

Industry In-Depth

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Accelerating Offshoring In Australian Banks

NAB Leading, But It's Still Early Days

- **NAB best positioned to deliver the benefits from offshoring** — National Australia Bank (NAB.AX - A\$43.18; 1L) has a clear “burning platform” to address costs, a stated strategic intent to offshore, and is already addressing a broad range of business functions.
- **Offshoring now on the agenda** — With traditional earnings drivers likely to weaken into FY08, we expect banks to accelerate offshoring plans.
- **Cost benefits from offshoring potentially substantial** — We estimate the cost saving opportunity to be 10% – 15% of the operating cost base for a major bank.
- **Risk management increasing in importance** — Explosive demand in the major offshoring locations has driven significant wage inflation and labor shortages; the result is that the quality of staff has been diluted.
- **Assessing current strategies, we favor NAB ahead of WBC & SGB** — NAB is the most advanced in offshoring, already addressing a broad range of domains and developing relationships with multiple service providers. We rank Westpac (WBC.AX - A\$26.91; 1L) and St George Bank (SGB.AX - A\$37.37; 2L) next in line, though we take increased confidence in the recent appointment of Peter Clare to head Group Technology and Operations within SGB.
- **However banks' current offshoring models are not best practice** — Current third party vendor models (employed by NAB, WBC and SGB) concede too much control to vendors, and provide insufficient incentive for improving the underlying function. While ANZ has been acknowledged as the leader among the banks, its wholly-owned captive model is inflexible and difficult to scale up.
- **Picking the winner in offshoring** — The winner will be the first bank to adopt a model that treats its functions as operational assets rather than cost centres. By partnering with specialist service providers, banks can strike deals that provide both parties with an incentive to enhance and grow those assets.
- **The authors would like to thank Sri Annaswamy and Mohit Sharma of Swamy & Associates for their contribution to this report.**

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Executive Summary

With earnings drivers to weaken, offshoring is now firmly on the agenda

With volumes expected to moderate, credit losses rising and investment spend increasing, banks will turn their attention to operating cost efficiency. As a result, we believe increased offshoring is now firmly on the agenda for most major banks. In our view, the potential benefits from offshoring equate to 10% - 15% of the operating cost base for a major bank.

However the risks in offshoring are increasing

Risk management is increasing in importance – explosive demand in the major offshore locations has driven significant wage inflation and labor shortages: the result is that the quality of staff has been diluted.

Bearing this in mind, investors need to consider two key differentiators

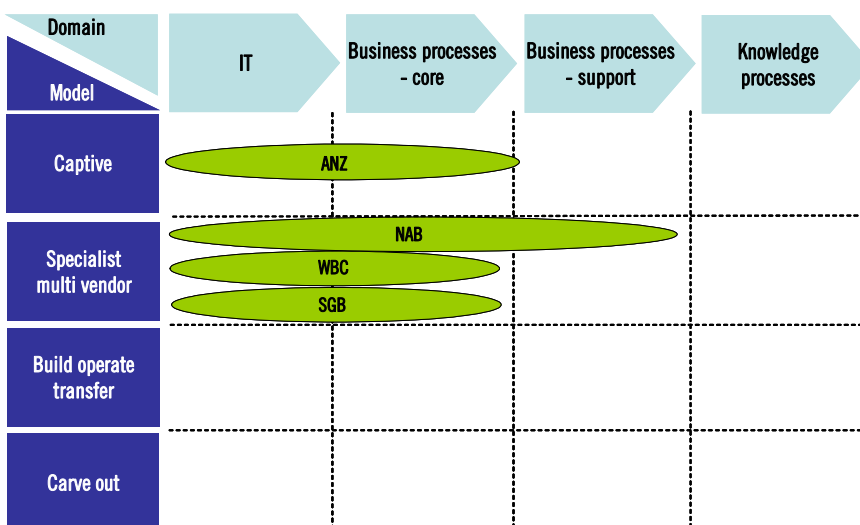
When assessing bank offshoring initiatives there are two key factors investors need to consider:

1. The domains (or functions) involved – lower end activities (e.g. IT and transaction processing) are more vulnerable to quality issues, whereas higher end knowledge processes (e.g. marketing analytics) provide more scope for savings and quality improvements.
2. The operating model (or structure) chosen by the bank – traditional wholly-owned captive and simple vendor/client models have respective weaknesses in terms of scalability and controllability. New structures have emerged that recognize the value inherent in a bank's functions: build-operate-transfer and carve-out models enable a bank to leverage the value-add that specialist providers can bring, and provide a shared stake in the upside.

Assessing current strategies, we favour NAB ahead of WBC and SGB

To date the Australian banks have taken a conservative approach to offshoring, focusing on low end domains and simple models:

Figure 1. Australian banks – current approaches to offshoring



Note: To date CBA has conducted no offshoring and indicated no distinct approach

Source: Citigroup Investment Research

Of the strategies, we prefer NAB's offshoring model, slightly ahead of WBC. NAB is offshoring a broader range of domains, has relationships with multiple service providers, and has stated its intention to expand the scope of its activities in 2007. While ANZ has the largest current commitment offshore, its wholly-owned captive model has clear limitations in terms of scalability.

Figure 2. Offshoring programs – relative positioning



Source: Swamy & Associates, Citigroup Investment Research

However the banks' current models are deficient

In our view the banks' current models will deliver sub-optimal risk / return outcomes. The simple multi vendor models (employed by NAB, WBC and SGB) concede too much control to vendors, and provide insufficient incentive for improving the underlying domain. Alternatively, ANZ Banking Group's (ANZ.AX - A\$29.93; 1L) wholly-owned captive model, while enabling management control, is difficult to extend into multiple domains.

The way forward in offshoring

To achieve the benefits promised by offshoring, banks need to adopt next generation models that treat their internal functions as operational assets to be leveraged rather than cost centres. By partnering with specialist service providers and striking deals that provide for a shared stake in the performance improvement upside, banks will be better placed to optimize their returns and manage their risk.

In our view the first bank to embrace this approach will be the winner in offshoring.

Introduction – clouds are gathering

The banking sector is experiencing the best of times, with solid volumes and exceptional credit quality delivering double-digit EPS growth across the board.

However both analysts and bank management agree that we have now seen the peak of the cycle. In the medium term, the environment will be less favorable. We summarise below the key drivers of this view:

- **Credit growth slowing** - as the business sector slows during 2007, total credit growth will ease toward its low-inflation average (~10%).
- **Margin decline continuing** - we expect loan books to see further competitive impacts on pricing, as players seek to continue to maintain their volumes in the face of lower credit growth.
- **Credit losses rising** - after an extremely benign FY06, the credit quality cycle will begin to deteriorate in FY07, with the impact of recent interest rate rises combining with a slowing economy.
- **Investment spend increasing** - in essence, banks are all competing on service, and are committing more investment to it. While over the next few years each major will spend \$400 - \$600m per annum, the revenue pie is still only so big.

Implication – efficiency needs to improve

With major P&L line items likely to come under pressure – in particular net interest income and credit loss provisions, the banks' earnings trajectory will also be at risk over the next few years.

We expect that reminiscent of their response to a challenging environment in the 1990s, the banks' will again look to review their cost base. With the bulk of investment spending focused on improving front office capabilities, banks are likely to look at back office efficiencies as a means of funding some of this spending.

Of course, this time around, with much of the low-hanging fruit now gone, it will be more difficult to achieve a step-change improvement in cost efficiency.

Offshoring...cost pressures will provide the “burning platform”

While banks have in recent times begun tinkering with the offshoring of business processes and technology, their strong earnings growth has seen them without a real “burning platform” for change. This, combined with the reputation risk issue that has been generated by trade unions and the media, has seen them largely avoid the opportunity.

Our best estimate of the offshoring opportunity is around 10% – 15% of the operating cost base of a major Australian bank. But while investors will focus on this range, we note the actual savings could be below this range depending on several factors – the third party service providers chosen, the extent of labor cost arbitrage achievable and the operating structure utilized. The factors that will drive the ultimate benefits are the focus of this report.

Figure 3. Offshoring for Australian banks – estimated cost saving opportunity

Domain	% of bank cost base	% offshorable	% Savings from offshoring	Savings as % of bank cost base
IT	15%	80%	25-30%	2.5 – 4.0%
Back office operations	20%	70%	30-35%	4.0 – 5.5%
HR, finance & accounting, risk management	15%	50%	30-35%	1.5 – 2.5%
Product management & marketing	30%	20%	40-45%	2.0 – 3.0%
Distribution & servicing	20%	50%	0%	0%
Total	100%			10 - 15%

Note: As banks have effectively ruled out the offshoring of customer facing domains, we have given Distribution & Servicing zero weighting in this analysis.

Source: Company reports, Citigroup Investment Research

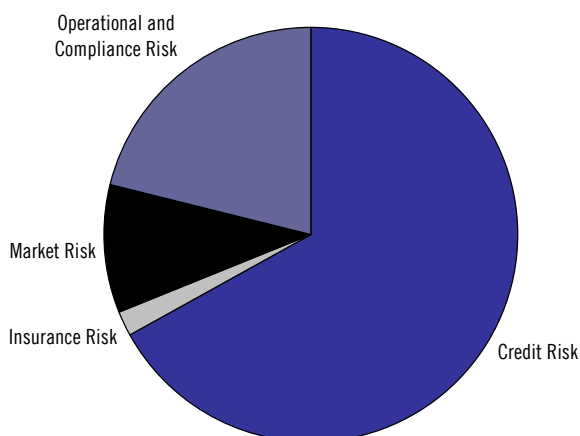
We believe a “burning platform” will emerge over the next few years, hence we expect offshoring to be on each bank’s agenda as they seek to respond to a more difficult operating environment.

Operational risk management ...potentially an additional benefit

Australian banks have experienced some well-documented operational risk issues in recent years – in 2006 alone we saw corrections for WBC’s over accrual of credit card income, as well as NAB’s loan disclosures in its FY05 annual report.

As shown in the Commonwealth Bank (CBA.AX - A\$55.43; 1L) example below, operational risk is the second largest component of bank capital.

Figure 4. CBA – FY06 economic capital mix



Source: Company reports

We believe that in providing an opportunity to outsource functions to third parties that are better placed to manage the risks, offshoring can be used to help banks mitigate operational risks. A flow-through effect of this would be the release of operational risk capital associated with those functions.

While APRA has ruled out buy backs while banks are receiving capital relief on the transition to AIFRS accounting, in a Basel II environment (from 2008) this restriction is likely to be lifted.

With regard to operational risk capital freed up via offshoring, analogous to arguments around securitization and credit risk transfer, we believe the regulator will ultimately agree to the logic of market-based risk transfer.

Offshoring – no longer a sure bet

The offshoring of bank functions has been lauded as a sure route to a step-change in cost efficiency. However the reality is that challenges now exist in this space that must be actively managed. For example India, which Gartner estimates currently holds 80%-90% of the offshoring market, is experiencing pressures akin to maturing industries. That is, the exponential growth it has seen over the last decade has resulted in wage inflation, and a shortage of skilled resources in major locations.

The implication of this trend is that while offshoring is still an attractive option for financial institutions located in advanced markets, the approach taken to going offshore is now a critical indicator of the long term prospects of success.

In our view there are two key differentiators between the strategies taken by bank offshorers:

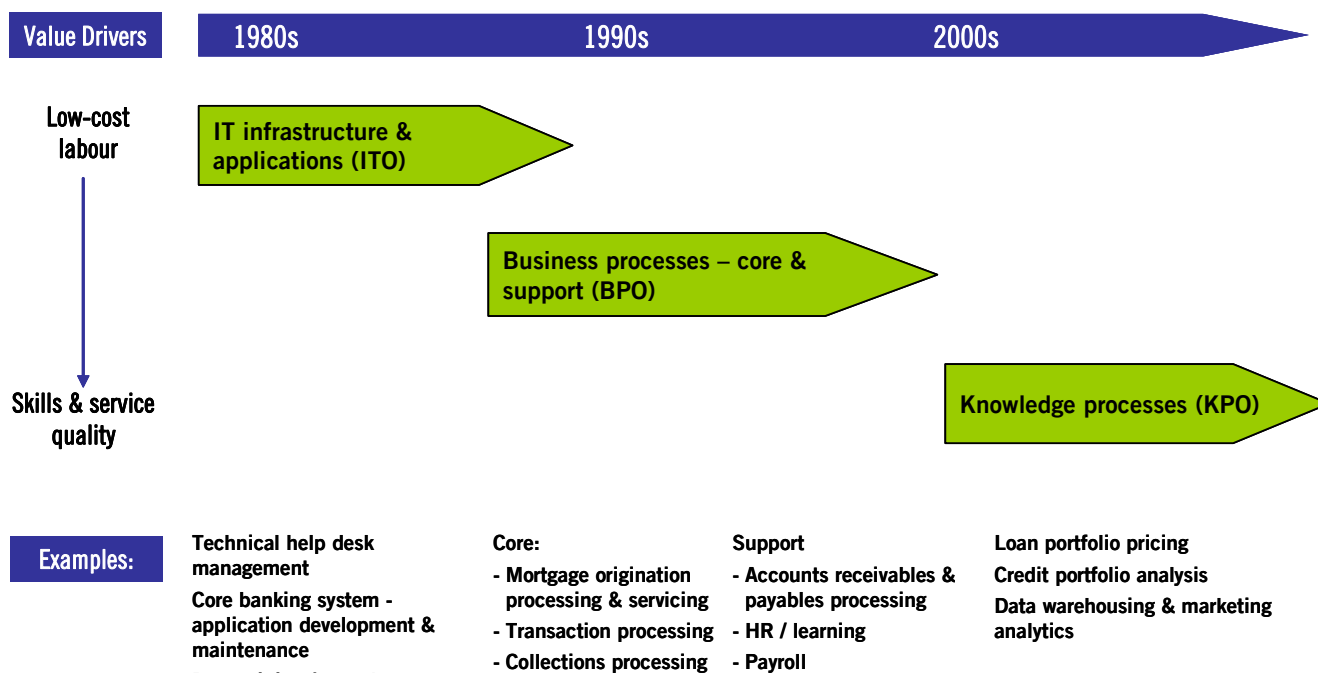
1. **Domain selection** – e.g. IT functions (ITO) , business processes (BPO) or knowledge processes (KPO)
2. **Operating model selection** – e.g. “traditional” (wholly owned or outsourced) versus “next generation” (hybrid structures)

We consider these in turn:

1. Offshoring domains

The choice of domains for offshoring has become a key determinant of value creation. While IT functions have traditionally been favored due to labor cost differentials, over time offshoring has moved up the banking value chain as capability-based advantages have been acknowledged and leveraged.

Figure 5. Evolution of offshoring domains



Note: Where domains are outsourced, the terms used are IT outsourcing (or ITO), business process outsourcing (or BPO), and knowledge process outsourcing (or KPO)
Source: Swamy & Associates, Citigroup Investment Research

Lower end domains – IT and transaction processing

Value creation opportunities are diminishing in the lower end domains – IT and transaction processing in particular – largely due to rising labour costs in key locations. With global players joining the local firms in India over the last ten years, the average back office BPO wage in India has risen at 9%-10% per annum. To maintain their economics, service providers are diversifying into less developed cities, recruiting far less qualified people, and streamlining training to cut their costs. As a result, the quality of staff available for these tasks is being diluted.

The IT and transaction processing domains are largely commoditised, with minimal scope for improvement of the underlying function. As a result, moving forward only the largest scale service providers will be able to deliver substantial savings in these functions.

Higher end domains – knowledge processes

The emergence in recent years of higher end domains has changed the nature of offshoring. The offshoring opportunity is no longer simply about “sub-contracting” non-core functions to service providers in cheaper locations, but rather has become increasingly focused on capability improvement. Knowledge

Process Outsourcing (KPO) is perhaps the best example of this. The higher end of the value chain has become more attractive for two reasons:

a. More favorable wage cost differentials

The higher end domains utilize professional level staff, and these have more favorable wage cost differentials on two levels. Firstly, the wage differential is greater. For example, a top tier MBA credit analyst would cost ~USD 200K in New York or London, versus USD 70K in India, so the differential is USD 130K per job. Alternatively, in more commoditised BPO domains the differential is small (e.g. an accounts payable clerk in India is about USD 10K versus USD 25K in the US, so the differential is only about 15K per job). As a result, there is far greater scope to strike compelling offshoring deals in KPO.

Secondly, while similar to BPO the cost of KPO resources are also being bid up, the pace of decline in the wage differential with the West is slower for KPO than for the lower end domains. The key reason for this is that wages in more developed markets for the more analytical functions are also growing strongly. For example, analysts have forecast that in 2010, a 50-60% cost differential between India and US costs will remain.

Figure 6. Employment cost differential: - India costs as % of US costs

	2005	2006	2007	2008	2009	2010
MBA Graduate	67%	66%	64%	63%	61%	59%
Engineer	65%	63%	62%	60%	58%	56%
Chartered Accountant	62%	60%	58%	61%	54%	51%

Note: Includes salaries, training, and on-costs

Source: Swamy & Associates

b. Greater scope for capability improvement

As noted above, the lower level domains typically rely on scale and cost arbitrage to deliver value. However India's large pool of highly-educated knowledge workers can enable outsourcers to improve their performance in higher end domains.

Higher end processes demand more advanced analytical skills and specialized business knowledge and experience. In retail banking, a good example of this is marketing analytics, where customer data is mined to identify sales opportunities.

By developing specializations in these higher end activities, service providers can deliver improved quality of outcomes.

Today's approach to offshoring domains

Leading offshorers now use a more integrated approach – bundling together domains from across the value chain. Combining lower value BPO activities with higher end KPO enables them to achieve greater leverage when dealing with service providers.

2. Offshoring – the different models

While domain selection is an important component of success in offshoring, equally as critical is the operating approach used to go offshore. Over time, four models have evolved as being suitable for offshoring banking operations. We compare and contrast these below.

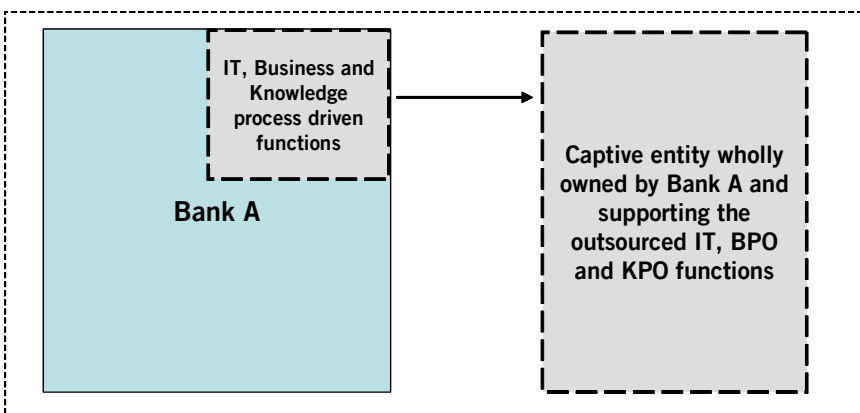
Traditional models

The first two models, captive and specialist multi vendor, are the more conventional, early generation structures.

a. Captive

The original structure used to offshore businesses process or IT functions involved the creation of a wholly-owned entity. The entity would then process activities from across the broader group. The earlier adopters of offshoring used this model, including banks such as Standard Chartered and GE Capital.

Figure 7. Captive model



Source: Swamy & Associates, Citigroup Investment Research

Advantages

- Greater capacity to monitor, control and impact the performance of the operation
- Easy compliance with intellectual property, data protection and privacy laws
- Retention of parent-bank culture and values – the bank recruits its own staff

Disadvantages

- Captives are typically smaller scale and lower growth operations, hence find it difficult to achieve optimal cost performance
- Limited ability to release operational risk capital as the functions are retained in-house
- Limited flexibility to rapidly shift to alternative locations
- Limited ability to rapidly shift up the value chain from IT to business processes to knowledge processes

b. Specialist multi-vendor

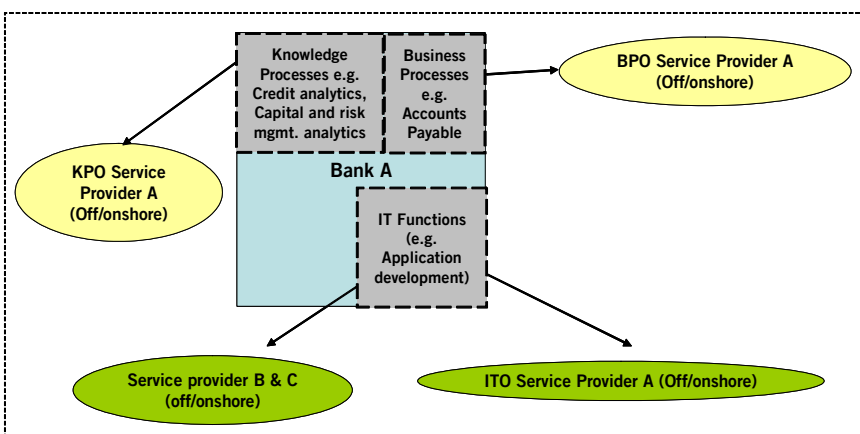
The specialist multi-vendor model is the first of the remaining three models that involve outsourcing components of the bank's operations to third party service providers.

Historically, the model involved a "lift and drop" approach, whereby business functions were simply relocated from one location to another. Traditionally, broad-based technology service providers such as IBM and EDS were dominant in this space.

However this model has evolved from primarily single to specialist multi-vendor. Changing client demands - for deeper domain skills (e.g. product-specific processing such as mortgages) has been a key driver. Broad-based players tended to focus on horizontal or support processes (e.g. IT, HR, finance) rather than vertical industry-specific domains. Over time, specialist players emerged to fill the gap.

As a result, many banks now utilize a multi-geography, specialist multi-vendor approach, whereby they develop relationships with a range of service providers to ensure they are receiving best-of-breed service for a given domain.

Figure 8. Specialist multi-vendor model



Source: Swamy & Associates, Citigroup Investment Research

Advantages

- Geographically flexible – global service providers have facilities in multiple locations, hence can better manage skill set availability issues
- Strong brand names – large service providers (e.g. Genpact, IBM) have well-recognised brands, hence have an advantage over captives in attracting quality staff
- Third party BPO providers are better prepared to deal with the process of transitioning operations offshore, as well as providing for business continuity and disaster recovery
- Outsourcing functions to a specialist service provider can release the operational risk capital associated with those functions

Disadvantages

- Relying on third parties, the bank has a reduced level of ownership of intellectual property, or control over risk management
- Cost savings are lower for the bank because the service provider will take a profit margin
- Increased reputation risk as outsourcing labor to foreign locations is still seen as politically unpalatable
- Difficult to retain parent-bank culture and values

Next generation models

While the specialist multi-vendor model is a clear advance on the captive structure, it has some limitations – particularly the less than optimal cost savings and reduced control over performance. As organizations seek to accelerate their offshoring program, two new models - build operate transfer and carve outs, have emerged in recent years as more innovative, value-creating structures.

a. Build Operate Transfer (BOT) model

The major limitation of the specialist multi-vendor model is the relative inability of the bank to control the performance of the service provider. The BOT model is the first of the next generation models that has emerged to mitigate this issue. Under this approach, the bank forms a joint venture with service providers and transfers its function into the new entity.

The service providers take responsibility for developing and managing the entity, which includes re-engineering the process (e.g. mortgage processing) and improving efficiency. However the bank has substantial input into the process improvement and retains an option to buy back the operation once it is performing more effectively. To ease the transition the operation may remain onshore for the first few years at least. In this case, lower value-add components of the process would be offshored overtime.

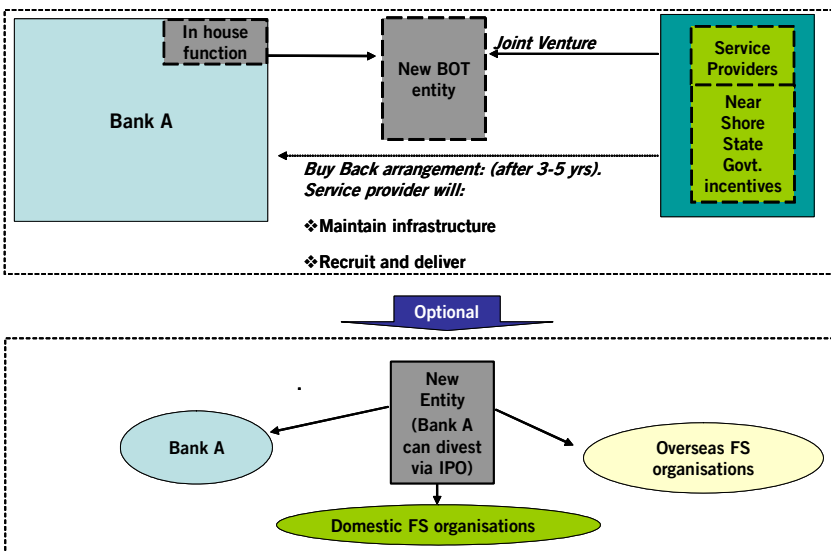
An alternative to the buy-back option is divesting the entity through an IPO. In this structure, additional value can be created for the bank while it still maintains control.

Local governments...beginning to see the opportunity

A more recent innovation has been the involvement of state governments, who have an incentive to keep jobs onshore. They may offer incentives to the joint venture to ensure the operation is situated locally. While some jobs will be offshored, the higher end labor will be maintained, with a view to developing “centres of excellence” for the local geography.

An Australian example of this is IBM, which in 2005 launched a major BPO centre in Brisbane, creating up to 1,000 jobs over the next 10 years. The Queensland government reportedly offered tax exemptions for the IBM BPO office in the form of payroll tax relief that is expected to continue over the next five years as a way to attract such investment into Queensland.

Figure 9. Build Operate Transfer (BOT) model



Source: Swamy & Associates, Citigroup Investment Research

Advantages

- Similar to specialist multi-vendor model – access to better capabilities, easier staff recruitment, as well as business continuity and disaster recovery
- Relative to specialist multi-vendor model, enables the bank greater control over its function, and greater input into the process improvement
- Onshore transition option likely to bring reduced reputation risk

Disadvantages

- The need to develop a new facility for the function indicates that cost savings will be lower in year one, though will recover thereafter
- Few other disadvantages

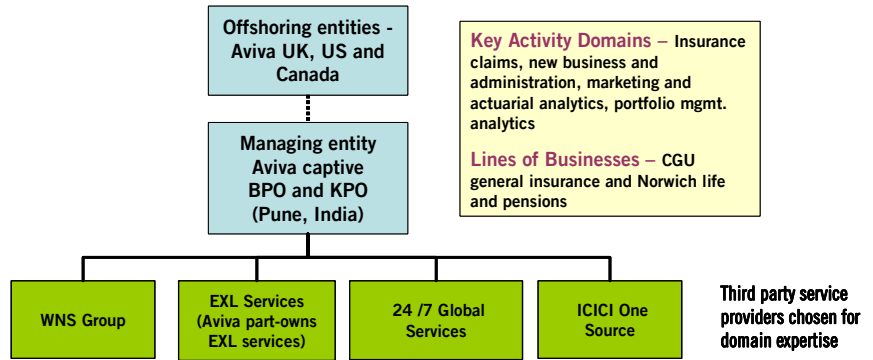
Case Study

Global insurer Aviva PLC (AV.L - £8.37; 2M) provides an interesting example of the BOT model in action. To ease the shift offshore, a business is initially transitioned to Aviva's captive entity in Pune, India. The captive ultimately outsources key processes to third party service providers that have specific domain expertise in insurance.

Two of the service providers, WNS and EXL Services, have been contracted to build facilities to provide insurance claims and new business administration services. However under the Build-Operate-Transfer structure agreed, Aviva has options to buy back the facilities at pre-arranged valuations.

For Aviva, this structure has enabled it to leap-frog the initial "setup and teething" phase of offshoring, by leveraging the expertise of the two service providers. In addition, it has been able to maintain significant management control as well as ensure the right organizational culture.

Figure 10. BOT case study – Aviva PLC



Source: Swamy & Associates, Citigroup Investment Research

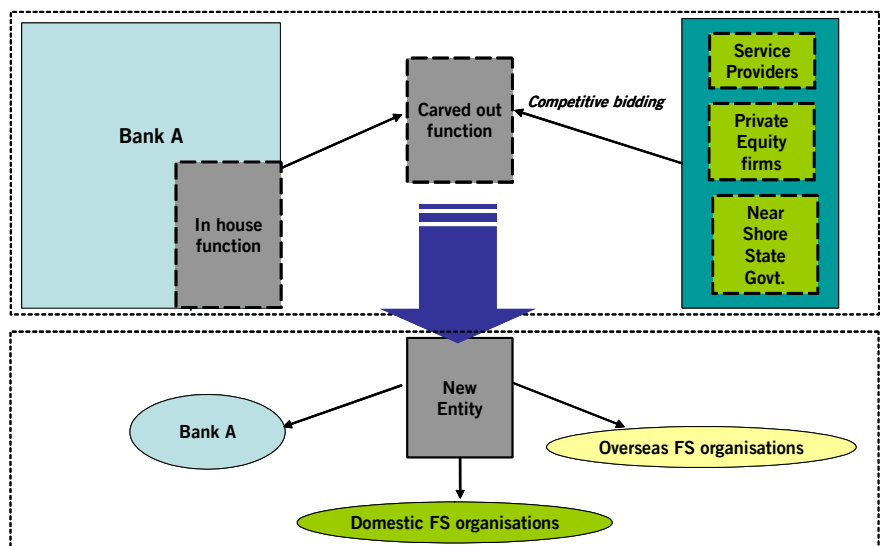
b. M&A Style Carve Out

The most aggressive structure currently being adopted for offshoring involves carving out a bank’s function and selling it in a competitive bidding process.

This model has parallels to the BOT model, in that the function may be kept on-shore initially, with the lower value processes ultimately being sent offshore. However the main difference is that a new entity would be formed with a view to offering services to additional banks. The original bank would be the anchor client for the new business, however the business would be managed independently.

As with the BOT structure, the competitive bidding process will attract service providers and local governments. However with the carve-out model, because the business is being acquired with the intention of growing its market with a view to potential re-sale, private equity firms often also express interest.

Figure 11. M&A Style Carve Out model



Source: Swamy & Associates, Citigroup Investment Research

Advantages

- Sale via a competitive bidding process is likely to achieve a premium for the bank, hence maximizing overall benefits
- Relative to the BOT model, the client has greater control over the earlier delivery of benefits
- Under this model, the process being offshored is transformed from a cost centre to a revenue centre
- On shore transition option likely to be more politically palatable

Disadvantages

- Riskier relative to the BOT model, given the bank’s function is being physically sold off
- Few other disadvantages

Case Study

In 2001, Deutsche Software Limited, a captive outsourcing subsidiary of Deutsche Bank (DBKGn.DE - €116.65; 2M), had been in existence for nine years. Based in Bangalore, it had 486 employees, with revenues of US\$18.7million, but at less than 70% utilization. The operation was doing work solely for its parent, but was sub-scale and barely breaking even.

Deutsche Bank was looking to accelerate its outsourcing and offshoring strategies within the IT domain, with the key objective to increase cost reduction as well as release operational risk capital.

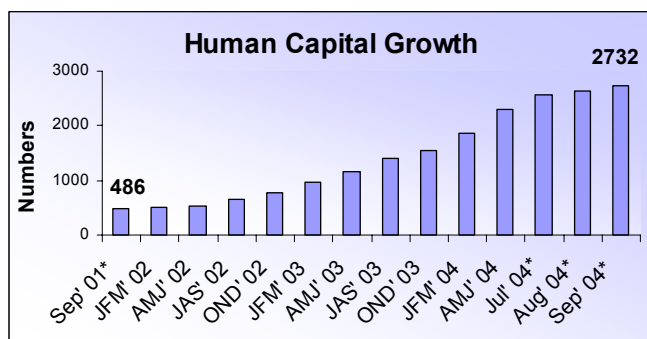
The solution was a carve-out structure

HCL Technologies is an Indian based company, focusing on software services.

In 2001, Deutsche and HCL transformed the bank’s operation when it was carved out into a new entity – DSL Software. HCL acquired a 51% stake in the captive along with management control of the entity.

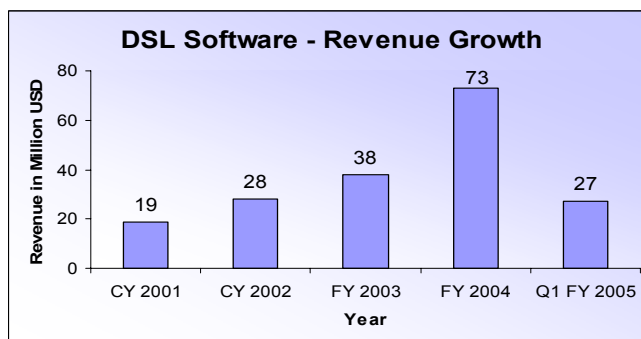
Deutsche Bank became an “anchor client” for DSL’s IT Outsourcing services by signing an operational contract with a “first right of refusal” on any Deutsche business to be sourced from India. DSL had a mandate to expand the client base of the operation.

Figure 12. DSL Software – growth in FTE



Source: DSL Software

Figure 13. DSL Software



Source: DSL Software

In 2005, HCL acquired the remaining 49% of DSL for a substantial premium and pay-out to Deutsche Bank.

Australian banks....previous experience with carve-outs

WBC and CBA have in the past launched carve-out type models - WBC with the mortgage centre in Adelaide and CBA with its IT outsourcing arrangement with EDS. However these have by-and-large been failures for various reasons – the most glaring of which was the failure of the banks to distinguish the management and governance of the carved-out business from their own. Because of this they were unable to convince potential client organizations (essentially the parent bank’s competitors) that they were independent of their parent companies.

The 2005 cheque processing utility arrangement between WBC, CBA and NAB looks likely to be more successful, largely because it is being managed by Fiserv, a third party specialist.

To attract business from potential competitors, carve-outs must have truly independent boards and management.

Interestingly, we understand CBA is considering a carve-out structure for its sale of the Avanteos wholesale platform business. Should this come to fruition, we keenly await the details of the deal.

Comparing the models on key risk & return parameters

To highlight the relative strength of the next generation models, we have performed a brief benchmarking exercise, comparing each on risk and return measures.

Risk

The next generation models enable access to best of breed skills and economies of scale, while still enabling the client to exercise a higher degree of control. Alternatively, the earlier models have clear weaknesses, whether in a lack of flexibility or an inability to effectively influence outcomes.

Figure 14. Rating the models on key risk parameters

Parameters	Captive	Specialist Multi-vendor	Build Operate Transfer (BOT)	M&A Style Carve Outs
Geographical Flexibility	Strong	Medium	Weak	Medium
Management Bandwidth (Control)	Medium	Strong	Medium	Medium
Speed to market	Medium	Strong	Medium	Medium
Infrastructure/Business Continuity	Strong	Medium	Weak	Medium
Skill Set	Medium	Strong	Medium	Medium
Recruitment	Strong	Medium	Medium	Medium
Technology	Medium	Strong	Medium	Medium
Scalability	Strong	Medium	Medium	Medium
Organisation Culture	Medium	Strong	Medium	Medium

Legend: Strong Medium Weak

Source: Swamy & Associates, Citigroup Investment Research

Returns

To assess the relative benefits available under each model, we have developed a hypothetical example of a \$100 million cost base, with operational risk capital of \$10 million. Of course, the actual value creation will differ significantly depending on the nature of the specific domain (IT vs BPO vs KPO) and the expertise of the specific service provider chosen.

Figure 15. Relative benefits available from a \$100 million offshoring (indicative)

\$M	Net cost reduction		Additional cost reduction p.a. (+ 24 mths)	Operational risk capital release	Sale / transfer premium (increased valuation)
	0 - 12 mths	12 - 24 mths			
Captive	5	35	5	5	0
Specialist multi-vendor	15	25	10	8	0
Build operate transfer	10	30	7	8	10
Carve-out	5	35	10	8	25

Source: Swamy & Associates, Citigroup Investment Research

Net cost reduction

- Each model would deliver a similar cost reduction over the first 24 months, with the key difference being the timing. Specialist multi-vendor delivers the most benefits here, given there is minimal build / set up time required to achieve maximum savings.

Additional cost reduction

- Assessing ongoing cost reduction, the multi vendor and carve out models would be best, primarily because given both utilize multiple clients, they have access to greater economies of scale. This enables a greater ability to attract specialist staff and leverage process improvements.

Operational risk capital release

- Under this measure, operational risk capital is released by transferring risk to parties better positioned to manage it. The captive model is relatively worst positioned, given the process stays in-house.

Sale / transfer premium

- The carve out structure receives the highest benefit, given the bank's process is sold and the premium received upfront. The BOT model also receives some benefit, in that it enables the bank to buy back the facility and share in the value created by the service provider

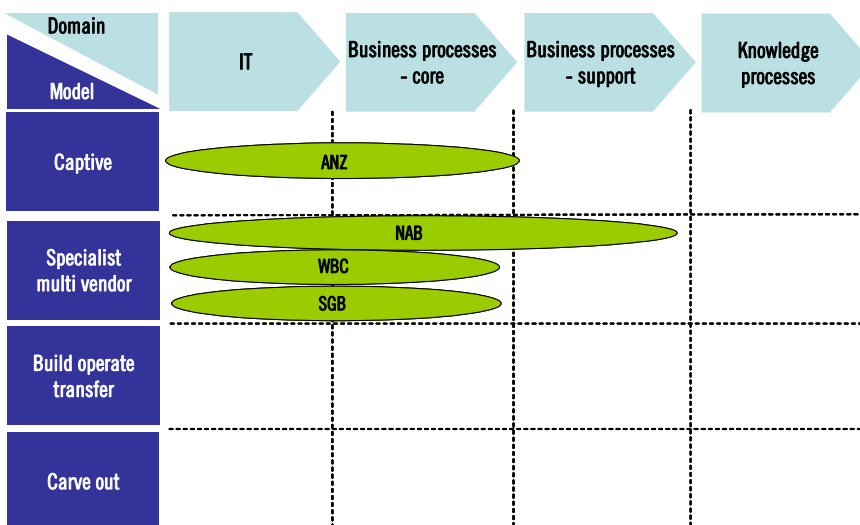
Conclusion

On a risk / return basis, the next generation models are clearly superior. They have lower control / flexibility risks than the traditional models, and also have the return upside potential from sale / transfer of the function.

What are the strategies of the Australian banks?

While each would acknowledge the opportunity inherent in offshoring, the Australian banks have to date taken a conservative approach. We categorise each bank's current model below.

Figure 16. Australian banks – current approaches to offshoring



Note: To date CBA has conducted no offshoring and indicated no distinct approach

Source: Citigroup Investment Research

ANZ

ANZ is the only Australian bank to have a captive offshore centre. In 1989 the bank launched an IT development centre in Bangalore, India – which currently employs in excess of 1,500 people. The primary purpose of the centre is to manage many of the bank's internal software applications (this employs ~1,200 FTE). In addition, the does some product processing work, specifically institutional transaction processing as well as some consumer functions (e.g. account opening).

Further, the bank recently announced a three year mortgage automation project, which may ultimately involve some back office operations being transferred to India.

While the captive approach has advantages in terms of control and risk management, the operation is sub-scale in the Indian market. Experts say that for IT processes in particular, the true economies of shared infrastructure, as well as the ability to quickly ramp up hiring and the benefits of best-of-breed processes, are only realised when the headcount reaches 10,000.

CBA

While it continues to review opportunities, CBA recently announced that it has no current intention of offshoring business processes or systems. CEO Ralph Norris recently stated that the bank has internal systems issues to resolve before it looks at offshoring. As a result, in our view CBA is least likely of the major banks to be entering offshoring arrangements in the near term.

The bank has recently renewed a longstanding relationship with EDS for IT infrastructure outsourcing (on shore).

NAB

We categorise NAB's approach to offshoring as a specialist multi-vendor model. While its arrangements are still in the pilot phase (with ~200 staff involved), it has BPO contracts with Genpact and Accenture. The domains covered are both core and support - including credit card collections and accounts payable. We understand another ~70 finance positions will relocate to India in 2007.

In addition, the bank recently announced the offshoring of 85 international payments roles to an ABN Amro facility in Chennai.

In IT, the bank has infrastructure and application outsourcing contracts with IBM GSA, HCL and Accenture (the latter offshore). NAB's UK business has also outsourced ~200 IT jobs to Accenture (some offshore).

WBC

Similar to NAB, WBC has also pursued a specialist multi-vendor approach, forming relationships with several service providers. Its BT wealth management subsidiary recently signed a letter of intent to outsource 70 unit trust administration jobs to Genpact – these positions will be relocated to India.

WBC also has a longstanding IT infrastructure outsourcing contract with IBM GSA (onshore). In addition, BT recently extended its system support and integration relationship with Indian firm HCL, the bulk of which will be conducted offshore (> 100 jobs).

The bank recently shelved plans to offshore 475 loan processing jobs to Genpact in India.

SGB

While it appears less advanced than some of the other banks, SGB also looks to be adopting a specialist multi-vendor model. In September 2006, the bank announced a pilot to offshore ~80 credit processing and collections positions to IBM in Bangalore.

For software development, SGB has been using Tata Consulting Services and HCL Software, both major Indian players. Approximately 10-15% of development work goes offshore.

SGB has a longstanding IT infrastructure outsourcing arrangement with Fujitsu (for its branch technology and ATM machines).

Figure 17. Australian bank outsourcing / offshoring

Organisation	Domain	Structure	Service Provider	Delivery location
ANZ	<ol style="list-style-type: none"> IT Application / maintenance Back office operations 	<ol style="list-style-type: none"> Captive Captive 	<ol style="list-style-type: none"> Captive IT operation – conducting software development and maintenance, and helpdesk. Captive - back office operations understood to be institutional transaction processing (~150 jobs) and consumer product processing (150 jobs) 	<ol style="list-style-type: none"> Bangalore
CBA	<ol style="list-style-type: none"> IT Application / IT Helpdesk 	<ol style="list-style-type: none"> Initially CBA held a 35% stake in EDSA, but this has since been sold back 	<ol style="list-style-type: none"> EDSA Satyam/HCL are also doing some IT Application work 	<ol style="list-style-type: none"> Australia Satyam/HCL uses mix of their staff from onshore and offshore development centres.
NAB / MLC	<ol style="list-style-type: none"> IT Application / IT Helpdesk Finance and Accounts (Accounts Payable) Credit Card collection International payment processing 	<ol style="list-style-type: none"> IT outsourcing contract with Accenture. Also contract with IBM GSA BPO contract with Accenture BPO outsourcing contract with Genpact for NAB BPO outsourcing contract with ABN Amro 	<ol style="list-style-type: none"> Accenture providing applications management and infrastructure maintenance. IBM GSA contract is for applications management and IT helpdesk. Accenture (Pilot project in 2005 with 50 FTEs outsourced to Accenture in India.). Accenture (Second 'pilot' project in 2006 with 80 FTEs outsourced to Accenture within the Accounts Payable function in 2007 in India.) Genpact is taking 73 credit card processing roles offshore, and 70 personal loan operations jobs will also be piloted offshore ABN Amro is taking 85 roles relating to international trade & payments 	<ol style="list-style-type: none"> Accenture's delivery centre is based in Bangalore. IBM GSA is located in Australia. Accenture's delivery centre is based in Bangalore . Genpact facility is located in Jaipur, India. ABN Amro facility is based in Chennai, India
Westpac / BT	<ol style="list-style-type: none"> IT Application / IT Helpdesk Retail unit trust administration of BTFG Loan processing 	<ol style="list-style-type: none"> IT Outsourcing contract for WBC and BTFG BPO outsourcing contract with Genpact for WBC and BTFM 	<ol style="list-style-type: none"> IBM GSA/HCL (IT Application Outsourcing) Genpact – Letter of Intent has been signed to outsource up to 70 FTEs in retail unit trust administration of BT Genpact – WBC recently shelved plans to outsource 500 loan processing FTEs to Genpact 	<ol style="list-style-type: none"> IBM GSA based in Australia. HCL in India. Genpact facility is located in Bangalore.
SGB	<ol style="list-style-type: none"> IT Infrastructure – branch technology, ATMs Applications development Credit collections and credit card fulfillment 	<ol style="list-style-type: none"> IT Outsourcing contract Software development projects IBM GSA 'piloting' BPO 	<ol style="list-style-type: none"> Fujitsu – SGB has worked with Fujitsu since the 1990s. Current deal runs to 2008 Long term relationships with Tata Consulting Services and HCL Software IBM GSA (Currently doing a pilot with IBM around credit collections and processing activities with about 80 FTEs) 	<ol style="list-style-type: none"> Fujitsu facility is Australian based Various Indian cities IBM facility is located in Bangalore.

Note: In addition to the above, CBA, NAB and WBC have formed a consortium to outsource cheque processing to FiServe

Source: Company reports, Swamy & Associates, Citigroup Investment Research

Risks of current stance

Aside from the lack of a “burning platform”, we expect the difficult political environment has also been a factor in the banks’ current reticence to embrace offshoring. However, we note that even if they do accelerate offshoring from here on, we do not believe the current conservative approaches being taken can ultimately deliver the long term outcomes being sought. By eschewing the next generation models, the banks are exposed to the following risks:

ANZ

- Maintaining a captive model, ANZ risks remaining a sub-scale player that will face difficulty achieving optimal cost performance. In addition, by keeping operations in-house, ANZ will deliver minimal capital release. Further, given its current offshoring focus is IT delivery, extending this to broader business operations will be problematic. While it is now transferring some product processing roles to Bangalore, it is effectively starting from scratch with these functions, lacking capability and scale.

NAB, WBC, SGB

- By pursuing a specialist multi-vendor offshoring model, these banks have reduced control over outcomes. In an environment where key offshoring locations are experiencing staff shortages and emerging labor quality issues, the risks are increasing for banks with traditional client: vendor relationships.

CBA

- By electing not to pursue offshoring in the near term, CBA risks falling behind the game. While to date none of its peers have made a material move in this space, this appears to be only a matter of time. Once this happens, the remaining banks will be under pressure to respond, CBA in particular.

How do we rate the relative positioning of the banks?

Bearing in mind the shortcomings in their current approach, which of the banks is best placed to effectively progress their offshoring agenda? To assess this, we have reviewed the risk / return characteristics of each bank's current model. We have done this by undertaking a "rate and weight" analysis of each of these characteristics across the banks.

The key drivers of this analysis were:

Return

The potential size and timing of the cost savings and capital release. The factors considered are:

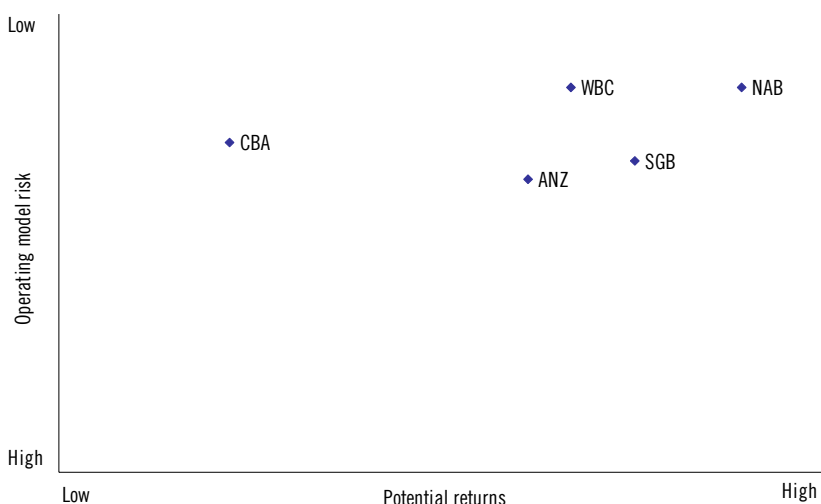
- Current offshoring model used by the bank or more correctly, the closer the current structure is to where they need to be (Carve Out or BOT). The logic is that the closer they are to the ideal structure, the greater will be the quantum of returns and also the faster will be the speed of realization
- Strategic intent or "commitment" displayed by the bank's management team to accelerating offshoring
- Capability and spread of the bank's current service providers especially in being able to scale up into the KPO domains

Risk

Key risks considered include:

- Geographic flexibility to rapidly scale-up at alternative locations
- Capacity to recruit and retain skilled staff at middle and senior management levels
- Management bandwidth and degree of control over outcomes
- Exposure to political and union backlash
- Retention of intellectual property rights, and compliance with data protection and privacy laws

Figure 18. Offshoring programs – relative positioning



Source: Swamy & Associates, Citigroup Investment Research

Figure 19. Detailed "rate and weight" analysis

Category	Parameters	Weighting	Ratings					Weighted Ratings				
			ANZ	CBA	NAB	WBC	SGB	ANZ	CBA	NAB	WBC	SGB
Return related												
	Potential size and timing of benefits - impact of current offshoring model and service providers used	25	2	1	4	3	3	50	25	100	75	75
	Management strategic intent to increase offshoring	15	4	1	4	3	4	60	15	60	45	60
	Total return related							110	40	160	120	135
Risk related												
	Geographical Flexibility (rapid scaling up at alternative locations)	10	2	2	4	4	4	20	20	40	40	40
	Brand name to recruit skilled-staff esp. at middle to senior mgmt. levels	10	2	3	4	4	3	20	30	40	40	30
	Globally benchmarked expertise of BPO and KPO service providers currently engaged by the organization	5	0	0	5	5	3	0	0	25	25	15
	On-shore customer service impact	5	4	5	2	3	2	20	25	10	15	10
	"Protection" from political and union back-lash	5	3	5	2	2	2	15	25	10	10	10
	Management Bandwidth and Control	5	5	5	3	3	3	25	25	15	15	15
	Ready access to domain expertise across ITO, BPO and KPO domains	5	2	0	5	4	3	10	0	25	20	15
	Process transition, Quality management, Business Continuity, Disaster Recovery and Infrastructure Mgmt. expertise	5	2	1	4	4	3	10	5	20	20	15
	Intellectual Property, data protection and privacy law compliance	5	4	5	3	3	2	20	25	15	15	10
	Retaining client-organisation culture and values	5	4	5	2	2	2	20	25	10	10	10
	Total risk related							160	180	210	210	170
Total		100						270	220	370	330	305

Source: Swamy & Associates, Citigroup Investment Research

NAB – has more strategic intent

We rate NAB No.1 ahead of WBC and SGB, largely by virtue of its more positive moves in offshoring in recent times. NAB has already established relationships with several leading vendors – including Genpact, IBM GSA, Accenture and ABN Amro . We understand bank management is pleased with the results of its recent offshore pilots, both in terms of the cost reduction and improved quality. As a result, the bank has now signaled its intention to offshore 200 credit card operations FTEs in 2007, in addition to information management roles. NAB's more pro-active approach indicates it is likely to deliver greater benefits from offshoring than its peers in the near term.

From a risk management perspective, we rate it equal to WBC. Its multiple relationships give it more flexibility than others, and a greater ability to attract and retain scarce skilled resources. On the downside, its approach requires it to cede control over outcomes to third parties, and leaves it more vulnerable to a reputational backlash domestically. We concede that project management has not been an organizational strength in the past, and remains a question mark.

We understand the bank is struggling to meet its internal cost-targets of CPI-level growth in FY07. As a result, we believe NAB is prepared to more aggressively adopt offshoring.

Moving forward, NAB could seek to extend its existing relationships into a BOT-type model. This would involve transferring domains into a joint venture with a Genpact or Accenture. These companies have established capabilities in six sigma and other quality methodologies. By leveraging the expertise of global leaders, NAB can improve both quality and efficiency outcomes.

WBC – second, due to unclear strategic intent

In preparing the analysis for this report, we had difficulty separating NAB and WBC as the two leading players. However in our view, WBC's November 2006 about-face on offshoring 475 loan processing FTE made the difference between the two. While we understand part of the reason for the about-face lay in the relatively high redundancy costs it faced at its Concord processing centre, we believe a bigger factor was the pressure the bank faced from state politicians and media personalities. As a result, we rate WBC No.2 overall.

On the return axis, we rate WBC just below SGB. While WBC arguably has a broader range of relationships with third party vendors than SGB, in our view SGB, through its words and actions is showing a greater willingness to embrace offshoring. Hence we rank SGB a little higher.

From a risk perspective, we rate WBC higher than SGB. The major reason for this is WBC's relationship with Genpact. This provides a relative advantage in terms of a ready access to domain expertise across IT, business processes, and knowledge processes. It also has longstanding relationships with IBM GSA (domestic) and HCL (India).

Similar to NAB, moving forward WBC may seek to extend its current deals into BOT arrangements. By partnering with specialists and sharing the upside, both parties have an incentive to improve domain performance.

SGB – recent restructuring may be a catalyst

SGB is our No.3 ranked bank in terms of its positioning for offshoring. As noted above, we rated it just above WBC on its potential to deliver benefits. While SGB has only one offshore vendor relationship of note (with IBM GSA), by its actions it has revealed it is not afraid to take on negative publicity for its long term benefit. The bank copped a degree of media flak over its decision to pilot 70 credit collections jobs to IBM in Bangalore – however it refused to blink. Hence we have confidence it is prepared to stay the course.

With the benefit of hindsight, SGB management concedes that the communication of the credit collections offshoring in 2006 was not handled well. For future announcements, we expect CEO Kelly to be more forthright in highlighting the bank's position as a growth company, and a net creator of new jobs in this market.

On risk management, SGB scores slightly above ANZ, though for very different reasons. SGB's model provides it with relatively more flexibility – in terms of scaling up operations and attracting staff. On the other hand, ANZ's captive model is a safer short term bet for offshoring – it controls its own operations, and the approach is more saleable domestically in terms of avoiding a media backlash.

We take confidence from the recent appointment of Peter Clare to head the newly merged Group Technology and Operations division. Clare has a strong track record as a “can-do” operator (both within SGB and from his days with CBA). At the 1H07 result, we note CEO Kelly's comment that he now has the responsibility of integrating siloes and implementing “best sourcing” strategies across the bank. We believe the bank is anticipating that this process will deliver savings that can help fund its future investment requirement.

ANZ – currently tied to a first generation model

While ANZ is recognised as being the most advanced bank in terms of offshoring, we do not rate it as highly as others. Despite the fact that the 1,500 FTEs it has in Bangalore is far ahead of any other bank, we believe ANZ's captive model has some significant limitations that will ultimately constrain the benefits it can deliver and the risks it can mitigate. Hence we rank ANZ No.4.

As a response to the current political heat around offshoring, ANZ is using its captive model as a differentiator against peers – for instance CEO John McFarlane recently argued “these are all ANZ people in Bangalore”. The risk with maintaining this line is that the bank will find it difficult to ever reach a position of scale, hence its potential benefits are constrained.

From a risk perspective, while there are some control advantages, the key limitations relate to reduced flexibility and ability to attract and retain staff. That is, its base city of Bangalore is a major offshoring hub. However as such it is also most exposed to competition for scarce skills and wage inflation. The disadvantage of this model is that it provides limited flexibility to relocate operations in response to localized labor supply constraints.

Given its current stance, we believe ANZ will find it difficult to migrate to one of the next generation models. As we note earlier in this document, IT services and transaction processing at relatively small scale are no longer attractive for service providers. Similarly, we understand the bank has in the past sought expressions of interest from potential purchasers, however few serious bidders have been identified.

CBA – no enunciated interest

Given management has stated the bank has no current plans to offshore any operations, CBA is a clear No.5. Of course, our analysis highlights some advantages in maintaining the status quo – including reduced reputation risk and clearer control over outcomes. However the obvious disadvantage is that the bank will not benefit from the cost savings and potential service quality improvements available from offshoring.

We understand the bank's internally-held view is less clear cut – CBA will look at offshoring, however it has no plans to be the first mover. This approach reflects CBA's broader attitude to defending its market position, however in our view this in itself is a risky strategy. That is, once its peers begin to scale up their offshoring, CBA will be compelled to respond simply to keep pace. In our view, the bulk of the benefits of offshoring will flow to the early movers.

But even the leaders need to change

While we rate NAB highest, as noted above, in our view even its specialist multi-vendor model will not deliver optimal risk / return outcomes. The reason for this is that the BPO market is already showing signs of commoditizing, and the simple vendor / client model will be among the first to feel the pinch.

The key pressure points in the market are:

Domain expertise – several Indian delivery locations have until recently had government-owned and controlled financial markets and financial services industries. Now with the rapid growth in offshoring across several key BPO and KPO domains, these cities are struggling to meet demand.

Skill-set shortage (at middle and senior management levels) – several delivery locations are experiencing critical skill-set shortages due to a combination of booming domestic banking and insurance industries and historical lack of domain maturity. This is very critical at the middle and senior management levels which are being leveraged very highly.

Note the data in the table below shows that the growth in salaries for “Entry Level” positions has trailed that of “Middle and Senior Management” positions.

Skill-set shortages at more senior levels are being circumvented (compromised) by broadening the staffing pyramid – that is, using a labour mix of one middle manager over 40 entry level compared to a previous model of one middle level manager for 10-15 entry level.

Figure 20. Indian BPO / KPO Salaries (US\$)

Skill Set	1996	2000	2006 Indian Average Salary	2006 Highest Indian Salary	2008 (Projection)	Compounded Salary growth ('96-'06)
BPO						
Entrant	800	1,050	1,600	3,500	2,000	9%
Manager	1,200	1,500	3,000	7,000	3,500	15%
Team Leader	1,500	1,800	4,500	10,000	5,500	20%
KPO						
CA (Fresh)	4,000	5,000	10,000	18,000	14,000	15%
CA (2-3 yrs experience)	10,000	15,000	32,000	60,000	70,000	16%
CA (5 yr + experience)	15,000	20,000	45,000	75,000	100,000	18%
MBA - Tier II Institute						
MBA (Fresh)	7,000	12,000	15,000	30,000	20,000	5%
MBA (2-3 yrs experience)	12,000	35,000	40,000	55,000	55,000	3%
MBA (5 yr + experience)	40,000	45,000	50,000	75,000	75,000	2%
MBA - Tier I Institute						
MBA (Fresh)	9,000	15,000	35,000	60,000	80,000	18%
MBA (2-3 yrs experience)	14,000	30,000	50,000	80,000	100,000	11%
MBA (5 yr + experience)	45,000	60,000	95,000	100,000	150,000	10%

Source: Swamy & Associates

While the salary growth is highest in KPO, the problem is greatest in BPO. The reason for this is that KPO equivalent salaries in Western markets are also increasing rapidly. As a result the differential in salaries will shrink at a lower rate in KPO.

Private equity investors demand for growth – many service providers now have private equity shareholders, and hence are under pressure to focus on “big” M&A-style deals to grow revenues rather than smaller organic initiatives, as well as deliver high profit margins.

Business Continuity Planning, Infrastructure concerns – broadly adopted BCP methodologies are forcing service providers and clients to diversify delivery hubs outside of current locations (mostly based within India).

Impact ... increased pressure on service providers

With significant supply constraints, corners are being cut and service standards are slipping. This has led to several recent examples of “forced” restructuring of outsourced operations.

Figure 21. Recent forced restructurings of outsourced operations

Date of Review	Company name	Captive / Service provider details	Staff FTEs impacted	Supposed rationale
Aug-06	Aviva plc / Aviva Global Services,	Exl, WNS, 24/7 and ICICI One Source	1200 to 2000 FTEs were re-located back to Aviva Global Services as part of Aviva exercising the BOT option	AGS exercised the BOT option as it felt that they would have far better control over process performance metrics on their own rather than through these service providers.
Aug-06	Aviva plc	Exl	Limited number (only 8 FTEs) but they were senior project managers and team leaders who were asked to leave	Aviva audit found that senior EXL managers were involved in “fudging” process documentation to show better KPI achievement than the actual indication
Jun-06	Apple Computers	Captive Indian BPO entity providing technology support and customer contact services was scrapped	30 FTEs already employed as well as 3,000 FTEs planned to be recruited	Increasing costs and infrastructure issues Competitive and more flexible offer from third-party BPOs, with option to move to cheaper destinations if SLAs not met
May-06	AC Nielsen India	Captive Mumbai-based Market Research KPO providing statistical and quantitative analytics services to AC Nielsen Australia and globally	45 KPO FTEs as well as another 200 planned FTEs	Staff and rental cost inflation levels in Mumbai were found to be unacceptable. Company currently considering either relocating captive to a 2nd tier Indian city or out of the country
Mar-06	IBM India,	Threatened to sue and demanded full refund of recruitment fees from a significant proportion of its recruitment agents for a period of up to 3 years	2,000 to 3,000 FTEs estimated to have been recruited by these agents and found to be substantially under-qualified and in-experienced compared to stated competency levels	IBM “discovered” significant discrepancies between recruiters’ descriptions of candidates competency levels and actual on the job performance. Recruiters’ defenses of “market practice” and “state of the market” were deemed unsatisfactory by IBM
Jan-06	Abbey National	Put its third party contract for India-based customer contact and service operations under review	2,000 FTEs based with third-party service provider, Mphasis -DFL (subsequently acquired by EDS)	Sub-standard customer service levels with poor cost outcomes. Questionable data protection and privacy practices

Source: Swamy & Associates

While some of the examples above resulted from questionable practices on the part of service providers, it is clear that the supply side pressure is being passed through to their clients. Significantly, this pressure will continue to build, and we believe it will ultimately threaten the viability of the early generation offshoring models – captive and specialist multi-vendor.

As a result, unless they are willing the change their approach, we believe even the best-positioned of the Australian banks will find the benefits from offshoring more difficult to achieve.

The winner? - The first bank to adopt a next generation model

We believe a lack of a “burning platform” is the major reason for the conservative approach taken by the banks to date. Unlike their counterparts in the US and Europe, an extended favorable environment over recent years has enabled the Australian banks to tread very gently in this area.

However the next 2 – 3 years will deliver lower credit growth and higher bad debts. In response, the banks will again need to use the cost lever more aggressively to maintain earnings growth. Our view is that this will be a catalyst for more substantial offshoring.

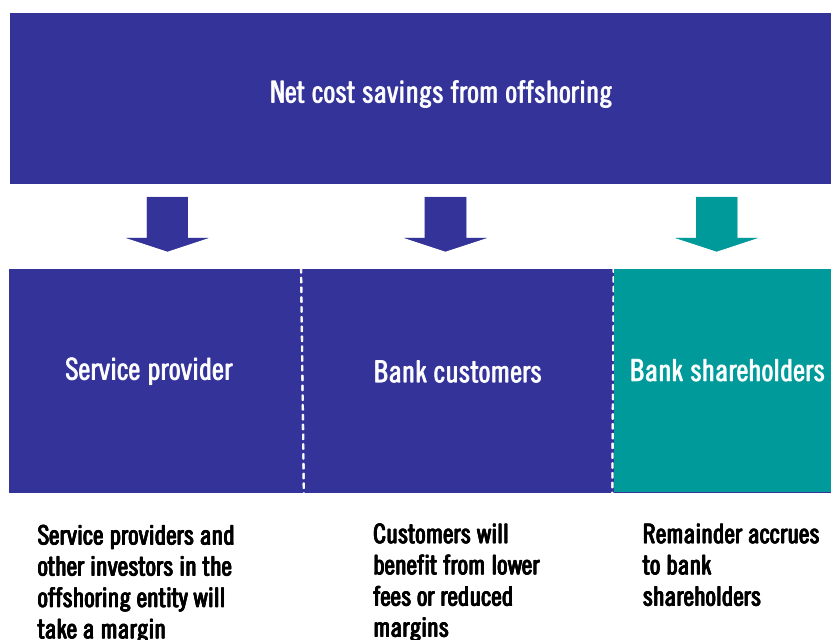
As we have proposed in this report, we believe each of the individual banks should pursue cost and capital expenditure savings by offshoring processes to third party service providers with scale and more importantly, domain specialized skills.

However, our concern is that if most major banks pursue the same strategies by offshoring the same domains (often to the same service providers), much of the benefits will be quickly competed away.

That is, while the first movers will achieve a window of advantage, the laggards will increasingly find they need to share larger components of the benefits with other parties, particularly their customers.

As per the schematic below, we note that there is in effect, a three way tussle for the same pool of future cost savings – the service provider vs the bank customer vs the bank shareholder. The reward to the shareholder of an individual bank is a residual reward – the savings produced by the outsourcer less that passed on to the customer in reduced fees and margins.

Figure 22. Division of net benefits from offshoring



Source: Citigroup Investment Research, Swamy & Associates

It typically follows that the winners in most pursuits are the first movers. However while it's fair to say ANZ has been the first mover into offshoring, we believe its captive structure is a significant constraint to success. Alternatively, other banks such as NAB appear more willing to embrace the new structures, and may ultimately deliver better returns to shareholders.

Hence we believe the winners in offshoring will be the first to adopt the next generation models, and who are able stay ahead of their peers by continually broadening their position and seeking more innovative structures.

Alternatively, the laggard banks will end up competing away much of the savings into the hands of the customer and as a corollary retaining much less residual value for the shareholder.

Appendices

Appendix 1 – Glossary of key terms

BPO – Business Process Outsourcing (or BPO) is the contracting out of business functions or processes to a third party. In these contracts the provider is responsible for performing and managing the outsourced function or process on behalf of the customer. BPO is distinct from IT outsourcing (or ITO) because under this arrangement, the service provider takes responsibility for performing the business process, not just providing the IT capability required for the process. Categories include core BPO (i.e. industry domain-specific processes such as mortgage processing) and support BPO (i.e. generic processes such as procurement or accounts payable).

ITO – Information Technology Outsourcing (or ITO) is the contracting out of IT hardware and software to third parties. Typical ITO arrangements include infrastructure (hardware) management, or applications (software) development and management

KPO – Knowledge Process Outsourcing (or KPO) is effectively an extension of BPO, in that it involves the outsourcing of industry domain-specific processes that require deeper technical expertise. Examples include customer data analytics, loan portfolio pricing and credit proposal analysis.

Domain – the segment of the business that is being offshored. The business is typically segmented along the following lines: IT functions, core (or industry-specific) processes, support (generic cross-industry) processes and knowledge processes.

Operating model – the approach taken by a business for organising and managing its offshore operations.

Onshore – where a business process or function is outsourced but the location of the operation is maintained domestically.

Appendix 2 – Major offshoring service providers to Australian banks

Genpact

Genpact was launched in 1998 as the captive Indian back office centre for General Electric (GE.N - US\$36.96; 1L) (originally known as GE CIS). To help transition the business from a captive model to a third party service provider, in 2004 GE sold a 60% stake to private equity interests.

Genpact's services include sales & marketing analytics, financial services, core operations & collections, finance & accounting, information technology services, and enterprise application services & program management.

Accenture

Transitioning from an IT consulting company, Accenture (ACN.N - US\$39.67; 2H) has over recent years become a significant outsourcing service provider. It now has BPO and IT delivery centres in 10 Indian cities, with over 17,500 staff in that country (up from 4,000 in 2003). Globally, it has over 40 delivery centres in 20 countries across Asia, Europe and the Americas.

While the bulk of Accenture's outsourcing business is IT-related, it also provides BPO services in finance and accounting, payroll, human resources, benefits administration and taxes.

IBM

With a long legacy in IT hardware, IBM (IBM.N - US\$107.99; 1M) has recently transitioned itself to a services company. IBM now has 43,000 staff in India (up from 9,000 in 2004), including software development and BPO. Its BPO subsidiary IBM-Daksh employs 20,000 staff in India (up from 6,000 in 2004).

While 66% of the Indian operations related to customer care (i.e. call centres), other business process services offered include human resources, finance and accounting and procurement.

HCL

HCL Technologies (HCLT.BO - Rs352.65; 1M) is one of India's leading global IT Services companies, providing software-led IT solutions, remote infrastructure management services and BPO. The company has an extensive global offshore infrastructure and its global network of offices in 16 countries, and delivers solutions across several vertical industry specializations (including financial services). HCL was formed in 1975 and achieved its IPO in 1999. It currently has over 36,000 staff globally. In Australia, the company has offices in Sydney and Melbourne, and services more than 35 key clients, primarily covering software applications development.

Tata Consulting Services

Tata Consultancy Services (TCS.BO - Rs1,249.95; 1L) is one of the leading information technology companies in the world. It has a workforce of over 74,000 professionals spread across more than 50 global delivery centres. TCS is part of the Tata Group, which is one of India's largest business conglomerates (with revenues in 2005-06 of US\$21.9 billion).

TCS offers its clients consulting, IT services, business process outsourcing, infrastructure outsourcing, and engineering and industrial services.

TCS is listed on the National Stock Exchange and Bombay Stock Exchange in India.

ANZ Banking Group Ltd

Company description

ANZ is a major Australian-based bank operating in retail and business banking in Australia, New Zealand and throughout the South Pacific. Australian operations make up the largest part of ANZ's business with commercial & retail banking & funds management.

Investment thesis

We rate ANZ Buy/ Low Risk (1L), with a target price of A\$31.55. While the uncertainty surrounding the pay-off from Basel II has to date seen investors largely ignore its potential impact, we believe it will result in increased returns to shareholders of the major Australian banks. This is combined with continued favourable operating conditions for the banking sector at the moment.

With stable earnings growth and a strong management team the outlook for the business is positive, particularly in the medium term, given the level of investment in the franchise.

Valuation

Our 12-month target price of A\$31.55 for ANZ is derived by applying a 3% premium to our THoR valuation, as we believe the bank's slow ongoing re-rating is justified. Our Theory of Relativity (ThOR) methodology is a Price-to-NTA, Return-on-NTA methodology, which uses 10 years of historical data. Our 12-month ThOR valuation is A\$30.73.

This target price equates to a FY09 dividend yield of 5.45%, which is a 30 basis point discount to CIR's 12-month forecast 10-year bond yield of 5.75%, which is broadly in line with the stock's 5-year history.

On a P/E basis, ANZ is trading on 14.8x FY07e earnings, which represents a 3% discount to the major bank average - roughly in line with its decade average (5% discount).

Risks

We rate ANZ Low Risk referencing a number of quantitative and fundamental screens. We believe the share prices and earnings performance of Australian banks are subject to a number of factors and risks. These include (but are not limited to): Net interest margin pressure; Bad debt (credit) risk; Interest rate risk (including potential for bond prices to weaken and negatively impact valuation); Market risk; and Operational risk. At the company level, disruption due to job cuts and exposure to further irrational pricing in the NZ market remains a risk for ANZ given their overweight position. The restructure of the Institutional business is also a potential risk given intense margin pressure and skilled staff shortages. While the necessity to drive top-line growth given the cost commitment in the Australian franchise looms as a negative risk in the short term, achievement of management's ambitious 7-10% p.a. revenue targets could see the stock's discount P/E rating versus the sector continue to unwind through a positive market reaction. Adverse/favourable movements in these risk factors may impede ANZ's share price reaching our target price.

Commonwealth Bank of Australia

Company description

Commonwealth Bank of Australia is Australia's largest retail bank. Its core business is the provision of retail, business and institutional banking services. It also is a major participant in Australia's wealth management sector with products covering superannuation and life insurance as well as retail and wholesale fund management activities.

Investment thesis

We rate CBA Buy/Low Risk (1L) with a target price of \$54.00. While the uncertainty surrounding the pay-off from Basel II has to date seen investors largely ignore its potential impact, we believe it will result in increased returns to shareholders of the major Australian banks. This is combined with continued favourable operating conditions for the banking sector at the moment.

We believe Ralph Norris is the right person to manage the cultural change at CBA, but believe the changes in personnel and the bank's distribution model will take time to bed down.

Valuation

Our 12-month target price for CBA is \$54.00. This target price is based on our Theory of Relativity (ThOR) valuation methodology, which is a price to NTA, return on NTA type methodology. ThOR has the formula: $EPS/NTA - \text{risk free rate} = \text{Price}/NTA$, where: EPS = 12 month prospective, rolling "cash" earnings per share; NTA = net tangible assets; and Risk free rate = the 10-year Commonwealth Government bond. Using a straight-line regression equation, we map the long-run relationship between return on net tangible assets (NTA) and the price to NTA which each stock trades on to determine our stock valuations. CBA's 12-month \$54.00 target price is based upon Citigroup's 12-month ThOR valuation of A\$53.94.

This target price equates to a FY09 dividend yield of 5.9% which is a modest premium to CIR's 12 month forecast 10 year bond yield of 5.75%. This premium is in line with the stock's 5 year history.

On a P/E basis, the stock is trading on 14.6x FY07e earnings - a 2% premium to the major bank average (a narrower premium than its long-term average of 7%).

Risks

We rate CBA Low Risk referencing a number of quantitative and fundamental screens. We believe banks' share prices and earnings performance are subject to common factors and risks - net interest margin pressure, interest rate risk, market risk, operational risk and the spectre of re-regulation. CBA is the Australian bank most leveraged to movements in equity markets through funds management/wealth management. We believe it is also most susceptible to erosion of market share across many major product lines in banking - both as competitive pressures intensify the focus on customer satisfaction, and as management take time to familiarise themselves with their new roles. From a positive perspective, Ralph Norris's history of managing cultural change raises the prospect of material upside to consensus estimates for CBA, should he be able to harness the power of the bank's distribution network. Adverse or favourable movements in these risk factors may impact the prospect of CBA's share price reaching our target price.

National Australia Bank Ltd

Company description

National Australia Bank is a large financial services group providing a comprehensive and integrated range of financial products and services throughout Australia, NZ and parts of the UK. Australian banking operations dominate and represent 60% of group assets.

Investment thesis

We rate NAB Buy/Low Risk (1L) - with a 12-month target price of \$43.40. While the uncertainty surrounding the pay-off from Basel II has to date seen investors largely ignore its potential impact, we believe it will result in increased returns to shareholders of the major Australian banks. This is combined with continued favourable operating conditions for the banking sector at the moment.

The bank has emerged from 2H06 with considerable momentum in most divisions. We also interpret a lift in the dividend and capital management initiatives as symbolic of management's confidence in the outlook. Thematically, the bank's geographical exposure and business mix continues to look favourable.

Valuation

Our target price is \$43.40. As our usual valuation methodology (ThOR) is a Price-to-NTA, Return-on-NTA methodology, NAB's poor return profile in recent times dictates a 12-month valuation of only A\$39.39. As ThOR works best in a steady state environment, it is of limited use in setting our target price for NAB.

This target price of \$43.40 implies a FY09 dividend yield of 5.25%, a discount to CIR's 12 month forecast 10 year bond yield of 5.75%. This 50bps discount is in keeping with the stock's history under current management.

We believe the emerging strength in NAB's volumes, combined with capital management initiatives and a reversal of institutional underweights will see the stock trade above its long term PE relative to the sector. NAB currently trades at a 3% premium to the major bank average in FY07e at 14.6x, and is in line with the major bank average in FY08 at 12.8x.

Risks

We rate NAB Low Risk. We believe the share prices and earnings performance of Australian Banks are subject to a number of factors and risks. These include (but are not limited to): Net interest margin pressure; Residential property market slow down; Bad debt (credit) risk; Market risk; Operational risk; and Strategic convergence - consequential diminishing returns & ratings; Threat of re-regulation. The largest risk facing NAB is the ability to execute on the second half of its restructuring program. While it appears the bank has turned the corner, management must continue to improve efficiency by reducing staff numbers and eliminating excess costs. The potential for ongoing redundancies to derail staff focus, and subsequently customer service remains a threat in the short term. The bank also faces the prospect of a drop off in earnings in its nabCapital division following a surprise bounce in the midst of restructuring this year. From a positive perspective, a continuation of strong volumes and resilient margins across the Group could see NAB's earnings trajectory exceed our forecasts. Adverse/favourable movements in these risk factors may impede NAB's share price reaching our target price.

Westpac Banking Corp

Company description

Westpac operates a strong banking franchise in both Australia and NZ and has a strong presence in both the consumer and business segments. It has been one of the more acquisitive banks domestically with successful takeovers of Bank of Melbourne and more recently has aggressively expanded its wealth management activities with the acquisitions of Rothschild, BT and Hastings.

Investment thesis

We rate WBC Buy/Low Risk (1L) with a target price of A\$29.25. While the uncertainty surrounding the pay-off from Basel II has to date seen investors largely ignore its potential impact, we believe it will result in increased returns to shareholders of the major Australian banks. This is combined with continued favourable operating conditions for the banking sector at the moment.

There remains some uncertainty about the extent of operational improvement which has been achieved in the past 12 months, despite improved credit growth performance. Ongoing restructuring of the NZ and Australian domestic franchises should result in improved operational performance over time. The BT business also provides leverage to Australia's continuing expansion of the Wealth Management industry.

Valuation

Our 12-month target price of \$29.25 implies a FY09 dividend yield of 5.45%, a 30 basis point discount to CIR's 12 month forecast 10 year bond yield of 5.75%. This modest discount is broadly in line with the stock's trading history in the past 2 years, but equates to a 9% premium to the stocks 12 month prospective Theory of Relativity (ThOR) valuation.

Our ThOR methodology is a Price-to-NTA, Return-on-NTA methodology, which uses a decade of historical data. Our 12-month ThOR valuation is A\$26.90.

Using a P/E methodology WBC is trading at a 4% discount to the major bank average in FY07e. This is below its decade average of a 1% premium.

Risks

We rate WBC Low Risk referencing a number of quantitative and fundamental screens. We believe banks' share prices and earnings performances are subject to common factors and risks - net interest margin pressure, interest rate risk, market risk, operational risk and the spectre of re-regulation. The bank's significant presence in the NZ market represents a risk, given customer attrition in its franchise and the renewed prospect of severe price discounting. While management continue to discount the likelihood, some probability of acquisition risk must also be associated with the stock. On the positive front, WBC's investment in several large-scale technology projects is now complete, and ongoing volume momentum would likely result in revenue growth above our estimates should the bank get its margin contraction under control. Adverse/favourable movements in these risk factors may impact WBC's ability to reach our target price.

St George Bank Ltd

Company description

St George is Australia's 5th largest bank having been spawned out of the NSW-based St George Building Society. It merged with Advance Bank & acquired BankSA, which rounded out its banking operations. SGB has 4 main operating divisions: Retail Bank, Wealth Management, Institutional and Business Banking (IBB), and BankSA.

Investment thesis

We rate SGB as Hold/ Low Risk (2L) with a target price of \$36.00. While management's consistent delivery on targets, an increased 11-12% EPS growth target in FY07e and double-digit EPS growth target in FY08e are differentiators, ongoing softness in NSW & SA could perpetuate pressure on the stock's relative rating.

Valuation

SGB's 12-month target price of \$36.00 is based upon Citigroup's 12-month ThOR valuation of A\$35.85. ThOR is a price-to-book versus returns style valuation, incorporating a decade of monthly data. On a PE basis, the stock is trading on 16.8x FY07e earnings, representing an 11% premium to the sector - just below its 10-year average 12% premium.

Risks

We rate SGB Low Risk, referencing a number of quantitative and fundamental screens. We believe the share prices and earnings performance of Australian banks are subject to a number of factors and risks. These include (but are not limited to): Net interest margin pressure; Residential property market slowdown; Bad debt (credit) risk; Interest rate risk (incl. potential for bond rates to weaken and negatively impact valuation); Inflationary risk; Operational risk; and Threat of re-regulation. Given its mix of business, SGB is potentially more vulnerable than the major banks to a property cycle downturn. There is also some risk that unforeseen disruptions to the macro-economic landscape will hinder management's ability to deliver its increased 11-12% EPS growth target in FY07e and double-digit EPS growth target in FY08e. On the positive side, SGB's momentum in middle market commercial lending (~2x system), interstate expansion and historical strength on cost control imply some upside risk to our estimates should the macro-economic environment remain favourable. Adverse/favourable movements in these risk factors may impact SGB's ability to reach our target price.

Analyst Certification Appendix A-1

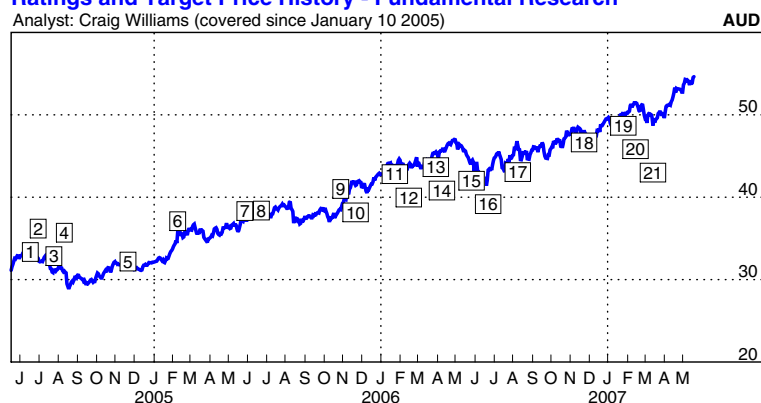
We, Craig Williams, Wes Nason and Mark Lang, research analysts and the authors of this report, hereby certify that all of the views expressed in this research report accurately reflect our personal views about any and all of the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

IMPORTANT DISCLOSURES

Commonwealth Bank of Aust. Ltd (CBA.AX)

Ratings and Target Price History - Fundamental Research

Analyst: Craig Williams (covered since January 10 2005)



#	Date	Rating	Target Price	Closing Price
1:	17 Jun 04	1L	*35.40	32.55
2:	30 Jun 04	1L	*35.43	32.58
3:	26 Jul 04	*1M	*34.67	31.30
4:	11 Aug 04	*2M	*33.35	31.04
5:	22 Nov 04	2M	*33.50	31.74
6:	9 Feb 05	2M	*37.50	35.76
7:	27 May 05	2M	*38.00	37.38
8:	23 Jun 05	2M	*39.00	38.38
9:	28 Oct 05	2M	*39.30	38.50
10:	22 Nov 05	2M	*39.50	41.43
11:	24 Jan 06	2M	*44.60	43.45
12:	15 Feb 06	2M	*45.00	43.98
13:	30 Mar 06	2M	*47.70	45.50
14:	10 Apr 06	*2L	47.70	45.53
15:	26 May 06	2L	*46.00	44.40
16:	22 Jun 06	*1L	46.00	43.29
17:	9 Aug 06	*2L	*48.00	46.30
18:	23 Nov 06	2L	*49.00	48.12
19:	25 Jan 07	2L	*49.70	50.15
20:	14 Feb 07	2L	*53.10	51.35
21:	14 Mar 07	*1L	*54.00	48.70

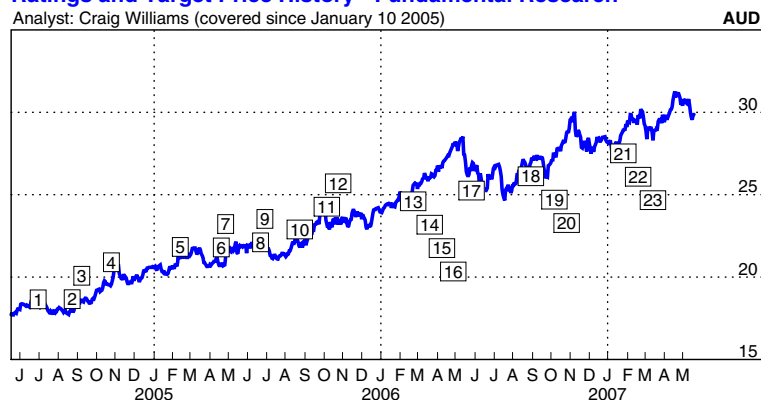
*Indicates change.

— Covered
 Not covered

ANZ Banking Group Ltd (ANZ.AX)

Ratings and Target Price History - Fundamental Research

Analyst: Craig Williams (covered since January 10 2005)



#	Date	Rating	Target Price	Closing Price
1:	30 Jun 04	1L	*20.68	18.28
2:	24 Aug 04	*1M	20.68	18.02
3:	8 Sep 04	1M	*21.00	18.59
4:	26 Oct 04	1M	*21.70	19.57
5:	14 Feb 05	1M	*22.50	21.18
6:	20 Apr 05	1M	*23.00	20.80
7:	27 Apr 05	1M	*23.30	21.24
8:	22 Jun 05	*2M	23.30	21.96
9:	29 Jun 05	2M	*23.60	21.75
10:	24 Aug 05	2M	*24.00	21.80
11:	6 Oct 05	2M	*24.30	23.22
12:	25 Oct 05	2M	*24.60	23.19
13:	22 Feb 06	2M	*25.70	25.57
14:	21 Mar 06	2M	*26.00	26.01
15:	10 Apr 06	*2L	*26.50	26.61
16:	27 Apr 06	2L	*28.50	28.12
17:	26 May 06	2L	*27.30	26.77
18:	30 Aug 06	2L	*28.00	26.95
19:	6 Oct 06	2L	*28.75	27.42
20:	26 Oct 06	2L	*29.20	28.75
21:	25 Jan 07	2L	*30.00	28.93
22:	19 Feb 07	*1L	*31.50	29.83
23:	14 Mar 07	1L	*31.55	28.30

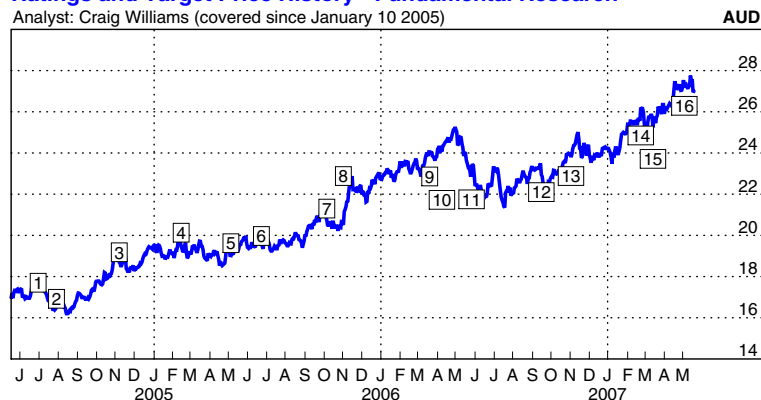
*Indicates change.

— Covered
 Not covered

Westpac Banking Corporation (WBC.AX)

Ratings and Target Price History - Fundamental Research

Analyst: Craig Williams (covered since January 10 2005)



#	Date	Rating	Target Price	Closing Price
1:	30 Jun 04	1L	*19.28	17.60
2:	29 Jul 04	*1M	*19.39	16.75
3:	8 Nov 04	1M	*20.50	18.69
4:	15 Feb 05	*2M	*20.20	19.47
5:	5 May 05	*1M	*21.00	19.02
6:	23 Jun 05	1M	*21.70	19.66
7:	6 Oct 05	*2M	*22.00	20.75
8:	2 Nov 05	*1M	*23.50	20.51
9:	21 Mar 06	*2M	*24.40	24.04
10:	10 Apr 06	*1L	*25.50	24.07
11:	26 May 06	1L	*24.50	23.33
12:	15 Sep 06	*2L	*23.80	22.95
13:	2 Nov 06	2L	*24.60	23.80
14:	22 Feb 07	2L	*26.50	26.20
15:	14 Mar 07	*1L	*27.70	25.24
16:	3 May 07	1L	*29.25	27.20

*Indicates change.

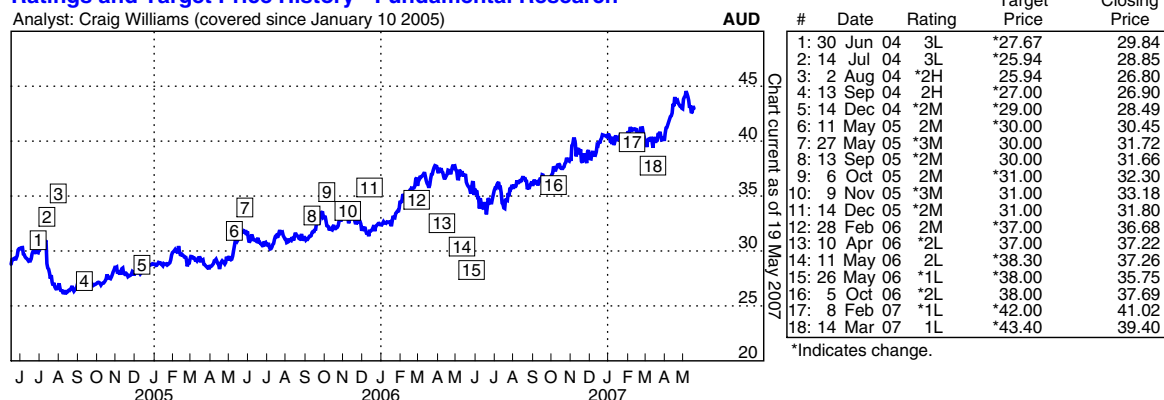
— Covered
 Not covered

Accelerating Offshoring In Australian Banks

22 May 2007

National Australia Bank Ltd (NAB.AX) Ratings and Target Price History - Fundamental Research

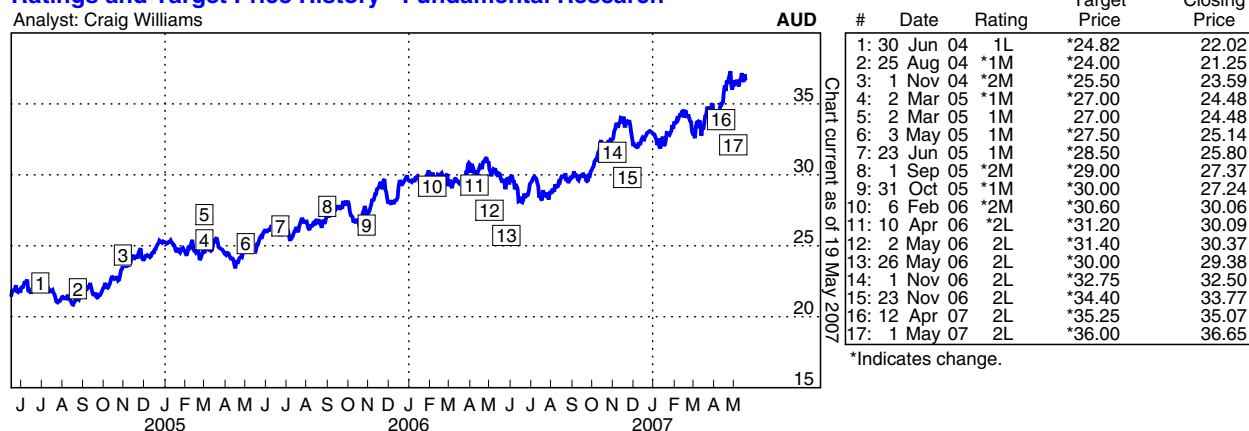
Analyst: Craig Williams (covered since January 10 2005)



— Covered
- - - - - Not covered

St George Bank Ltd (SGB.AX) Ratings and Target Price History - Fundamental Research

Analyst: Craig Williams



— Covered
- - - - - Not covered

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A member of Craig Williams's team received compensation from National Australia Bank Ltd in the past 12 months.

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Accelerating Offshoring In Australian Banks

22 May 2007

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Data current as of 31 March 2007

	Buy	Hold	Sell
Citigroup Investment Research Global Fundamental Coverage (3215)	45%	40%	15%
<i>% of companies in each rating category that are investment banking clients</i>	45%	42%	32%
Banks -- Australia/New Zealand (8)	50%	50%	0%
<i>% of companies in each rating category that are investment banking clients</i>	100%	25%	0%

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