SECTOR REVIEW

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Bank Offshoring

Who will lead the next secular profit driver?

AN OVERLOOKED INDUSTRY ISSUE IN OUR VIEW – NO LONGER CONSIDERED JUST A LABOUR COST ARBITRAGE

WE ASSESS AUSTRALIAN BANKS TO BE LAGGARDS IN THE GLOBAL BANKING INDUSTRY IN TERMS OF THEIR RESPONSE TO THE OFFSHORING PHENOMENON

WE SEE POTENTIAL FOR STEP CHANGES IN COST EFFICIENCY – WITH SUB-40% COST/INCOME RATIOS CONSIDERED POSSIBLE

WE BELIEVE OFFSHORING COULD DIRECTLY OR INDIRECTLY CHALLENGE THE "FOUR PILLARS" POLICY

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Bank offshoring

Who will lead the next secular profit driver?

An overlooked industry issue

We believe that 'offshoring' is particularly relevant for the Australian banking industry today given: the current phase of industry evolution (emphasising ongoing productivity gains, but also enhanced customer service/responsiveness), ongoing globalisation of financial services (assisted in itself by offshoring), competition/political constraints on further consolidation ('Five Pillars') and regulation (BISII implementation in 2007). Currently, we assess Australian banks as laggards within the global banking industry in terms of their response to the offshoring phenomenon underway within financial services.

The next secular profit driver for an industry apparently facing headwinds?

With the Australian banking industry, in our view, currently quite efficient, facing an environment of likely decelerating system credit growth and apparently lacking any clear secular growth drivers in the period ahead, we believe that offshoring has the potential to be an important strategic lever over the next few years (opportunity for step change in efficiency to potentially sub-40% cost-to-income ratios, benefits of scale and standardisation, enhanced transparency of processes). Indeed, offshoring within the Australian financial services industry is already underway, either directly through specific initiatives (e.g. AXA) or indirectly through existing outsourcing arrangements with global vendors (e.g. WBC, CBA, ANZ).

Offshoring no longer just a labour cost arbitrage

We believe that rapid evolution within the offshoring vendor market has increased the scope of potentially offshorable domains well beyond the traditional labour cost arbitrage of commoditised functions (e.g. processing and call centres) to now include analytical functions (which can, potentially, favourably impact a bank's operational risk capital requirements). Accordingly, we consider that perhaps 30%-40% of an Australian bank's entire cost base is amenable to offshoring, potentially leading to up to 30%-50% cost savings within that offshorable segment, all seen as deliverable within three years from commencement of implementation.

Executive summary

The major conclusions we reach in this report are as follows:

- With the Australian banking industry, in our view, currently quite efficient, facing an environment of likely decelerating system credit growth and lacking any clear secular growth drivers in the period ahead, we believe that offshoring has the potential be an important strategic lever and a driver of shareholder value creation over the next few years.
- We see offshoring as particularly relevant at this juncture as a technique for banks to either directly or indirectly achieve further M&A-like productivity gains in the face of current Federal Government and ACCC constraints on consolidation amongst the five larger banks. Indeed, we believe that, indirectly, banks could use the spectre of the pursuit of offshoring strategies to force a reassessment of the ‘Five Pillars’ policy, using potential offshoring-driven job losses as bargaining leverage to clear the way for further industry consolidation. In this regard, we note the potentially potent nature of offshoring at the current time given its prominence in the US Presidential election campaign debate.
- We believe the scope of an offshoring strategy is no longer restricted to traditional transaction processing operations and that it now encompasses essentially group-wide activities and therefore needs a similar approach to any other group-wide strategic development initiative.
- Possessing global scale or even geographically-spread businesses and operational structures are no longer necessary criteria for banks and financial services companies to successfully implement an innovative offshoring strategy in our view. We consider the emergence of a credible, third-party vendor market and specialist service providers (across several major domains) has significantly reduced this scale and size barrier (refer our case-study of medium-sized US mortgage originator, Greenpoint Mortgages based in Novato, California, which has executed what we consider to be a successful and complex strategy through partnerships with third-party service providers, achieving material productivity improvements).
- The scope of current and prospective offshoring strategies suggests to us that 30% to 40% of a typical banking and financial services company’s total cost base is potentially amenable to offshoring, given the current state of the global offshoring industry (9-12-month stabilisation period).
- However, with upfront cost savings providing, in our view, only a 15% to 25% savings per outsourced process, we would caution against overstating the importance of the upfront, net factor cost savings potential of offshoring (which are seen to be primarily staff expenses, but also property, management support, etc.).
- We see ongoing process consolidation and Six Sigma-driven improvements as an equally important part of a successful offshoring strategy, which we estimate has the potential to add a further 15% to 25% to the cost benefits over and above the upfront, net factor cost savings referred to above (i.e. 30%-50% total cost saving potential for the 30%-40% of a bank’s total cost base that we assess is amenable to offshoring). We believe, however, that these productivity improvements can often only be made over a period of 12 to 18 months following stabilisation of the initial offshoring

transition. Further, we believe that such additional cost benefits need dedicated 'process champions' to fulfil their execution.

- Though currently unable to quantify it, we believe that the impact on operational risk capital efficiency of a successful offshoring strategy should not be underestimated. We are of the view that improved business continuity planning, transparency and information quality can only serve to reduce a bank's overall operational risk profile and therefore reduce operational risk economic equity requirements, notwithstanding the emerging market nature of common outsourcing destinations.
- In terms of structuring an appropriate offshoring model for Australian banks and financial services companies, we believe that a combination of a 'captive' with a multi-vendor model would ensure that the organisation could focus on the more complex processes while managing delivery of the commoditised functions. Further, we consider a multi-vendor and multi-location strategy arguably ensures easier enabling of business continuity contingency scenarios and should provide maximum long-term flexibility for evolving the offshoring strategy.
- We believe that implementing a successful offshoring strategy requires a mindset and cultural change, shifting from a routine 'grind-out-the-costs' operations management mindset to a group-wide strategic-sourcing mindset – similar in orientation to 'captive' offshoring entities such as GECIS (General Electric) or a SCOPE (Standard Chartered). Indeed, for Australian banks, this might necessitate the creation of a separate, cross-functional Global Strategic Sourcing division, reporting directly to the CEO, similar in nature and function to the Group Strategy area.
- A successful offshoring strategy should also be a Principal Board and CEO-supervised effort in our view (for example, GE CIS or SCOPE under the previous CEO of Standard Chartered). The importance of this lies in our belief that the operational risk management issues and business continuity planning initiatives need to be reviewed and addressed at Principal Board level.
- Re-negotiating and re-structuring current outsourcing structures and constantly locating newer vendors and/or newer locations (Philippines, South Africa, Eastern Europe, etc) should be as important a success factor in any offshoring strategy as being able to execute and monitor the original transaction. Again, we see the GE CIS example as a case in point towards this trend of constantly restructuring to envisage and control the commoditisation of processes.
- An estimated impact table of a potentially successfully executed offshoring strategy for each of the five major banks has been set out below, based on the following assumptions:
  - *Non-direct customer interacting domains outsourced first* (i.e. group technology, group finance and accounting, group HR, mortgage and personal loans document mgmt, funds management new business and administration).
  - *Transition time of nine months*, as we assume primarily a "third party service provider" strategy.
  - *Upfront net factor cost price savings (including transitioning costs) of about 30%.*
  - *Ongoing quality improvement and "process championing" cost savings of about 25%,* spread over a further 12 months.

Figure 1: FY03 major bank operating cost bases

(A$m)	ANZ		CBA		NAB		WBC		SGB		Total	
Personnel	1,750	55%	2,502	45%	3,416	54%	1,797	48%	577	49%	10,042	50%
Premises	295	9%	609	11%	556	9%	596	16%	125	11%	2,181	11%
Computer	465	14%	860	15%		0%		0%	207	18%	1,532	8%
Other	640	20%	1,366	25%	2,382	37%	1,330	35%	261	22%	5,979	30%
Restructuring	60	2%	214	4%	0	0%	40	1%	0	0%	314	2%
Total (cash)	3,210	100%	5,551	100%	6,354	100%	3,763	100%	1,170	100%	20,048	100%

Source: Company data, CSFB estimates

Figure 2: Potential financial and valuation impact of offshoring

(A$m)	ANZ	CBA	NAB	WBC	SGB
Cash Operating Costs FY06F	4,197	6,185	7,093	4,191	1,358
Offshorable Operating Cost Base (35% of total)	1,469	2,165	2,483	1,467	475
Estimated Upfront Net Factor Cost Saving @ 20%	294	433	497	293	95
Estimated Consolidation / Six Sigma Improvements @ 20%	294	433	497	293	95
Estimated Total Pre-tax Impact	588	866	993	587	190
Cash Cost-to-Income Ratio FY06F	**41.2%**	**50.6%**	**47.7%**	**46.4%**	**44.4%**
Pro-forma Cash Cost-to-Income Ratio FY06F	**35.5%**	**43.4%**	**41.0%**	**39.9%**	**38.2%**
Estimated Post-tax Impact (30% tax rate)	411	606	695	411	133
2006E Cash PE ratio	9.7x	11.2x	10.6x	10.7x	11.0x
Estimated Valuation Impact	3,990	6,789	7,368	4,395	1,464
Current Share Price	$18.30	$32.55	$29.11	$17.05	$21.95
Estimated Upside Potential Per Share	**$2.21**	**$5.43**	**$4.89**	**$2.43**	**$2.87**
…% Current Share Price	**12%**	**17%**	**17%**	**14%**	**13%**

Note: Estimated upside potential per share based on estimated valuation impact (FY06E Cash PE x estimated post-tax impact) / current shares on issue
Source: ASX, Company data, CSFB estimates

** NOTE: “Six Sigma” refers to a measure of quality that strives for near perfection. Conversely, a Six Sigma defect is defined as anything outside of customer specifications. Six Sigma is a data-driven methodology for eliminating defects (driving towards six standard deviations between the mean and the nearest specification limit) in any process – from manufacturing to transactional and from product to service. Statistically, to achieve Six Sigma, a process must not produce more than 3.4 defects per million opportunities. The fundamental objective of the Six Sigma methodology therefore is the implementation of a measurement-based strategy that focuses on process improvement and variation. We believe this is a central process improvement technique in financial services given the current industry focus on improving customer service (improved responsiveness to customer requests, accuracy in responses) and cost efficiency (reduced re-working).*

Strategic industry relevance of offshoring

In this section we seek to establish the relevance of offshoring for the Australian banking and financial services industry

The offshoring revolution already underway…

Knowledge-based sectors, such as IT and media, telecommunications, financial services and pharmaceuticals have led the offshoring trend

Business Process and Services Outsourcing (BPSO), also referred to as "offshoring", "offshore-outsourcing" or even, "strategic sourcing" – has rapidly emerged as one of the important strategic levers employed by organisations of varying sizes and in a range of industry sectors, and utilised to improve their productivity and facilitate innovation by leveraging global skill-sets. In financial services, offshoring dates back to 1984-1985 when Citibank established COSL, its wholly-owned global IT and application development subsidiary SEEPZ, at Mumbai, but has evolved considerably since then.

Unsurprisingly to us, the industries that have led this trend have been predominantly in knowledge-based sectors, such as information technology and media, telecommunications / telecommunications services, financial services and pharmaceuticals.

We consider the offshoring trend has been hastened by increasingly complex activities that are now offshorable, more sophisticated remote working technologies and the emergence of a third party offshore vendor market

We consider this strategic trend has been further hastened by three important developments:

- *The rapid increase in the complexity of activities and process groups deemed 'offshorable':* As the offshoring industry has matured, offshoring has extended beyond the traditional, cost-driven IT and call centre domains to now include data warehousing and data mining, management information systems and management accounting, M&A valuation and deal support.
- *The growing sophistication of remote working technologies:* New technologies such as imaging, workflow management, as well as scorecard-driven reporting tools and Six Sigma quality management programs have assisted the spread of outsourcing to newer geographic locations, away from the more conventional locations such as India, China and the Philippines.
- *The significant emergence of specialist, third-party vendors in a number of key activity domains:* In our view, the growth in the number of vendors within the offshoring industry has enabled some smaller-sized and geographically-bound organisations that otherwise lacked the global resources and remote working expertise to implement 'captive' outsourcing strategies, to now implement offshoring strategies effectively, often on competitive terms that compare favourably to large multi-nationals that have their own 'captive' outsourcing facilities.

Against this global backdrop, the purpose of this thematic report is to examine the strategic relevance and potential implications of offshoring for the Australian banking and financial services industry, and in the process examine the potential productivity improvement and strategic transformation potential.

Key drivers of offshoring in our view: the current stage of industry evolution, globalisation, consolidation and regulation

Roles for offshoring in addressing key industry issues

We believe that there are four key issues driving the relevance of offshoring in the Australian banking and financial services industry today. These issues are as follows:

- the current stage of industry evolution;
- globalisation;
- consolidation; and
- regulation.

1. Industry evolution driving offshoring

In the following table we identify four key phases of evolution within the Australian banking and financial services industry since the early 1990s. The table includes many of the activities that were commenced or first became prevalent during those phases:

Figure 3: **Dominant themes in the Australian banking and financial services industry**

From the early 1990s – balance sheet reconstruction and restoring industry profitability
* Centralisation of back-office functions out of branches
* Branch rationalisation
* Staff retrenchment
* Restoration of bank capital levels
* Work-out of problem loans
* Enhancement of credit risk management processes
From the mid 1990s – capital and operational gearing
* Branch sale and lease back programs
* Migration of customer transaction activity onto telephone banking platforms
* Separation of functions (front, mid, back office) with “matrix” reporting structures
* Global lines of orientation (NAB, ANZ); systems standardisation; product commoditisation
* Outsourcing of IT, telecommunications, etc
* Strategic sourcing
* Creation of large scale back-office facilities (e.g. mortgage processing centre)
* Bank M&A
* Development of industrial company styled capital allocation models
* Increased gearing of ordinary equity (hybrids, share buy-backs)
From the early 2000s – strategic focus on wealth management and Internet platforms
* Migration of customer transaction activity onto Internet platforms
* Straight through processing / Internet protocol roll-out / e-procurement
* Automation / business process re-engineering
* Rationalisation of back-office sites
* Financial services M&A
From the mid 2000s – focus on customer service
* Rediscovery of the branch
* Expansion of third party lending distribution / advent of wealth management platforms (e.g. wrap)
* Cultural change programs within the banks
* Cost efficiency as a continuous process
* De-risking strategies
The next wave
* Offshoring or the demise of the effective “Five Pillars” political / regulatory policy?

Source: CSFB estimates

The table suggests that the current phase of industry evolution (from the mid-2000s – “focus on customer service”) is a multi-pronged phase, involving elements of:

- *cost efficiency:* Whilst cost efficiency became an area of industry focus from the early 1990s (to restore industry profitability), this focus appears to have intensified from the mid 1990s, driven by forced unbundling of product cross-subsidies, industry consolidation and the potential spectre of "Four Pillars" major bank mergers policy being dismantled. Whereas in the late 1990s Australian banks were achieving step changes in efficiency and absolute cost base reductions, in the current decade banks have shifted towards pursuing incremental productivity enhancements through such techniques as workflow automation, reduction of headcount through streamlining and simplification of operations/straight-through processing;
- *de-risking strategies* (to preserve industry profitability); but most importantly, in our view,
- *a focus on customer service:* Following the apparent service denigration arising from years of cost cutting, Australian major banks have started focusing on improving customer service levels in the past couple of years. Amongst the major banks, such efforts seem to us to be most apparent at CBA and WBC, with more targeted service aspirations at ANZ and NAB. However, a significant proportion of the effort to date has been directed to *processes*, such as improving response times to applications and the accuracy and timeliness to customer queries (e.g. WBC's "Ask Once") as opposed to *people* (i.e. increased staff numbers, although we note there is a degree of migration of staff from the back-office to the front office).

We believe that offshoring could be relevant to realising these first and third elements within the current phase of industry evolution, given that we believe offshoring can potentially achieve both cost improvements and improved work quality.

What will be the next secular driver of industry earnings growth?

Extending this historical analysis of phases of industry evolution into the future, the question we often raise is: from where will the next secular driver of industry profitability be sourced? When raised, this question appears often predicated on a presumed lack of visibility of secular earnings drivers that would be sufficient to equal say, the asset quality recovery driver of the mid-1990s or the pure 'cost-out' retrenchment restructuring programs driver of the late 1990s. However, we would cite two expected developments:

- *The return of wealth management as a growth driver:* Despite (arguably warranted in our view) perceptions that bank acquisitions of wealth management businesses in the current decade were fully priced and executed at or near the peak of the equity market cycle, we nevertheless believe that the Australian wealth management industry remains structurally sound, with strong growth (+10%) and solid returns (20%+ return on equity) seen as possible for scale competitors, despite expected medium-term margin pressures and recent cyclicality. We therefore regard the wealth management industry as a secular growth industry (underpinned by population demographics, welfare reform, pension privatisation, etc.), albeit also incorporating cyclicality (across very long cycles that can exhibit considerable amplitude). We believe the apparent poor timing and full M&A pricing for many past transactions should not have any lasting negative impact for this positive outlook.
- *The relentless drive for cost efficiency:* We perceive that cost efficiency is sometimes regarded as a near exhausted secular industry earnings growth driver following the pure 'cost-out' retrenchment restructuring programs of the late 1990s. However, we would rather view it as more of an incremental driver in the future, led by technology-

based reinvestment programs. Indeed, we expect the seemingly conventional wisdom that net interest margin compression will be an ongoing industry phenomenon should underpin such a consistent focus on cost efficiency longer term.

Again, we believe that offshoring could be relevant for both (but especially the second) of these secular drivers, given the cost efficiency potential that we see being offered by offshoring.

2. Globalisation driving offshoring

The offshoring phenomenon in global financial services

Over the past two years the financial press has reflected the increasing trend for global financial services companies to announce a significant offshoring venture (typically by companies based in the USA or the UK, but increasingly on the European continent). Usually, these announcements have involved the establishment of a specialised, overseas, wholly owned 'captive' subsidiary with the stated purpose of undertaking a variety of activities currently performed in the home geographies. Further, these overseas subsidiaries have typically been based in India, China and the Philippines, with the stated intention to recruit hundreds or even thousands of staff in those locations to perform various activities. The activities that have been offshored to date have involved:

- *information technology,* including IT maintenance and development, legacy systems support, finance and accounting applications development and support, HR and payroll systems development and support;
- *customer contact call centre activities,* including in-bound call centres for customer queries, out-bound telemarketing centres, mortgage broker and advisor contact centres;
- *transaction processing,* including processing functions supporting credit cards, cheques, mortgages, home, contents and motor vehicle insurance claims, trade finance and letters of credit, funds management investor services, pensions and superannuation fund back-office processing;
- *administrative and back-office functions,* including human resources, payroll processing, accounts payable and receivables processing, financial reporting and management information systems reporting, superannuation and pension fund statements, database marketing and campaign support, group legal back-office activities; and
- *analytics functions,* including data warehousing and data mining functions, group finance, audit and accounting functions, management accounting, risk management analytics, business case / due diligence / valuation analytics, treasury and corporate banking analytics.

We see this development as promoting the further globalisation of the Australian banking and financial services industry, particularly as it relates to retail banking, which has traditionally been a highly localised / national centric business. While acknowledging that *offshoring* is in a nascent phase in the Australian financial services industry, we note though that *outsourcing* has been a more prevalent trend, which has implicitly introduced incrementally more offshoring to Australian financials through global outsourcing vendors performing contract activities in remote locations. To this extent, we believe *offshoring* can be regarded as a species or sub-set of *outsourcing*.

Outsourcing in the Australian banking industry

Traditionally, outsourcing within the Australian banking and financial services industry has involved the transfer of non-core or non-strategic functions such a stationery, printing and payroll. However, from the mid to late 1990s the outsourcing of large, core functions commenced, including activities such as IT operations and development, payment processing, property management, human resource management and accounting, including a number of significant IT outsourcing transactions including landmark deals involving CBA, WBC, BOQ, Trust Bank Tasmania (acquired by Colonial) and Colonial (acquired by CBA). In announcing these transactions, banks appear to have tended to regard outsourcing as a legitimate means of improving cost efficiency, enhancing their organisational focus on customer service and accessing world-class scale and latest technology. While CBA was an early mover in outsourcing, in our view WBC has now arguably gone further more quickly. Examples of the larger outsourcing transactions undertaken are as follows:

- In 1997, Colonial State Bank signed a seven-year, $532m agreement with Alltel Information Services for all IT servicing requirements.
- In 1997, CBA signed a 10-year outsourcing contract with EDS Australia, involving all of CBA's information technology functions, including desktop, communications and applications development. CBA acquired a 35% interest in EDSA as part of this arrangement. In 2000, CBA further announced a $500m, five-year telecommunications outsourcing agreement with Telecom New Zealand.
- In 2001, WBC outsourced its IT and telecommunication operations to IBM GSA (10-year agreement) and to Telstra (five-year agreement), respectively, in deals collectively worth $4.3b. Further, in early 2001, WBC announced a $140m, seven-year cheque processing outsourcing contract with Unisys. Finally, in late 2001, WBC announced the outsourcing of the mortgage processing and servicing operations to EDS in a 10-year, $1b agreement (this included the Mortgage Processing Centre in Adelaide).
- In 2002, Bank of Queensland commenced a 10-year, $480m IT outsourcing agreement with EDS.
- NAB has also outsourced its European communications network to British Telecom (a member of the now defunct Concert alliance).
- We understand that ANZ, NAB and WBC are examining co-sourcing arrangements for activities such as cheque processing.

Typical functions outsourced by Australian banks include:

- cheque processing and loan administration;
- back-office administration;
- credit card and other document processing;
- core banking and data processing; and
- custody and investment management.

We consider this tendency toward outsourcing in Australia and the implications of globalisation arising from global bank offshoring arguably increase the prospects for offshoring initiatives by one or more of the larger banks in Australia.

3. Consolidation driving offshoring

Offshoring an innovative response / threat to regulatory barriers to industry consolidation?

While the Australian banking and financial services industry has undertaken progressive consolidation over a number of decades, the process looks to have now, arguably, almost reached its natural conclusion in the Australian and New Zealand markets, particularly given the currently regulatory/political environment. More particularly, we note that:

- the potentially indefinite maintenance of the "Four Pillars" policy (which arises from the Federal Treasurer exercising his national interest discretion under financial services legislation in relation to bank mergers, prohibiting mergers amongst any of the four major banks) - including the Australian Competition and Consumer Commission's (ACCC) apparent views on bank M&A, we consider this might more correctly be more correctly described as the "Five Pillars" policy; and
- an apparently more stringent bank M&A review process by the ACCC (evident to us in the 2000 Commonwealth Bank / Colonial merger decision).

We believe that these factors are likely to prohibit substantial further industry consolidation, despite continued global bank consolidation and ongoing pressures on net interest margins (arguing, in our view, for the realisation of further scale benefits within the industry). Indeed, given this backdrop, we believe it could be argued that there are now no large-scale bank M&A opportunities remaining for the major banks in the Australian and New Zealand markets.

Accordingly, the risk we see is that at the current juncture these regulatory/political barriers increase the risk that one or more of the major banks undertakes a break-out initiative in order to access further efficiency benefits in the face of ongoing global bank consolidation (leading to scale disadvantages/takeover risk for Australian banks) and ongoing margin compression (leading to pressures on industry profitability). *We believe such a breakout initiative could potentially involve a proposed large-scale offshoring, either to access scale efficiency gains that are otherwise not available through bank M&A or as leverage to place pressure on the "Four Pillars" policy itself.* Indeed, we believe there has been evidence of major bank interest in such lateral approaches to bank M&A regulation/policy, with reports of banks examining the establishment of back-office utilities, most notably the so-called "back-office merger" concept from mid-1998.

4. Regulation driving offshoring

The New Capital Accord (BIS II) proposes, for the first time, under Pillar 1 an explicit capital charge for operational risk. While neither operational risk nor capital to offset such a risk are new concepts, under BIS I both operational and credit risks were both implicitly covered in one measure of risk and in one capital charge. The innovation in BIS II is that, by designating a risk-based system for credit and operational risk, the two risks have been separated and therefore require capital to be held separately for each risk.

The proposed Advanced Management Approach (AMA) to operational risk (one of three proposed techniques for measuring operational risk) allows banks themselves to bear the primary responsibility for developing their own methodology for assessing their own operational risk capital requirement. Importantly, under the AMA approach, a bank can reduce its operational risk charge by adopting procedures, systems and controls that reduce its risk or shift the risk to other parties through measures such as outsourcing and insurance. This approach parallels that taken for credit risk, inasmuch as capital charges can be reduced by shifting to less risky exposures or by making use of risk mitigation techniques, such as collateral or guarantees.

We believe that offshoring could provide an opportunity for operational risk capital relief for banks proposing to adopt the AMA approach to operational risk (note that APRA has stated that it will be requiring banks adopting the more sophisticated Internal Ratings Based approaches to credit risk management to adopt the more sophisticated AMA approach to operational risk).

Figure 4: **CSFB review of current offshoring arrangements amongst selected Australian banks and financial services companies**

Stock	Current Offshoring Strategy	Service Provider	Sophistication Score
ANZ Banking Group	Current offshoring strategies limited to IT and institutional banking applications Offshoring strategies are to be driven by the newly appointed CIO, a former operations executive with Standard Chartered with involvement in SCOPE	Captive entities in Bangalore, for IT application development We understand this to be Wipro, for institutional banking applications Accenture, for institutional banking IT application development	3
Commonwealth Bank	Current offshoring strategy limited to IT outsourcing and credit cards processing Offshoring strategies and structure alternatives have been scoped as one of the work streams of the transformation project One of three banks participating in the cheque processing co-sourcing RFP, announced January 2004	EDS, for IT outsourcing American Express, for credit card processing and servicing	(not ranked)
National Australia Bank	Current offshoring strategy very limited Offshoring strategies have been reviewed broadly within the Australian Financial Services division One of three banks participating in the cheque processing co-sourcing, announced January 2004		(not ranked)
Westpac Banking Corporation	Current offshoring strategies focused on mortgage processing, cheque processing, credit and collections solutions Future strategies include corporate banking and wealth management back offices Offshoring strategies are driven by the newly established Global Strategic Sourcing Group, reporting to the Group Executive, Business Technologies, Systems and Solutions One of three banks participating in the cheque processing co-sourcing, announced January 2004	EDS, for mortgage processing HCL Information Systems, for wealth management application development (legacy systems) Accenture, for credit solutions and CRM implementation	4
AXA Asia Pacific	Offshoring strategy is about 18 months old, and currently involves IT, new business and administration for both insurance and funds management. No direct customer or advisor contact as yet Multi vendor / multi locational structure involving its own captives as well as specialist service providers Future strategies being considered could include underwriting process, claims administration and management and data mining analytics	Bangalore and Poona based captives "AXA Business Services" catering to AXA Australia, UK and Japan IT service providers: We understand this to be Wipro and Infosys Specialist service providers: We understand this to be EXL Services and Nittany Life	6
Insurance Australia Group	Offshoring strategy is around 12 months old, and currently involves IT and new business No direct customer contact as yet Focus solely on specialist service providers with strong insurance expertise	Phoenix Information Systems, based in Bangalore, India (recently acquired by Tata Consulting Services, India)	4

Note: "Sophistication Score" is CSFB's estimate of global ranking out of a possible score of 10
Source: Company data, CSFB estimates

Benefits and risks of offshoring

In this section we review the potential benefits of offshoring, together with the risks and barriers

Benefits of offshoring

Offshoring should offer opportunities for: step change in efficiency, scale and standardisation benefits, improved transparency of process and emergence of a high performance culture

We believe that the (somewhat inter-related) benefits of offshoring are as follows:

- *Opportunity for step change in efficiency:* Offshoring potentially offers a labour cost arbitrage between the home country and the offshoring destination, with a consequential positive impact on cost efficiency. We see this as particularly the case for labour-intensive and rapidly-commoditising banking activities, such as back-office processing and call centres, IT legacy systems maintenance and software application development. However, we also caution that the 'upfront' labour cost differential could potentially be both volatile and diminish over time. For example, in a commoditised activity such as software application development, we note that the salaries for Indian software professionals based in India have risen by almost 20% per annum over the past three years, thereby progressively closing the labour cost arbitrage opportunity between Australia and India. Further, a recent survey (dated 11 November 2003) by HR consulting firm Hewitt Associates pointed out that, over the past three years, the Indian software industry experienced the highest rate of remuneration increase in the Asia Pacific region. At these compounding rates, labour cost arbitrage can evaporate in a relatively short time, highlighting to us the risks of using a "CPI+" cost assumption.
- *The need for scale and standardisation:* Offshoring can potentially provide productivity benefits through standardisation of processes and the realisation of scale economies (i.e. process consolidation).
- *Improved transparency of processes:* The process re-engineering involved in offshoring can potentially allow a financial services company to better understand its own processes, resulting in improvements to the quality, rigor and documentation of processes, and thereby to a decline in the number of re-workings and other workflow hindrances. In turn, this enhanced understanding can potentially lead to improved returns on economic equity through lower operational risk capital charges.
- *The emergence of a "high performance culture"*, through the global sourcing of staff, scorecard driven reporting and the ease of quantitative benchmarking.

Risks of and barriers to offshoring

Generic barriers/risks:

Generic barriers / risks of: privacy legislation, operational risk / business continuity planning considerations and existing paper based processes

- *Data protection, data usage and privacy legislation:* Banking and financial services companies are subject to strict regulations with respect to protection of customer data and the usage of customer information. While this potentially creates an issue for offshoring strategies, in our view a number of structures have previously been created to enable compliant outsourcing strategies. These range from the use of dummy customer information for the outsourcers' use to hosting all live customer information at the home jurisdictions and allowing strict access to the outsourcer via broadband lines.

- *Economic equity impact of operational risk management and business continuity planning:* While we see operational risk and business continuity planning as critical issues in any offshoring initiative, for banking and financial services companies we consider there is an additional complexity in needing to determine the impact of offshoring transactions on economic equity and, therefore, the overall risk profile of the company. Given that in many banks and financial services companies we understand that economic equity driven capital management techniques have not yet penetrated beyond the risk-management and product-pricing activities in the operations and technology functions, understanding the operational risk and business continuity planning implications of offshoring strategies could potentially be challenging. Further, given the emerging-market nature of most existing offshoring locations, we believe operational risk and business continuity planning considerations become critical.

- *Paper-based and non-standardised interaction of support functions:* We consider paper-based processes tend to make business continuity planning quite challenging and increase the need for manual intervention. Further, we believe it tends to make process-related, operational-risk incidence data quite difficult to collect, monitor and analyse and therefore to complicate operational risk measurements and management. It appears to us that frequently the interaction between the customer-facing origination functions and the non-customer-facing support functions is paper based and does not occur in a standardised manner. This seems to be the case even when origination is performed through third-party channels such as mortgage brokers, dealer groups and IFAs. For example, a standard mortgage application through a mortgage broker might be automatically keyed in and credit scored at the point of origination but then transferred into manual form at the underwriting bank's central documentation point onwards through to servicing and settlement. The practical constraint this likely places on any offshoring strategy is that domain selection for offshoring implementation usually involves starting with automated functions first, followed by significant transitioning of the manual processes to the outsourcers' workgroup programs at a later stage. Accordingly, we see imaging as being one of the basic building blocks for successfully offshoring any group of processes. Finally, we see effective 'remote' workgroup management and sophisticated performance reporting systems as important precursors to effective offshoring strategies, allowing workgroup managers to clearly identify trade-offs that might need to be made, such as flexibility for certain customer group versus process unit costs and, more importantly, to quantify and communicate them across the workgroups.

Australian industry-specific barriers/risks:

Australian specific barriers/ risks of: reputation/brand damage, "pecking order" issues, organisational cultural adjustment issues, product complexity issues and regulatory barriers

In addition to these generic barriers/risks, we believe that Australian banks and financial services companies face a few additional barriers /risks to any offshoring initiative:

- *Reputation risk and brand damage:* We consider Australian financial services companies to enjoy high-profile roles in the community through their brand awareness, status as significant employers and their market capitalisation prominence on the Australian Stock Exchange. Further, Australian banks are relatively heavily dependent on their Australian and New Zealand customer base. We believe this dependency (and the accompanying community expectations) creates a significant risk of reputation risk with communities, unions and political parties, potentially creating the risk of a backlash should an offshoring strategy be pursued. In turn, we believe this could create the scope for brand damage, union activism and re-regulation/political pressure. For example, retailer Coles Myer, in conjunction with GE Consumer Finance, brought jobs back to Australia after its plan to relocate its credit card call centre to India was cancelled, following union and customer reaction (Coles Myer's credit card calls are apparently handled by its call centre in Melbourne, with an overflow facility into India when call volumes exceed a certain level). The potential adverse community perceptions regarding offshoring include issues of large-scale job losses to cheaper overseas labour forces (impacting Australian wages and lifestyle), the hollowing out of capabilities within the Australian services industry (and therefore the Australian community), images of Australia as a branch economy (with just branding and marketing activities being performed in Australia) and fears that the potential primary impact on Australian jobs (potential redundancies and wage pressures) will have a secondary impact on Australian real asset values. Recent media articles in the UK have illustrated the significant reaction from the unions directed at Lloyds TSB, HSBC and Abbey National in relation to offshoring announcements.

- *Lack of control – the "pecking order" problem:* From a practical perspective, we consider offshoring would likely to place any Australian bank in competition for an offshoring service provider's time, effort and innovation against other global clients, such as ING, Aviva, etc., with potential implications for the 'pecking order'. Given the various complexities of offshoring we believe it is likely that the most likely route to be chosen by Australian banks would be through third-party service providers (rather than through a 'captive'). Given that most of these vendors have shared offshore delivery centres to maximize productivity, we believe it is unlikely that an Australian bank would be their highest priority client (measured either by value of contract, scale of transactions or client profile and reference value). Accordingly, despite the technical assurances provided by service level agreements and the remaining in-country influence over sales and marketing teams, we consider there is some risk that offshoring delivery centre managers would likely prioritise matters differently.
- *People/culture issues and strategic sourcing mindset change:* We believe that the necessary change in mindset from an operations management perspective to a strategic sourcing mindset (which we see as a precondition to any offshoring strategy) would raise several key cultural issues for Australian banks in terms of both the type and outlook of staff in operational leadership roles.
- *The uniqueness of Australian products:* Australian financial services products are, in our view, quite advanced and unique globally (particularly "wrap" type products). We also see the associated processes as quite unique and, on this basis, could potentially pose considerable training and ongoing management issues during any offshoring transition. The training costs of these unique processes could be quite substantial (especially considering the individual scale involved), which could then reduce the economic attractiveness of offshoring.
- *Regulatory barriers:* Outsourcing (and therefore offshoring) is the subject of both APRA and RBNZ prudential oversight. While APRA's views on outsourcing (detailed below) do not appear to us to create any substantial barriers to offshoring strategies, we believe the same might not be said for the RBNZ's views. In particular, we note

that, in 2003, the RBNZ stated that its regulatory objective was to ensure that the boards of locally-incorporated New Zealand registered banks have unambiguous legal authority and the practical ability to control all of the functions, systems and management capacity necessary to operate on a stand-alone basis under statutory management. The RBNZ has stated that the intent of this requirement is to ensure that any outsourcing does not undermine the legal authority and the practical ability for directors or statutory managers to manage a New Zealand bank on a stand-alone basis, should this become necessary. While the RBNZ has stated that this requirement does not necessarily mean that the core functionality of New Zealand banks must in fact be domiciled in New Zealand (rather it means that the legal and practical access in a banking crisis must be unimpeded), we note that these requirements may have been sufficient to cause ANZ to commit itself to migrate its New Zealand IT processing capabilities back to New Zealand from Australia, as part of the National Bank of New Zealand regulatory approval process. In itself, this outcome suggests to us a potential regulatory hurdle for any major Australian bank offshoring strategy.

Figure 5: **Selected offshoring initiatives amongst Australian corporations**

Company	Initiative
Telstra	Shifted the work of 450 software programmers to India
Hutchison	Moved its customer retention and business support groups to Mumbai
Coles Myer	Has an overflow facility into India when credit card call volumes exceed a certain level
NAB	Previously used Indian residents for software programming requirements that could not be sourced locally
ANZ	Has more than 400 developers in Bangalore working on IT projects
Wesfarmers	Owns the Lumley Technology software centre in Hyderabad through its Lumley Insurance joint venture

Source: Australian Financial Review*, Friday, 30 April 2004, p.30, 'Offshore Brings the Best Back Home'*

APRA and outsourcing

Outsourcing has been the subject of an APRA prudential standard (APS 231 – Outsourcing) and a guidance note (AGN 231.1 – Managing Outsourcing Arrangements), both issued in May 2002. Overall, the regulations are not prescriptive, but rather establish minimum standards that banks should adopt as part of their own internal controls and provide "best practice" guidelines for managing risks associated with outsourcing arrangements. To us, the salient features are as follows:

1. *Regulatory oversight:* Banks must notify APRA as soon as possible after entering into any material outsourcing agreements, no later than 30 days after execution (note how there is no authorisation requirement, only notification). APRA states that outsourcing banks should outline to the regulator the key risks involved in the outsourcing arrangement and the risk mitigation strategies put in place to address these risks.
2. *Risk management principles of outsourcing:* APRA states that it remains the responsibility of banks to ensure that all risks associated with the business activity are addressed to the same extent as they would be if the activity were performed in-house. Accordingly, APRA believes that banks should have policies and processes in place to address the additional risks arising from outsourcing, including a formal

policy covering outsourcing arrangements within the overall risk management policy. Procedures established to monitor and control outsourcing risk in accordance with board approved policy can involve the use of internal or external audit.

3. *Risk management framework:* APRA states that the risk management framework for outsourcing should cover: 1) the preparation of a business case for outsourcing a business activity; 2) the tender process. 3) the role of the Board in approving the agreement; and 4) factors to be included in the agreement itself.

4. *The outsourcing agreement:* APRA states that outsourcing arrangements should be undertaken using a written, legally binding agreement, covering at least: 1) service levels and performance requirements; 2) audit and monitoring procedures; 3) business continuity plans; 4) default arrangement and termination provisions; 5) pricing and fee structures; 6) dispute resolution arrangements; 7) liability and indemnity; and 8) confidentiality, privacy and security of information. APRA states that the outsourcing arrangement should include a clause giving APRA access to documentation related to the arrangement and the right to conduct on-site visits to the service provider.

Bank architecture: Scope for offshoring

In this section we examine the architecture of a typical bank's mid and back-office functions to identify the activities that could potentially be offshored

What types of activities are 'offshorable'?

Considerations when assessing offshorable functions: volume driven processes, back-office work, online processes and repeatable processes

We believe there are four main considerations involved in the domain selection for offshoring:

- *Volume driven transactions versus relationship driven processes:* Any process (or sub-process) that is driven by high-frequency transaction volumes and is a repeatable process is suitable for offshoring in our view (such as credit card, mortgage and personal loan processing, collections, new business administration, foreign exchange and derivatives settlements). Conversely, we see processes that involve complex or critical customer relationship needs as less amenable to offshoring. However, we consider processes may be broken down into individual sub-processes to capture offshorable components. For example, one of the major UK life insurance companies offshores the sub-processes that comprise claims assessment, evaluation and settlement procedures, but retains the claims management processes onshore. The customer's claims application is imaged and allotted to an offshore workgroup that performs activities such as completing the claims data screen, verifying the certificate of demise, confirming the premium paid status, etc.
- *Back-office work versus customer and intermediary contact:* Any process (or sub-process) that is predominantly 'back office' in nature with little or no customer contact (especially voice contact) is suitable for offshoring in our view. For example, employees of Standard Chartered's captive offshore subsidiary SCOPE International in Chennai currently settles, validates and revalues foreign exchange derivatives positions for the Global Institutional Bank for several of Standard Chartered's other onshore locations. Conversely, where there is significant customer or intermediary contact involved (especially voice contact), the process may need to be reviewed for identification of sub-processes that might be offshorable. We believe this is particularly applicable in the context of the Australian banking and financial services industry, given the apparent limited familiarity with offshore call centre models (which are nevertheless used extensively in the UK and USA) and the apparent perception of poor service quality and query handling involved with this call centre model. In this example, an appropriate strategy might be to retain voice contact for both customers and advisers onshore, allowing for the offshoring of other sub-processes such as the updating of data screens, sending out policy renewal statements, fund transaction confirmations, etc.
- *Elimination of paper-based processes versus remote and online processes:* As previously identified, we believe that paper-based processes are generally required to be reworked and minimised prior to their being amenable to offshoring. However, we understand that many Australian banks and financial services companies have already made significant investments in imaging and reworking current workflow management systems.

- *Repeatable, analytical capabilities versus "instinctive" processes:* Finally, we believe the degree to which a process / sub-process is repeatable and analysis-driven as opposed to being an ad-hoc instinctive process is also a key indicator of its offshoring potential. Analytics functions such as finance, audit, accounting and business performance analysis or data warehousing and data mining, credit risk, equity research, M&A due diligence and valuation analysis have, in our view, the inherent advantage of currently being performed in an essentially globally standardised manner (assisted by IFRS and other harmonisation initiatives). We consider offshoring can provide the benefits of similarly qualified staff operating on standardised platforms, using relatively standardised processes and relatively standardised rules and evaluation criteria. Conversely, we expect instinctive or ad hoc processes are unlikely to be amenable to offshoring. For example, we consider deal-making and ad hoc sales activities could be supported offshore, but remain substantially based onshore, close to the end client.

Understanding a bank's architecture: The back-office and support processes

Key activity domains seen as relevant to any offshoring strategy: IT, contact and support services, shared services, transaction processing, analytics

In order to better illustrate the potential scope of an offshoring strategy, we have dissected the typical Australian banking and financial services company along two significant dimensions:

- key activity domains; and
- lines of businesses including centre and head office functions.

In this regard, we note that the global offshoring has now moved beyond the first wave of traditional outsourcing of IT application development, back-office administration, transaction processing and call centres.

In our view, the five key activity domains relevant to any offshoring strategy for the typical Australian banking and financial services company are as follows (listed in our assessment of the increasing order of complexity and decreasing order of commoditisation):

1. *IT and Infrastructure maintenance,* which includes application development, Core Banking System re-platforming, application maintenance and infrastructure management.
2. *Customer Service:* Contact and support centres, customer / intermediary / user / help desk support, web chat-based support and basic document management.
3. *Shared Services activities:* Basic finance and accounting processing, such as accounts receivable and payable activities, general ledger maintenance, HR, superannuation, payroll and pension benefits processing.
4. *Product-based transaction processing:* Specialised, product-driven process groups such as life and general insurance new business administration, foreign exchange and currency settlements, real-time transaction processing (RTTP) for mortgages, institutional and investment banking settlements, fund accounting and reconciliation, mortgage documentation and settlement, etc.

5. *Analytics process groups:* Complex information and analytics-driven process groups such as data warehousing and data mining operations, management accounting and reporting, equity research, dynamic financial analysis, institutional bank credit proposal preparation, pricing and valuation, as well as corporate portfolio review analytics, etc.

These five categories of back-office and support functions (as well as the technology platforms underpinning them) are usually not located in the same geographic area or even within the same line of business within the typical banking and financial services company. Instead, they are often discrete process groups clubbed with several other discrete processes and reporting to various C level executives, namely the COO / CIO / CFO. Further, we would emphasise that successful offshoring, in our opinion, is a continuous supply chain management process of identifying newer locations, newer vendors, newer domains to be offshored and management of existing offshored domains.

In Figures 6 and 7 we set out the activities that we believe are currently amenable to being outsourced against the relevant functional groups, with a few key sample activities. The tables suggest that offshoring cuts across the various business lines of the typical banking and financial services company, from retail banking through to institutional banking, to funds management and the corporate centre:

Figure 6: Activates currently amenable to being offshored

IT and Infrastructure Maintenance

Head office and Group Centre	Retail and Business Banking	Corporate and Institutional Banking	Insurance and Wealth Management
Enterprise-wide HR platforms support, application development and maintenance (e.g. Peoplesoft) Finance and accounting systems application development, support and maintenance (e.g. Oracle Financials) Property management and vehicle fleet leasing systems	Core banking systems support, application development and maintenance (mainly mainframe based systems such as HOGAN, GLOBUS or windows-driven solutions FLEXCUBE) Support, application development and maintenance of customer information files, data warehousing and data mining platforms and tools (e.g. TERADATA platform, Cognos / Informatica tools)	Maintenance and support of various capital markets and treasury systems, mainly post-trade settlement and workflow management systems (e.g. Acordia technology platform)	Application development, support and maintenance of legacy policy and claims management platforms

Customer Service and Contact Centres

Head office and Group Centre	Retail and Business Banking	Corporate and Institutional Banking	Insurance and Wealth Management
No significant impact, given that 'internal' customer service interactions are usually limited to IT and shared services help desks	Mortgage and personal lending in-bound call centre activities – customer query handling and record updating Direct banking and direct marketing centre activities – outbound campaign management and telemarketing Mobile bankers and mortgage broker support centres – status and customer query handing	Voice and chat based administrative support for online retail stockbroking Voice based support activities for foreign exchange and dealing rooms	Financial planner, IFA and dealer groups voice based support activities Insurance and managed funds new business and administration voice based support – basic query handling, record updating and customer correspondence Claims management – first level choice interaction activities, such as claim lodgement and claim status enquiries

Shared Services

Head office and Group Centre	Retail and Business Banking	Corporate and Institutional Banking	Insurance and Wealth Management
Accounts receivable and payables processing Basic financial reporting functions, such as general ledger, data entry and cash book maintenance HR payroll processing and payroll support activities Superannuation and pension benefits processing support HR support activities, such as offer letter preparation, verification of testimonials, etc	No significant impact (relevant activities covered under Head Office and Centre)	No significant impact (relevant activities covered under Head Office and Centre)	No significant impact (relevant activities covered under Head Office and Centre)

Source: CSFB estimates

Figure 7: **Activates currently amenable to being offshored (continued)**

Product Based Transaction Processing

	Head office and Group Centre	Retail and Business Banking	Corporate and Institutional Banking	Insurance and Wealth Management
	No major impact (these are product driven activities)	Mortgage and personal loan origination support (e.g. application documents verification, exceptions and automated credit scoring) Loan documentation and conveyancing (imaging and workshop management) Loan servicing and collections (loan arrears determination and schedule preparation, advice letters and follows up and discharge notification)	Capital markets and treasury support activities (e.g. deal settlement and post-trade management activities, ISDA documentation preparation, limits monitoring and reporting and position revaluation statements production) Trade and structured finance support activities (e.g. letter of credit opening, documentation verification and settlement, loan and ISDA documentation preparation, security and collateral monitoring)	Policy maintenance activities (e.g. record changes, collateral verification, policy surrender, audits and reinstatements and premium reconciliation) New business administration (e.g. customer records updating, policy quotes and letter preparation Claims case management and payments activities (e.g. determination of eligibility, document verification, medical advice reviews and discussions, advice preparation, payment and settlement)

Analytics Process Groups

	Head office and Group Centre	Retail and Business Banking	Corporate and Institutional Banking	Insurance and Wealth Management
	Group finance and accounting analytics (e.g. budgeting, planning and forecasting support) Business cases and business performance analysis, evaluation and support Group treasury and risk management analytics. Portfolio risk measurement and management analytics (e.g. VaR curve construction, portfolio loss given default and event given default determination and stress testing of credit portfolios) M&A and investment due diligence processes, check list driven support and document management	Data warehousing and data mining analytics. Data quality verification and testing Report preparation from standard CRM platforms using data mining tools Product pricing and performance analytics. Personal loan and home loan portfolio performance analysis, evaluation and support (e.g. basic ROE and return on target equity analysis) New product costing and pricing analysis Product management and market research analytics (e.g. designing and analysis of quantitative product market research surveys)	Structured finance analytics (e.g. credit analysis for project finance proposals) Ongoing credit model maintenance and management Treasury products analytics (e.g. portfolio VaR analysis and stress testing) Specific product group pricing and reviews Equity research analytics (e.g. valuation models maintenance) Knowledge centre arrangements for industry specific analysis and research	Actuarial analytics support (e.g. dynamic financial analysis modelling support and maintenance) Underwriting standards, algorithms and rules creation and monitoring support Statistical reporting (statutory and regulatory reporting)

Source: CSFB estimates

Structuring alternatives for offshoring

In this section we examine the traditionally preferred offshoring structures as well as potential structures for the Australian banking and financial services company

Traditional captive offshoring strategies have now opened up to alternative structures

Historically, the seemingly preferred structure for an offshoring strategy has involved the establishment of an offshore captive entity that then processed activities from various parts of the group. This was the structure followed and adopted by several major global financial institutions (e.g. GE Capital, American Express, Standard Chartered, Citibank / Citigroup, etc).

However, in our view this captive strategy has been subject to review and restructuring for the following reasons:

- *Growth in (and competition from) the third-party service provider market:* The earlier offshoring players appeared to have little choice but to establish captives to implement their offshoring strategies since the third-party vendor market for offshoring/remote outsourcing functions was in its infancy, and therefore there was a lack of credible third-party service providers. Further, remote working and delivery technologies were at a rudimentary stage of development during these years and there were significant teething problems to be overcome. Also, the quality and capability of the workforces in outsourcing destinations was relatively unknown. This situation has changed materially over the past five years, during which we have seen the emergence of several significant third-party service providers in most major key activity domains, from simple call-centre-based work through to the advanced analytics delivery operations. These third-party service providers have been primarily backed by venture capitalists and have been aggressive in pricing their services, creating strong, price-based competition to the captives.
- *Commoditisation and increasing complexity:* Strong, price-based competition from captives, combined with the increased staff turnover and wage inflation levels amongst offshoring industry workers (around 15% p.a. for the past five years), looks to have resulted in significant commoditisation of outsourcing activity domains such as IT and application development, customer service and call centres and shared service processes such as HR and finance and accounting. Further, the activity domains of interest to global banking and financial services companies at the current time are significantly more complex and advanced than before, since they are primarily analytics-driven processes in a variety of domains ranging from quantitative market research and equity research valuations to credit portfolio risk management and data mining and analysis. This appears to have resulted in captives moving up the value chain and the farming out of the commoditised areas to third party service providers.
- *Business continuity planning and operational risk demands:* The increasing range of functions and domains being outsourced has necessitated greater rigour and robustness in business continuity planning and operational, risk-mitigation strategies. This looks to have necessitated more open, multiple-vendor and multiple-location offshoring strategies as opposed to reliance solely on the captive entities, to enable proper diversification of operational risk as well as increased fall-over in business continuity planning contingency scenarios.

In our view, for Australian banking and financial services companies there are, fundamentally, two major offshoring structuring options:

- *Exclusively third-party offshoring strategy:* We see this as a relatively low-risk, contract-management-driven strategy. While we believe this strategy is suited to more commoditised activities, in our view it does not easily facilitate transfer of more complex activities until significant third-party providers emerge within the global offshoring industry operating in those domains. We believe such a structure also has the potential to create significant lack of control and pecking order issues.
- *Captive plus multi-vendor offshoring strategy with a build-operate-transfer (BOT) structure:* The combination of a captive with a multi-vendor model should ensure that the organisation can focus on the more complex processes while managing delivery of the commoditised functions. Further, a multi-vendor and multi-location strategy should ensure easier enabling of business continuity contingency scenarios. We believe the BOT structure has the potential to minimise lack of control issues that can arise with such outsourcing initiatives, given that the role of the third-party vendor is akin to a manager of a process group rather than that as the owner-deliverer.

Value creation potential

In this section we examine the potential financial benefits that could arise from bank offshoring initiatives

Fundamental sources of value creation

Sources of value creation: net factor cost savings, consolidation and re-platforming cost savings, Six Sigma cost savings and improved operational risk capital efficiency

We believe there are four fundamental sources of value creation for a typical banking and financial services company arising from an offshoring strategy:

- *Net factor cost savings and quality of performance:* Net factor cost savings are primarily cost savings arising as a result of unit labour cost arbitrage, adjusted for additional costs associated with transition management and telecommunications costs. Historically, net factor cost savings have been in the range of 35% to 40% for the outsourced processes and functions (source: I Gate – Quintant study 2004, and McKinsey outsourcing study 2002). This was often achieved alongside improved quality of performance owing to the recruitment of a more qualified person to perform a similar role. However, we do not expect this experience to translate directly for Australian banking and financial services companies for two important reasons. First, fast commoditisation of low end processes, combined with an increasing unit labour cost. For example, several recent HR surveys have pointed out that the wage inflation within Indian IT and customer-service functions is in the order of 15% p.a., or even higher for specialised functions. Secondly, the phenomenon of commoditisation (created by the significant emergence of third-party service providers competing strongly in most low-end, key-activity domains) has also had the effect of increasing turnover in the offshoring industry workforce (often to around the 25% to 40% level), resulting in lower quality standards. While there are short-term alleviation measures such as anti-poaching agreements in place, these are not expected to be sustainable over the longer term. Indeed, as our case studies on offshoring hiccups such as AXA UK and Conseco suggest, there could be potential for quality-related issues. We believe this further highlights the need for Australian institutions to be careful and innovative in their domain selection strategies to avoid these potential pitfalls;

- *Ongoing consolidation and re-platforming cost savings:* These savings are primarily related to the rationalisation of technology and operational platforms as well as standardisation of the associated processes. For example, standardising a relatively simple process such as letter of credit opening and closing on a single process and technology platform across 15 countries (per Citibank's eServe unit based in Mumbai and Chennai) has created cost savings of between 10% to 15% over and above the previously mentioned factor cost savings. Several independent studies have also confirmed that consolidation can potentially contribute as high as 15% in addition to labour cost arbitrages. We believe that this form of cost savings (rather than sheer labour cost arbitrage) is likely to be a material component of the cost savings potentially attainable by Australian banks and financial services companies;

- *Ongoing Six Sigma driven process cost savings:* The third stream of expected productivity improvements arise directly as a result of implementing Six Sigma based quality metrics and initiatives around the outsourced processes. Typically, we believe this contributes another 10% to 15% of cost savings over and above the previous two factors and should be also available to an Australian banking and financial services company embarking on an offshoring strategy. We believe that co-locating and consolidating operations and service centres enables better documentation and analysis of quality metrics, faster identification of quality improvement opportunities as well as quicker dissemination of initiatives across key domain and process groups. Further, in our view it has also enabled organisations to recognize the signs of commoditisation and diminishing returns quickly.

- *Improved operational risk capital efficiency:* The last aspect of the value-creating themes (which is an emerging theme) we see is in respect of improved operational risk capital management. In a typical Australian banking and financial services company, we understand that operational risk capital accounts for as much as 35%-40% of group economic equity. Usually, about 50% of this operational risk capital pertains directly to the back-office and support functions (that we believe could be impacted by an offshoring strategy) whilst the other half pertains to business risks that are not directly impacted by such a strategy. We believe that the accuracy of any of the three fundamental approaches to operational risk measurement – the database model, the risk driver model (causal analysis method) and the scenario analysis and stress testing model – is dependent on the availability and quality of information in respect of the back-office and support functions. In practice, we believe that processes that have been subjected to an offshoring initiative are significantly more metric-driven, more transparent and are often subject to more rigorous multi-locational business continuity scenario planning exercises than in-house processes. In our opinion, this has the potential to reduce both the raw operational risk impact as well as the post-mitigation risk impact, potentially leading to lower levels of required operational risk economic equity. Again, we believe that a well-thought-out offshoring strategy is a significant lever for Australian bank and financial service company managements to monitor, measure and manage operational risk capital more efficiently.

Quantifying the benefits

The table below sets out our views on the quantifiable, 'steady-state' value creation potential for a typical Australian banking and financial services company if it were to embark on a group-wide offshoring strategy, assuming a 21 to 33-month implementation period:

Figure 8: **Potential value creation from outsourced process groups**

Cost savings category	Amount
Net factor cost savings (i.e. net of transition and telecom costs)	15% - 25%
Ongoing process consolidation and platform rationalisation	5% - 10%
Six Sigma metrics driven productivity improvements	10% - 15%
Operational risk capital efficiency	Not quantifiable, but an emerging factor
Total estimated value creation per outsourced process group	30% - 50%

Source: CSFB estimates

Assuming that an offshoring strategy is pursued, typically we believe it would take 9-14 months for a group of processes that are 'marked for outsourcing' to be transitioned and stabilised, depending on whether the 'third-party service provider approach' or the 'captive route' is chosen. We believe this timeframe is needed to overcome both the potential risk management hurdles as well as the outsourced staff training issues. We believe that upfront net factor cost savings (primarily staff expenses, but also property, management support, etc.) will provide only a 15% to 25% savings per outsourced process. In our view, the days of 45% to 60% upfront savings obtained by GE CIS and American Express are now over. Also note our previous comments that costs for experienced staff have been inflating at a rate of 15% per annum.

Ongoing consolidation and Six Sigma driven improvements are an equally important part of a successful offshoring strategy in our view. We believe that such cost savings have the potential to add another 15% to 25% over and above the upfront factor cost savings (comprised of 5%-10% ongoing consolidation, and a further 10%-15% of productivity improvements). We believe these productivity improvements can often only be achieved over a 12 to 18-month timeframe after stabilisation and that they would need dedicated ‘process champions’ to oversee these efforts.

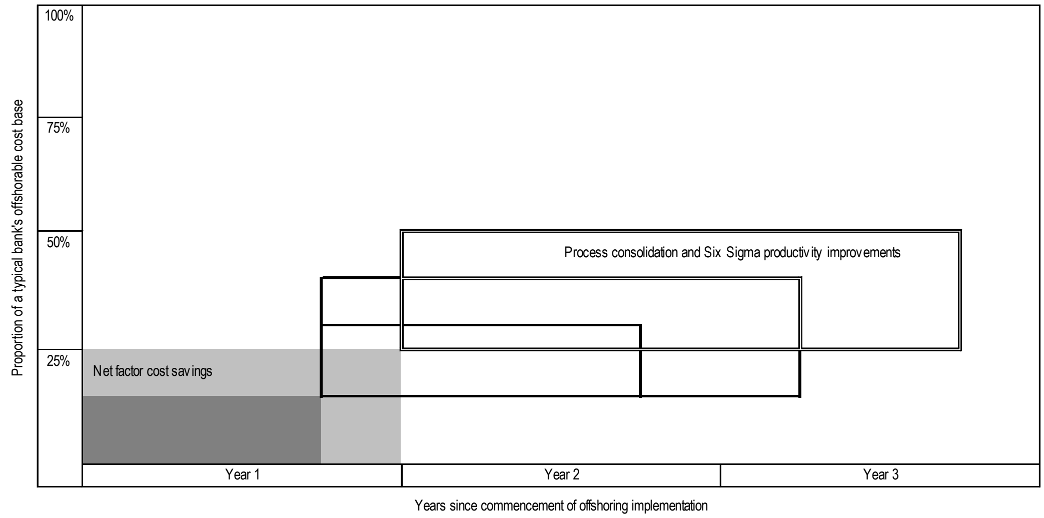
While not quantifiable by us currently, we believe the potential impact on operational risk capital efficiency of a successful offshoring strategy should not be underestimated. We believe that improved business continuity planning, transparency and information quality can only serve to reduce overall operational risk and therefore reduce the overall operational risk capital charge.

We assess that 30% to 40% of a bank’s entire operating cost base is amenable to offshoring, based on the current stage of evolution of the global offshoring industry (and that therefore this proportion of a bank’s total operating cost base could benefit from the 30% to 50% value creation potential referred to above). In reaching this estimate, we note that:

- technology, operations and procurement costs (including property leases) are typically 30% to 40% of a bank’s operating cost base, of which we assess 75% is amenable to offshoring;
- head office operating costs are typically 12% to 15% of a bank’s operating cost base (group executives, HR, finance and risk management), of which we assess 50% is amenable to offshoring;
- customer service and distribution functions are typically 20% to 25% of a bank’s operating cost base (branch FTEs, call centres, sales and service staff, IFA and broker service staff, property leases), of which we assess 50% is amenable to offshoring; and
- the remaining costs comprise institutional banking, product development, marketing and other support functions, although we have not assumed any of this portion of the cost base is amenable to offshoring.

We summarise these conclusions in the following illustrative chart, showing the estimated total proportion of a bank’s offshorable cost base on the vertical axis (suggesting that 30% to 50% of this portion of the operating cost base can be saved through offshoring) and the timeframe for offshoring implementation on the horizontal axis (showing a 9-12-month implementation period for upfront net factor cost savings, which are shown as the shaded block, and a 12-18-month implementation timeframe for re-platforming and Six Sigma benefits, which are shown as the unshaded block):

Figure 9: Illustrative conception of offshoring benefits and realisation timeframe



Source: CSFB estimates

Appendix 1: Offshoring case studies

In this section we examine a range of banking and financial services offshoring case studies

Criteria for selection

Our selection of case studies has been driven by three criteria important to us:

- to demonstrate that both medium-sized innovative players as well as trans-national players have used offshoring effectively;
- to provide a good overview of both successful players who progressed along the value chain (from IT and application development operations to complex transaction processing, shared services and analytics service providers) and others who have experienced significant hiccups and teething problems (we believe the crucial differentiating factor between a successful strategy and a failed pull-back will be the strategic thinking and implementation of Six Sigma driven productivity improvements, after the initial stabilisation); and
- to provide a clear view on the alignment of these offshoring strategies with the overall group-level corporate strategy, including quantified process productivity improvements achieved.

Cases selected

Consistent with the criteria above, we have selected the following cases:

- *Successes and highly-evolved offshoring players* – Greenpoint Mortgages, GE Capital International Services (GECIS), Standard Chartered / SCOPE and Citigroup / eServe; and
- *Hiccups and teething problems* – AXA Group and Conseco / EXL Services.

Success Case #1: Greenpoint Financial Corporation

Background

Greenpoint Financial Corporation is a Greater New York headquartered, medium-sized mortgage origination and retail banking organisation.

Fundamentally, it has two businesses:

- *Greenpoint Mortgages* – a Novato, California headquartered nationwide mortgage origination franchise with about US$38b of mortgages originated in FY03; and
- *Greenpoint Retail Bank* – a New York based retail deposit bank with about US$20b in deposits.

The company has a market capitalisation of US$6b, an overall efficiency ratio (cost-to-income) of around 39%, a return on average equity (book equity) of about 25%, an overall cost to average assets ratio of around 2.2% and FTEs of about 4,500.

Roughly translated to the Australian marketplace, Greenpoint might be broadly regarded as the equivalent of an Aussie Home Loans or a regional bank like St George Bank or Adelaide Bank.

Review of Greenpoint's offshoring strategy

Greenpoint's offshoring strategy commenced in 2001 / 2002 as essentially a by-product of its 1998 IT and application development outsourcing strategies, developed through an outsourcing partnership with Infosys (an India based outsourcer).

Greenpoint appeared to have a very favourable experience with respect to its application development partnership with Infosys, which resulted in the development of a proprietary application named "Web Point" – a web-based transaction processing portal for its 20,000 strong mortgage broker network with automated credit scoring as well a transformation program for mortgage processing centres called "Greenpoint Express".

Largely as a result of these and other smaller application development outsourcing initiatives, Greenpoint's Group efficiency ratio improved from 43.5% in 1998 to 35.7% in 2001. The company was also awarded the Wharton Business School's "Business Transformation" award for technological innovation for 2002.

Building on this experience, Greenpoint made the strategic decision to move up the value chain by broadening its partnership with Infosys from IT and application development outsourcing to complex offshoring activities involving processes along the mortgage processing value chain.

The company's first offshoring deal was announced in June 2002 with Progeon (a controlled entity of Infosys based in Bangalore in India). The original scope of the partnership involved very little direct customer or broker contact, but mostly document preparation and management work involving application processing, exception credit scoring (non-status and low-doc mortgages form a large specialty of Greenpoint's mortgage origination business), conveyancing and settlement support and payment and accounting support for Greenpoint's mortgage-backed securities investors. Almost all credit decisioning, product recommendation and direct broker contact was retained at headquarters.

Other important aspects of this original offshoring deal as announced were as follows:

- *Approximate cost base range of proposed outsourced processes:* US$20m-$25m (representing roughly 8%-10% of its mortgage operations cost base of about $250m).
- *Approximate cost savings forecast on outsourced processes:* US$5m-$10m (representing cost savings of about 25%-50% on various sub-processes).
- *Contracted timeframe:* three years.
- *Approximate timeframe for transition and stabilisation:* 9 to 12 months.
- *Greenpoint senior management involvement:* Greenpoint's offshoring strategies are directly reviewed by the President and CEO of Greenpoint Mortgages, Mr Ibrahim and the COO of the overall group, Mr Bhatt.
- *Data protection, security and US privacy law issues:* Handled by mitigation measures including separate account management, dedicated data and process redundancy

measures (i.e. away from Progeon's / Infosys' other customers) as well as rigorous training programs for both Greenpoint and Progeon's employees involved in the transaction.

- *Workflow management and communication:* There are strict paper controls for both offshoring and security issues, with documents imaged and transferred onto the company's workgroup platform and allocated to the Progeon unit in Bangalore. Progeon employees complete the documents electronically and any manual storage of paper is on a "needs" basis.
- *Staffing:* Almost all of Progeon's employees are at a minimum undergraduates and often have postgraduate qualifications (which is not the case with like-for-like Greenpoint staff). Most of the initial transition and stabilisation phase was spent in training Progeon's staff on mortgage processing industry specifics.

Meanwhile, Greenpoint has reaffirmed its commitment to its offshoring strategy by recently announcing a second offshoring partnership (April 2004). This second partnership involves moving even further up the value chain involving the Credit Decisioning Analytics processes and potentially, a series of complex data mining, data review and loan pricing decisions.

Greenpoint has also selected Quintant, a controlled entity of iGate Global Solutions (a Bangalore based analytics outsourcer specialising in customer analysis and data mining services for mortgage originators, credit card and insurance companies). Given the recent nature of the deal, a lot of information is yet to be fully disclosed. However, information based on publicly available data is as follows:

- *Approximate cost base range of proposed outsourced processes:* US$20m-$25m (representing approximately 10%-15% of its mortgage operations cost base of about $250 million);
- *Structure of pricing:* There is a significant innovation in the pricing structure in our view as it is driven by cost per transaction (per mortgage application completed, for example) rather than per FTE. There are also year-on-year incentives for the outsourcer for achieving reductions in cost per successful transaction;
- *Approximate cost savings forecast on outsourced processes:* Unfortunately there is no reliable disclosure. However, industry research estimates it to be around US$10m (representing cost savings of about 25%-50% on various sub-processes).
- *Contracted time frame:* Five years.
- *Data protection, security and US privacy law issues:* Handled by mitigation measures including separate account management, dedicated data and process redundancy measures (i.e. away from other customers) as well as rigorous training programs for both Greenpoint and Quintant employees involved in the transaction.
- *Staffing:* Being an advanced analytics outsourcer, most of Quintant's employees have at least an MBA or a Master's degree in engineering, maths or other sciences and typically, have PhD's in quantitative analysis or other such discipline.

Conclusion

We believe the Greenpoint case study demonstrates how a mid-sized financial company in a highly competitive market can materially enhance its overall productivity levels and potential shareholder value through successful execution of an innovative and well-conceived offshoring strategy.

Further, we believe it demonstrates how such a medium-scale entity can partner third-party service providers in a successful manner (thereby avoid the need for more costly and time consuming captive outsourcing efforts) and the important role that CEO level commitment can play in ensuring that an organisation moves up the offshoring value chain towards more complex decisioning functions.

Success Case #2: GE Capital International Services ("GE CIS")

Background

GE Capital International Services is the captive offshoring entity of GE Capital – a wholly-owned subsidiary of General Electric Corporation (a manufacturing and financial services conglomerate headquartered in Stamford, Connecticut).

Review of GE's offshoring strategy

For a number of years, GE Capital under its former head, Gary Wendt was a successful implementer of several innovative productivity improvement strategies including Six Sigma and Total Quality Management – concepts that at one time, were deemed solely relevant to manufacturers and not significant to financial services companies.

GE's offshoring strategy commenced in 1997, following a visit in 1996 to India by the then CEO of GE, Jack Welch, as part of assessing opportunities for the group in the emerging Indian market.

An overall strategic direction for GE's offshoring efforts was set in 1998 as part of the so called "60:60:60" concept – 60% of in-house processes to be outsourced, 60% of those to be sent offshore and 60% of offshored processes to be sent to India.

Given the infancy of such strategies in 1998 as well as the dearth of credible third party offshoring service providers at the time, GE decided to set up a wholly owned captive entity, GE Capital International Services – GECIS – based out of Gurgaon, near Delhi, in the north of India.

Again, given the nascency of the offshoring market, GECIS commenced its operations by focusing solely on inbound call centre activity for GE Capital's retail customers, involving such rudimentary tasks such as credit card balance enquiries, card statement enquiries, etc. The centre employed about 200 FTEs in 1997/1998, whom were primarily basic graduates with reasonable English language proficiency. GE's experience from this was that its overall score for customer satisfaction improved significantly (from a baseline of 80% to 90%-95%) as a result of its India-based customer servicing strategy.

This appeared to provide the impetus for the rapid growth both in GE CIS's FTE numbers as well as the nature and complexity of domains outsourced.

Starting from the base level of 200 FTEs and a single centre outside Delhi as at 1998, GECIS now has about 11,000 FTEs at six sites in four separate cities spread across India (Delhi, Hyderabad, Bangalore and most recently, Calcutta). Even more telling in our view is the approximate high level breakdown of FTEs across functional domains, as provided by GECIS at an industry conference last year:

Figure 10: **GECIS FTE deployment**

Key Activity Domains	FTE numbers
Customer fulfilment	1,700
Credit recovery and collections	1,800
Insurance claims and other support processes	1,600
Industrial processes for GE industrial companies	1,100
Planning & analysis, budgeting and other basic finance and accounting activities	1,800
Analytic activities such as data mining and customer analysis, credit risk management, structured finance support, due diligence and valuation analysis	800
IT services – application development, database and platform support	1,500
Knowledge management and research, eLearning and Total Quality Management	1,000
Approximate total FTE	11,300

Source: Company data, CSFB estimates

Other key indicators from industry data about GECIS and its contribution to the wider GE Group (including GE Capital) are as follows:

- the per annum cost savings attributable to GECIS are about US$400m per annum. By comparison, GE Consumer Finance and GE Insurance (the two main global end-clients for GECIS) had combined pre-tax earnings of about $4.5b for 2003 – implying a contribution of about 10% to their pre-tax earnings;
- it is worthwhile also noting that despite being a relatively small operation in a significant global enterprise, GECIS reports directly to GE Group's global corporate management committee and its strategy is driven by one full time, dedicated Corporate Staff Officer – the President and CEO of GE CIS, Mr Bhasin;
- the range of per process cost savings achieved by GE CIS is about 25% to 50%, depending on the domain complexity; and
- approximately half of these cost savings are attributed to factor cost savings such as labour cost, property costs, etc and the other half are attributed to ongoing consolidation benefits as well as Six Sigma initiatives.

Also, despite being the largest captive offshoring organisation, GECIS has also constantly restructured itself to exit low-end commoditised functions and has sought to move up the value chain. Its recent restructuring announcement (wherein it has decided to sell/close functions such as application development, software and application platform maintenance, help desk support, etc., by engaging partnerships with third-party vendors) is an example of this consistent movement up the value chain and illustrates this point in our view.

Indeed, as recent announcements demonstrate, we believe GE CIS might even attempt to remodel itself into a high-end, 'third-party' service provider for the financial services industry focusing on functions such as data mining, customer analysis, product development and equity and company research.

Conclusion:

We believe that GE CIS demonstrates the vital importance of top management focus and involvement in the development and execution of a successful offshoring strategy. As can be seen, we believe the amount of corporate management attention that GE CIS has received is arguably disproportionate to its current contribution to Group earnings (only 10% of group companies' earnings and 3% of the overall group's earnings).

We believe that it also illustrates the need for offshoring strategies to consistently move up the value curve – from basic processing functions to complex analytics activities.

Lastly, we believe it also illustrates the importance of weeding out the low-end commoditised functions to third party service providers in order to focus on outsourcing the complex functions under captive structures.

Success Case #3:
SCOPE International / Standard Chartered plc

Background

SCOPE International is the captive offshoring entity of Standard Chartered plc, a UK headquartered emerging market bank with most of its operational businesses located in the Middle East and Africa, North Asia, South East Asia, China and the Indian subcontinent. Standard Chartered employs about 30,000 FTEs and has a market capitalisation of about STG 10b. It also has a relatively minor presence in Latin America and the Caribbean.

Review of Standard Chartered's offshoring strategy

The overall strategy for SCOPE International was created as part of a CEO (Mr Talwar, an ex-Citibank) led group-wide shared services strategy pursuant to a series of acquisition integration efforts across several geographies, particularly the Grindlays Bank acquisition from ANZ Banking Group in 2000.

As part of the Grindlays Bank acquisition, Standard Chartered also acquired the Grindlays India software processing centre based in Chennai from ANZ.

Standard Chartered was also a late entrant in respect of its offshoring strategy relative to other advanced players such as GECIS, Citibank and the World Bank and, on this basis, we believe it had to be a fast follower in overcoming this disadvantage.

Following a significant period of location and structure research, the strategic decision was made in mid-2001 to establish two group-wide shared services centre platforms dedicated to transitioning and co-locating several group-wide functions and to derive the cost savings potentially available through offshoring. This involved the creation of a large facility based in Chennai in India (essentially a conversion of the Grindlays / ANZ facility) and a smaller (but newer) facility at Kuala Lumpur in Malaysia.

The Chennai centre is the larger of the two centres and houses most of the approximately 3,000 FTEs of SCOPE International and is located in about 300,000 square feet of office space in the business district of Chennai (interestingly, this is positioned close to eServe, the Citibank entity and the World Bank captive processing centre).

The key features we see of SCOPE International's offshoring strategy are as follows:

- We consider SCOPE International's offshoring strategy rather unique inasmuch as it had a clearly articulated intent to offer its services to other banks and financial services organisations in addition to servicing Standard Chartered's in-house businesses;
- SCOPE International's Chennai processing centre has four major processing lines of business – global wholesale banking processes, global consumer banking services, global IT application development and support as well as group finance, accounting and HR shared services;
- typical wholesale banking functions outsourced to SCOPE include trade settlement, payments reconciliation, FX settlement and reconciliation and derivative trades post-deal management;
- typical consumer banking functions outsourced to SCOPE include credit cards fraud analysis, cards statement reconciliation and collections;
- typical accounting and HR functions performed include general ledger support, payroll processing, pension and other benefits administration as well as corporate intranet updating and maintenance; and
- in terms of overall geographic coverage, SCOPE currently services around 12 countries across the Standard Chartered group for banking operations in addition to HR and IT for about 56 countries across the group.

An approximate overall timetable detailing the establishment of SCOPE is set out below, demonstrating how SCOPE achieved these various milestones over a 30 to 36-month timeframe:

Figure 11: Completion dates for key activities offshored to SCOPE

Year	Quarter	Key Activities
2001	1Q	Software support for Africa
		Seven banking operations transitioned from six countries
	2Q	
	3Q	Global reconciliation hub for 17 countries
		Software development and support hub in Chennai
	4Q	
2002	1Q	
	2Q	Banking operations support for 9 countries
		Market operations for UK, India and US
		IT Service centre for 12 countries
		HR Shared Services centre for 56 countries
	3Q	
	4Q	
2003	1Q	Back up centre – Scope Malaysia
	2Q	Market operations for Malaysia and Indonesia
		Finance and Accounting Shared Services Centre for seven countries
	3Q	
	4Q	Banking operations for 12 countries

Source: Company data, CSFB estimates

SCOPE's original strategy forecast cost savings of around 30% to 50% per outsourced process and approximately US$80m of cost savings per annum across the group over a three-year period. Current SCOPE management comments and other industry data suggest to us that it is on track to achieve these projected savings. This translates to approximately 3% of Standard Chartered's overall cost base.

As with other successful offshoring strategies, SCOPE's cost savings are roughly split equally between the upfront factor cost advantage and the ongoing consolidation and Six Sigma driven cost savings.

SCOPE International intends to leverage its existing US$100m investment in its offshoring strategy by aggressively marketing its services to other banking and financial services institutions in competition with other third-party vendors.

Conclusion

We believe the SCOPE International case is especially relevant to Australian financial institutions for the following reasons:

- In our view, it demonstrates the emerging importance of third-party service delivery strategies as an integral component of a bank's overall offshoring strategies – be it incorporating other third-party service providers or modelling one's own strategy to be a third-party competitor, eventually; and
- we consider it also illustrates how a determined and committed late entrant with a cohesive offshoring strategy can overcome the disadvantage of a late start to nevertheless derive significant productivity benefits.

Success Case #4: Citibank / eServe International

Background

Citibank is the retail and wholesale banking entity of Citigroup Inc., the largest diversified financial services institution in the world with a market capitalisation of approximately US$250b.

Review of Citibank's offshoring strategy

In contrast to SCOPE International and GECIS, which we believe have executed to a clear and well-defined offshoring strategy and have consistently moved up the value chain, we regard Citibank's offshoring strategy through eServe (and various other predecessor entities) to have evolved over the last decade or so through an iterative process.

The origin of Citibank's offshoring strategy goes back to early 1990s when it created a partly owned subsidiary by the name of Citicorp Information Technology Limited (CITIL) based in Bangalore in India. CITIL changed its name to iFlex (the leading vendor of core banking systems in the world today) and took on the processing tasks for Citibank's cheque and cash management systems, initially within India and eventually across several geographies.

Eventually, this processing division was taken over by another Citibank controlled entity, Citicorp Securities and Investments Ltd ("CSIL") which was then merged with yet another entity (CCSIL) performing other trade and retail processing tasks to form eServe International, which went public in 2002 with the intention of becoming a third party service provider for the financial services industry.

Until April 2004, eServe International was a publicly listed company with a Citigroup stake of about 44%. Citigroup has formally made a tender offer to purchase the remainder of eServe's shares to enable complete ownership of eServe and the company has also stated its intention to solely serve Citigroup businesses globally.

Despite this iterative process, eServe itself has some important features:

- It has three distinct lines of businesses being transaction processing, customer contact and IT services and has about 4,000 FTEs located in two sites in Chennai and Mumbai, in India.
- Its transaction processing centre cuts across both retail and wholesale banking businesses as well as the insurance businesses of Citigroup. eServe is the largest transaction processing centre of its kind with about 100m transactions processed, per annum.
- Indeed, the company's core expertise has historically been around trade and payments processing, credit card processing and deposit / liability products processing for retail customers, as well as cash management for corporate clients.
- The company currently accounts for approximately about US$150m per annum of Citibank's global cost base and industry data suggests to us that it has made process-wise cost improvements of anywhere between 30% and 50% in terms of per process cost.
- So far, the company has not announced significant broadening of scope to include high end analytic, finance and accounting or HR functions.

Conclusions

Despite a well-resourced, parent organisation and early mover advantage in transaction processing outsourcing, Citibank has not climbed the value chain in as rapid a manner as GECIS or even a later entrant like Standard Chartered.

We believe this can be attributed to a lack of a clearly articulated strategy geared towards climbing the value chain from call centre and processing functions to the high-end analytics and corporate reporting functions, and also to its parent company's iterative view of where and how eServe fits into its own corporate strategy.

Hiccups and pull-backs Case #1: AXA UK / AXA Business Services

Background

The AXA group is a global insurance and wealth management group with operations in almost all major geographies, particularly North America, UK and Continental Europe, Asia and Australia.

Review of AXA's offshoring strategy

As with Standard Chartered, AXA's offshoring strategy was a by-product of the acquisition of Guardian Life by AXA in the UK about six years ago, through which AXA inherited a software development and processing facility based in Bangalore in India, which AXA decided to expand into a full-fledged offshoring outfit.

Over the last three years, the renamed outfit called AXA Business Services ("ABS") has provided primarily IT application development support and voice-based new business and administration support to four AXA companies around the world – AXA UK, AXA Asia Pacific (based out of Melbourne, Australia), AXA USA and AXA Japan.

It has approximately 1,000 FTEs in two sites located at Bangalore and is considering a second site in Poona, also in India, which is expected to locate about 500 FTEs.

Most of the new business and administrative work is basically product-based transaction processing work for AXA's insurance and funds management products (e.g. change of addresses, policy renewals and payment receipt production, product switch fulfilment tasks, balance statements, etc). This includes several of AXA Australia's products such as the business super master trust product and SUMMIT, its wrap platform.

So far AXA has not progressed up the value chain to include complex functions such as claims processing and management, underwriting standard setting and review or data warehousing and mining functions.

Specific instance of pull-back

AXA UK recently decided to pull back from ABS in Bangalore in relation to the processing of healthcare and medical products distributed by its UK-based subsidiary, PPP Healthcare.

The subsidiary's customer base was primarily small and medium-sized businesses based in and around the north of England. Industry commentary claims that the SME clients of PPP were unhappy with the need to deal with an unfamiliar person based overseas rather than a domestically located relationship manager, whom they had dealt with for over five years in most cases.

The company claimed that the work being done at ABS was performed satisfactorily in accordance with productivity, quality and turnaround targets. However, the work was still re-located back to its original centre at Turnbridge Wells.

Conclusions

We believe this pull-back has significant implications for Australian banking and financial services organisations that desire to outsource either the customer facing or even the intermediary contact for relationship based products such as business superannuation, wrap accounts or disability insurance.

In outsourcing these relationship driven products, we believe there is a compelling need to ensure that advisors and customers are fully informed about the initiative. Also, we consider the process of outsourcing these complex relationships needs to be 'phased'* and 'tiered'* to avoid the need for such costly pull-backs.

** NOTE*: 'Phasing' describes the migration of offshoring domains, commencing with more traditional back-office domains and slowly progressing towards the middle office and customer contact domains. 'Tiering' refers to the staggering of the complexity of the process / sub-process being offshored. This means that after deciding on a particular domain to be offshored, the simpler and more automated processes would be offshored before the more complex, regulation and exception driven processes.

Hiccups and pull-backs Case #2: Conseco / EXL Services

Background

Conseco is an US insurance group that went into Chapter 11 bankruptcy in 2000 and has since attempted several strategies to emerge out of it. Strategies that the company has attempted include hiring management with a reputation for turnarounds (Gary Wendt from GE Capital) as well as strong productivity improvement measures such as the outsourcing of major processes pertaining to its insurance operations.

Review of Conseco's offshoring strategy

Conseco's offshoring strategy appeared to be the result of its bankruptcy status as well as the hiring of Gary Wendt, the former CEO of GE Capital. In 2000, the company acquired a partial stake in a US and India-based financial services' back-office services provider, EXL Services, which initially served Conseco's businesses on a quasi-captive basis.

Over the past three-year period, EXL has developed a specialisation in serving insurance and finance companies and was recently rated by the official Nasscom survey as the #1 offshoring provider within the banking and financial services industry sector.

Conseco, with its focus on cost cutting, has now outsourced about 50 major insurance processes, including claims processing and management as well as new business and administration processes and has involved the offshoring of about 800 FTEs to EXL's centres in India.

Specific instance of pull-back

Conseco recently announced that it was pulling back a significant portion of its work outsourced to EXL, back to various other processing centres in the US. The announcement also mentioned that other processes outsourced to EXL were being monitored closely and would be moved back, if needed.

The stated reason was that the company was not satisfied with the quality of the work carried out by EXL and that the original cost reduction estimates had not been met.

Industry reviews also suggests to us that the upfront factor price cost savings (which were estimated at around 45% to 50% per process) did not materialize and the ongoing Six Sigma programs were the subject of disagreements between Conseco and EXL.

Further, the apparent industry view emerging is that Conseco also experienced significant lack of control as a result of its decision in 2002 to sell its stake in EXL to a venture capital consortium. In effect, it went from being an owner and a major client, to just another client of EXL, which has recently opened its fourth centre to cater to other clients.

Conclusions

We believe the Conseco pull-back potentially has three significant implications for Australian banking and financial services companies developing their own offshoring strategies:

- Upfront factor price savings are considered unlikely to be sole driver of productivity improvement from outsourcing. We believe a clear ongoing improvement process with an appropriate focus on Six Sigma initiatives needs to be agreed before the signing of the deal;
- The difference between captives and third-party service delivery appears to rapidly be becoming redundant. In our view, any offshoring strategy will need to take this factor and the consequent lack of control into account, before committing to it.
- We consider Conseco's strategy failed because it appeared to have a static view of outsourcing i.e. it did not move up the value chain towards the more complex analytic processes, but preferred to stick to the lower-end, processing tasks. Any successful offshoring strategy should, in our view, have a clear upfront view and timeframe for movement up the value chain away from the commoditised processes.

Appendix 2: Offshoring geographic centres

In this section we review the main global offshoring geographic centres relevant for the banking and financial services industry

India

Mumbai, Bangalore, Chennai, Gurgaon (near Delhi) and Hyderabad and increasingly Kolkotha

While Bangalore currently appears to attract media attention in relation to the Indian offshoring market, we note that Chennai, Hyderabad (located relatively close to Bangalore) and Gurgaon are increasingly popular offshoring destinations with global financial services companies.

We believe that India is the most established and most competitive offshoring location, with seemingly significant technology and language advantages, as well as the availability of talent across the entire spectrum (e.g. graduates for contact centres through to engineer-MBAs for analytics to PhDs for advanced analytics, such as catastrophe insurance pricing, options and derivatives modelling, data mining and consumer behaviour modelling). We note that Standard Chartered's entity SCOPE commenced its processing operations in Chennai as did the Citibank entity, e-Serve, when it commenced retail processing in 1999. GECIS started in Gurgaon in 1998 and now has large transaction processing, shared services and risk management and finance analytics centres in Hyderabad, Gurgaon and Calcutta.

China

Shenzhen, Shanghai, Beijing and Dailan

Increasingly, we observe China as becoming an IT and processing hub:

- amongst pan Asian global financial services companies (e.g. HSBC has large IT and processing operations based out of Shenzhen and its regional headquarters is based out of Shanghai); and
- for Japan / Korea focused offshoring via the unique language and service positioning offered by locations such as Dalian.

We believe this is a rapidly-emerging destination, with seemingly strong technology and multi-lingual advantages (including the rapid emergence of an English-based quality education system and MBA programs with global affiliations). There is an apparent temporary scarcity of talent in the processing and analytic activities, although we believe that the availability of talent will soon match that of India.

Malaysia

Kuala Lumpur

This is an established destination for IT, systems and infrastructure management skills, but seen as a limited talent pool for high-end activities. Nevertheless, we believe the recent Multimedia Super Corridor that acts as the IT and systems hub for KL arguably enhances the attractiveness of KL as an offshoring destination.

The Philippines

Manila

We see this as an established destination for contact centre and telemarketing activities, but also increasingly for IT and finance and accounting as well.

Eastern Europe

Warsaw and Budapest

We see this centre as rapidly becoming a popular global delivery centre with clients and service providers (e.g. Citibank's Warsaw RPC, Wipro's Budapest centre), with, in our view, currently very strong IT and finance and accounting skills.

South Africa and Namibia

Cape Town and Windhoek

We see this as an emerging location for finance and accounting and HR activities, both with clients and service providers (e.g. Old Mutual's Cape Town centre). These regions should offer longer-term potential, given the relatively large, English-speaking populations and relatively cheap real estate and labour.

Multi-sourcing strategy

The key point that we would highlight from this geographic review of offshoring centres is that we believe the 'lift and drop' approach to offshoring will arguably not be successful (since no single location or vendor is expected to have the highest productivity or skill set for one particular activity beyond a three to five year timeframe), but rather that a multi-locational, multi-vendor model is preferable.

In illustrating this point, we suggest that the key vendors in the offshoring market within the financial services sector can currently be classified into six major categories, as follows:

- *IT and consulting enabled service providers:* For example, Accenture, Wipro Spectramind, Satyam, TCS, HCL Infosystems, Infosys, Mphasis;
- *Transaction processing entities:* Usually entities that are fully or minority owned by other financial services companies (e.g. e-Serve International – Citibank, SCOPE – Standard Chartered, GECIS, HSBC's processing centres, World Bank's centre, ICICI One Source). However, we note that third party vendors such as Progeon and Msource have also commenced transaction processing activities;
- *Domestic customer contact specialists:* For example, Daksh, 24/7, vCustomer, Msource);
- *US contact centre specialists with large offshore operations:* For example, Convergsys, Spherion, ICT, TeleTech;

- *Finance and accounting, HR, pension / superfund shared service providers:* For example, Accenture, India-Life Hewitt (40% owned by Hewitt Associates), Nittany-Life India, Progeon; and
- *Analytics specialists for financial services:* For example, Quintant, Office Tiger, Evalueserve.

As can be seen from the above, very few outsourcing vendors appear to possess all three of the competencies of IT and systems integration kills, detailed process knowledge for the relevant domains and multiple geography / global scale. Accordingly, we believe offshoring often requires a carefully managed, 'co-sourcing' arrangement involving a master sourcing partner whom assists and manages the multi-vendor / multi-locational delivery process.

Appendix 3: Recent announcements

In this section we briefly review selected recent offshoring announcements from financial services companies globally

Aviva plc – UK business

- *Date:* 9 June 2004.
- *Domains:* Business services operation, which manages IT, facilities and project management for the rest of the group.
- *Geographies:* Aviva is currently examining third-party partners and planned to outsource half the business services operation and keep the rest in-house. No deal has yet been signed.
- *Number of jobs:* 700.

Aviva plc – UK and Canadian businesses

- *Date:* 2 December 2003.
- *Domains:* Car and home insurance claims processing; new business and administration back office; IT and application development; customer and adviser contact centres.
- *Geographies:* Bangalore (India) or Chennai (India).
- *Number of jobs:* 3,000 over the next 12 months.

Lloyds TSB – UK

- *Date:* 29 September 2003.
- *Domains:* Call centres and transaction processing.
- *Geographies:* Hyderabad (India) and Bangalore (India).
- Number of jobs: 2,000 over the next 12 months.

HSBC – UK and Asia

- *Date:* 6 November 2003.
- *Domains:* Analytics and research; finance, audit and accounting.
- *Geographies:* Shenzhen and Shanghai (China), Chennai (India), Colombo (Sri Lanka).
- *Number of jobs:* 4,000.

Abbey National – UK

- *Date:* 23 September 2003.
- *Domains:* Call centres and transaction processing.
- *Geographies:* (not disclosed).

- Number of jobs: Not disclosed, but media reports place it at around 1,500.

JP Morgan Chase

- *Date:* September 2003.
- *Domains:* Global equity research, analysis and valuation support.
- *Geographies:* Mumbai (India).

Number of jobs: Not disclosed, but media reports place it at around 50.

Morgan Stanley – USA

- *Date:* 16 September 2003.
- *Domains:* Fund accounting, portfolio services, equity research, analysis and valuation support.
- *Geographies:* Mumbai (India).
- Number of jobs: About 1,500.

World Bank group – Global

- *Date:* 18 November 2003.
- *Domains:* IT and systems development, finance and accounting, risk management analytic support.
- *Geographies:* Not disclosed, but media reports appear to suggest Chennai (India).
- *Number of jobs:* Around 200.

Bank of America – USA

- *Date:* 13 October 2003.
- *Domains:* Portfolio review, valuation, auditing and back-office processing.
- *Geographies:* Chennai (India).
- Number of jobs: (not disclosed)

ING Group – IT, Systems Development and Data Analytics

- *Date:* 27 October 2003.
- *Domains:* IT and systems development, customer contact, new business and administration, life claims processing and management.
- *Geographies:* Not disclosed, but media reports appear to suggest Chennai (India) or Hyderabad (India).
- Number of jobs: (not disclosed).

Appendix 4: About the authors

CSFB's financials research team, consisting of Nick Selvaratnam, James Ellis, Arjan van Veen and Simone Rouse, prepared this report in conjunction with consultant Sri Annaswamy.

Sriraman ("Sri") Annaswamy

Sri is an independent Financial Services Strategy and Operations specialist focusing on advising clients on the development and implementation of group-wide Business Process and Services Outsourcing strategies. He was also the co-author (along with Michael Pain) of a recently-published, Accenture-sponsored study titled *Financial Services Strategic Offshoring – an Australian Road Map*, which helped kick-start the offshoring debate within various Australian financial services organizations.

He has spent the first half his life in three major cities in India including two major Strategic Offshoring hubs, Chennai (Madras) and Mumbai (Bombay) and the second half of his life in Sydney, London and the San Francisco Bay Area.

Originally trained as an engineer, he has spent the past 15 years in the global financial services industry in a variety of organisations: the Financial Services / Strategy and M&A group at Coopers & Lybrand, the Group Strategy, Planning & Development area of Commonwealth Bank of Australia, the International Strategy & Development group of eLance (www.elance.com) – a Silicon Valley based Business Services Outsourcing start-up - and as a Project Director on a Strategic Services & Operations Offshoring project in India involving the BPO subsidiary of a major UK global financial services group.

He holds an engineering degree from the Indian Institute of Technology (IIT) and an MBA from the Indian Institute of Management (IIM).

Figure 12: Australian bank stock summary

Stock Performance

(A$m)	Reuters Code	Price	Price Target	Rating	Implicit Upside	Market Cap AUD	Market Cap USD	52 Week High	52 Week Low	Versus High	Absolute 1 month	Absolute 1 qtr	Absolute y.t.d.	vs. S&P/ASX Banks 1 month	vs. S&P/ASX Banks 1 qtr	vs. S&P/ASX Banks y.t.d.	vs. S&P/ASX 200 Index 1 month	vs. S&P/ASX 200 Index 1 qtr	vs. S&P/ASX 200 Index y.t.d.
		(1)					(2)												
ANZ Banking Group	ANZ.AX	$18.30	$20.00	NTRL	9%	34,111m	23,503m	$19.40	$16.06	-6%	4%	-5%	4%	1%	0%	-1%	0%	-7%	-3%
Commonwealth Bank	CBA.AX	$32.55	$34.00	NTRL	4%	41,382m	28,512m	$33.51	$27.14	-3%	5%	-2%	11%	2%	4%	6%	0%	-4%	4%
National Australia Bank	NAB.AX	$29.11	$31.00	NTRL	6%	43,863m	30,222m	$34.31	$28.55	-15%	2%	-8%	-3%	-1%	-3%	-7%	-3%	-10%	-9%
Westpac Banking Corp	WBC.AX	$17.05	$18.00	NTRL	6%	30,795m	21,218m	$18.25	$15.13	-7%	3%	-7%	7%	-1%	-1%	2%	-2%	-9%	0%
St George Bank	SGB.AX	$21.95	$25.00	NTRL	14%	11,517m	7,935m	$22.62	$19.25	-3%	4%	0%	13%	1%	6%	8%	-1%	-2%	6%
Suncorp - Metway	SUN.AX	$14.02	$14.50	NTRL	3%	7,792m	5,369m	$14.42	$11.20	-3%	5%	-3%	13%	2%	3%	9%	0%	-5%	7%
Adelaide Bank	ADB.AX	$8.48	$8.50	NTRL	0%	903m	622m	$8.90	$7.24	-5%	4%	0%	6%	1%	6%	1%	-1%	-2%	-1%
Bendigo Bank	BEN.AX	$9.88	$9.00	UPFM	-9%	1,323m	912m	$11.00	$8.00	-10%	-1%	-4%	11%	-4%	1%	7%	-6%	-6%	5%
Bank of Queensland	BOQ.AX	$9.35	$11.50	NTRL	23%	930m	641m	$12.03	$8.19	-22%	-4%	-19%	-5%	-7%	-14%	-10%	-9%	-21%	-12%
Macquarie Bank	MBL.AX	$34.50	$35.00	NTRL	1%	7,462m	5,141m	$37.12	$28.51	-7%	-1%	0%	-3%	-4%	6%	-7%	-6%	-2%	-9%
Universe Market Capitalisation						180,079m	124,074m												
S&P/ASX Banks		4,857						5,134	4,420	-5%	3%	-5%	4%				-2%	-7%	-2%
Major Banks											4%	-5%	4%	0%	0%	0%	-1%	-7%	-2%
Regional Banks											2%	-5%	7%	-2%	0%	3%	-3%	-7%	1%

Core Valuation

	Price	Basic Cash EPS FY03	Basic Cash EPS FY04F	Basic Cash EPS FY05F	Basic Cash EPS FY06F	CAGR 06F/03	Cash PE FY04F	Cash PE FY05F	Cash PE FY06F	DPS FY03	DPS FY04F	DPS FY05F	DPS FY06F	CAGR 06F/03	Nominal Yield FY04F	Nominal Yield FY05F	Nominal Yield FY06F	Franking FY04F	Franking FY05F
	(1)										(2)								
ANZ Banking Group	$18.30	$1.46	$1.62	$1.74	$1.89	8.9%	11.3x	10.5x	9.7x	$0.95	$1.02	$1.11	$1.20	8.1%	5.6%	6.1%	6.6%	100%	100%
Commonwealth Bank	$32.55	$2.03	$2.06	$2.68	$2.91	12.9%	15.8x	12.2x	11.2x	$1.54	$1.69	$2.00	$2.18	12.3%	5.2%	6.1%	6.7%	100%	100%
National Australia Bank	$29.11	$2.68	$2.39	$2.49	$2.74	0.7%	12.2x	11.7x	10.6x	$1.63	$1.66	$1.76	$1.92	5.6%	5.7%	6.0%	6.6%	90%	80%
Westpac Banking Corp	$17.05	$1.25	$1.38	$1.50	$1.59	8.6%	12.4x	11.4x	10.7x	$0.78	$0.86	$0.94	$1.03	9.7%	5.0%	5.5%	6.0%	100%	100%
St George Bank	$21.95	$1.42	$1.64	$1.82	$1.99	11.9%	13.4x	12.1x	11.0x	$0.95	$1.21	$1.28	$1.40	13.8%	5.5%	5.8%	6.4%	100%	100%
Suncorp - Metway	$14.02	$0.82	$1.15	$1.17	$1.23	14.7%	12.2x	12.0x	11.4x	$0.56	$0.64	$0.68	$0.73	9.2%	4.6%	4.9%	5.2%	100%	100%
Adelaide Bank	$8.48	$0.58	$0.66	$0.68	$0.75	8.9%	12.9x	12.5x	11.2x	$0.37	$0.43	$0.46	$0.49	9.8%	5.1%	5.4%	5.8%	100%	100%
Bendigo Bank	$9.88	$0.50	$0.59	$0.64	$0.68	10.8%	16.7x	15.5x	14.5x	$0.335	$0.390	$0.425	$0.470	11.9%	3.9%	4.3%	4.8%	100%	100%
Bank of Queensland	$9.35	$0.58	$0.64	$0.72	$0.82	12.2%	14.5x	13.0x	11.5x	$0.37	$0.44	$0.48	$0.53	12.7%	4.7%	5.1%	5.7%	100%	100%
Macquarie Bank	$34.50	$1.65	$2.33	$2.33	$2.29	11.7%	14.8x	14.8x	15.0x	$0.93	$1.22	$1.29	$1.36	13.5%	3.5%	3.7%	3.9%	90%	90%
Commercial Banks						10.0%	13.5x	12.3x	11.3x					10.4%	5.0%	5.5%	6.0%		
Major Banks						7.8%	12.9x	11.4x	10.5x					8.9%	5.4%	5.9%	6.5%		
Regional Banks						11.7%	13.9x	13.0x	11.9x					11.5%	4.8%	5.1%	5.6%		

Notes: 1) Price as at 17 June 2004. 2) Translated at $0.69 (Stock Performance table); Excludes any special dividends (e.g. MBL $0.50 FY03) (Core Valuation table). "Commercial Banks" refers to all banks except MBL. "Major Banks" refers to ANZ, CBA, NAB and WBC. "Regional Banks" refers to SGB, SUN, ADB, BEN and BOQ.

Source: Company data, CSFB estimates

Notes

Notes

Companies Mentioned *(Price as of 18 Jun 04)*

Australia & New Zealand Banking Group Limited (ANZ.AX, A$18.55, NEUTRAL, TP A$20, MARKET WEIGHT)
Commonwealth Bank of Australia (CBA.AX, A$32.79, NEUTRAL, TP A$34, MARKET WEIGHT)
National Australia Bank Limited (NAB.AX, A$29.29, NEUTRAL, TP A$31, MARKET WEIGHT)
Westpac Banking Corporation (WBC.AX, A$17.28, NEUTRAL, TP A$18, MARKET WEIGHT)
AXA Asia Pacific Holdings Limited (AXA.AX, A$3.29, NEUTRAL, TP A$3.3, MARKET WEIGHT)
AMP Limited (AMP.AX, A$5.87, NEUTRAL [V], TP A$6, MARKET WEIGHT)
Macquarie Bank Limited (MBL.AX, A$34.46, NEUTRAL, TP A$35, MARKET WEIGHT)
St George Bank Limited (SGB.AX, A$22.05, NEUTRAL, TP A$25, MARKET WEIGHT)
Insurance Australia Group Limited (IAG.AX, A$5.01, NEUTRAL, TP A$4.6, MARKET WEIGHT)
Coles Myer Ltd (CML.AX, A$8.39, NEUTRAL, TP A$9, MARKET WEIGHT)
Bank of Queensland Limited (BOQ.AX, A$9.39, NEUTRAL, TP A$11.5, MARKET WEIGHT)
Citigroup (C, $47.5, OUTPERFORM, TP $60, MARKET WEIGHT)
General Electric (GE, $32.58, RESTRICTED, OVERWEIGHT)
Lloyds TSB (LLOY.L, p436.5, UNDERPERFORM [V], TP p515.00, OVERWEIGHT)
Telstra Corporation Limited (TLS.AX, A$4.8, NEUTRAL, TP A$5.1, MARKET WEIGHT)
Hutchison Telecommunications (Australia) Limited (HTA.AX, A$0.27, UNDERPERFORM, TP A$0.2, MARKET WEIGHT)
Wesfarmers Limited (WES.AX, A$28.67, NEUTRAL, TP A$26.78, MARKET WEIGHT)
Adelaide Bank Limited (ADB.AX, A$8.5, NEUTRAL, TP A$8.5, MARKET WEIGHT)
J.P. Morgan Chase & Co. (JPM, $37.23, OUTPERFORM, TP $45, MARKET WEIGHT)
ING (ING.AS, eu19.15, OUTPERFORM [V], TP eu21.3, MARKET WEIGHT)
Bendigo Bank Limited (BEN.AX, A$9.87, UNDERPERFORM, TP A$9, MARKET WEIGHT)
Suncorp-Metway Limited (SUN.AX, A$14.08, NEUTRAL, TP A$14.5, MARKET WEIGHT)
Abbey National (ANL.L, p477.75, UNDERPERFORM, TP p500.00, OVERWEIGHT)
American Express Co. (AXP, $51.96, UNDERPERFORM, TP $46, MARKET WEIGHT)
Accenture Ltd. (ACN, $27.2, OUTPERFORM, TP $32, MARKET WEIGHT)
AXA (AXAF.PA, eu17.53, OUTPERFORM [V], TP eu21, MARKET WEIGHT)
AVIVA Plc (AV.L, p563.00, NEUTRAL [V], TP p608.00, MARKET WEIGHT)
HSBC Holdings (HSBA.L, p805.00, NEUTRAL, TP p955.00, OVERWEIGHT)
Standard Chartered (STAN.L, p889.00, NEUTRAL, TP p850.00, OVERWEIGHT)
Conseco (CNO, $18.98, OUTPERFORM, TP $24, MARKET WEIGHT)
Bank of America Corp. (BAC, $84.51, OUTPERFORM, TP $95, MARKET WEIGHT)
GreenPoint Financial (GPT, $38.24, NOT RATED)
Electronic Data Systems (EDS, $18.02, RESTRICTED [V], MARKET WEIGHT)
International Business Machines (IBM, $90.06, NOT RATED)
British Telecom Group (BT.L, p195.00, NEUTRAL [V], TP p190.00, OVERWEIGHT)
Unisys (UIS, $13.89, NOT RATED)
Oracle Corporation (ORCL, $11.14, RESTRICTED, OVERWEIGHT)
PeopleSoft Inc (PSFT, $18.11, RESTRICTED [V], OVERWEIGHT)
Old Mutual (OML.L, p99.00, NOT RATED)
Spherion (SFN, $10.06, OUTPERFORM [V], TP $14, MARKET WEIGHT)
Nittany Financial Corp. (NTNY.OB, $23.50, NOT RATED)

Disclosure Appendix

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