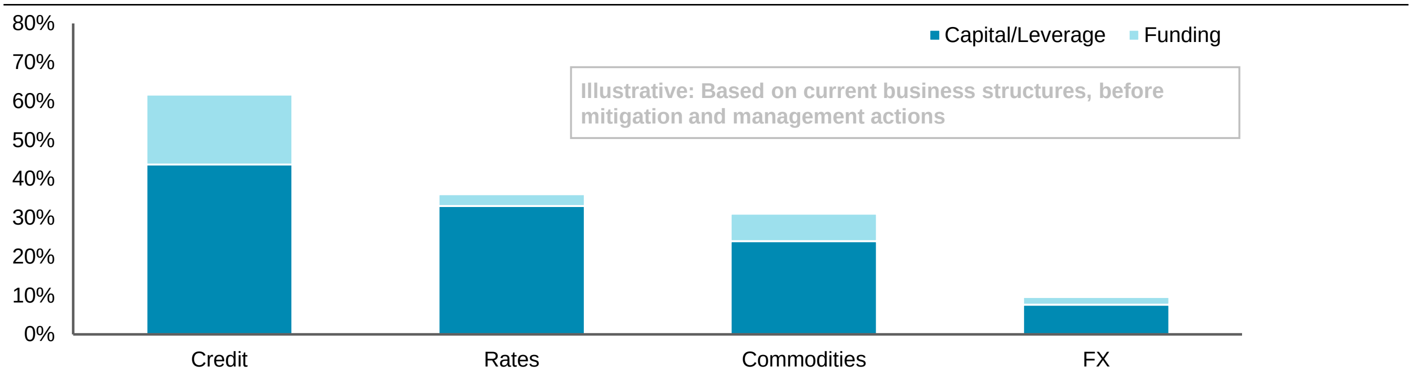
Impact on Products

Exhibit 17 shows our estimates of the product-level impact of the new capital and liquidity rules on the Australian banks (without taking into account any mitigating actions by management). Structured products will be significantly affected, especially because of the increasing risk-weightings applied to the counterparty credit risk exposures arising from these products. Banks will need to consider drastic capacity reduction, re-pricing, cost management or cross-subsidisation initiatives for these product sets. Flow products will be affected relatively less, as they do not entail such significant risk exposures and funding requirements, and because central clearing of some of these contracts will reduce counterparty credit risk exposures associated with these products (see box on OTC clearing on Page 19).

Clearly, bank management will respond by changing pricing and re-deploying capital and liquidity across business lines. Accordingly, the final results for product profitability will not look like the picture that Exhibit 17 traces. However, this static view shows where the regulatory impacts will be the most pronounced.

Exhibit 17

Basel 3 Impact: Incremental Cost of Equity and Funding/Revenue



1. "Funding" is the increase in term funding required; "Capital/leverage" is the impact of additional RWA, capital and leverage requirements under Basel 2.5 and Basel 3, charged at a 12% cost of equity and assuming 10% Tier 1 capital requirement after Basel 3
Source: Oliver Wyman data and analysis

Exhibit 18

Summary of regulatory changes proposed in Australia and globally

Regulatory impact	Key regulatory chages proposed	Impact
1. Higher risk weighted assets	• CVA capital charge for mark to market losses on counterparty credit • Increase of counterparty credit risk charges for trades with other financials • Use of stressed Expected Positive Exposure (EPE) • New charges for wrong-way risk • Lower risk-weighting for OTC derivative exposures to CCPs • Calculation of stressed VAR for Market Risk	Increased assessment of riskiness for • Exposures to derivatives counterparties • Doing business with Financial Institutions • Running trading books • Underwriting securitisations
2. Higher capital requirements	• Minimum CET1 ratio of 7% (incl. conservation buffer) • 0–2.5% counter-cyclicality buffer • 1–3.5% CET1 buffer for Global-Systemically Important Financial Institutions (current list only includes overseas institutions) • Minimum Tier 1 leverage ratio of 3%, to be tested from Jan 2013	• Banks will have to hold higher amount of capital for a given amount of risk • Global banks deemed systemically important will hold even more capital
3. More stringent definition of capital	• New deductions, including securitisation exposures and all investments in commercial entities deducted from Tier 1 capital ratio	• Cost of capital will increase as banks are less able to make use of cheaper instruments such as hybrids
4. More stringent liquidity requirements	• 30-day Liquidity Coverage Ratio – Requirement to hold liquid assets against run-off of liabilities in given scenarios • Net Stable Funding Ratio requirement to require long-term funding of long-term assets	• Banks will need to fund their positions with longer term liabilities, increasing funding costs

CET1: Common Equity Tier 1; CVA: Credit Valuation Adjustment; CCP: Centralised Counterparty; OTC: Over The Counter; VAR: Value At Risk
Source: Oliver Wyman analysis

Impact on Client Segments

Beyond fundamentally changing economics for Markets products, the forthcoming regulations will also have significant differential impacts across client segments. The regulations will hit hardest in the banks and hedge funds segments, increasing the costs of doing business with these clients and reducing their demand for Markets products.

However, for the Australian majors, their core segment of Corporates will not escape unscathed but will be relatively less affected.

Asset managers and superannuation funds, which make fewer demands for credit and will be cheaper to deal with under the new OTC clearing regimes, will be the least affected segment, further increasing their attractiveness. In Exhibit 19, we provide further details of these client segment-level dynamics. Banks that recognise these shifts in client demand and react most proactively could mitigate their exposure and gain market share in the emerging market environment.

Central Clearing for OTC Derivatives

Along with the emphasis on improving bank capital and liquidity positions, which has been the focus of Basel 3, Northern hemisphere regulators have also been driving banks towards increased clearing of their Over-the-Counter (OTC) derivatives on central clearing houses and increased use of electronic trading facilities. This has been motivated by the desire to decrease the systemic implications of counterparty risk and to increase transparency in the derivatives market.

Australia has indicated that it will also encourage central clearing. However, there is no clear move on the migration to electronic platforms.

The clearing of OTC derivatives by central clearing houses will affect the derivatives businesses of the Australian majors in two ways:

- **Short-term:** Their offshore rates and credit businesses will need to be centrally cleared in 2012/2013, when the US/European regulations are due to take effect. They will need to establish appropriate interconnectivity with banks that are members of clearing houses to facilitate this.
- **Long-term:** Their core AUD product sets will need to be centrally cleared once the appropriate rules and infrastructure are in place. However, this will probably be a slower process.

Local regulators in Australia have been considering solutions for central clearing, either using an offshore central clearing house or establishing a local clearing house. While consultations are ongoing, the Council of Financial Regulators' preference appears to be for the local option to maintain regulatory control and the ability to intervene in a crisis. The Australian Stock Exchange has also announced its interest in providing central clearing services.

However, much uncertainty remains over the nature of the new structure, e.g.

- What products will be required to be centrally cleared?
- Which types of counterparties will need to centrally clear?
- What will the clearing-house membership requirements be?
- What will the margin requirements and related rules be?

Two things are clear, however. Banks will need to establish linkages and negotiate agreements with central clearing houses and adapt back- and mid-office systems and processes to leverage these linkages and ensure compliance with the requirements. The Australian majors are well advanced in this process.

Beyond executing these operational changes, banks will need to adapt their strategy given that the competitive playing field will change:

- High credit ratings will be less advantageous for derivatives counterparties, thus undermining one of the sources of competitive differentiation the Australian majors have sought to exploit in recent years.
- Technology and scale will be more important to offer superior execution, ancillary services and provide economics.

New offerings such as collateral management and transformation will likely become more important to the banks.

Exhibit 19

Regulatory Impacts across Client Segments

	Impact of regulation	Regulatory impact
Banks/ wholesale-retail		• Capital markets volume likely to decrease as intra-bank transactions attract higher CCR charge • Increasing demand for ECM and DCM activity • New opportunities for bank funding opened by launch of covered bond issuance • Investor protection regulation (e.g. FOFA) may further limit structured product sales • Refocus on cost reduction and funding opportunities (innovative structured funding solutions being considered)
Hedge funds		• Basel III has direct impact with implications for Counterparty Credit Risk, liquidity, and collateral management • Reduced leverage available; new rules on highly leveraged counterparties and tax increase (and closure of offshore loopholes) may lead to shrinkage • Increased regulation may lead to slower segment growth and more restricted strategies
Insurers		• LAGIC will highlight the volatility of the sector which could imply higher costs of capital in the short run and limit capital raising • Insurers and banks will have different capital costs for credit of various ratings and maturities, potentially generating arbitrate activities
Corporates		• Impacted by higher capital requirements for OTC due to exemptions for central clearing – some banks providing financing for collateral • Overall corporate banking business more difficult to make profitable given increased liquidity costs for lending and challenged economics for Markets products
Asset managers, super funds		• Increased counterparty risk charges • Opportunities for credit distribution given constraints on bank balance sheets • Opportunities to assist with operational complexity around OTC clearing requirements

Source: Oliver Wyman analysis

Bank Responses

The changing market and regulatory conditions and the diverging outlook for different client segments and product groups will affect each of the Australian majors differently. How they respond to these environmental changes will also differentiate them. They may change their business mix, reallocate financial resources to optimise efficiency and cut operating costs.

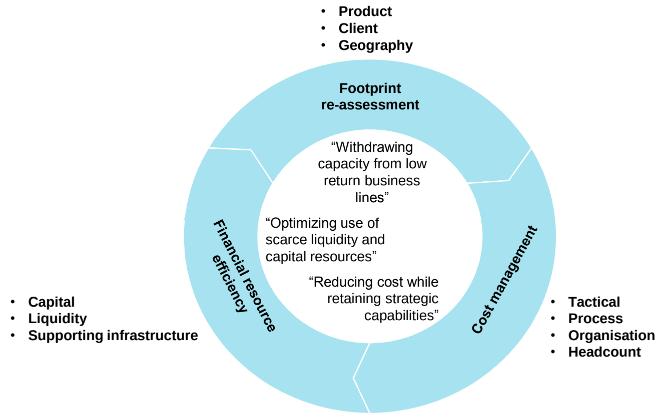
Footprint re-assessment will involve realigning resources across product lines and client segments to reflect the new realities of post-regulation economics and growth prospects.

At the product level, this will probably involve a move away from structured and toward flow businesses**.** However, this will be less pronounced for Australian banks than for global players, which have historically done a larger amount of structured business. Credit and securitisation businesses will need to be reconfigured to ensure ongoing viability. Banks will also have to look at the implicit cross subsidies between business lines, such as those between DCM and rates/FX as the derivatives cross-sell becomes less profitable.

Re-assessing client footprints may lead some banks to refocus on the local asset manager and super funds sector. While facing challenging conditions currently, the sector will likely be further bolstered by the increase in mandatory superannuation contributions. As the managers of this growing pool of assets increase their appetite for more debt and foreign products to diversify their asset base, they will face challenges in managing interest rate risks, currency risks and the pending asset-liability mismatch challenges of asset decumulation. These buy-side businesses may also become more attractive as an avenue for selling down credit exposures from bank balance sheets as the new liquidity and capital rules begin to bite. Australia's major banks will be in a position to exploit their existing relationships with local players in this sector and their strong capabilities in fixed income products.

Exhibit 20

Re-configuring Australian banks' markets and treasury businesses



While the majors are predominantly concentrated on their home markets, some have more substantial offshore footprints that will merit scrutiny given the macro outlook and new regulatory constraints. On both counts, the Asian markets are likely to look more attractive to most players than North America or Europe, and we are likely to see ongoing reconfiguration of geographic footprints.

In a world with increased scarcity of financial resources, ensuring ***financial resource efficiency*** will be even more critical to optimize use of these scarce resources (such as capital and liquidity) and maximizing returns achieved from their use. We see these efforts as likely to focus on four key areas:

- Increased transparency about the uses of financial resources and their returns;
- Higher prices for financial resources (e.g. funds transfer prices reflecting the true cost of liquidity) and increased use of P&L charging for capital consumption;
- Applying these more comprehensive pricing methodologies in performance measurement and incentives;
- Organisational and governance alignment (e.g. bringing together decision making across resource types, linking it to strategic planning, and embedding its governance at the appropriate levels in the organisation).

Given the complex nature of Treasury and Markets products, we think major Australian banks face two distinct challenges in increasing resource efficiency:

- Accurately reflecting the resource consumption of these businesses;
- Striking the balance between allocating them the required capital while retaining the flexibility to shift the resources "real-time" in response to changing conditions in a volatile market.

Limited opportunities for top-line growth will compel firms to engage in disciplined ***cost management***. In 2011, we saw the increased use of tactical measures by Australian majors to reduce costs. While these have been helpful, we identify a number of areas where the Markets operations of Australia's major banks can further increase their cost efficiency, including:

- Increasing Front Office productivity via appropriate shape and structure of the talent pyramid, producer monitoring and management, and addressing content and coverage overlaps;
- Increasing process efficiency (e.g. reducing manual intervention points in trade execution, and eliminating silos and infrastructure overlaps for trading, structuring and sales);
- Ensuring support functions and management infrastructure are not over-resourced for the market conditions.

Overall, while the outlook for Australian Markets businesses is challenging, we believe that those banks that take the opportunity to deploy strategies similar to those outlined above will find themselves well positioned to weather the on-going market and regulatory storms. This should allow them to gain market share and outperform peers that fail to adapt to the new environment.

Section 4: Markets and Treasury Income for Major Banks

The valuation section solely reflects the views of Morgan Stanley Research, not Oliver Wyman. This section is intentionally blank for this Oliver Wyman shortened version – please contact Morgan Stanley directly for this section.

Section 5: Comparison of Major Banks' Performance

The valuation section solely reflects the views of Morgan Stanley Research, not Oliver Wyman. This section is intentionally blank for this Oliver Wyman shortened version – please contact Morgan Stanley directly for this section.

Section 6: Morgan Stanley Markets and Treasury Income Forecasts

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(as of February 29, 2012)

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	Coverage Universe		Investment Banking Clients (IBC)		
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category
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Equal-weight/Hold	**1229**	**42%**	**449**	**42%**	**37%**
Not-Rated/Hold	**105**	**4%**	**24**	**2%**	**23%**
Underweight/Sell	**464**	**16%**	**124**	**12%**	**27%**
Total	**2,918**		**1058**		

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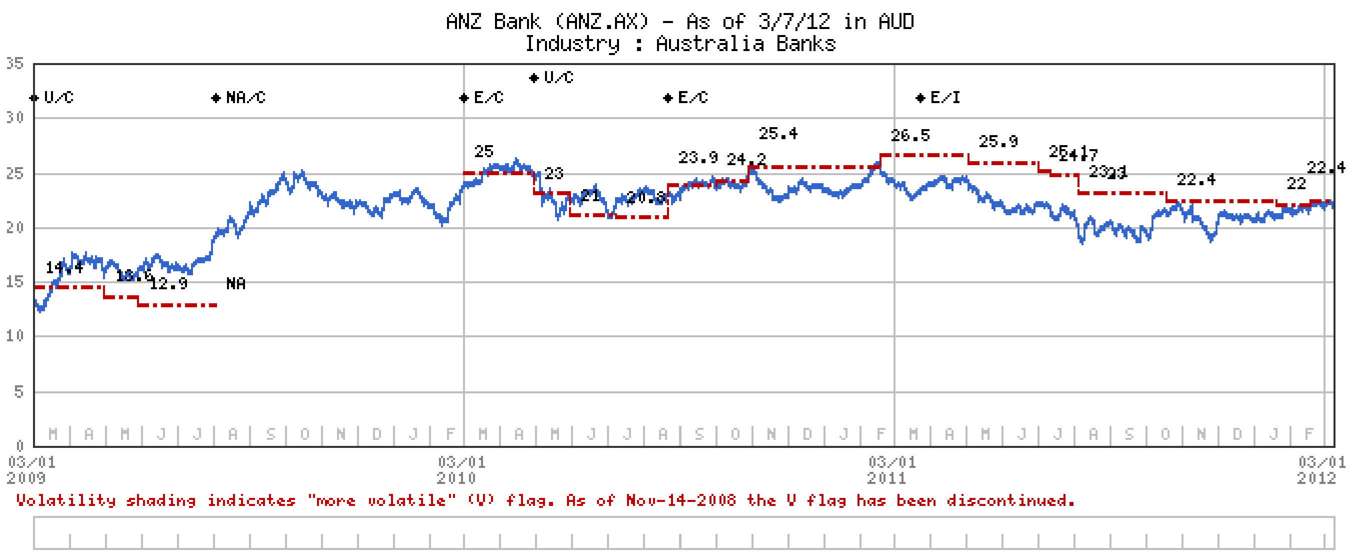
Stock Price, Price Target and Rating History (See Rating Definitions)

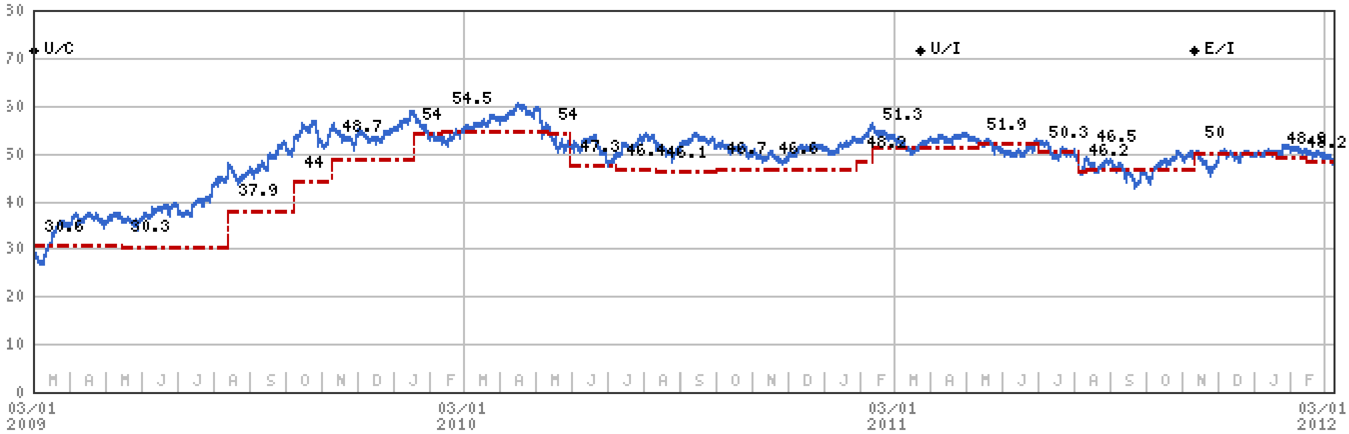


Stock Rating History: 3/1/09 : U/C; 8/3/09 : NA/C; 3/1/10 : E/C; 4/30/10 : U/C; 8/21/10 : E/C; 3/24/11 : E/I

Price Target History: 12/9/08 : 14.4; 4/30/09 : 13.6; 5/28/09 : 12.9; 8/3/09 : NA; 3/1/10 : 25; 4/30/10 : 23; 5/31/10 : 21; 7/8/10 : 20.8; 8/21/10 : 23.9; 10/1/10 : 24.2; 10/29/10 : 25.4; 2/18/11 : 26.5; 5/3/11 : 25.9; 7/1/11 : 25.1; 7/11/11 : 24.7; 8/5/11 : 23.1; 8/20/11 : 23; 10/19/11 : 22.4; 1/20/12 : 22; 2/17/12 : 22.4

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —
Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) More Volatile (V) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Commonwealth Bk Aust (CBA.AX) - As of 3/7/12 in AUD
Industry : Australia Banks



Volatility shading indicates "more volatile" (V) flag. As of Nov-14-2008 the V flag has been discontinued.

Stock Rating History: 3/1/09 : U/C; 3/24/11 : U/I; 11/11/11 : E/I

Price Target History: 2/12/09 : 30.6; 5/14/09 : 30.3; 8/13/09 : 37.9; 10/8/09 : 44; 11/9/09 : 48.7; 1/17/10 : 54; 2/10/10 : 54.5; 5/12/10 : 54; 5/31/10 : 47.3; 7/8/10 : 46.4; 8/12/10 : 46.1; 10/1/10 : 46.7; 11/15/10 : 46.6; 1/28/11 : 48.2; 2/10/11 : 51.3; 5/11/11 : 51.9; 7/1/11 : 50.3; 8/5/11 : 46.2; 8/11/11 : 46.5; 11/11/11 : 50; 1/20/12 : 48.9; 2/15/12 : 48.2

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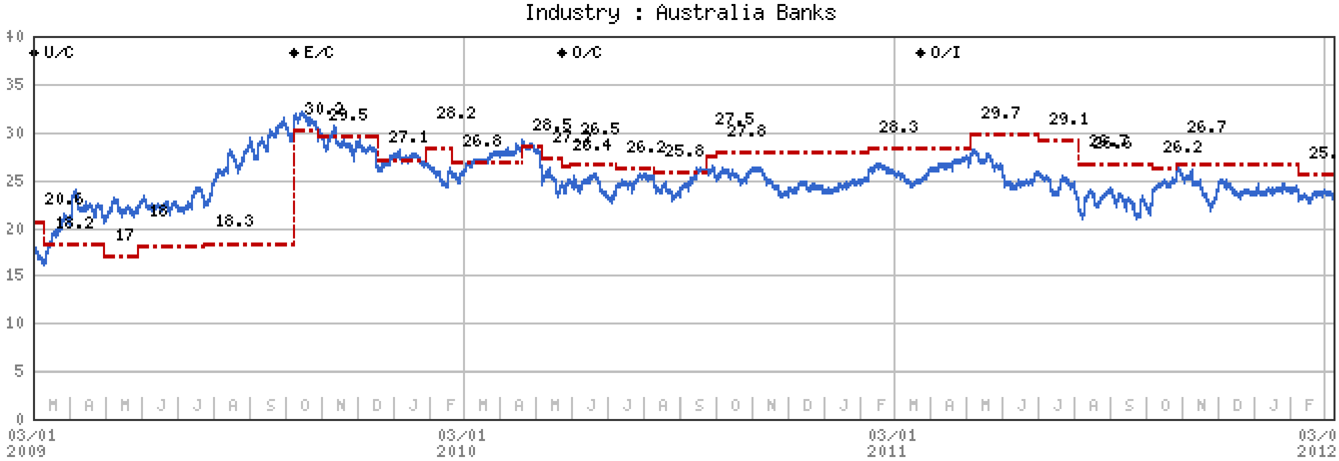
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Nat Aust Bank (NAB.AX) - As of 3/7/12 in AUD
Industry : Australia Banks

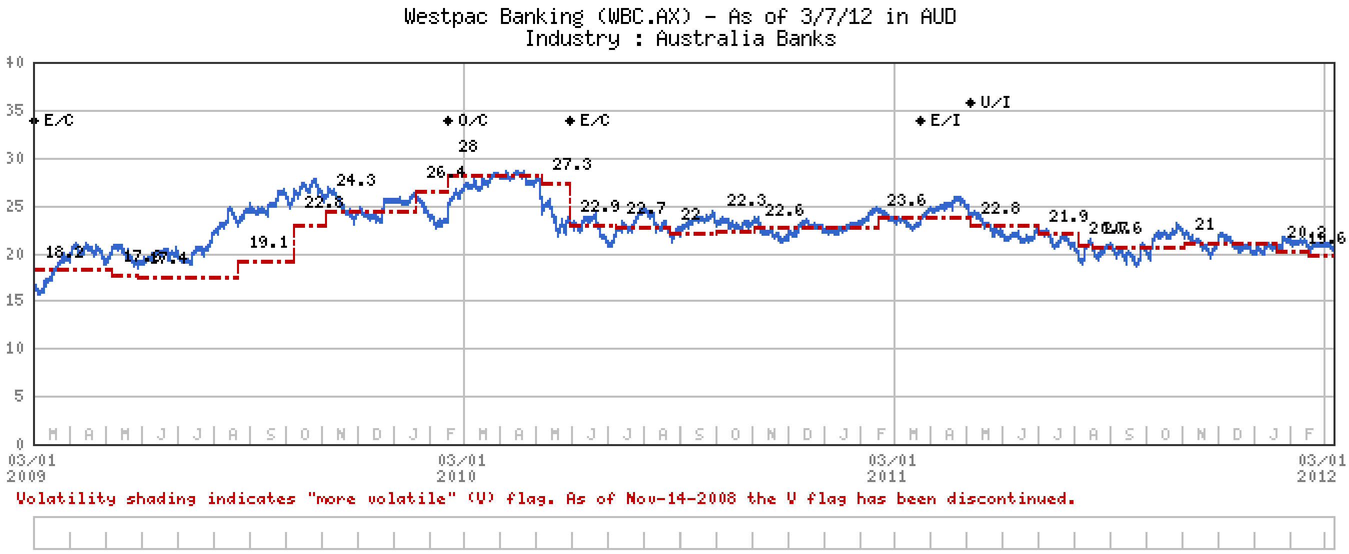


Volatility shading indicates "more volatile" (V) flag. As of Nov-14-2008 the V flag has been discontinued.

Stock Rating History: 3/1/09 : U/C; 10/8/09 : E/C; 5/24/10 : O/C; 3/24/11 : O/I

Price Target History: 12/9/08 : 20.6; 3/10/09 : 18.2; 4/29/09 : 17; 5/28/09 : 18; 7/23/09 : 18.3; 10/8/09 : 30.2; 10/29/09 : 29.5; 12/18/09 : 27.1; 1/28/10 : 28.2; 2/19/10 : 26.8; 4/19/10 : 28.5; 5/7/10 : 27.2; 5/24/10 : 26.4; 5/31/10 : 26.5; 7/8/10 : 26.2; 8/10/10 : 25.8; 9/22/10 : 27.5; 10/1/10 : 27.8; 2/8/11 : 28.3; 5/5/11 : 29.7; 7/1/11 : 29.1; 8/5/11 : 26.7; 8/9/11 : 26.6; 10/7/11 : 26.2; 10/27/11 : 26.7; 2/7/12 : 25.5

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst) Stock Price (Covered by Current Analyst)
Stock and Industry Ratings (abbreviations below) appear as ◆ Stock Rating/Industry View
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) More Volatile (V) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)



Stock Rating History: 3/1/09 : E/C; 2/16/10 : O/C; 5/31/10 : E/C; 3/24/11 : E/I; 5/5/11 : U/I

Price Target History: 2/18/09 : 18.2; 5/7/09 : 17.6; 5/28/09 : 17.4; 8/21/09 : 19.1; 10/8/09 : 22.8; 11/4/09 : 24.3; 1/19/10 : 26.4; 2/16/10 : 28; 5/6/10 : 27.3; 5/31/10 : 22.9; 7/8/10 : 22.7; 8/23/10 : 22; 10/1/10 : 22.3; 11/3/10 : 22.6; 2/15/11 : 23.6; 5/5/11 : 22.8; 7/1/11 : 21.9; 8/5/11 : 20.7; 8/16/11 : 20.6; 11/2/11 : 21; 1/20/12 : 20.2; 2/16/12 : 19.6

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target No Price Target Assigned (NA)
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