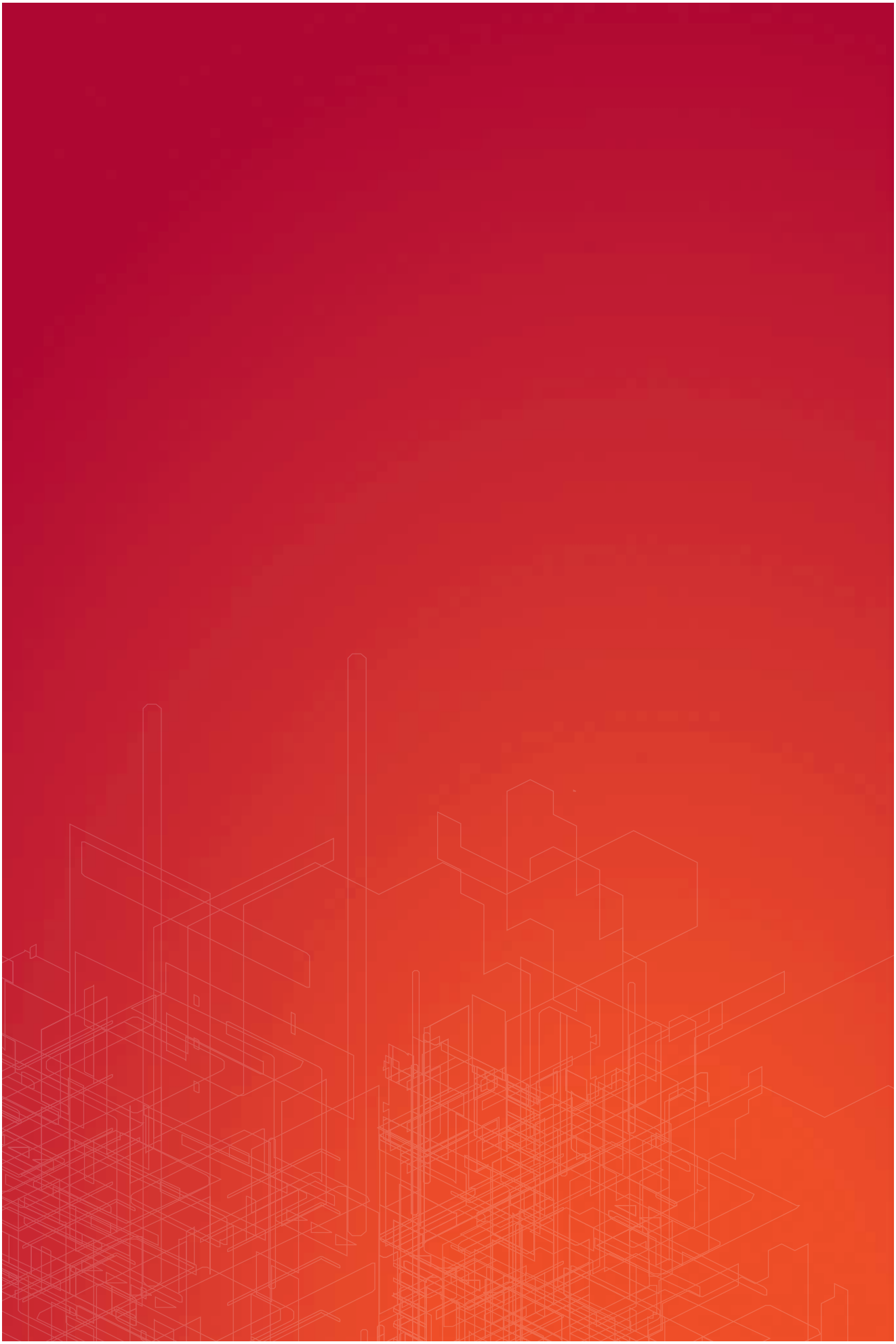
more give, less take

nab

Corporate Finance Insights: **Current Issues**

Edition 2: February 2012



Welcome

John Martin
Managing Director
Head of NAB Advisory

Welcome to the second edition of Corporate Finance Insights.

In our first edition of Corporate Finance Insights (August 2011), we focused on the challenges of funding and the potential impact of Basel 3 on corporate borrowers. In our client discussions over the last three months there have been two recurring themes: the challenges of risk management in a highly uncertain world; and the increasing need for sophisticated liquidity management by banks and corporates.

Looking forward to 2012, with the lack of clear resolution to the European sovereign debt crisis, the themes of heightened risk and focus on liquidity are set to continue. As we live through the second major phase of the Global Financial Crisis caused by government indebtedness, credit markets are likely to remain very expensive and all markets will remain volatile as they flip between recessionary and expansionary views of the world.

Our research shows that in the past three years most financial markets have exhibited more than double the risk observed in the years prior to the onset of the global financial crisis (GFC). No wonder CFOs and treasurers regularly comment to us that they are 'feeling the heat' around their risk management strategies. In many ways liquidity management had become a lost art form. With ample global liquidity up until 2007, there was no particular reason to focus on what would happen if liquidity dried up.

However, the GFC highlighted the consequence of insufficient liquidity and we have seen most corporates de-gear and build up liquidity reserves in response. In this edition, we examine both the impact of Basel 3 on corporate liquidity risk management and the new Standard & Poor's corporate liquidity standards.

Retail investors have also reacted to the significant increase in risk. The success of recent hybrid issues is a reflection of investors' new-found focus on stable income and capital preservation. We examine two hybrid case studies: Woolworths and Origin.

While capital structuring and M&A are on the backburner for many corporates, our research shows reasonable levels of M&A activity in the past year and an opportunity exists to optimise share buyback tactics.

Much has been made of the declining levels of Australian productivity. Our economics group provides some cause for hope that this may just be a reflection of the special conditions created by the current mining boom.

Lastly, the carbon tax takes effect on 1 July 2012 and we take a look at the extensive range of assistance measures available to industry.

I hope you find this edition of Corporate Finance Insights useful and informative. Feel free to contact us on any of the issues discussed.

Yours sincerely

John Martin
Managing Director
Head of NAB Advisory

In this issue

Managing risk post-GFC:
double the risk and the 'hedger's dilemma'

John Martin
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Viktor Svatek
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John Martin and Viktor Svatek examine the increase in risk across most financial and credit markets following the GFC and the impact on corporate risk management.

2011: The year we realised volatility was here to stay

In 2011 everything was meant to go back to normal. After three years of extreme volatility in financial markets, most of us anticipated a return to the good old 'noughties', with plenty of liquidity, low credit costs and stable interest rates and input prices. Financial market conditions which would support stable earnings and business growth were widely anticipated. The easiest strategy in dealing with financial markets was to do nothing and hope for a favourable improvement in markets.

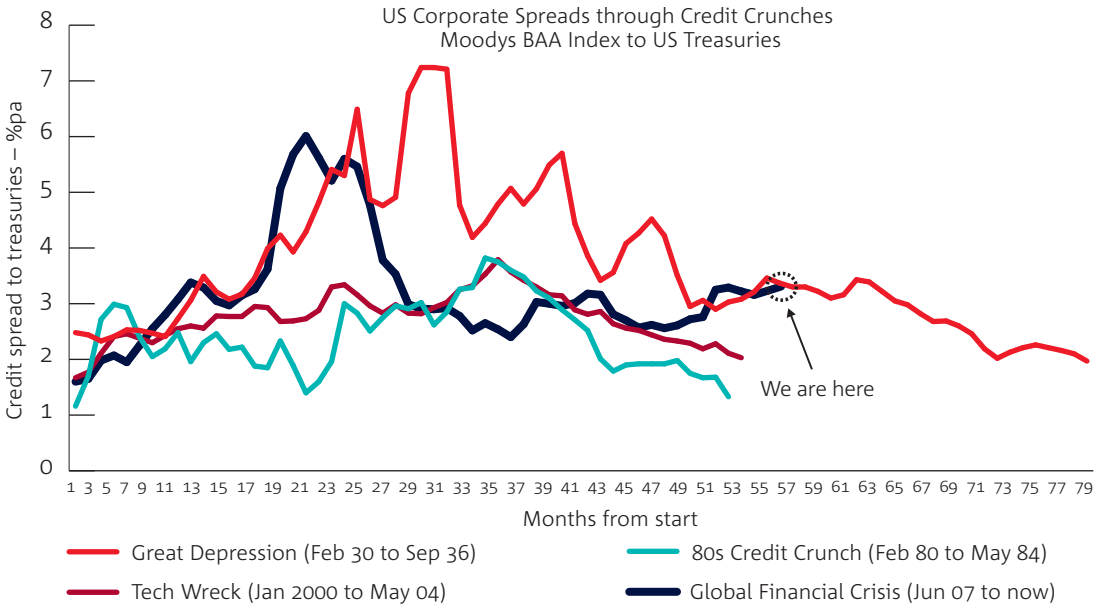
The reality was very different. After a brief improvement in credit and equity markets in early 2011, the stagnation of major OECD economies and the worsening European sovereign debt crisis saw credit and equity markets worsen through the remainder of the year and significant swings in exchange rates and commodity prices. The strategy of doing nothing is likely to have been high risk: for example, your credit costs are likely to be sharply higher while unhedged interest expense may be slightly lower.

After four years of rolling crisis, we need to accept that relatively high credit costs and unstable financial markets may persist for some time.

In relatively benign financial markets, the consequence of incorrect risk management decisions can be easily concealed. In these far more volatile market conditions, the impact of an adverse risk event can be far more dramatic – think of the impact the higher Australian dollar (AUD) has had on many local manufacturers. Though simply hedging everything is not necessarily the magic answer, higher volatility leads to greater mark-to-market losses on hedge positions and chief financial officers (CFOs) and treasurers come under intense scrutiny over the opportunity cost of hedging. For example, in 2008 interest rates plummeted and there was considerable scrutiny around the very large mark-to-market losses which emerged on corporate interest rate swap portfolios – more on this later. This gives rise to what we call the 'hedger's dilemma' – this is also discussed later in the article.

Recognising this increased volatility, most companies have focused on improving their capacity to withstand financial risk by de-gearing and building up significant amounts of liquidity. While we discuss this in greater detail in later chapters of this edition of Corporate Finance Insights, in our view this is a fairly blunt risk management strategy – while it provides additional capacity to absorb shocks it does not address the source of risk directly and will impact on the value of the business. In our view, in this new, riskier environment most companies need to rethink how they approach risk management.

Chart 1: Credit spreads during the major credit crises over the past 100 years



Source: US Federal Reserve, NAB Internal Data, January 2012.

"After four years of rolling crisis, we need to accept that relatively high credit costs and unstable financial markets may persist for some time ... in this new, riskier environment most companies need to rethink how they approach risk management."

Volatility in everything means greater financial risk

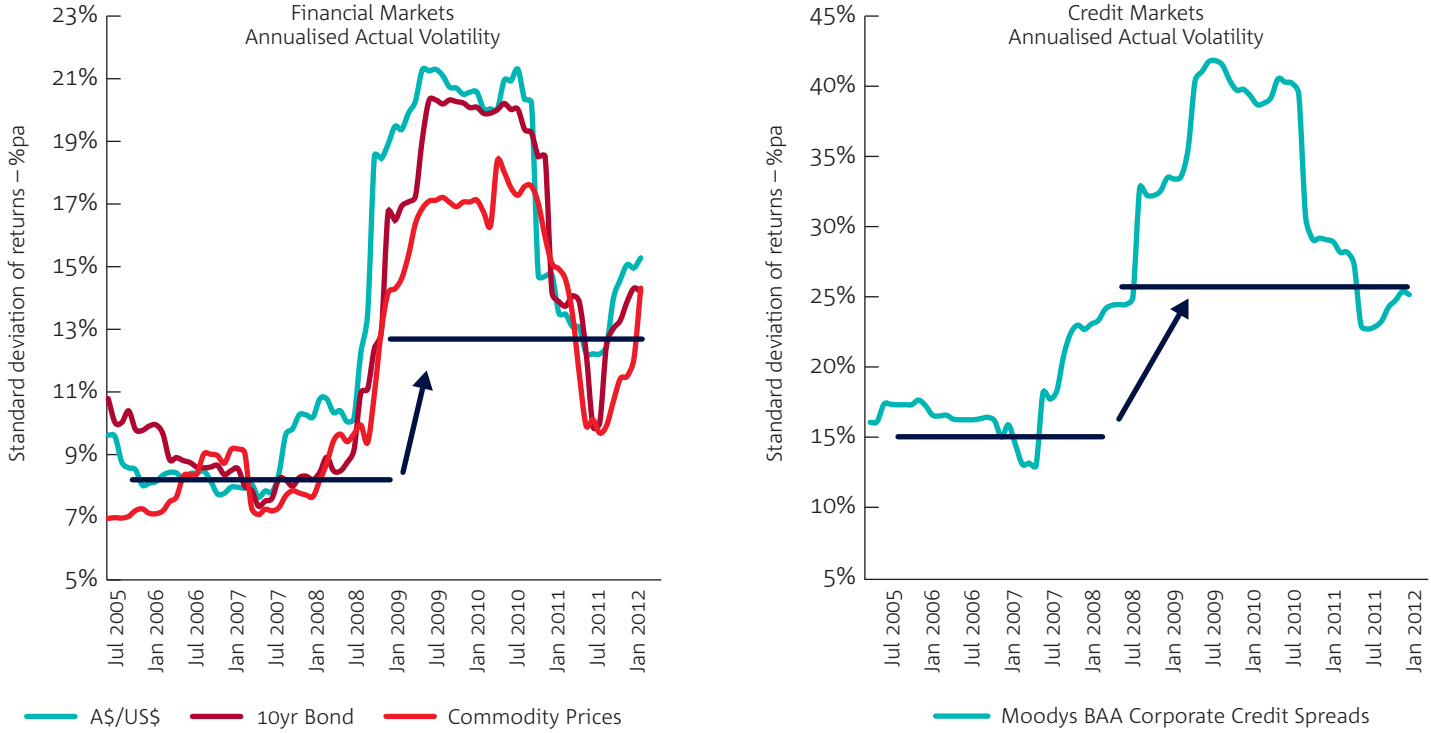
The financial market conditions of recent years are well beyond anything we have seen in our working lives. This makes it hard to develop risk management strategies – which are usually informed by how we have done things in the past. As an illustration of this concept, Chart 1 shows that the persistently high cost of credit since the start of the GFC has not been seen since the Great Depression – something very few of us would have experienced first hand. How many of us commented in late 2007 that credit markets couldn't get much worse than this and have regretted not entering into long-term credit facilities back then? We were framing our risk management decisions based what we had experienced over the past 10 years – not the past 100 years.

Not only are credit market conditions nothing like we have experienced before, but the general level of risk across all markets has reflected a noticeable 'step change' increase. Our intuition is right, the world is considerably more uncertain now than it has been in the past decade. This is illustrated in Chart 2, which shows how risk (measured as actual annualised volatility) has changed in currency, interest rate, credit and commodity markets before and after the GFC.

While risk has fallen from the peak years of 2008 and 2009, volatility remains between two and three times higher across all of these markets. So, for a given dollar amount of exposure in most markets, the level of risk has more than doubled since the onset of the GFC. What makes it more complex is that many of the traditional assumed correlations between different market variables have changed dramatically as well. As a consequence, numerous assumed natural hedges' are open to question. This topic will be discussed in far greater detail in coming issues of Corporate Finance Insights.

A good example of the impact of greater volatility on risk management practices can be seen in the AUD/USD exchange rate. Chart 3 compares the AUD/USD foreign exchange (FX) rate and its volatility over the past decade. In recent years we have seen extreme volatility over very short-time frames, providing considerable scope for both significant exposure to loss from not hedging and opportunity loss from hedging.

Chart 2: Risk is here to stay



Source: RBA and NAB Internal Data, January 2012

Chart 3: Exchange rate and volatility

Source: Bloomberg data, November 2011.

Some of the lessons which standout include:

- Prior to the GFC (i.e. up to 2007), both historical and implied volatilities consistently stayed at around 10%. Volatility (i.e. uncertainty) was low and the volatility of volatility (i.e. changes in the level of perceived uncertainty) even lower. The exchange rate, like many other market variables, was seen as safe and fairly predictable.

- In 2008 volatility shot up as the market became increasingly unconvinced that the exchange rate was going to remain at its prevailing level. Interestingly, while the implied volatility implied a heightened level of uncertainty, what actually happened when the AUD fell from 98c to 60c within the space of about three months was far more volatile. In other words, the market took itself by surprise!

- To illustrate just how much the market surprised itself during 2008, consider the following: in mid-2008 implied volatility was still at the then-normal level of 10% and the currency was near its high of 98c. What happened subsequently resulted in actual realised volatility reaching 50% later that same year. Anything is possible (clearly!) but an implied volatility of 10% implies that such an event would normally be expected to occur just once in every 100,000,000,000,000 years. In other words, this should not have happened so early in the life of the universe!

- Of course the collapse and subsequent recovery in the currency is just one of a number of market events that shouldn't have happened. Others include the shut down (even if temporary) of credit markets and the corresponding drying up of liquidity sources for corporates and financial institutions alike.

A familiar adage should probably be amended in light of recent events: "the market is always right, except when it isn't very convinced about what it is saying". Of course, the market has always reserved the right to change its mind (i.e. its price), even if it is sometimes tempting to think that it won't.

The impact of higher volatility on risk management: hedger's regret

If managing risk is important to your organisation, then the focus on financial risk management needs to significantly increase because the impact of a given risk event on earnings is now more than double. While this has prompted many organisations to re-assess their exposure to risk and their risk management procedures for reducing this risk there is a flip side. If we are actively managing risks and the market variable moves favourably, then the magnitude of the loss on hedging contracts (which is also a measure of opportunity loss) will also be more than double. The challenge this creates for CFOs and treasurers is what we term 'hedger's regret': the bigger and more noticeable the losses (and refinancing risk) on hedging contracts, the greater attention they will receive and, with that, the greater potential for significant criticism from senior management and shareholders.

Often if you do nothing, there is very little scrutiny of the failure to act. The challenge with choosing to hedge is that it is a proactive management action which comes under considerable scrutiny – and it will only be deemed a good decision half the time. The 'hedger's dilemma' is that often hedging strategies will only be viewed favourably 25% of the time because doing nothing often avoids any scrutiny at all. In fact doing nothing could be favoured because it is likely to be right 50% of the time.

A classic example of the 'hedger's regret' during the GFC was the sharp movement down in interest rates seen in Australia in 2008 and illustrated in Chart 4. Many corporate borrowers who fixed interest rates in the late 2007 as a risk mitigation strategy came under significant criticism as short-term interest rates plummeted more than 3% in under a year and the mark-to-market losses on interest rate swaps rose significantly. This drop in interest rates was an extreme event-driven phenomenon created by government policymakers' common desire to fend off a global recession.

This can be illustrated in the following matrix:

The hedgers dilemma: damned if you do, ignored if you don't

	Price Down	Price Up
Hedge	✗ Opportunity Loss	✔ Loss Protection
Do Nothing	✔ Lower Costs	✗ Higher Costs

Hedging only seems worthwhile 25% of the time

While an infrequent event, understanding how these extreme events can impact on hedge decision-making has to be part of the risk manager and treasurers' toolkit.

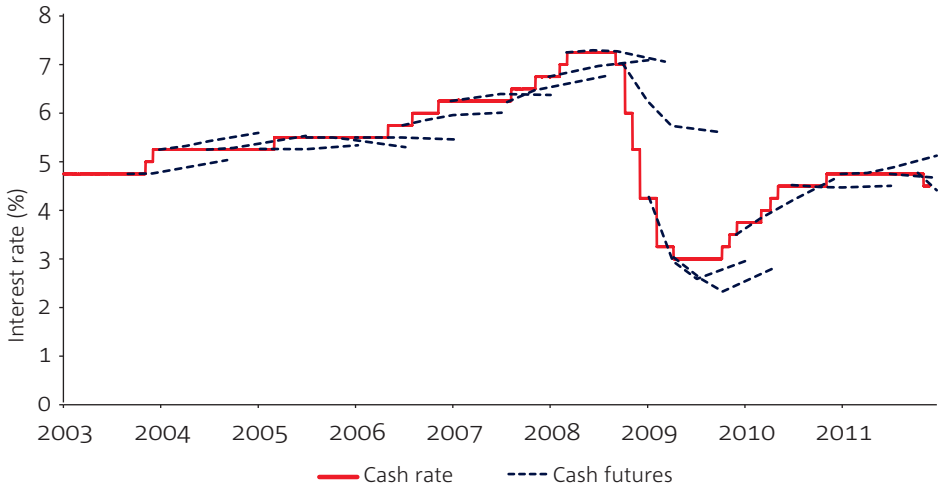
Reflecting the greater scrutiny placed on risk decision-making we are seeing increased attention being paid to risk management strategies involving purchasing option structures which limit exposure to mark-to-market loss. While these strategies typically involve an upfront premium cost, they still provide protection from unfavourable movements in the underlying price and, when the market price moves in a favourable direction, the opportunity loss is limited to the premium. The implication for CFOs and treasurers is that we need to ensure that the consequences of doing nothing about risk are subject to the same scrutiny as hedging decision. Further, given the increased focus on the opportunity costs of hedging, it does encourage the use of options strategies which limit the opportunity costs associated with forwards and swaps.

Challenges and opportunities for treasurers

This unpredictable environment has brought corporate risk management to the fore and many organisations are re-assessing how they manage risk. At the same time, the number and the complexity of the various moving parts has put a strain on the resources of most treasuries. Out of necessity, treasurers have had to adapt and become more discriminating, identifying the risks that really matter for their companies and focusing on those while adopting a 'near enough is good enough' approach for the rest. Now is a good time for corporates to reassess how they approach risk management to ensure it is suited to this new volatile world. Important questions include:

- What is the magnitude of the exposure to each financial market risk and what are the assumed inter-relationships? Are our assumptions on 'natural hedging' correct?
- What is the impact of financial market risk scenarios on the company (e.g. replaying 2008 movements in interest rates, FX and commodity prices) – do we have an earnings at risk model to quantify these risks?
- Do we recognise that doing nothing is a risk management strategy and assess it in the same way as a proactive risk management decision like hedging?
- What is the potential magnitude of opportunity loss through hedging? What role do option based products provide to reduce the 'hedger's dilemma'?
- What is our capacity to absorb financial risk? What is our liquidity risk position? What is the appropriate level of gearing? What sort of financial structure is optimal?
- What is our refinancing risk? Do we have an appropriate spread of debt maturities? What other strategies can we adopt to reduce our exposure to higher costs of borrowing?

Chart 4: History of RBA cash rate and futures



Source: Bloomberg data, November 2011.

In the coming year we will delve more deeply into these questions. In this edition of Corporate Finance Insights we examine a selection of key strategic and emerging treasury issues, focusing on managing liquidity and capital structure in the context of market risk constraints:

- Managing liquidity risk as well as the cost of liquidity;
- Standard & Poor's new approach to incorporating liquidity criteria into credit metrics;
- Strategies for optimising capital structure such as tapping the re-opening hybrid markets and the merits of share buybacks.

Corporate liquidity risk management: who stole my liquidity?

Nick Scott
Associate Director
NAB Advisory

Nick Scott explains how various responses to the GFC have caused liquidity to re-emerge as an economic good and changed risk management strategies.

In the wake of the global financial crisis, liquidity risk management and its counterpart, managing refinance risk, have emerged as the top priorities for many corporate treasurers. Liquidity risk can mean many things, but in its simplest form it is the risk of not being able to meet cash payment obligations when due.

The 2007 – 2009 financial crisis revealed that the liquidity of some banks and other financial intermediaries, the main providers of corporate liquidity, was an illusion. The various responses to the GFC from market participants, regulators and rating agencies can now be seen as responses to the same issue of liquidity risk.

- **Bond markets**, perceiving the heightened risk of bank insolvency due to inherent illiquidity, have kept the margin demanded on long-dated bank paper (bank cost of funds) very high relative to previous decades. This has the inevitable implication of higher charges for bank financing
- **Rating agencies** have reworked their methodologies for both corporate and financial institutions, such that more weight is given to liquidity management (including liquidity survival period tests) and access to stable and diverse sources of funding
- **Bank regulators** have come up with the Basel 3 liquidity requirements which impose on banks very prescriptive quantitative requirements for liquidity (30-day horizon) and stable funding (12-month horizon).

Taken together, the various responses mean that liquidity has re-emerged as an economic good with a very significant and potentially volatile price. This provides additional incentives for corporate treasurers to try to optimise their liquidity needs and reassess the cost/benefit/risk of alternative banking products and services.

The regulatory cost of liquidity

In the same way the Basel 2 capital requirements created a regulatory cost of capital that directly influenced the way banks price loan margins across sectors and various credit grades, the Basel 3 liquidity requirements create a regulatory cost of liquidity that will have its own impact on corporate loan margins and other bank services. To ensure that banks adequately price regulatory liquidity, banks are required to estimate the profit and loss outcome related to the liquidity risk accepted and to attribute that profit or loss to its various business units.

The regulatory cost of liquidity for Australian banks is created by the following requirements:

- The time horizon to ensure sufficient liquidity under a stressed scenario is 30 days; the time horizon for stable funding classification is 12 months
- The only eligible assets for regulatory liquidity purposes are cash, Australian commonwealth and semi-government bonds
- Any eligible liquid asset gap is to be made up by a Reserve Bank of Australia (RBA) committed liquidity facility with a range of haircuts for different collateral securities
- A hierarchy of minimum run-off rate assumptions (for deposits, credit facilities etc.) and stability of funding assumptions for different client segments.

Example: As banks will need to back 75% of corporate demand deposits with the low-yielding eligible liquid assets, they will likely introduce lower rates for corporate demand deposits relative to retail demand and term deposits to compensate for this cost. Additionally, banks will only be able to include 50% of a corporate demand deposit (or a corporate term deposit with residual maturity less than 12 months) as stable funding versus 80% to 90% for retail demand deposits.

"If a firm is able to assess its 'economic cost of liquidity' relative to the 'regulatory cost of liquidity' charged by banks, it may be able to arrange more optimal banking arrangements that save costs or profit from this difference."

In contrast, a rolling 12-month corporate deposit should allow a bank to optimally satisfy all Basel 3 liquidity and funding requirements and therefore provide a higher rate (the 'regulatory liquidity premium') than corporate demand or fixed term deposit.

The key implication of this is that if a firm is able to assess its 'economic cost of liquidity' relative to the 'regulatory cost of liquidity' charged by banks, it may be able to arrange more optimal banking arrangements that save costs or profit from this difference. Firms which have excess liquidity can earn a liquidity premium by committing a deposit for a longer maturity or increasing the drawdown notice period on a credit facility.

Optimising liquidity

Firms manage liquidity risk in essentially three ways:

- Matching contractual cash outflows with contractual cash inflows
- Holding standby liquidity facilities and lines of credit
- Holding a buffer of liquid assets that can be sold when experiencing a liquidity stress event.

As liquidity risk management has always been a mainstay, if not primary duty of corporate treasurers, the fundamental approach to accessing, analysing and managing liquidity risk should be largely unchanged. As liquidity has emerged as an economic good with a very significant and potentially volatile price, there is a strong impetus to reconsider risk management disciplines in the light of these changes.

Two key areas stand out:

1. Define and measure liquidity risk appetite

A company's liquidity risk appetite or tolerance should be defined by the board and senior management in a risk appetite statement that as well setting out clearly how the company's liquidity and liquidity risk is defined, describes how liquidity risk is measured quantitatively. Techniques based on value-at-risk concepts (VAR) for credit and market risk can be used to measure 'liquidity-at-risk' (LAR).

A central liquidity buffer, established by a standby facility, call deposit or other perceived liquid asset (e.g. money market mutual fund) can be determined based on a minimum acceptable LAR; e.g. a 1% chance of not meeting liquidity needs over a 12-month time horizon.

As liquidity has a price, firms that have excess liquidity can 'sell' that liquidity to a bank by entering into a term deposit rather than a call deposit and pick up the liquidity premium. Additionally, like any other market-based risk, setting different liquidity risk targets can result in greater downside risks and higher upside potential, e.g. if credit margins fall over the life of a project and result in cost savings or rise and cause economic unviability.

2. Incorporate liquidity costs into internal transfer pricing

Quantifying liquidity costs and benefits and allocating those costs and benefits to the appropriate business and product provides a market signal for liquidity that assists in managing liquidity risk.
By charging an internal funding rate to new projects and assets, liquidity risk can be internally transferred from the business unit to a central treasury. The reason for this is that a fully match-funded position has no liquidity risk and is similar to charging the business unit the cost of a cross-currency swap to hedge currency risk.

Example: the cost of a 10-year asset should be assessed based on the weighted and estimated market cost of 10-year funding; recognising that any equity component is perpetual funding.
Though potentially unfavourable to the business unit at inception, the benefit is that in interim periods profitability is measured based on the cost of funds set at inception and not the company's actual funding costs across this period.

In respect of treasury's own accounting, if the asset is funded by short-dated liabilities, a liquidity provision should be recognised based on the present value of the difference between actual short-term rates and expected short-term rates over the life of the asset with an appropriate risk margin for lending margin volatility. To ensure the interest rate benefit of the asset-liability mismatch is not booked prematurely, profit due to actual versus expected funding costs should only be released to treasury's profit centre at each reporting period when liquidity risk for that period has run-off.

How can NAB assist?

- The NAB Advisory team, together with your Relationship Banker, can assist in understanding the impact of regulatory change on your business.
- We can develop simple and/or innovative solutions to the adverse impacts of regulatory change that can potentially result in significant cost savings.
- We will discuss and provide advice on banking and financing strategies that provide the optimal liquidity risk/reward trade-off.
- We assist in modelling expected cash flows using statistical techniques (in similar ways to market risk modelling) and providing advice on subjects such as internal transfer pricing methods.

New Standard & Poor's corporate ratings criteria: liquidity analysis for corporate issuers

Craig Bennett
Director
Capital & Ratings Advisory
NAB Advisory

"Liquidity is an important component of financial risk and a material driver (and predictor) for default – and now this is more closely aligned with the issuer credit rating."

Craig Bennett looks at the refinement of Standard & Poor's liquidity criteria and the impact on corporate Australia.

Standard & Poor's (S&P) recently refined the liquidity methodology employed when determining issuer credit ratings of corporate entities, with implications for Australian corporate ratings and liquidity policies. The new methodology highlights how liquidity will be assessed as an independent characteristic and measured on an absolute basis, reflecting its critical importance to credit worthiness. This amendment is positive, as it enhances transparency in the credit evaluation process and sets clear thresholds for evaluating the quality of liquidity risk management. It also promotes a forward looking, proactive stance to liquidity management that would typically feature in a well-managed company.

Ordinarily, a gradual deterioration in a company's fundamentals can lead to earnings pressures and surface as liquidity problems. However, even the most solid of businesses can experience a liquidity crisis that may be triggered by an inability to access debt markets.

As such, liquidity is an important component of financial risk and a material driver for the issuer credit rating. S&P approaches liquidity from the downside – whether the company can meet obligations (such as debt servicing, meeting debt maturities and day-to-day expenses) when confronted with a shock or trigger event. The revised methodology focuses on a new two-step process:

1. Identify the sources and uses of liquidity with a focus on those flows over the next six to 24 months; and

2. Assessing the coverage of sources to uses of liquidity to evaluate the relative strength of that coverage. The combination of quantitative and qualitative considerations is used to categorise that liquidity profile into one of five new standardised liquidity descriptors.

All else being equal, a corporate that is assigned an unfavourable liquidity descriptor will receive a lower issuer credit rating. The revised criteria also states that a company's liquidity score must be at least 'adequate' to receive an investment grade issuer credit rating.

Table 1: Key sources and uses of liquidity

Sources of liquidity	Uses of liquidity
Cash/liquid investments	Negative forecasted FFO
Positive forecasted funds from operations (FFO)	Expected capital spending (maintenance plus growth capex)
Positive forecasted working capital inflows	Negative forecasted working capital outflows
Proceeds of asset sales (when predictable)	Debt maturities
Undrawn, available portion of committed bank lines maturing in >12 months	Required postretirement employee benefit top-ups
Expected cash injections from parent or government	Puts triggering debt acceleration or new collateral posting upon a one to three notch ratings downgrade
	Contracted acquisitions and shareholder distributions

Source: S&P: Methodology and Assumptions – Liquidity Descriptors for Global Corporate Issuers, September 28, 2011.

Step 1: Identify the sources and uses of liquidity

Monetary flows of sources and uses of cash will be assessed over the next six to 24 months, with timeframes identified by the liquidity descriptors used.

Step 2: Assess the sources and uses of liquidity and assign a liquidity descriptor

Upon identifying what sources and uses of liquidity exist within the corporate entity, S&P will then assess to what extent sources cover uses as this provides a good indication of a company's liquidity buffer.

The revised evaluation also incorporates a scenario evaluation to estimate the potential for a company to breach its covenants if there was a decline in earnings before interest, taxes, depreciation, and amortisation (i.e. EBITDA). This is then overlaid with a qualitative consideration of various liquidity management capabilities, including the resilience of the company to low-probability but high impact shocks.

Following this assessment, S&P will assign one of five liquidity descriptors, as detailed in Table 2.

Benefits of S&P's revised methodology

S&P's refinement of its liquidity criteria was likely undertaken in response to the events of the GFC when there was less certainty of a company's ability to rely on external funding, and consequently greater focus on its proactive management of liquidity. Nonetheless, the analysts and market welcomes any change that fosters greater clarity regarding the credit assessment process.

The key benefits from the methodology revision include:

- greater transparency regarding how S&P assess a corporate's liquidity profile;
- improved insight into the liquidity management and risk appetite of a company; and
- reduced complexity in the process of comparing liquidity profiles for a rated peer group reflecting the quantitative assessment.

At this stage S&P expects that only a small number of ratings will change because of these revisions. Even so, NAB encourages clients to engage early with the credit rating agency regarding the new criteria to ensure minimal impact on your business.

NAB Capital & Ratings Advisory works with treasurers across corporate Australia to assist with the development of financial policies and engagement around issues affecting credit ratings.

Table 2: Summary liquidity characteristics and descriptors

	Liquidity Descriptor				
Criteria	**Exceptional**	**Strong**	**Adequate**	**Less than adequate**	**Weak**
A/B*	≥2.0x over next 2yrs	≥1.5x over next year	≥1.2x	≤1.2x	Deficit over next year
A – B*	Positive when EBITDA ↓50%	Positive when EBITDA ↓30%	Positive when EBITDA ↓15%	Zero	Deficit over next year
Covenants	Headroom exists when EBITDA ↓50% & debt ↑30%	Headroom exists when EBITDA ↓30% & debt ↑25%	Headroom exists when EBITDA ↓15% & debt ↑15%	Headroom exists when EBITDA ↓10%	No headroom
Ability to absorb high impact, low probability events without refinancing	High	High	High	Low	None
Banking relationships	Well-established	Well-established	Sound	Weak	None
Standing in market assessed using trading data against market/peers	High	High	Satisfactory	Poor	Poor
Financial risk management framework	Strong	Strong	Strong	Weak	Weak

*Legend: A = Source, B = Use

Source: S&P: Methodology and Assumptions – Liquidity Descriptors for Global Corporate Issuers, September 28, 2011.

Hybrid resurgence:
the ongoing investor desire for yield

Nicholas Chaplin
Director
Capital Markets Origination

Nicholas Chaplin describes the advent of corporate hybrid issuance and its galvanising effect on the retail investor base.

The extreme popularity of the recent listed subordinated debt issues by Woolworths and Origin should not be surprising. The level of interest is the result of a number of factors that have built up over a long period of time and revolve around the retail investor's desire for safe fixed interest investments offering a higher return than bank term deposits.

In lead managing the above two high profile transactions, the NAB capital markets and global investment teams have seen first hand the dramatic rise of the retail investor. We are seeing ongoing growth in self-managed super funds with balances now in excess of A$400 billion together with an increasingly volatile and unreliable equities market. These factors alone have driven up cash balances in super fund accounts – funds which are being kept, for the most part, in cash term deposits as a means of providing a safe, albeit relatively low return.

Retail investors have had a long experience of hybrid instruments, with the first mainstream issues commencing in 1999. These instruments flourished over the next 10 years with a broad group of corporate and financial issuers raising primarily hybrid equity as a means of improving the balance sheet and driving shareholder returns.

The GFC put a stop to issuance as investors closed up shop and headed for the cover of cash deposits. Only the banks continued to issue and even this ceased in 2009 as the Basel Committee sat down to determine capital requirements and how hybrid issues should be structured to qualify for regulatory bank capital.

While the Basel rules are not yet finalised and only brave banks have issued Tier 1 capital instruments this year, the success of the corporate hybrid issues by Woolworths and Origin has reignited interest by both investors and other potential issuing companies looking for a cost effective and non-dilutive way to raise equity.

The Woolworths and Origin issues were designed to provide equity credit in support of each company's credit rating. The instruments are structured with long ultimate maturities of 25 and 60 years respectively and are each callable by the issuer at year five. Investors are given a reasonable assurance that the securities will be called by the issuer as the instruments will lose their equity credit at year five providing an incentive (although not an obligation) to redeem. The instruments contain certain other terms, including the ability for coupons to be deferred and margin step-ups that increase the case for higher equity credit.

Table 1 compares the structures of the Woolworths and Origin issues depicting the key differences. It should be noted that Woolworths achieved 50% equity credit for its issue while Origin achieved 100% equity credit – both assigned by Standard & Poor's.

Through the deep investor channels of MLC, JBWere, NAB Private Wealth, National On-Line Broking, and the business bank, NAB has been privileged to provide vast support for these issues by our clients. Our investors have demonstrated strong interest through having a good understanding of the risks involved and a great deal of comfort in the issuers. The yields available have provided a very solid incentive to invest. The return of the hybrid market was inevitable and these issues maintain hybrids at the forefront of the growing retail bond market in Australia.

Other issues likely to be seen in the future are a return to securities that are structured as equity for accounting and tax purposes thus enabling cost-effective equity on a company's balance sheet. Regardless of the structures, however, the general familiarity of investors with hybrids in general, an increasing awareness of the standard terms and conditions and a currently insatiable desire for safe investment yields will provide good support for appropriate issuers for some time to come.

"Our investors have demonstrated strong interest through having a good understanding of the risks involved and a great deal of comfort in the issuers."

Table 1: Comparison of Woolworths and Origin issues

Issuer	Woolworths Limited ("Woolworths")	Origin Energy Limited ("Origin")
Equity Credit form S&P	Intermediate (50%)	100%
Maturity	25 Years	60 Years
Call Dates	Year 5 and quarterly thereafter	Year 5 and quarterly thereafter
Loss of S&P Equity Credit	Year 5	Year 5
Step-Up	Year 5 (1.00%p.a.)	Year 25 (1.00%p.a.)
Interest Payments	Unfranked, cumulative cash payments Floating rate, payable quarterly	Unfranked, cumulative cash payments Floating rate, payable quarterly
Optional Deferral	Yes, subject to a dividend stopper	Yes, subject to a dividend stopper
Mandatory Deferral	None	Yes, subject to a dividend pusher Mandatory deferral triggered by reference to the following financial ratios: • Leverage ratio[2]: is above 4.0x for any two consecutive testing dates. • Interest Cover Ratio[3]: is below 3.5x for any testing date
Change of Control Event (linked to rating fall)	Issuer redemption right Holder redemption right	Issuer redemption right If not redeemed, the margin increases by a further 5.00%
Ranking	Subordinated	Subordinated
Replacement Capital	Legally binding covenant	Intent-based statement
Listing	ASX	ASX

Source: NAB Debt Capital Markets, November 2011.

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*Equal No.1, Peter Lee Associates 2011 Large Corporate and Institutional Relationship Banking Survey – Australia.

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more give, less take

Trends in Australian corporate activity

Ben Avery
Analyst
NAB Advisory

Ben Avery charts a resilient and resurgent M&A market.

Deal environment

Volatile and uncertain economic conditions have the potential to significantly impact the M&A climate. In 2011 alone, global regulatory reform, political unrest in the Middle East & North Africa, natural disasters across the Asia Pacific – including the devastating earthquake, tsunami and nuclear crisis in Japan – widespread corporate and sovereign rating downgrades and the on-going European sovereign debt crisis were just some of the themes to play out among other economic issues, which have contributed to instability in financing markets and the global economy.

Despite this volatility, large cash reserves, undeployed private equity funds, the relatively low cost of borrowing during the first half of the year and a resilient local economy fostered considerable local M&A activity. The 'valuation gap' between target and acquirer appears to have converged over the course of 2011, with Australian deal count steadily growing throughout the year. Targets which experienced mediocre financial performance in recent years have restructured and recapitalised and cash rich corporates, better access to funding and a need to put dry powder to work meant that both strategic and financial acquirers have been active.

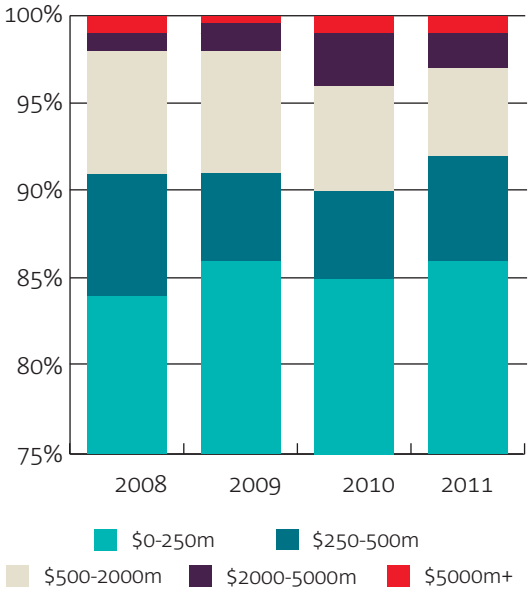
From 1Q – 4Q 2011, the total value disclosed of Australian companies being bought stood at A$76.3 billion, with total deal count of 401 up 4% on prior corresponding period, as illustrated in Chart 1.

Deal size breakdown

As reflected in Chart 2, while accounting for only 2.6% of Australian M&A volume in 2011, large cap deals in excess of A$2 billion actually contributed c58% of total Australian deal consideration, up from 57% in 2010 with A$41.3bn worth of deals announced.

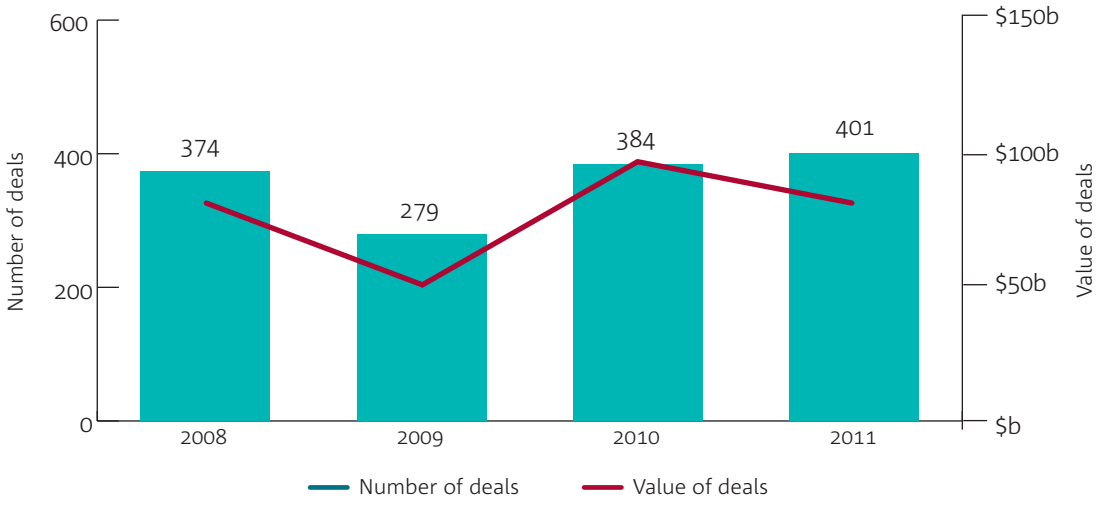
This is principally attributed to the nature of industries involved in Australian M&A, with infrastructure, mining, media and large consumer discretionary corporates featuring among the larger announced corporate transactions in 2011.

Chart 2: M&A deals size breakdown – percentage by deal count



Source: Merger Market, January 2012.

Chart 1: Number of Australian public and private deals FY08 to FY11



Source: Merger Market, January 2012.

Industries

The energy and resources sector again dominated M&A activity throughout 2011, up 14% to 23.2% of total private and public related deals (see Chart 3).

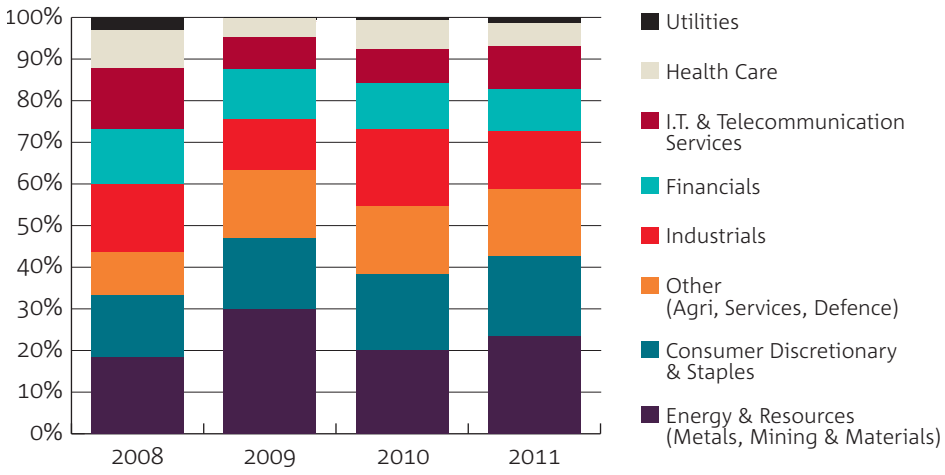
Sectors including utilities and IT and telecommunication services also performed well, with total deal volume up 33% and 23% respectively. Transactions in the Industrials sector declined 28% from 18.8% of total deal volume in 2010 to 13.5% of deals announced in 2011.

Consideration structure

Cash remains the dominant source of acquisition finance for corporate transactions in Australia.
Growing corporate cash balances, better access to funding and depressed equity markets meant the use of scrip as consideration was a less attractive component of an acquirers funding structure. Chart 4 documents trends in acquisition finance. Transactions financed with equity accounted for just 7.9% of total M&A deals in 2011 compared 9.2% of total volume in 2010 and 17% in 2009.

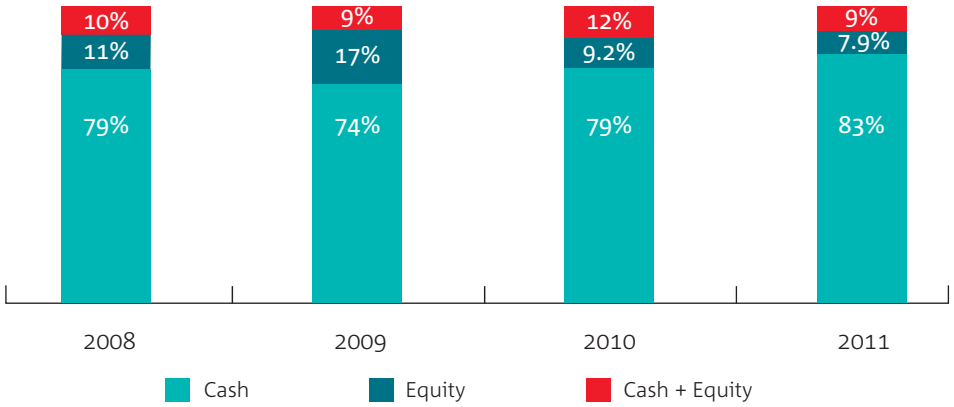
Cash financed deals accounted for 83% of total deal volume in 2011, up 5% from last year. Interestingly, companies are also paying more cash then historically, with 77% of total deal value paid in cash in 2011, up from 55% in 2010.

Chart 3: Deals by sector – percentage by deal count



Source: Merger Market, January 2012.

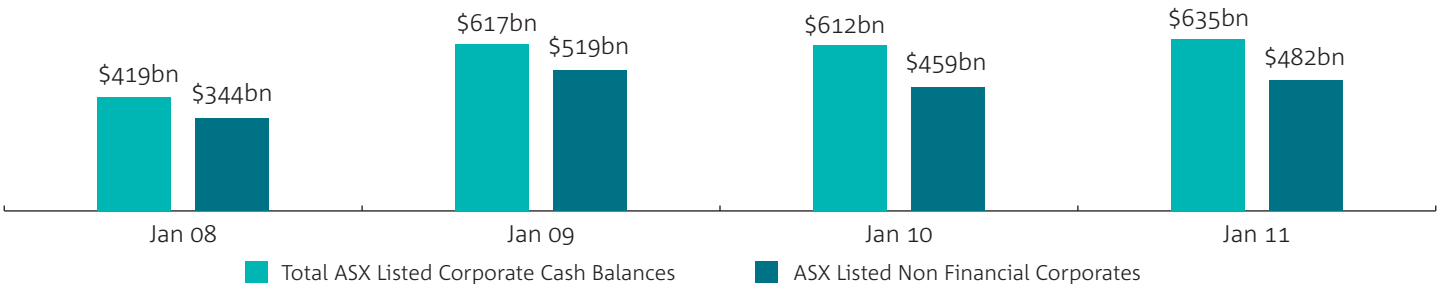
Chart 4: Australian M&A consideration – by deal count



Source: Merger Market, January 2012.

Corporate cash balances
In 2011, ASX listed corporates kicked off the year with a record level of cash sitting idle on their balance sheet, as displayed in Chart 5. As at January 2011, the 'cash and equivalents' of all ASX-listed corporates was up 4% to around A$635 billion. If we exclude banks and diversified financials to give a truer picture of corporate cash (i.e. excluding cash managed in client accounts), we find non-financial corporate cash holdings have increased by 5% to A$482 billion.

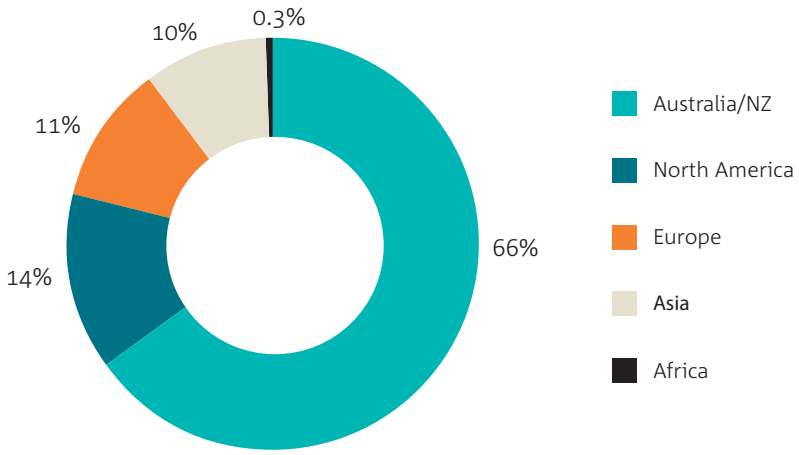
Chart 5: Australian ASX-listed corporate cash balances



Source: Capital IQ, January 2012.

"Despite ongoing market volatility, large corporate cash reserves, undeployed private equity funds and a resilient local economy have fostered considerable domestic M&A activity."

Chart 6: Origin of bidders 2011

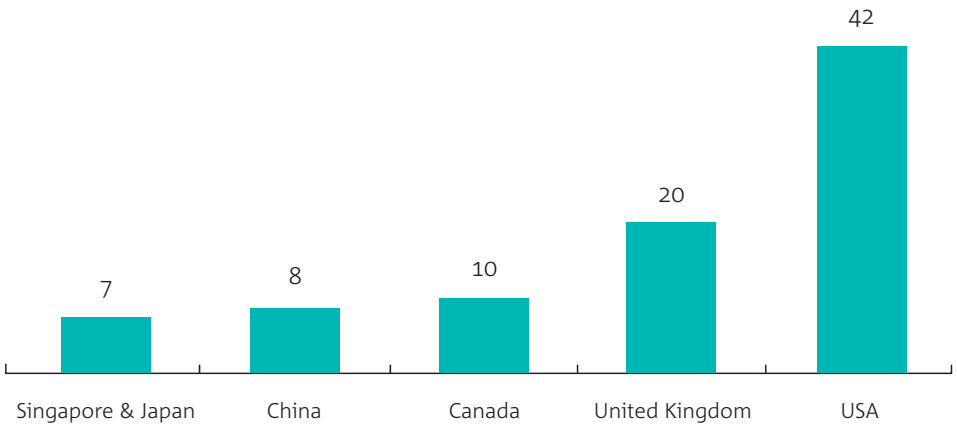


Source: Merger Market, January 2012.

Origin of bidders

There has been a strong increase in foreign buyers active in the Australian M&A market, with A$44.6 billion or 34% of total deal volume in 2011 originated by bidders outside Australia (Chart 6). Given the strength of the Australian dollar, it is somewhat surprising to note that North American and UK bidders were particularly active with around 72 deals announced throughout the year (Chart 7).

Chart 7: Top 5 most active bidders



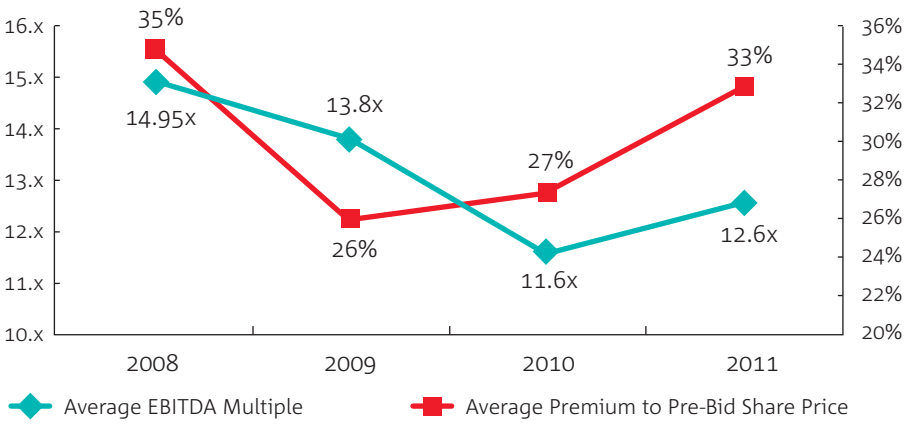
Source: Merger Market, January 2012.

Premium and multiples analysis

The average EBITDA multiple across Australian M&A in 2011 was 12.6x (excluding acquisitions with EV/EBITDA <0x or >100x), up from 11.6x in 2010 and approaching the highest level we have seen since 2009. The acquisition premium offered to publicly listed corporates relative to their pre-bid share price trailed at 33% on average, strongly up on 2010 and approaching pre-crisis levels (Chart 8).

It is worth noting that while transaction multiples in the energy and resources sector have marginally pulled back, the average pre-bid share price premium for public offers has actually remained relatively flat and is in line with the broad-based sell-off across energy, resources and materials stocks this year. An overview of M&A statistics for 2011 is outlined in Table 1.

Chart 8: EBITDA multiple vs share price premium



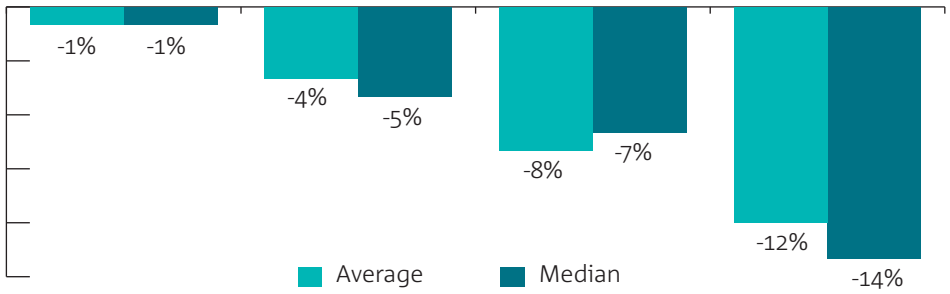
Source: Merger Market, January 2012.

Table 1: M&A statistics 2011

	2011		2010	
Industry	**Average EBITDA Multiple**	**Average Pre-Bid Share Price Premium**	**Average EBITDA Multiple**	**Average Pre-Bid Share Price Premium**
Energy & Resources (Metals, Mining & Materials)	11.06x	26%	12.46x	25%
Consumer Discretionary & Staples	11.09x	19%	11.17x	18%
Other (Agri, Services, Defence)	10.95x	49%	9.92x	21%
Industrials	10.4x	27%	10.9x	55%
Financials	13.6x	35%	12.1x	21%
I.T & Telecommunication Services	21.5x	145%	11.6x	13%
Health Care	24.1x	43%	14.4x	34%
Utilities	8.96x	N/A	N/A	N/A

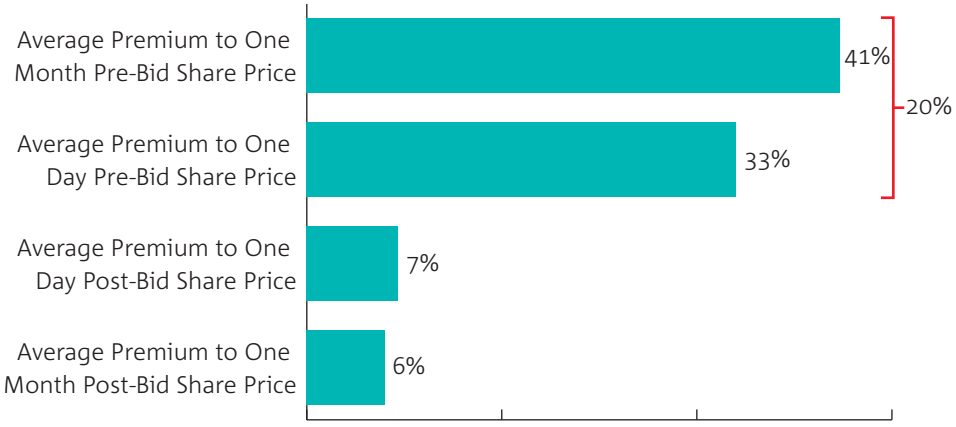
Source: Merger Market, January 2012.

Chart 9: Post-acquisition share price performance



Source: Merger Market, January 2012.

Chart 10: Target and M&A price sensitive information



Source: Merger Market, January 2012.

Share price performance

Numerous academic studies have documented the abnormally poor share price performance that acquiring firms exhibit, on average, in their post-merger period. While an assessment of abnormal share performance is fraught with difficulties and market noise, it is interesting to note that acquirers in 2011 on average earned negative returns in 30, 60, 90 and 180-day period following the announced transaction (Chart 9).

Leakage of price sensitive M&A-related information appears to have remained prevalent in Australia in 2011, with the average pre-bid premium contracting (or target's share price increasing) by around 20% in the month leading up to the announcement of a public market transaction (Chart 10).

Australian demerger activity

Australian demerger activity in 2011 has proven robust with A$5.1 billion of deals announced, 246% up on prior corresponding period – in fact, this amount is higher than the total value of Australian demerger activity for each of the two preceding years.

This is notably due to TABCorp Holdings' spin-off of Echo Entertainment Group and Foster's Group's demerger of Treasury Wine Estates. Both demergers were in line with a wave of recent capital management initiatives and designed to allow each individual business to focus on their respective core operations.

How NAB Advisory can assist

The NAB Advisory team is well known for its dedication to finding the most effective commercial outcomes for corporate clients and has unique advantages in regards to end-to-end structuring, advisory, financing and distribution capabilities.

The productivity slowdown: what does it mean?

Rob Brooker
Head of Australian Economics

Rob Brooker explains why poor productivity data may not be as dire as we think.

The slowdown in measured Australian productivity growth and, on some measures, its decline, has been the subject of considerable recent controversy. Slower productivity growth has breathed renewed life into the national economic reform agenda of the last decade, which focused on education, health and remaining competition policy issues. Does the current productivity slowdown justify these concerns?

Productivity is a measure of output per unit of input. It tends to rise because we live in an industrial society that provides strong incentives to develop and adopt improved technologies. But the inexorable growth in productivity is not constant and may even occasionally reverse itself because of other, non-technological factors.

While there are various measures of productivity, we focus on labour productivity (output per unit of hours worked). While 'multifactor' productivity, based on combined inputs of labour and capital, has also suffered (and by more than labour productivity), there are significant uncertainties in the measurement of capital services.

We should also be concerned with the 'market sector' of the economy as defined by the Australian Bureau of Statistics: this excludes (1) public administration & safety, (2) education & training, (3) health care & social assistance because there are issues about the measurement of output in these industries.

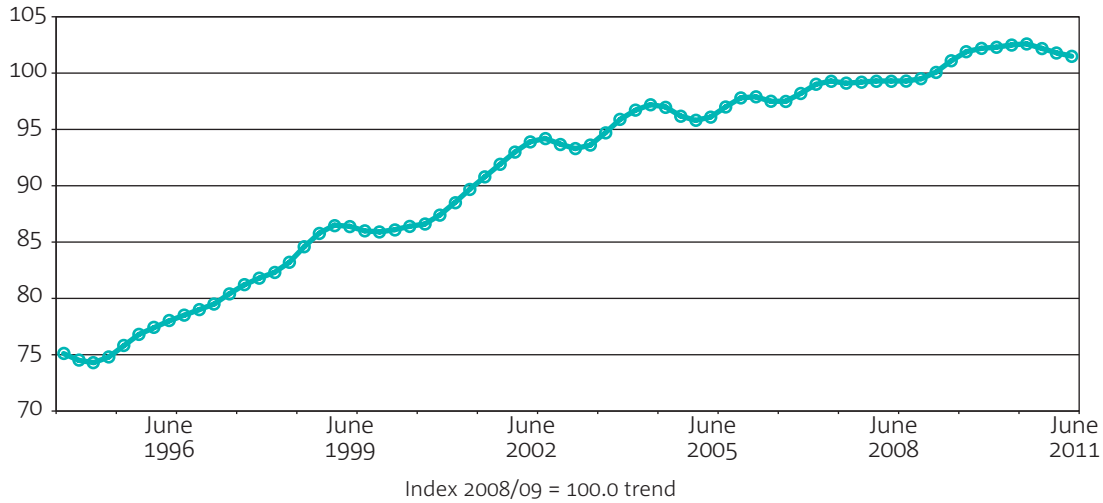
In broad terms, annual labour productivity growth (on an hours worked basis) in Australia has declined from 2.8% between the mid-1990s and the mid-2000s to just 0.9% since then, a decline of 1.9% points.

Before lamenting this slowdown, we need to distinguish between measured productivity growth and 'structural' productivity growth (the latter being also known in the arcane world of economists as the rate of 'technical progress'). It is structural productivity growth reflecting the rate of adoption and diffusion of new technologies and skills that is relevant to economic welfare. Structural productivity growth is much more difficult to measure.

Productivity growth weakest in mining and utilities

Some industries have arguably been subject to special circumstances. Of the 1.9% points decline in aggregate growth, mining is responsible for 0.9% points (abstracting from the effects of labour shifting between industries with different levels of productivity). Wages in mining have risen strongly but by nowhere near as much as minerals prices, possibly encouraging the use of labour rather than machinery wherever possible. Further, high commodity prices may make it profitable to exploit lower quality mineral deposits with greater effort required per tonne of ore extracted. The surge in investment in mines and infrastructure since the mid-2000s has employed large numbers of people but, because of long lead times, the concomitant rise in output is yet to be seen.

Chart 1: Quarterly labour productivity (market sector, trend, hours basis)



Source: Australian Bureau of Statistics (ABS), October 24, 2011.

"Much of the decline in labour productivity performance in Australia since the middle of the last decade is attributable to special and cyclical factors."

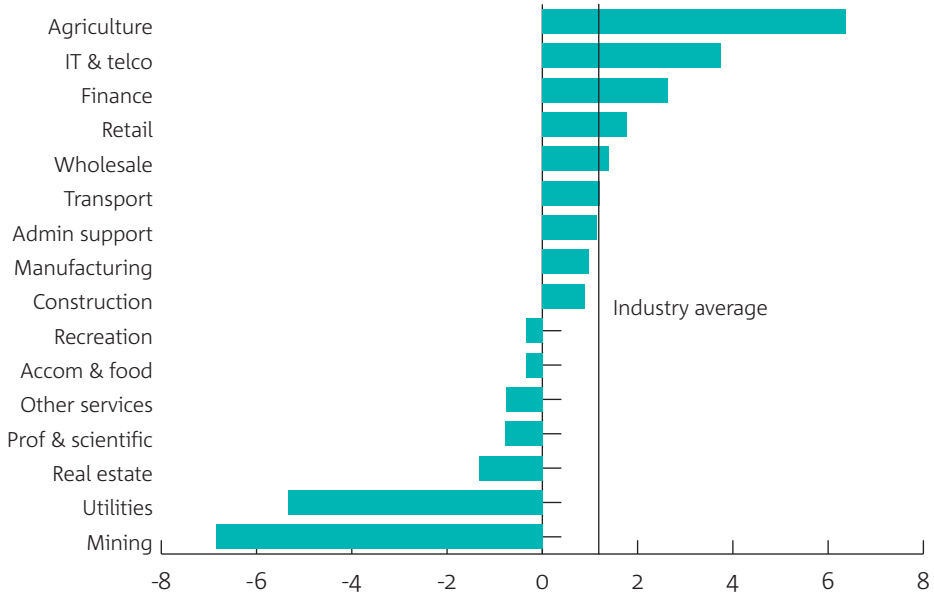
The utilities sector accounts for 0.2% points of the market sector growth decline (on an unchanged industry composition basis). There have been heavy investments in recent years in electricity and water supply (particularly pipelines and desalination plants) that may be yet to yield their full benefits. The drought has also meant that the output of water supply and hydroelectric power has been under pressure without a corresponding decline in the requirement for maintenance and administrative staff.

At the other end of the scale, labour productivity in agriculture appears to have risen sharply, but there are reasons to doubt the usefulness of this estimate. Measured labour productivity in agriculture is much more volatile than in any other industry, partly reflecting the sensitivity of the output measure to changes in its commodity composition. The data appears at odds with research by ABARES, which suggests that productivity growth in Australian agriculture has been struggling partly because there has been a decline in agricultural research effort. The agriculture sector is small, so even this strong measured productivity growth only contributed 0.2% points to the market sector result.

Productivity level remains highest in mining

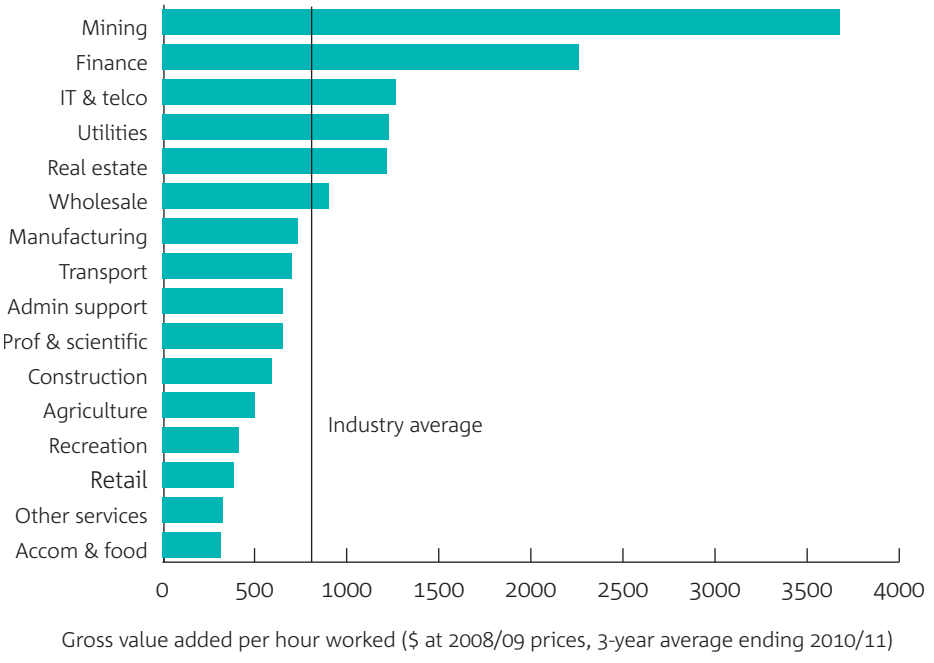
The only saving grace for measured productivity has been the expansion of the high productivity mining sector at the expense of the rest of the economy. Mining still has the highest level of productivity by far, despite the fact that its productivity has been falling. Since 2004/05, the share of mining in market sector hours worked has risen from 1.8% to 3.1%, while the share of manufacturing in hours worked has declined from 15.1% to 12.6%. Taken in aggregate, compositional shifts were responsible for all (0.9% points) of the recorded annual labour productivity growth rate since 2004/05.

Chart 2: Measured productivity growth by sector



Source: ABS and NAB calculations, October 24, 2011

Chart 3: Levels of labour productivity by sector



Source: ABS and NAB calculations, October 24, 2011.

Cyclical movement in labour productivity

Labour productivity growth is not independent of the state of the economic cycle. In economic folklore, the received wisdom is that productivity is 'pro-cyclical,' meaning that productivity strengthens during a boom and weakens during a recession. For most industries rising sales will not immediately result in additional hiring. Hiring and firing is costly and employers need to be confident that any change in activity will be sustained. Until then, hours will be extended and greater efficiencies will be exacted from each hour worked through reductions in idle time and the reallocation of workers. The same considerations apply in reverse. As sales decline, businesses initially reduce hours worked where they can and may also be willing to accept greater idle time.

For the market sector, excluding the possibly 'special' cases of agriculture, mining and utilities, annual labour productivity growth has shown a loose correlation with GDP growth. The slowdown in 2004/05 and the GFC in 2007/08 both seem to have been associated with an inordinate slowing in labour productivity growth. But this is clearly not the entire story.

Additionally, labour productivity is affected by the real wage faced by producers. Lower real wages encourage more intensive use of labour and a tendency for measured labour productivity to grow more slowly. For the market sector outside the farm, mining and utilities sectors, producer real wages have displayed little growth since the early part of the last decade, in contrast to the latter part of the 1990s. If technical progress has proceeded as normal (that is, if 'structural' productivity has not slowed), this would be consistent with substantial falls in real unit labour costs for many industries and may have also contributed to the observed productivity slowdown.

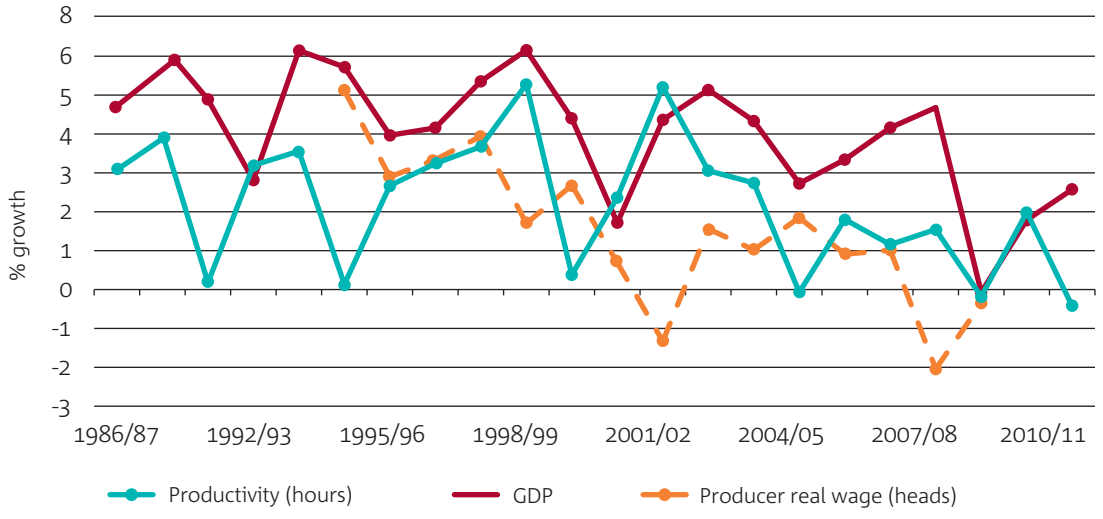
In some of the services industries within the market sector, annual output may be difficult to measure, in some cases relying on assumptions of no productivity growth, and this may also be having an effect on measured productivity.

Productivity growth to return

In summary, a plausible case can be mounted that much of the decline in labour productivity performance in Australia since the middle of the last decade is attributable to special and cyclical factors. These disappointing labour productivity results may improve in future years as new capital begins to be fully employed in mining and utilities.

From this perspective, neither the current low rate of productivity growth nor its prospective acceleration need be a cause for concern if structural productivity continues to grow at an acceptable pace. Consequently, we should not cease looking for opportunities to encourage ongoing structural productivity growth. One of the best means of doing this is by improving and expanding the skills base of the population through education and training. Reforms of this nature can be expected to support structural productivity over a medium-term time horizon.

Chart 4: Market sector (excluding agriculture, mining and utilities)



Source: ABS and NAB calculations, October 24, 2011.

Share buybacks: who are the real winners?

Joseph De Rango
Associate, NAB Advisory

Carter Xu
Analyst, NAB Advisory

"Buybacks will remain an important capital management tool for corporate management."

Joseph De Rango and Carter Xu evaluate the value created by on-market versus off-market buybacks.

Overview

NAB has conducted a review of 28 significant (defined as >5% of stock repurchased) share buybacks between 2006 and 2011 across large corporate Australia (ASX100 companies). Our analysis indicates that while on-market buybacks remain more popular than off-market buybacks, the majority of the time on-market buybacks appear to fail to achieve any permanent re-rating in share prices. This raises questions about who are the real winners in these deals.

As seen in Table 1, off-market buybacks have led to share price outperformance (relative to broad index) around three-quarters of the time – over both short- and medium-term horizons, indicating that the impact is closer to a permanent change in value. At best, on-market buybacks appear to be a 50/50 bet on adding permanent value to shareholders over any timeframe.

In addition, off-market buyback have the additional value add of having distributed cash directly to participating shareholders. It could be argued that on-market buybacks are creating short-term liquidity and demand that allows investors to exit the stock at a distorted value. Is this strategy really value accretive to long-term shareholders?

Thoughts

Buybacks will remain an important capital management tool for corporate management. The structure and decisions to conduct a buyback involves many considerations including the effectiveness of market signalling strategy, pressure from major shareholders, managing time and costs and assessment of value add to different classes of shareholders, among other factors. An overview of the two buyback structures is provided in Table 2. NAB Advisory looks forward to working with you to determine suitable size, value and strategy for your next buyback.

This article represents a short extract from recent NAB research into buybacks. NAB would be pleased to share our more detailed review with clients upon request.

Table 1: Performance of share buybacks relative to broader market (ASX200)

	After 1 month		After 3 months		After 6 months	
	Outperformed	Underperformed	Outperformed	Underperformed	Outperformed	Underperformed
Off-market	**78%**	22%	**67%**	33%	**78%**	22%
On-market	41%	**59%**	41%	**59%**	47%	**53%**

Table 2: Overview of share buybacks

Type of buyback	Pro's	Con's	Value assessment
On-market	Flexible, significant management control over timing and trading.	Primarily benefits sellers/exiting investors, instead of long-term holders. Management distractions (watching market, dealing with brokers). Broker fees.	Difference in share price for sellers between what they would have got vs. what company pays. Long-term investors will not benefit from the cashflow distribution, only from any permanent re-rate in the share price.
Structured off-market	Structured as a combination of capital return (at large discount to current share price) plus a large franked dividend.	Some administration complexity.	Efficient distribution of excess franking credits. Normally achieves greater EPS accretion due to the capital component being a repurchase at discount to current market.

Source: Bloomberg and company announcements, collated throughout October 2011.

Follow the money:
Industry assistance under the clean energy future package

Prashant Murthy
Associate, Environmental Finance Solutions
NAB Advisory

Robert White
Associate Director, Environmental Finance Solutions
NAB Advisory

"Industry would benefit from being across any programs they may be eligible for, as these could alter their forecast funding requirements."

Prashant Murthy and Robert White summarise the key points and opportunities available through the Clean Energy Future Package.

The Government's Clean Energy Future Package passed through the Senate in November 2011 and will start on 1 July 2012. While much of the talk over the past 12 months has been on the impact of the carbon price, the 18 bills also contained a number of complementary measures from compensation through to grant programs. The measures are all designed to either assist companies adjust to a carbon price, lower their emissions intensity, or in the case of the rural sector, help adapt to the impending risks and opportunities associated with climate change. A number of other programs are to be either separately legislated or implemented administratively. For example, both the Steel Transformation Plan and the Clean Energy Finance Corporation are to be separately legislated.

This summary outlines some of the key sources of funding available to industry, the majority of which will be available for application from 1 July 2012. Details are still light at this stage, however industry would benefit from being across any programs they may be eligible for, as these could alter their forecast funding requirements.

Jobs and competitiveness program

The Jobs and Competitiveness Program (JCP) is the largest assistance pool available to the manufacturing and heavy industry sector, providing A$9.2 billion in assistance over the first three years of the scheme. It is available to companies that are energy intensive and trade exposed (EITE). Businesses producing over 80% of the manufacturing sector's emissions are expected to be eligible for assistance under this program.

EITEs will receive compensation similar to the final form of the Carbon Pollution Reduction Scheme (CPRS) i.e. via free permits. They will be allocated on an activity basis rather than to industries or companies. Consequently, a diversified manufacturer may find that some of its production activities qualify for assistance, while others do not.

Eligibility will be determined on the basis of past emissions (1 July 2006 to 31 December 2008), and past revenue or value added data (1 July 2004 to 31 December 2008). Companies will be able to choose whether an activity is measured using either a revenue-based metric or a value add metric.

The amount of assistance to be provided at scheme commencement is outlined in Table 1.

Table 1: Free permits available for EITE industries

Emissions Intensity	Assistance	Example industries
≥ 2.0 ktCO2e/$m Revenue or ≥ 6.0 ktCO2e/$m Value Add	94.5%	Steel, glass, cement
1.0 – 1.99 ktCO2e/$m Revenue or 3.0 – 5.99 ktCO2e/$m Value Add	66%	Plastics, chemicals

Source: www.cleanenergyfuture.gov.au, January 2012.

This allocation is based off the historical industry-average emissions intensity of production multiplied by a company's actual level of production. Therefore, more efficient companies will receive a greater net benefit. Basing this assistance on actual production means that assistance will move in line with output fluctuations.

The level of assistance to be provided will decline over time. The rate at which this occurs will be 1.3% per year, based on the expected carbon productivity contributions. These levels are largely unchanged since the CPRS. The liquefied natural gas (LNG) sector will be provided further additional permits to ensure that it receives at least 50% compensation overall. With around A$90 billion of new LNG projects due to come online over the next few years and producing an estimated 24Mt CO2e p.a. this will leave a permit shortfall of around 12Mt p.a. from new LNG projects alone in 2020.

A review of the EITE assistance will be conducted in 2014-15; however any changes that could have a negative impact on assistance levels will not be implemented until at least the sixth year of the carbon price, with businesses receiving three years notice to any negative changes. The complementary measures outside EITE and electricity sector assistance programs are outlined in Table 2.

In addition to EITE assistance, the Government has separately legislated the Steel Transformation Plan (A$300 million). This program will provide competitive grants to the steel industry to encourage investment in more efficient equipment and processes. It will be administered by the Department of Innovation, Industry, Science and Research. Additionally, from 2016-17 the government will increase the direct emissions and electricity baselines by 10% for two types of steel manufacturing under the JCP.

Regulations for this program are due before March 2012.

Clean technology programs

Three grant programs are available to industry to provide assistance for investment in energy efficient capital equipment and low emissions technologies, processes and products.

The first package, the A$800 million Clean Technology Investment Program, has a minimum grant size of A$25,000 and is open to manufacturing businesses consuming at least 300MWh or 5TJ of natural gas, or who are a liable entity under the carbon price mechanism. Each dollar of grant funding will require a co-contribution of three dollars from the recipient.

The Clean Technology Food and Foundries Investment Program is open to both the food processing sector (A$150 million) and the metal forging and foundry sector (A$50 million). As with the Clean Technology Investment Program a co-contribution of 3:1 is required and the minimum grant size is also A$25,000.

The final clean technology fund is the A$200 million Clean Technology Innovation Program; this is available to support low emissions research and development in manufacturing businesses with grant sizes ranging from A$50,000 to A$5 million. Each grant will require an equal contribution from the recipient. This funding will be in addition to the broader research and development tax credit.

Coal sector mining support

The coal sector jobs package has been designed specifically for a few select mines within Australia that have a high level of fugitive emissions (≥0.1tCO2e per tonne of saleable coal produced). These mines will receive assistance towards the implementation of abatement opportunities (A$1.3 billion). Assistance will be for 80% of the fugitive emissions above the intensity threshold, based on actual production up to a hard cap. The cap will be the maximum production levels in 2001-08 or 2008-09.

An additional source of support will come from the Coal Mining Abatement Technology Support Package. This is available to all coal mines and provides grants (A$70 million), on a co-contribution basis, towards the implementation of abatement technologies.

Electricity sector support

Emissions intensive electricity generators will receive assistance in the form of free permits and cash estimated to be worth A$5.5 billion over six years. To qualify they must have an emissions intensity above 1.00tCO2e/MWh (i.e. brown coal power plants) and develop Clean Energy Investment Plans. The Government is also considering support through either loans or guarantees for generators who experience difficulty in obtaining refinance. The final form of this assistance is still to be developed.

Tenders have now closed for 2,000MW of Australia's most carbon intense power stations (>1.2tCO2e/MWh) to be bought out and closed prior to 2020 (Energy Security Fund). These contracts for closure are expected to be finalised by 30 June 2012.

Clean Energy Finance Corporation

The A$10 billion Clean Energy Financing Corporation (CEFC) is modelled on the UK's Green Investment Bank and will invest in renewables, energy efficiency, enabling infrastructure, and low emissions technology. Half of the fund will be exclusively for renewables and the government has expressly stated that the corporation will not invest in carbon capture and storage (CCS) projects. Importantly, the CEFC will not be providing grants, but rather a variety of funding tools (e.g. concessional loans) in order to make a commercial return on its investments. The CEFC is expected to be legislated at the start of 2012, and start operating during the 2013-14 financial year. In the interim, a review panel has been established, chaired by Ms Jillian Broadbent AO. The review panel has just commenced consultations and is expected to report back to the government by March next year. NAB, as the largest financier of renewable energy projects in Australia, recognises the unique challenges in driving these investments and will look to engage, where necessary, with the corporation in assisting project development.

ARENA

An independent regulatory body has been legislated to fund the development of renewable energy – the Australian Renewable Energy Agency (ARENA). ARENA will be established on 1 July 2012 and will initially receive A$3.2 billion from the consolidation of existing renewable initiatives including the Solar Flagships Program and the Australian Solar Institute among others. A$1.5 billion is already committed, leaving A$1.7 billion for new projects to be funded between now and 2020. ARENA will also receive ongoing revenue in the form of distributions from the CEFC. Its mandate will be to provide grants to the full range of renewable technologies, assisting in research, development, deployment and commercialisation.

Table 2: Complementary measures outside EITE and electricity sector assistance programs

Measure	Total Package (A$)	Availability period (years)	Direct funding available?	Co-funding required?
Clean Energy Finance Corporation	10,000,000,000	5	Yes	Yes
ARENA	3,200,000,000	9	Yes	Yes
Coal Sector Jobs Package	1,300,000,000	6	Yes	tba
Biodiversity Fund	946,000,000	6	tba	tba
Clean Technology Investment Program	800,000,000	7	Yes	Yes (3:1)
Carbon Farming Futures	429,000,000	6	Yes	Yes
Low Carbon Communities	330,000,000	5	Yes	No
Steel Transformation Plan	300,000,000	5	Yes	No
Carbon Farming Initiative non-Kyoto Fund	250,000,000	6	No	No
Clean Technology Food and Foundries Investment Program	200,000,000	6	Yes	Yes (3:1)
Clean Technology Innovation Program	200,000,000	5	Yes	Yes (1:1)
Regional Structural Adjustment assistance	200,000,000	7	tba	tba
Increased small business instant asset write-off threshold	200,000,000	4	No	No
Coal Mining Abatement Technology Support Package	70,000,000	6	Yes	Yes (tba)
National Resource Management Planning and Climate Change Fund	44,000,000	5	Yes	No
Energy Efficiency Grants to SMEs	40,000,000	4	Yes	No
Remote Indigenous Energy Program	40,000,000	5	Yes	No
Clean Energy Skills Program	32,000,000	4	Yes	No
Expand Energy Efficiencies Opportunities Act	32,000,000	5	No	No
Indigenous Carbon Farming Initiative fund	22,000,000	5	Yes	No
Household energy survey	10,000,000	3	No	No
Household advice line/website	6,000,000	4	No	No
Clean Technology Focus for Supply Chains Programs	5,000,000	4	No	No
Developing a national energy savings initiative	4,000,000	2	No	No
Carbon Farming Skills Fund	4,000,000	5	Yes	No
Land Sector carbon and Biodiversity Board	4,000,000	6	No	No

Source: NAB data.

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