KPMG

FIPS

Financial Institutions Performance Survey

Review of 2016

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

February 2017

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Contents

KPMG's Financial Services team provides focused and practical audit, tax and advisory services to the insurance, retail banking, corporate and investment banking, and investment management sectors.

Our professionals have an in-depth understanding of the key issues facing financial institutions.

Our team is led by senior partners with a wealth of client experience and relationships with many of the market players, regulators and leading industry bodies.

The Survey

The KPMG Financial Institutions Performance Survey (FIPS) report of 2016 represents the 30th year KPMG has provided in-depth insights into New Zealand's banking and finance sector. In this 30th edition publication we will be presenting industry commentary and analysis on the performance of the New Zealand registered banks and non-bank financial institutions, together with a range of topical articles from other key stakeholders such as industry experts, regulators and our own business line leaders.

TABLE 1: MOVEMENTS

	Who's out	Who's in
Banks: 25[1]	— Nil	— Nil
Non-banks: 23	— GE Capital — The Warehouse Financial Services	— EFN (New Zealand) Limited — LeasePlan (New Zealand) Limited

The survey covers registered bank and non-bank entities with balance dates between 1 October 2015 and 30 September 2016. As a result, entities with the balance date of 31 December will have their 31 December 2015 financial results included in this year's survey as their most recent results. Those affected include Bank of China, China Construction Bank, Citibank, Deutsche Bank, Industrial and Commercial Bank of China, JP Morgan Chase Bank, Kookmin Bank, Rabobank and The Hongkong and Shanghai Banking Corporation.

As this year marks the first full year of financial reporting from Bank of China and China Construction Bank, we hope the comparative figures presented will help develop a better sense of the potential size of these two growing banks. However, as the Chinese banks (including Industrial and Commercial Bank of China) are still in the early stages of their development, we may continue to see further accelerated growth and it may be some time before this begins to normalise. Of particular future interest for these entities will be the impact of the dual branch, subsidiary registration recently announced by the RBNZ.

Follow the announcement of its withdrawal from New Zealand, Deutsche Bank has relinquished its banking license to the RBNZ in August of this year. However, this year will be the last year of its inclusion as part of our banking sector analysis, with 31 December 2015 being the last annual financial statements available for Deutsche Bank.

For the non-bank sector participants, the threshold for inclusion in this survey has remained unchanged from the prior year at total assets of $75 million. In total, the non-bank sector comprises of 23 survey participants that are involved in an array of activities, including equipment financing, vehicle financing, consumer loans, working capital loans, and residential mortgages.

Following developments from the previous year, we see the departure of GE Capital and The Warehouse Financial Services from this year's survey. Having sold off its New Zealand operations in 2015, GE Capital has since transferred the majority of its loan books to its new owners, and as such do not have any loans to report on at its most recent year end fiscal date. EFN (New Zealand), formerly part of GE Capital's Equipment Finance and Fleet Solutions Division, is one of the entities that acquired a portion of GE Capital's loan book and because of that, we welcome EFN (New Zealand) to this year's publication as they have met the $75 million threshold for inclusion. The remainder of GE Capital's loan book was acquired by two large entities, whom we hope to welcome into the survey from next year onwards when they will by virtue of being large for two years be required to file their financial statements.

The Warehouse Group Limited's acquisition of The Warehouse Financial Services Limited from Westpac, has meant that the financial performance of Warehouse Financial Services will now be consolidated under The Warehouse Group's 31 July 2016 year-end financial statements. Hence, The Warehouse Financial Services Limited will no longer be included in the survey due to the absence of publicly available standalone financial statements.

The sale of Fisher & Paykel Finance to FlexiGroup (New Zealand) Limited has not affected the way Fisher & Paykel is presented in the survey this year, however it will have an impact next year.

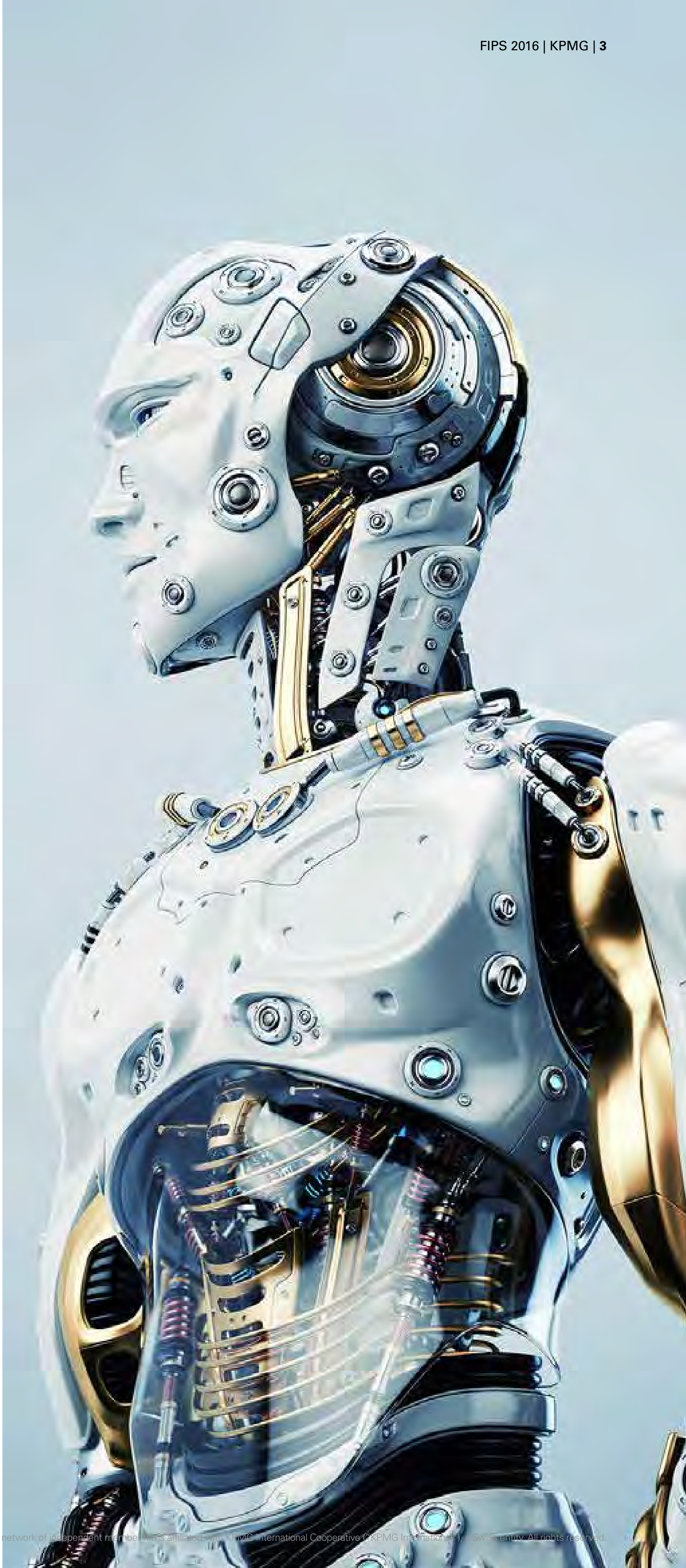
In addition, we also welcome LeasePlan New Zealand Limited to this year's publication. We have included all prior year comparatives for LeasePlan to ensure consistency and comparability between reporting periods.

As with all previous FIPS Surveys, the information used in compiling our analysis is extracted from publicly available annual reports and disclosure statements for each organisation, with the exception of certain information provided by the survey participants. A limited number of participants provide us with audited financial statements that might not otherwise be publicly available.

We wish to thank the survey participants for their valued contribution, both for the additional information provided and for the time made available to meet and discuss the industry issues with us. Without these valuable meetings with Executives the document would lack a lot of the colour and deep insights that it does. Massey University continues to be a key contributor to the compilation of this publication, assisting with the data collection, as well as drafting the banks' profit forecasting section of this survey. We thank them for their continued contribution.

External contributors continue to play a vital role in our publication, providing insight on key issues and developments that we might not otherwise have. We would like acknowledge the contributors from The Reserve Bank of New Zealand (RBNZ), the Financial Markets Authority (FMA), New Zealand Bankers' Association (NZBA), The Financial Services Federation and the Real Estate Institute of New Zealand (REINZ), for their exceptional contribution towards the compilation of this publication.

We have supplemented their external thought leadership commentary on the industry with some of KPMG's own business line thought leadership. We trust you find the content of this survey of interest.



A KPMG view from the editor

John Kensington
Partner – Audit
Head of Banking and Finance
KPMG

John has been with KPMG's Financial Services audit team for 30-plus years, 21 of these as a partner working with a wide range of financial services audit clients, specialising in banks and finance companies.

John has a wealth of experience in auditing and accounting for banking products and services including treasury, retail offerings, corporate loans and loan provisioning. He is currently Head of KPMG's Banking and Finance team, Head of Financial Services Audit and editor of this publication. John is also a Trustee of the Kidscan Charitable Trust, and Deputy Chairman of the New Zealand Audit and Assurance Standards Board (NZAuASB) and a member of the External Reporting Board (XRB). John is also a member of CAANZ and the Institute of Directors.

As I sit down to write the editor's letter, I look back over 2016 and what has truly been a year of volatility and change that perhaps offers a window into a future where increased volatility and pace of change will be the norm.

At the beginning of the year, funding channels started to tighten and become more expensive. This was followed by a series of successive slumps in dairy prices at the Global Dairy Trade auction. Fortunately, later in the year, global dairy prices have rebounded.

On the geo-political front, there was turmoil all over the world as ruling governments received clear messages from citizens that they were not being listened to. First there was Brexit and then late in the year, the election as US president of a billionaire businessman, talk show/reality TV host who prefers rhetoric over facts and uses Instagram and Twitter to espouse his policy. In New Zealand our own Prime Minister resigned, a new Prime Minister was appointed and subsequently an election date was set for 20 September 2017.

While all of this was going on, funding was becoming more difficult and more expensive to obtain and the fourth industrial revolution was impacting us faster than ever.

Despite all of this, the New Zealand economy has remained strong. Immigration, tourism, and the non-dairy primary sector have all performed well. Unemployment is at an all-time low and New Zealanders are feeling reasonably confident about their future.

Some of the concerns expressed in 2015 about an Asian (Chinese) market collapse have proven unfounded. Despite that 2016 was the year of volatility and change.

The key takeaways from the 2016 year that are highlighted by the survey are as follows:

- One thing that continues to underpin the banking sector's performance is the strength of its balance sheet.
- This year is the first year for seven years that we have seen a reduction in sector profitability compared to the prior year. This was caused by a reduction in non-interest income combined with increases in the impaired asset expense and operating costs. The decrease in non-interest income is understandable as this is a very volatile line in the sector's income statement. The increases in impaired asset expense is also understandable given where we are in the economic cycle and the fact that a lot of that growth was driven by collective provisioning increasing in line with balance sheet growth combined with industry specific overlays, particularly in the agri-sector. The increase in operating expenditure is a combination of the regulatory impost and the need to innovate for the customer.
- This year the sector margin decreased 13 basis points (bps) from 2.28 to 2.15%. This was primarily caused by less relief on the funding side of the balance sheet and intense competition on the lending side.
- Asset quality has continued to be strong with the total provision to average gross loans and advances ratio showing a slight improvement of 3 basis points from 0.58% to 0.55%. However, over the same period the impaired asset expense has increased.
- One factor we have seen near the end of the 2016 and early 2017 is the beginning of what some wrongly refer to as 'credit rationing'. There has been a clear message from the major banks that New Zealanders cannot expect lending rates to continue to fall nor to borrow at the same exuberant levels. A combination of increased funding costs, regulation limiting the amount of funding an Australian parent can provide to a New Zealand subsidiary, and concern around the overheated property market has caused the banking industry to start to prepare New Zealanders for rising interest rates and publicly warn that further Official Cash Rate reductions are unlikely to be passed on. At the heart of all this, is a realisation that returns on assets and equity in the sector have slipped to an unsustainable level.
- Probably one of the most outstanding illustrations of this was illustrated when within 48 hours of the Reserve Bank of New Zealand (RBNZ) publishing a consultation paper on the 19 July, the four major banks and Kiwibank immediately announced a voluntary adoption of the new 60% loan-to-value ratio (LVR) restriction. This was further backed up by a number of banks deciding that in the future foreign income would not be included in the affordability calculations.
- This all came at a time when the structural relationship between deposits and loans had become seriously out of balance. During the period June, July and August, the major banks saw a significant increase in lending and at the same time a significant decrease in deposits such that a significant system deficit was needed to be funded from offshore lending. This was not seen as sustainable and was in part behind banks' actions to slow lending. This in turn led to an increased focus on local deposits and increased competition in that part of the market.
- One area that always provides animated discussion is regulation. The current period has been no exception. At present the single biggest area of concern in the regulatory space is in relation to the RBNZ's revised outsourcing policy. It would be fair to say that Bank Executives are still nervous about where this might ultimately end up. A fortnight ago the RBNZ issued its final outsourcing policy proposal. There are very clear sides to the argument around outsourcing with the banks saying "we have outsourced services to centres of excellence and in doing so have improved the quality of control and the service, and have taken significant costs out of the New Zealand financial system". "If we are made to bring these centres back on shore, we will unfortunately duplicate and bring back to the New Zealand economy those costs previously removed and there is no guarantee that the quality of service from the on-shored centre will match the off-shore centre".
- The RBNZ's position, which has largely prevailed in the final policy is that they have a desire to see locally incorporated banks being able to be managed totally onshore. In the event that is required, they would not want a situation where they were reliant on an offshore centre under the jurisdiction of another regulator.

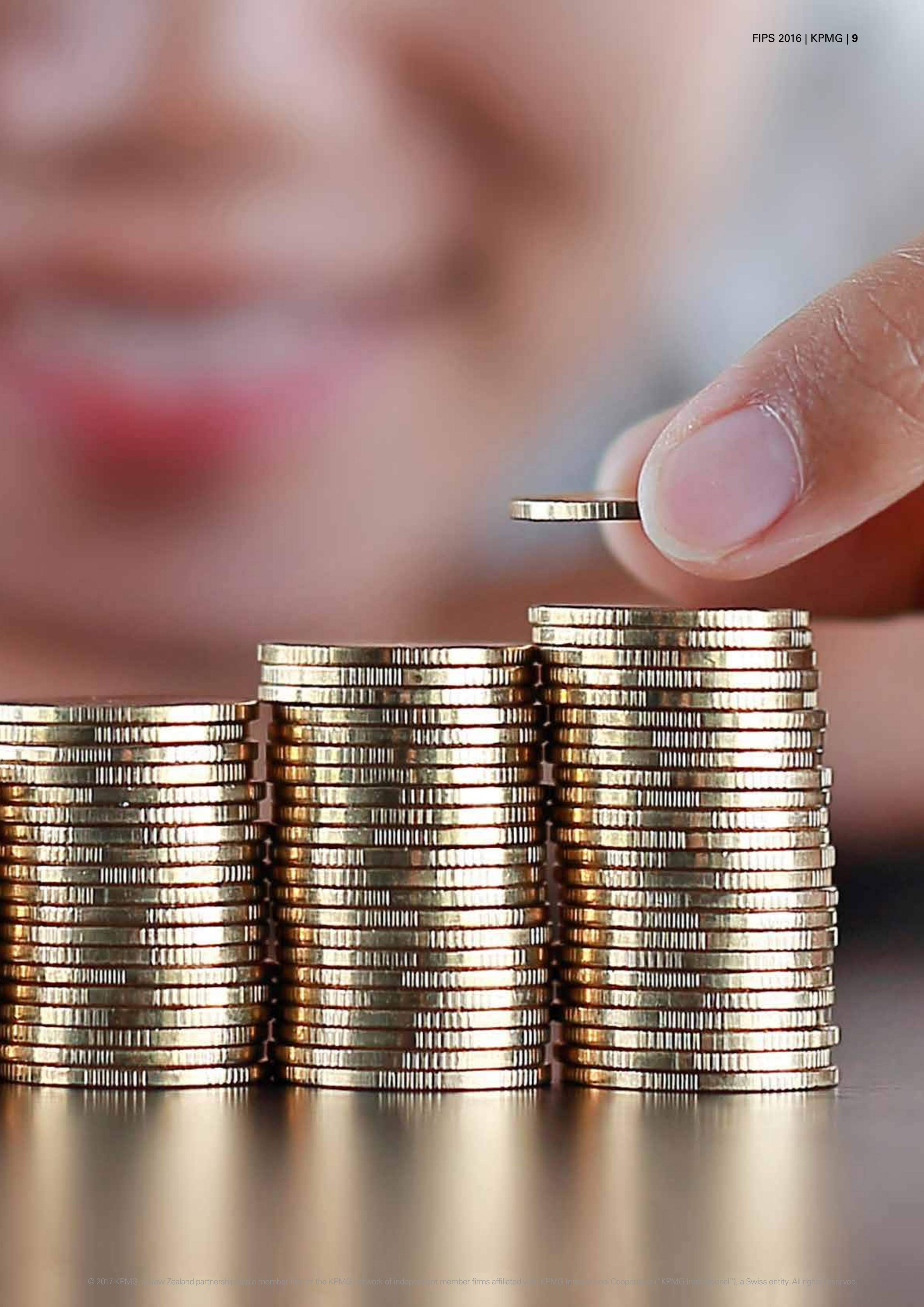
Looking to the future, the banking sector is facing a time of increased challenges, volatility and uncertainty.

- In the near term, securing of funding at favourable prices will be exercising all Executives' minds.
- The global market is more volatile due to the various geopolitical issues that it is facing. Nothing makes markets more expensive than a degree of uncertainty as to what might happen.
- In addition, locally the regulatory space has some water to go under the bridge, whether it be in relation to the implementation of the new outsourcing policy, the review of the Financial Advisor's Act, or the RBNZ's capital and liquidity review.
- One exciting piece of regulation released in late December was the ability for non-systemically important foreign banks to have a dual registration. For some of those players, this is an exciting business opportunity and it will be interesting to see how it translates into competition within the banking sector.
- On the global stage, there are a number of significant matters that will impact the sector. Firstly, the geopolitical turmoil that has been caused by the likes of Brexit and the US elections will over the next year or two start to play out. In addition, as elections occur in other countries, it will be interesting to see what happens. It is clear from recent election results that there is a significant section of the global population that are not happy with their lot and possibly have lost interest in the facts of the situation and rely more on Facebook, Twitter, and Instagram to find out what is going on and are quite prepared to protest vote to send a message to the leadership. It will be interesting to see if the same happens in our election in September of this year.
- The constant threat of disruption and the growth of digitalisation in the banking sector will only build in pace. All Executives have said that they will further digitise their offerings and they will look to partner with Fintech entities to do so. They readily acknowledge that a Fintech partnership is the way forward as they do not have the resources or the time to develop many propositions required on their own and partnership is the best way to ensure that they stay abreast of the latest developments. Executives agree that the most likely disruption will come in the payment space.
- With disruption, the risk of cyber crime increases. Customers expect entities to have their data and other sensitive information protected against cyber intrusion. As more channels and apps are opened and different services are offered, all of these channels and services require appropriate cyber protection. One thing is certain; those on the other end of the cyber crime line are only increasing their efforts to hack into, steal private data, and create embarrassment.
- The other major area where we will see a significant impact in the future is line the area of conduct risk. Surprisingly throughout this survey the Executives we spoke to thought that their entities were well placed in relation to conduct risk. While they acknowledged that many of their parent entities had issues in this area, they did not see the New Zealand landscape as being one that was fraught of examples of inappropriate conduct risk. This was surprising because the New Zealand financial sector has had its share of questions raised albeit none of them as significant as have occurred overseas. Conduct risk is an ever changing picture with things that are seen as acceptable business practice today being considered inappropriate in the near future and their identification and public shaming is not only swift if via social media, but near impossible to control. One factor that is very clear in relation to conduct risk is there needs to be a definite move from 'customer service' to 'customer experience'. Customer service is about the customer getting service quicker. Customer experience is ensuring that customer needs are being fully understood before anything is suggested as a solution and, that the customer is not only sold a product quickly, at the appropriate price, but it is still a product that serves their best needs and provides them with what they want. This is a subtle, but important change.

When you sit back and look at what has happened in 2016 and what potentially lies ahead in 2017, the clear messages are – expect volatility, expect change, and expect the unexpected. All of these are circumstances that both threaten and provide tremendous opportunity to the banking sector. 2017 could be a very interesting year.

J. P. Kemp

Banking industry overview



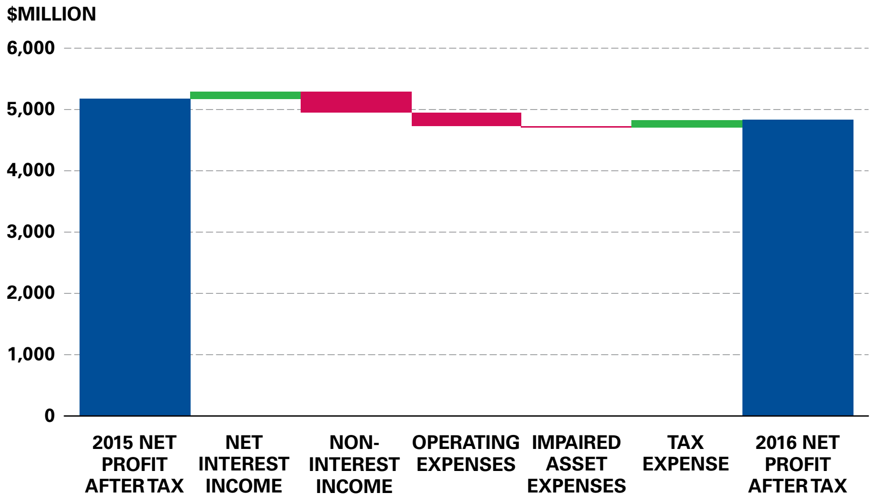
Registered banks – Industry overview

Decrease in profitability as the result of a reduction in non-interest income and increases in the impaired asset expense and operating costs.

The New Zealand banking sector experienced a contraction in profitability as net profit after tax (NPAT) declined by $334.38 million (6.46%) to $4.84 billion (see Figure 1). Four of the five major banks (ANZ, BNZ, Kiwibank and Westpac) contributed a total decrease of $400 million, while Commonwealth Bank of Australia New Zealand (CBA) reported a 4.25% ($37 million) growth in NPAT for the year. The other (non-major) banks also produced some notable movements in profitability with The Bank of Tokyo-Mitsubishi, HSBC and TSB Bank contributing an increase of $81.20 million to NPAT, while Deutsche Bank and Rabobank saw NPAT levels decline by $18 million and $36.56 million, respectively.

The single largest factor in this year's performance was a reduction in non-interest income of 11.19% ($350.20 million). ANZ and BNZ reported a decrease of $510 million in non-interest income, which was partially offset by a $160 million increase from CBA and Deutsche Bank. Of the $160 million increase, CBA contributed $76 million. However, due to a reclassification of income between net interest income and non-interest income in the 2016 financial year by CBA, using restated 2015 financial year figures would result in a smaller increase of $47 million for non-interest income. The fall in non-interest income for ANZ and BNZ stemmed from a decline in trading income and unfavourable movements of financial instruments (mainly cash flow and fair value hedging derivative instruments).

1 MOVEMENT IN NET PROFIT AFTER TAX



This does not come as a surprise, given the extent of volatility that was experienced in the global financial markets this year. Increased operating expenditure also had a notable effect on NPAT levels this year, as operating expenses (including amortisation) climbed $223.42 million, or 4.56%, to $5.12 billion. Of the 21 survey participants, 16 reported higher operating expense (including amortisation) in the current year due to larger personnel expenses and the continued investment in technology and digital capabilities.

Sector margins were also impacted. Interest margins for the year were down 13 bps, from 2.28% to 2.15%. Net interest income was lifted by 1.36% (or $127.41 million), as a result of interest expense declining by $1.48 billion (10.55%), offset by a $1.36 billion (5.79%) decrease in interest income. Lending growth for the banking sector was at its fastest pace in the last eight years, with loan books this year growing by 8.10%, from $366.04 billion to $395.71 billion.

However, many Executives we spoke to felt that funding pressures from rising interest costs offshore and a more competitive local deposit market, as well as the other measures such as LVR limits and restriction on foreign income in affordability calculations, could slow lending growth in the upcoming year.

Asset quality remained strong, with total provisions over average gross loans and advances showing a slight improvement of 3 basis points (bps), from 0.58% to 0.55%. However, impaired asset expense experienced an increase of 4.93%, or $21.59 million to $459.60 million in the last year, which is in line with lending growth.

The cost pressure of growing regulatory compliance, increased competition, volatility in markets and the costs associated with staying digitally competitive are examples of the current challenges the industry is facing.

TABLE 2: REGISTERED BANKS – PERFORMANCE TRENDS						
Year	**Increase in total assets**	**Increase in net profit after tax**	**Net profit after tax/Average total assets**	**Interest margin**	**Operating expenses/ Operating income**	**Impaired asset expense/ Average gross loans and advances**
2016	7.03%	-6.46%	1.00%	2.15%	39.39%	0.12%
2015	10.20%	6.94%	1.16%	2.28%	37.32%	0.12%
2014	5.28%	20.41%	1.17%	2.24%	39.44%	0.08%
2013	1.15%	8.53%	1.00%	2.26%	42.05%	0.16%
2012	0.78%	14.12%	0.93%	2.26%	44.40%	0.22%
2011	4.51%	10.04%	0.84%	2.23%	43.62%	0.30%

As competition in the banking industry continues to build and margins are squeezed, return on equity (ROE) and return on assets (ROA) levels have fallen over the past year. The banking sector saw its ROE and ROA decline by 200 bps and 16 bps, to 13.96% and 1.00%, respectively. The decreases in ROE and ROA played a large role in why banks have scaled back lending growth in recent months, as they look for deals that are appropriately priced as opposed to primarily looking for loan book growth. These decreases are also a reflection of an increasingly challenging environment where banks are finding it more difficult to maintain current levels of earnings. The cost pressures of growing regulatory compliance, increased competition, volatility in markets and the costs associated with staying digitally competitive are examples of the current challenges the industry is facing.

The industry remains highly competitive

The first half of the year showed the banks continuing to demonstrate a continued desire for loan growth. This was embodied by what some of the Executives described as overly-generous offers around interest rates and other incentives, in order to secure a deal.

In some cases, Executives were left to wonder if any profit was being made on such deals, and if such deals were only being made in the interest of retaining market share, retaining a key customer or for some other reason. They also wondered how long they could be realistically maintained.

However, as the banking industry entered into the second half of 2016, things took an interesting turn with developments that were not fully anticipated. It began in June with announcements from each of the big four New Zealand banks that they would impose restrictions and exclude foreign income for affordability calculations on home loans to foreign buyers following the steps that were taken by their respective parent companies in the Australian market as early as April.

Many Executives spoken to across a range of large and smaller banks commented that the inclusion of foreign income in an affordability calculation was difficult to verify – in particular, the level of foreign income being declared, the validity of supporting documents being provided, and its source (for the purpose of anti-money laundering regulations).

Executives noted that they have already encountered instances of fraud in this respect. However, at the same time, a smaller group of Executives wondered if this was an opportunity for them, particularly if through their global network, they were able to verify the income.

Executives of smaller banks were eager to comment on new LVR restrictions for residential property investors and owner occupiers and what they see as a distinctive change in the behaviour and attitude of the big four banks in the local market. There is a general consensus amongst those Executives that the big four banks are showing less interest in competing for some deals in certain areas of the lending market. One of these areas is the mortgage market, where fewer cash offers and incentives have been offered or where they are, they are not occurring to the same extent as at the beginning of the year.

Commercial property investment is another area that banks are seeing less ferocious competition. The RBNZ's November 2016 *Financial Stability Report* notes that bank credit to the commercial property sector grew at around 10%[2] in the year to September 2016 and it is forecast that this type of lending will continue to increase.

TABLE 3: REGISTERED BANKS – NON-PERFORMING LOANS	2013	2014	2015	2016
Past due assets to gross loans and advances	0.27%	0.19%	0.19%	0.13%
Gross impaired assets to gross loans and advances	0.87%	0.66%	0.48%	0.37%
Total	**1.14%**	**0.85%**	**0.67%**	**0.50%**

However, Executives noted that they are looking more closely at the deals that they are prepared to lend on and ensuring that those deals that are being funded are ones that will provide an appropriate return at an appropriate risk.

The Executives also commented that lending practices/policies were due for a much-needed change as they had started to see certain lending deals that were pushing ROE, ROA and return on investment (ROI) triggers. This prompted banks to start taking a closer look at the ROA, ROI and the capital impacts of the deals that they were starting to see and to consider whether it was appropriate and sustainable to be doing such lending. It appears banks are no longer 'falling over each other' to do every deal. Furthermore, the Executives pointed out that this recent change in behaviour could also be better characterised as a shift in their strategic focus, from an approach that meant competing at all costs for additional businesses to being more mindful of maintaining/building capital levels, and the return on capital being achieved on new businesses. This focus, in many cases, has been driven by a general desire to strengthen capital measures and by some parent country regulatory initiatives that will limit the Australian parent bank lending to its subsidiaries.

Recent tightening of the lending criteria by certain banks was also made in consideration of several factors, including a significant reduction in the availability of cheap funds, increasing geopolitical and global economic uncertainty, and a severely overheated housing market. While some may label these recent developments (restriction on foreign income, early implementation of new loan-to-value ratio (LVR) rules, and the pulling back of the bank's presence in certain areas of the lending market) as credit rationing, Executives have clarified that it is about being smarter in terms of using their capital when deciding who they are lending to, as they are still very much willing to lend to customers if the deal is right and it makes business sense. This means focusing lending growth strategies on existing key customers, and on potential customers with strong opportunities and a solid credit rating. Executives have stressed that the key to effective resource allocation lies in pricing loans correctly (in terms of interest rates), to ensure that they have sufficient funds to lend to the people that they really want to lend to, principally those who have a bankable proposition.

As the larger banks continue to adjust their operations to be in alignment with their new growth strategies there might be a slight easing of competitive pressures from these banks on certain types of lending. However, we can still expect significant competition in the banking sector in areas where good margins can be found, and the risk levels are appropriate.

Despite no indication of strong competitive pressures easing in the near future, the RBNZ and the banks have signalled the market to expect interest rate hikes in the upcoming year. They have cited upward pressures from funding costs and funding imbalances in New Zealand as the biggest driving factors behind the increase.

Higher funding costs expected due to increased global uncertainty

While the highlights of last year's survey were cheaper funding, tougher competition and tight margins, the banking industry news in the latter half of this year has been filled with headlines about funding pressures and how they were affecting the way banks were having to compete. This year, the banking industry had to notably scale back on lending growth during the second half of the year, amidst concerns of funding constraints leading to issues with capital levels, and with ROA and ROI triggers being met as a result of low margin deals and an increase in the outflow of funds that was not matched by deposit growth, thus forcing banks to fund offshore. All this occurred at a time when there was also the desire to bolster capital and local deposits, especially for the subsidiaries of the Australian banks.

2 SEE FIGURE 2 – PAGE 20

Many of the developments that we saw in the second half of the year, as discussed in the competition section, can be explained by funding constraints that began impacting the New Zealand financial market late last year. The first of these were the new Australian Prudential Regulation Authority (APRA) capital requirements that restricted Australian banks from lending more than 5% of level 1 tier 1 capital to their subsidiaries in New Zealand. This meant that, cumulatively, the big four banks in New Zealand will have to return billions of dollars in funding to their Australian parents over the next few years. These banks will have to then turn to the local deposit market or offshore wholesale markets to replace those funds. This explains some of the competition that we are seeing in the retail market. In addition, increased global uncertainty as a result of geopolitical issues around the globe this year have meant that access to cheap offshore funds began to dissipate as investors had to be compensated with higher-risk premiums for access to their funds. At the same time New Zealanders' appetite for borrowing was increasing.

On the other hand, increased competition with other competitors for local deposits is also putting pressure on funding costs as the banks compete to attract adequate funds from the local retail market.

3 SEE FIGURE 3 – PAGE 20

In addition, the new dual registration for small foreign banks, which has been in force since 21 December 2016, could lead to more competition, as foreign banks that are currently not systematically important will have the opportunity to enter the local market.

Many of the small foreign banks have expressed interest in applying for a branch licence, particularly the three Chinese banks. Executives of small foreign banks have stated that their interest in a branch license is the result of current funding limitations imposed by their parent companies, via directives, conditions of registration and/or the RBNZ's Orders in Council which restrict the level of related party borrowing and lending that can occur, and capital adequacy requirements. All these factors have prevented them from doing all the deals that they wanted to, especially those in the area of corporate lending, construction and infrastructure projects.

4 SEE FIGURE 4 – PAGE 20

In relation to the local retail deposit markets, the banking system noted that between the months of July to August it had witnessed a large outflow in deposits as investors were liquidating their deposit holdings in favour of other investment classes, whether they were investment property purchases, funds or shares. At the same time, the appetite for lending increased significantly, creating a gap that had to be funded offshore.

One other area that the banks identified as an issue this year is the spate of successive OCR cuts. Executives have commented that the OCR cuts placed them in a tough predicament in the public eye. They were unable to reduce deposit rates due to a decline in the volume of deposits, because of already low rates, and at the same time they could not reduce home loan rates any further as they were already under margin pressure and starting to hit ROE and ROI limits.

In the event that there are further OCR cuts, the banks have already intimated publicly that they will be unlikely to pass on the cuts to borrowers for reasons explained above. The Executives reiterated that contrary to publicly-held beliefs, the movements in home loan rates should be considered in the context of a myriad of factors, and not solely on the OCR movement. Factors to consider also include, but are not limited to, the banks' current funding mix (i.e. the combination of onshore and offshore funding), the availability of funds for immediate disbursement, and strategic goals (e.g. attracting only quality loans with the use of interest rate pricing).

5 SEE FIGURE 5 – PAGE 21

Executives from the banking industry have, in recent months, signalled the financial market to expect slower loan growth for the foreseeable future, and a rise in home loan rates, as increased funding costs persist through the upcoming year. While new loans will be funded by more expensive funds, it might be some time before the effect of the interest rate repricing comes through to the financials due to the current funding mix of existing interest-bearing liabilities (i.e. fixed vs. variable interest rate terms on borrowings).

Digitisation and disruptors

One area that we see digitisation having a profound effect on within the industry is in the use of branches. A banking expert from Massey University estimates that over a period of five years, approximately 150 branches of New Zealand's major banks have been closed.[3] The report does not mention if this was driven by the expansion of digitisation or digitisation replacing these services (which is a common theme).

As foot traffic into branches is on the decline, Executives are beginning to question the relevance of having branches, particularly in their current form. They have gone on to give an example of how today's typical customers are only visiting their branches one or two times year, as they move on to online banking to fulfil their daily banking needs. With that in mind, Executives have recognised that there is a need to transform their branding into one that stresses the use of online banking, via a device such as a mobile phone or a tablet, as the focus of their new brand image. For most people, at the moment the first thing that comes to mind when they think of a bank is often a bricks and mortar branch, and this is what Executives are hoping to change.

However, one local New Zealand bank argues that operating a branch is not necessarily a disadvantage and is keeping its branches open. The local bank is using branches to its advantage, after having listened to its customers about the kind of products/services that they value the most from their bank. What they have heard is that their customers are placing tremendous value in having a branch in their local community, and in developing long-term and close relationships with their personal banker by getting to know the branch staff, and dealing with the same staff on a consistent basis (as opposed to being served by a new staff member every couple of months due to high employee turnover). What it has been trying to achieve with the use of branches is to increase the level of personal contact with its customers, enhance the customer experience with a personal touch to every service delivered, and ultimately create customer loyalty.

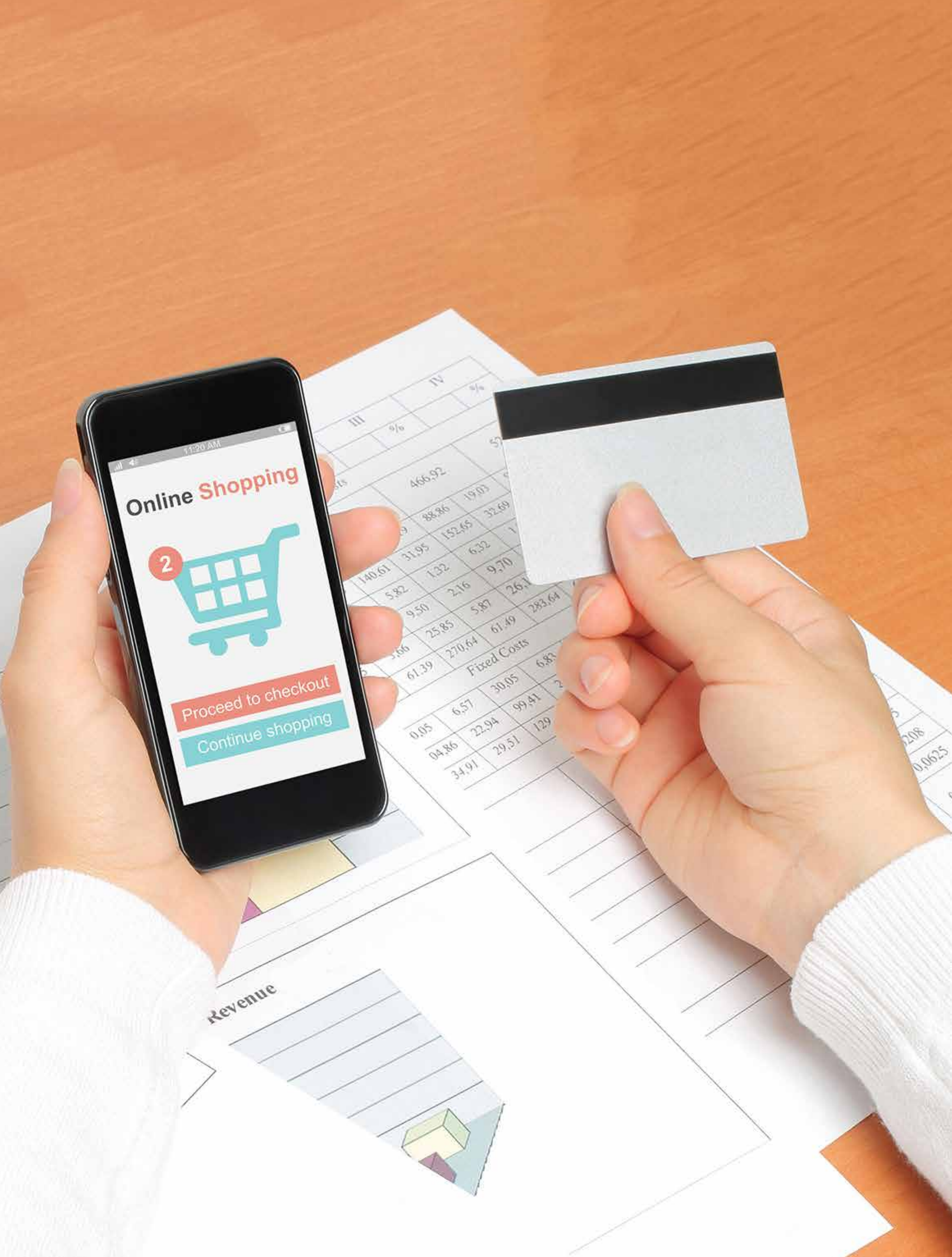
The Executive of the local bank does admit that their success in this area can be attributable to the fact that their main target market tends to be part of the older generation who may not be as technologically savvy, and their focus is on providing better customer service as opposed to profitability.

When asked about the topic of disruptors and how they see them developing in New Zealand, Executives are in agreement in saying that disruptors will likely emerge in the payment space. This is an area where they see the greatest potential for a Fintech disruptor to enter their industry, and to supplement it with tools and platforms that will enhance the user's purchasing experience with a more elegant form of interaction and shorter response times, with a reduction of the current costs. As New Zealand has one of the more efficient and advanced economies in the world, some Executives have questioned if there is sufficient margin available to entice Fintech companies to make a genuine effort in building an information technology (IT) application that will achieve the list of things that we have mentioned above. While most Executives think that New Zealand may not be a target in the first wave, they acknowledge they must look into and invest in similar technologies as the impact of these technologies will be global.

As the world around them changes due to new Fintech technologies, the Executives are not sitting idly by waiting for a disruptor to take away their margins or indeed their business. Many are in talks with Fintech companies to find common areas where they can work together and build an application/tool that will give them a competitive advantage against other banks.

Nearly all Executives see partnering as the way forward. In doing so, they have said that the biggest challenge so far has been to find the right Fintech company to partner with. What is happening is that they are noticing a significant number of Fintech companies that are developing and selling applications to other companies, only to find out later that they do not necessarily interact well with their in-house systems as they lacked the understanding of how their systems work. While it is easy to say that the banks need to establish partnerships with Fintech companies in order to survive impending disruption, it is also important that they are partnering with Fintech companies that have the right skills and knowledge to develop applications/tools that will seamlessly blend into their core IT systems.

Technology innovation will continue to change how banks operate. A KPMG report predicts that by 2030, digital transformation will drive an even deeper fundamental shift in banking – moving it from being hidden to completely invisible. However, it will be more intertwined in the lives of consumers than ever before. The KPMG report 'Meet EVA, the future face of the Invisible Bank' says that 'this Invisible Bank will be buried within a broader, more digital, connected way of life. Consumers will interact with a personal digital assistant'. According to this vision, large parts of the traditional bank could disappear. Customer service call centres, branches and sales teams, for large parts of the market, could be a thing of the past. The transition will not be easy. The winners will be those that are able to utilise their data, drive down costs, build effective partnerships with a broad range of third parties, and of course, those with robust cyber security.[4]


11:20 AM
Online Shopping
2
Proceed to checkout
Continue shopping
Fixed Costs
Revenue

As the banking industry begins to prioritise the adoption of new Fintech technologies and transition its business operations to online platforms, Executives see privacy and security as a key consideration for them. The topic of cyber security is continually discussed throughout the digital transformation process, even after the completion of its implementation. The issue of cyber security is focused on ensuring that all necessary and appropriate security policies and procedures are in place and are working effectively. While safeguarding customer privacy/data from potential cyber criminals is a crucial element of cyber security, equally important is ensuring that the new digital systems and channels being added are able to interact seamlessly with core IT systems. In a fast-changing technological world, cyber security risk has increased exponentially due to the complexity and the unpredictably of a cyber event, and as such, it remains on the top of the agenda for financial institutions.

Regulation in a continually changing risk landscape

It has certainly been another busy year for regulators as the RBNZ has introduced several policy initiatives and pieces of legislation. These include the dual registration policy for small foreign banks, the revision of LVR rules, updates to AML/CFT guidelines for banks and the publication of several consultation/discussion papers, including the stress-testing methodology for New Zealand incorporated banks, a proposal on the dashboard approach to quarterly disclosures for banks, and the review of the outsourcing policy for registered banks. Executives perceive that the RBNZ is becoming increasingly cautious about the banking system's liquidity and credit quality.

The RBNZ's apprehension in this area is understandable, given its role is to ensure the continued integrity of the banking industry by keeping exposures to internal risks to a minimum.

On 19 July the RBNZ published a consultation paper, proposing to increase LVR limits nationwide for both residential property investors and owner-occupiers. Within 48 hours of the release of the consultation paper, all of the major banks, including Kiwibank, responded by issuing statements announcing the immediate and voluntary adoption of the 60% LVR restriction on all new mortgage lending deals to property investors, as proposed by the RBNZ. With support from the major banks, the RBNZ confirmed the implementation of the proposed LVR restrictions, with the effective date of 1 October 2016. Many of the non-major banks, especially Executives of small foreign banks, have mentioned that the new LVR restrictions have not affected them operationally as they had only been doing loans at 60% LVRs or less. For small overseas banks, this restriction (i.e. 60% LVRs) has long been driven by directives from their offshore parents, as a measure to control credit risks from foreign operations.

The proposal for a revised outsourcing policy has become what is arguably the most debated issue facing the banking industry at the moment. This is largely due to the cost of its implementation, which the banks have initially estimated to be in the range of $10 million to $400 million.[5] However, Executives have emphasised that the full extent and scope of the proposal is still not entirely clear at this point in time.

While Executives understand the issue that the RBNZ is trying to address with its proposal, they argue that it will result in the duplication of administration services/costs that exist at the group level in the New Zealand sector, and are not convinced that bringing back-offices, which represent well-staffed centres of excellence, back onshore and that they will either result in benefits or actually be able to be replicated. Following strong feedback from the banking industry to the original proposal issued in August 2015, the RBNZ released a revised proposal in May 2016 to alleviate some of the concerns raised. In the revised May 2016 proposal, the RBNZ has since recognised the need to allow the outsourcing of certain non-essential functions, provided the bank has backup capabilities and is able to demonstrate direct control and the ability to operate the outsourced function (independent of related parties and/or its parent).

As an update to this issue, in February 2017, the RBNZ released a final policy paper concerning the revision of its current outsourcing policy. Although, no specific dates have been given as to when this would start. The RBNZ plans to hold another consultation on an exposure draft for a new BS11 (of The Banking Supervision Handbook). For a high level summary comparing the key features of the revised and original outsourcing policy, see appendix one of the 'Summary of submissions on the Consultation Paper'.[6]

Apart from the outsourcing review, the banks have expressed some interest in the capital and liquidity review that the RBNZ has planned for the upcoming year. The RBNZ has decided to regularly review its policy frameworks and make the necessary revisions to them, so as to remain relevant and appropriate in light of changes to the international regulatory standards and the industry environment.

The RBNZ said that it would consider whether there are benefits in harmonising New Zealand's approach with the liquidity standards developed by the Basel Committee on Banking Supervision. Another major change in this respect is the implementation of new Basel III requirements that are set to phase in during a six-year phase-in period, from 2013 to 2019. The RBNZ's review will also touch upon the new requirements to determine if adjustments to its liquidity policy will be required so that the standards of its policy frameworks are kept aligned with international standards.

With the upcoming capital and liquidity review, Executives are hopeful that the RBNZ will review the methodology by which the banks are required to calculate their capital ratios. The Executives explained that New Zealand's policy framework for capital requirements applies a more fundamentally conservative approach that those of APRA and Basel. Executives argue that if they had performed their capital ratio calculations based on methodologies under APRA and Basel, then they would have achieved a higher capital ratio due to the different calculation methodology.

Most recently, in December 2016, the RBNZ issued a policy paper confirming its decision to allow the implementation of a dual registration system for small non-systemic foreign banks. Non-systemic banks are banks that have not been identified as being systemically important to the overall financial stability of New Zealand. However, it is also important to point out that any bank wanting to avail itself of dual registration will have to meet certain stringent requirements before it can be approved for a branch registration license.

The bank is first required to provide a convincing argument as to why it requires a branch license (i.e. what activities does it plan to undertake under a branch license that it otherwise cannot or would have significant difficulty in doing so either as a subsidiary or through its parent). Additionally, it would also have to demonstrate an ability to identify the risks involved in operating a branch and construct a clear and effective plan on how it intends to either mitigate or address those risks.

The RBNZ did initially have some reservations about the dual registration system. The RBNZ believes that allowing a dual registration system could drive increased volatility in capital inflows and outflows, compromising New Zealand's financial stability. However, the RBNZ also sees the benefits of the use of a dual registration system, with better access to funding the key benefit with a branch structure is the ability to directly access capital markets more cheaply and easily than a local subsidiary, given a branch shares the parent's (typically higher) credit rating. Also, it may promote further efficiency and innovation, and better manage regulatory costs.

Survey participants are not fond of the fact that there is an increasing amount of regulation over the banking industry, due to the costs of compliance and resources required, at a time when they are seeking to innovate and where there are multiple pressures on resources, and they see regulatory compliance consuming a lot of these resources. The banks have accepted that this is part of doing business in an industry that represents a key supporting pillar to the financial stability of New Zealand's economy, and as such further regulation is to be expected, however, they are not anticipating any major legislative works or overhauls to come through RBNZ's pipeline.

Recent regulatory developments are seen as efforts by the RBNZ to fine-tune the current legislative frameworks, and many survey participants are of the opinion that all key/necessary regulations have now been put into place.

Key developments that the registered banks can look forward to in the upcoming year are as follows:

1. Following the International Monetary Fund's (IMF's) visit in August and November 2016, as part of its Financial Sector Assessment Program (FSAP), a formal report of key findings is expected to be published by the IMF in the first half of 2017. New Zealand was last reviewed under the FSAP in 2004.
2. As discussed above, the RBNZ will begin a review of its policy framework in the upcoming year. The review will be focused on capital and liquidity requirements that apply to locally incorporated banks in New Zealand.

Banks continue to look at and improve their approach to culture and conduct risk

Due to the lack of measurable outputs and its exclusion from balanced scorecards, it is easy to see why conduct risk may sometimes fail to get the right level of attention in corporations. Unfortunately, more often than not, conduct risk only gets the attention of Executives when inappropriate behaviours, whether by employees or industry competitors, are brought to the public's attention, and in today's environment, it can spread very quickly via the uncontrolled forum of social media. Even as conduct risk goes onto an executive's agenda, it is important that the focus on conduct risk is not quickly lost amidst the prominence of strategic goals that relate to profitability.

Dealing with conduct risk does not have to be an onerous undertaking if banks are able to embed it as a key pillar of their core business objectives. To translate this to business terms, this means having business goals that are first and foremost driven by the need to focus on understanding the customer's needs, and then developing suitable strategies and products to meet them. It is when the following is done out of order (i.e. developing products/services before getting a clear grasp of the customer's needs) that a banks runs the risk of either products/services that do not align with the needs of the customers.

Part of understanding the customer's wants/needs also involves recognising that the average person's notion of what customer service is today has changed. It has evolved to a point where the 'overall customer experience' has become the product that banks are trying to sell to their customers, and where the act of providing a service (i.e. customer service) is just a small component of the overall customer experience. It is also becoming apparent that banks not only have to worry about the repercussions of their activities but also about with whom they are being associated. In August, the funds industry (which includes some banks) was brought into the media spotlight when an investigation revealed that its default KiwiSaver schemes were either directly or indirectly investing in unethical companies that are involved in weapons manufacturing, tobacco, and nuclear energy.[7] Shortly afterwards, all of the banks investigated announced that they would review or divest from all such investments.[8, 9]

Additionally, Executives have also given the example of how the AML/CFT Act has expanded upon the concept of conduct risk by placing a burden of expectation upon the banking industry to know who their customers are (i.e. employment, family and financial background).

The rationale for this is that in knowing more about a customer, the bank should be in a better position to spot unusual transactions (i.e. money laundering) and escalate them for further examination in a timely manner.

Managing conduct risk is a complex job that involves a multi-layer approach as it involves a range of stakeholders. They include shareholders/owners, customers, suppliers, surrounding communities, and even other industry competitors. It also shows that the concept of conduct risk is encompassing a wider definition, as recent developments show that it is no longer just about the conduct of a firm and its employees, but also if the individuals/corporations that they associate with share the same values and beliefs that the community around them deems appropriate. The challenge going forward will be for banks to actively anticipate new issues that might arise from conduct risk that they might not have otherwise thought of, and ensure controls are in place to mitigate the risk. Other issues that conduct risk typically encompasses include collusion, anti-competitiveness, information privacy, and how effective the banks are in escalating and resolving conduct risk issues when they do appear.

One trend we did notice from talking to Executives was that they were surprisingly confident that their organisation was on top of conduct risk and felt it unlikely they would suffer the same issues other organisations, or indeed their parent had offshore. When one looks back at the list of issues in the industry over the past year, this confidence was surprising, as while New Zealand is yet to see a serious issue come to the market, there have been a number of matters that would fall into the conduct risk category. The question that we would ask is: is this confidence well placed?

Outlook of the New Zealand economy

A review of New Zealand's economy can often be a good indicator of the general health of the banking industry as it remains closely intertwined with several key industries, particularly the dairy and housing markets.

6 SEE FIGURE 6 – PAGE 21

Executives have noted that currently the New Zealand economy, while not a 'rock star' economy, is in good a shape and there are no current indications to say that a recession will come from inside New Zealand. New Zealand continues to have low unemployment levels, low interest rates, steady GDP growth of 3.0% for the year ended September 2016,[10] and its exporting and tourism industries are performing well. The one aspect that could impact locally is a fall in immigration, as this is bringing people (workforce) and investment into New Zealand. This is not something the industry will need to worry about just yet as New Zealand continues to see record-breaking net migration figures for 2016,[11] and even possibly for 2017. In reinforcing what we have heard from non-bank Executives, the banks also believe that should economic disruption impact New Zealand, it will likely come from global events that will have a flow-on effect in New Zealand. However, what they cannot definitively anticipate is what that event might be or when it would arrive in New Zealand. What we have seen in the interviews is a wariness and the return to a very risk-based view of the world and New Zealand economy by Executives and, if anything, together have a slightly cautious approach.

In analysing some of the internal matters facing New Zealand, it is noted that the latest statistics reveal unemployment rates to be at 4.9% for the September 2016 quarter,[12] the lowest since 2008. At that level, those listed as unemployed are likely people who are not equipped with the right skills that the economy requires at this time.

GDP growth this year was supported by a rebound in exports earnings that came mainly from wine, beef, lamb, fisheries, forestry, stone fruits, kiwifruit and dairy.

Moving onto the topic of dairy, despite having lost its spot as the largest earnings exporter to the tourism sector just over a year ago,[13] the dairy sector continues to be a key cornerstone of New Zealand's economy, with a direct contribution of 5-6% towards total GDP.[14] Since our last update in the June 2016 FIPS quarterly publication, the global dairy milk prices continued to deliver strong gains in the last quarter of 2016, with the Global Dairy Trade (GDT) index recovering by 21.58%[15] for the three-month period between October and December 2016. The GDT index rebounded by a staggering 54.60% between June 2016 and December 2016, compared to a 4.66% contraction during the first half of the year.[16] In its Global Dairy Quarterly Q4 2016 report, Rabobank attributes the return of milk prices during the second half of 2016 to the fall in milk supply by key European and Oceania markets.[17]

7 **SEE FIGURE 7 – PAGE 21**

Fonterra has since increased its forecast milk payout in November by 75 cents, to $6.50 to $6.60/kgMS (including dividends of 50-60 cents).[18]

Similarly, leading economists at the big four banks have also increased their forecast milk payout for the current 2016/2017 season to the range of $5.80 to $6.25/kgMS.[19] Economists at Rabobank expect a further recovery of global milk prices in 2017 due to supply constraints, as opposed to demand factors.[20] On another note, Fonterra's success in the international market has led to the introduction of winter milk premiums from the winter of 2017 onwards, so as to encourage additional milk production for a market that needs to be catered for throughout the year.

In the last couple of years, we have seen significant changes in the housing market with the implementation of tighter LVRs, the introduction of a capital gains tax on investment properties sold within two years (including the requirement for an IRD number and a local New Zealand bank account), the exclusion/restriction of foreign income in calculations, and the big four banks shifting their strategic focus from loan growth to maintaining/building capital levels. The most recent changes might have started to have an impact, as auction sale rates across the country have fallen notably in the last quarter of the 2016.

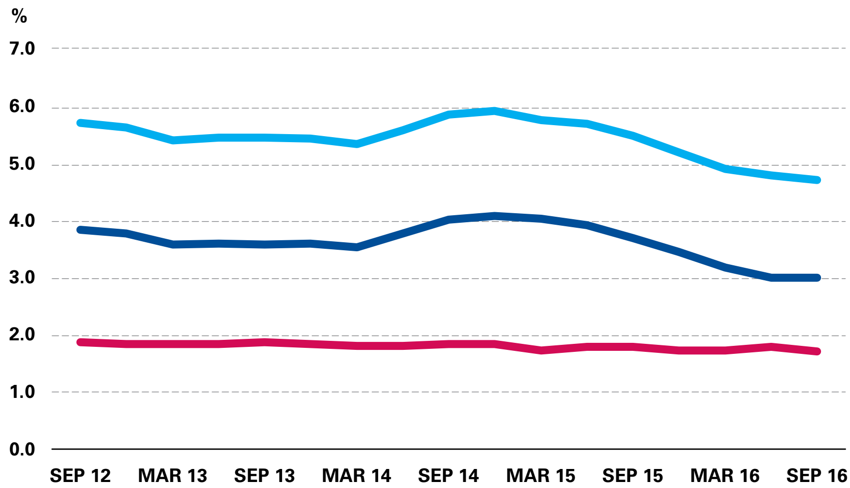
Despite the drop-off in sales, the median sale price of houses sold in December 2016 was $516,000, up 11% from December 2015.[21] It is anyone's guess how long the slowdown will last, if it was indeed caused by the latest round of cooling measures put in place, or if it will 'stick' this time round. However, we will not really know the answers to these questions until New Zealand is back from holiday and the economy is back in full gear.

When asked about the implementation of debt to income (DTI) tools, Executives are in unanimous agreement that the RBNZ's consideration of DTI measures are taking place a bit late in the cycle, as current DTI ratios have already exceeded levels that would have been considered ideal. According to Executives, an ideal DTI level would be in the range of 5 to 7. However, they say that most borrowers are already at levels of 9 to 12. In addition to this, the banks do sympathise with young families as the implementation of DTI restrictions could effectively prevent them from buying a house of their own, and this could be an unintended social consequence that the Executives feel that the effect might not have been adequately researched. The other issue raised with the enforcement of DTI measures is that it would require a clear, fair and explicit definition of what constitutes income and what constitutes debt, and this is likely something that the banking industry and regulators could find themselves at odds over. Meanwhile, the RBNZ is still waiting on its formal request to the government to be granted, that would give them statutory powers that would enable them to implement DTI restrictions, should they deem them to be necessary.[22]

With New Zealand being in a good position relative to the rest of the world, and largely uninterrupted by global events at the moment, Executives have indicated that this might be a good opportunity for the government to channel more of its resources into developing its ageing infrastructure. Executives have raised the issue of traffic congestion in Auckland and Wellington as a good example of drag upon our economic growth. Inadequate infrastructure in such cases would reduce economic productivity and could cause capacity constraints that might hinder future GDP growth.

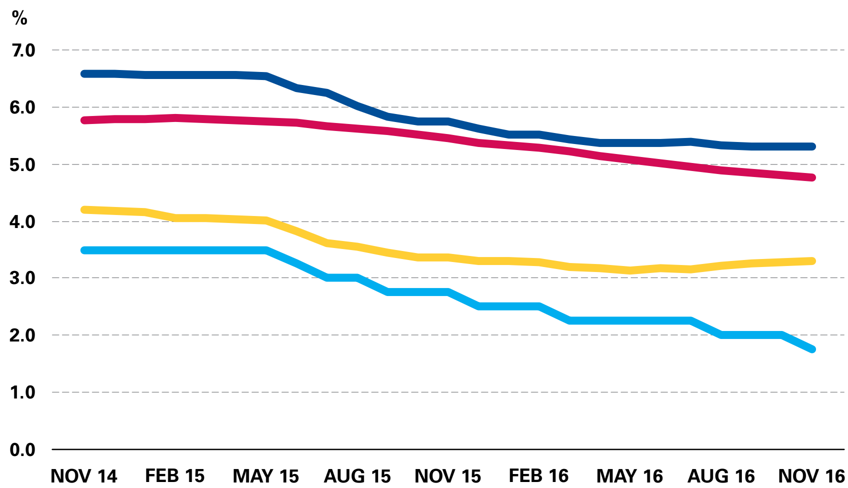
2 MAJOR BANKS: YIELD VS. COST OF FUNDING

- COST OF FUNDS
- SPREAD
- YIELD (OR RETURN ON INTEREST BEARING ASSETS)



3 SIX MONTH TERM DEPOSIT VS. FIXED AND FLOATING MORTGAGE RATES

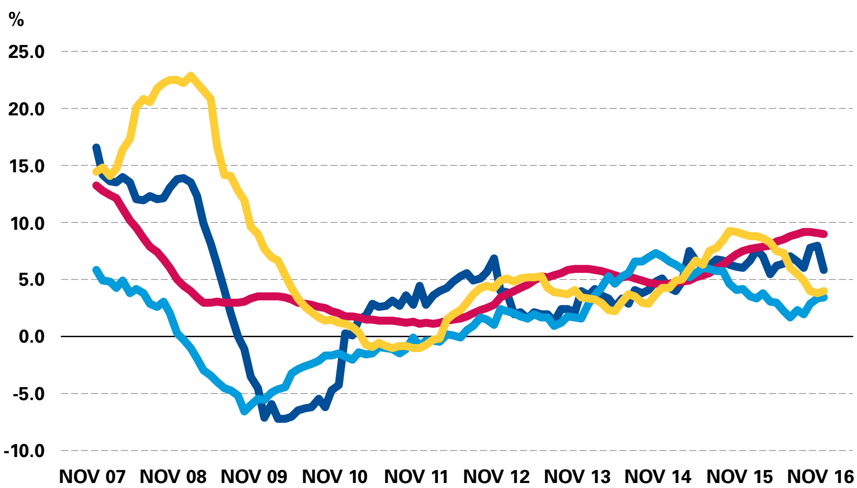
- EFFECTIVE FLOATING MORTGAGE RATE
- EFFECTIVE FIXED MORTGAGE RATE
- OCR
- SIX-MONTH TERM DEPOSIT RATE



SOURCE: RESERVE BANK OF NEW ZEALAND STATISTICS (B3)

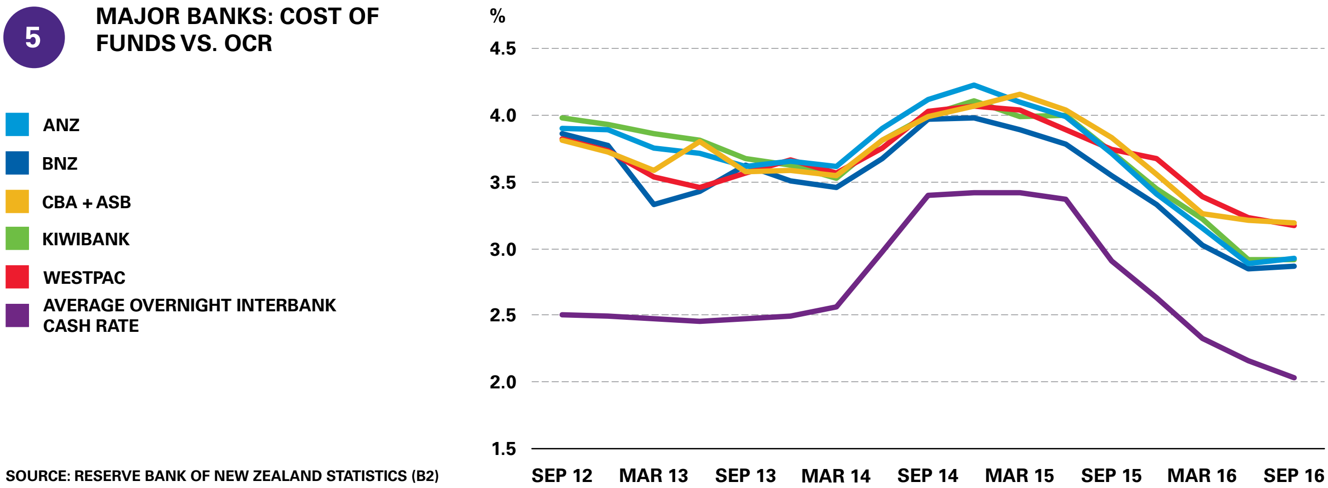
4 REGISTERED BANKS: LENDING GROWTH BY SECTOR

- BUSINESS
- HOUSING
- CONSUMER
- AGRICULTURE



SOURCE: RESERVE BANK OF NEW ZEALAND STATISTICS (C5)

5 MAJOR BANKS: COST OF FUNDS VS. OCR

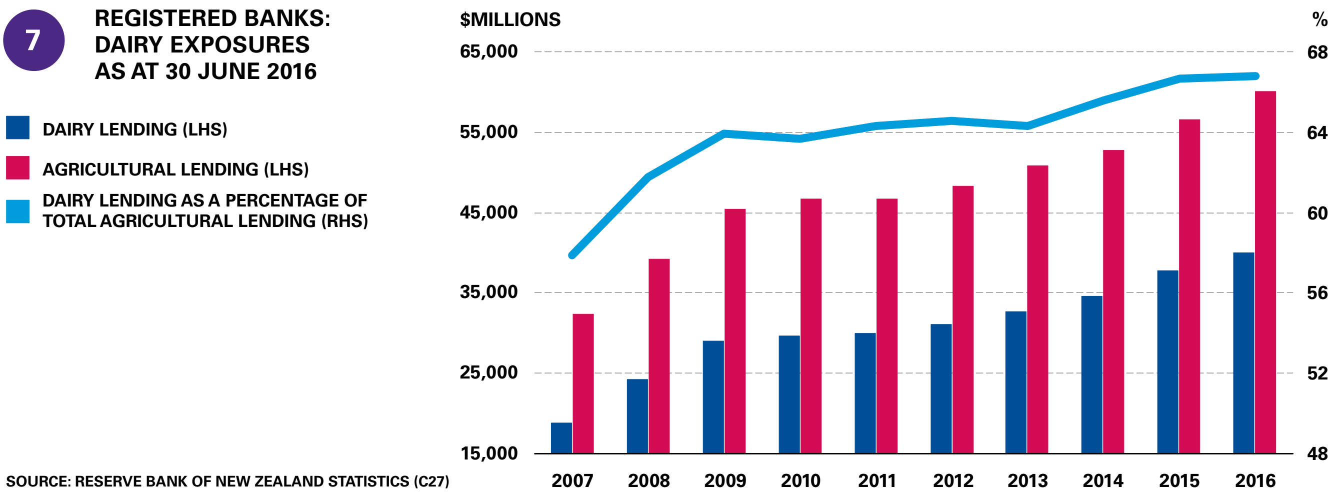


SOURCE: RESERVE BANK OF NEW ZEALAND STATISTICS (B2)

6 REGISTERED BANKS: SECTORAL ANALYSIS OF CREDIT EXPOSURES AS AT 30 NOVEMBER 2016

SOURCE: RESERVE BANK OF NEW ZEALAND STATISTICS (S7)

7 REGISTERED BANKS: DAIRY EXPOSURES AS AT 30 JUNE 2016



SOURCE: RESERVE BANK OF NEW ZEALAND STATISTICS (C27)

Registered banks - Timeline of events[23]

Jan. 2016

27th
Fitch Ratings downgrades the outlook of New Zealand's issuer default ratings from 'positive' to 'stable', but maintains its 'AA', sovereign rating. Simultaneously, Fitch Ratings revises New Zealand's banking sector outlook to 'negative'.

28th
The RBNZ leaves the OCR unchanged at 2.50%.

Feb. 2016

11th
BNZ acquires a 17% stake in Figured Limited, a cloud-based accounting software provider that caters primarily to agri-businesses.

16th
Westpac reaches an agreement with the Commerce Commission to refund over $4 million for overcharged overseas ATM card fees.

Mar. 2016

1st
The Commerce Commission completes its review on the level of competition within the dairy industry, and concludes that any deregulation of the Dairy Industry Restructuring Act 2001 (DIRA) would give Fonterra too much power in setting domestic farmgate milk prices.

4th
Moody's affirms the 'A1' long-term rating of all three New Zealand's Chinese banks, but downgrades their respective outlook from 'stable' to 'negative'. This reflects the change to their parents' outlook and the China's current sovereign rating.

10th
The RBNZ cuts the OCR by 25 bps to 2.25%.

16th
The RBNZ publishes a final report, detailing the result of the dairy stress test that began in late 2015.

Apr. 2016

27th
The RBNZ announces that a visit by the IMF in August and November this year can be expected, as part of the 'Financial Sector Assessment Programme'. The results of this assessment is expected to be published in a formal report by the IMF in early 2017.

28th
The RBNZ leaves the OCR unchanged at 2.25%.

May 2016

5th
Former BNZ employees, Ryan William Writ and Scott Alan McRobie agrees to a settlement of $250k with law enforcement, after having been uncovered for approving a loan for a personal investment property development. No criminal charges were filed.

23rd
The RBNZ releases a 2nd consultation paper on its outsourcing policy, with a revision to the initial proposal made on August 2015.

Jun. 2016

7th
The Co-operative Bank announces its partnership with Unisys, a global IT company that provides leading-edge IT security to help modernise its core IT infrastructure and capabilities.

9th
Westpac and ANZ stops lending to foreign property buyers with overseas income. Overseas income by New Zealand citizens and residents will still be considered, but with a tighter lending criteria.

The RBNZ leaves the OCR unchanged at 2.25%.

10th
BNZ is the third major bank in New Zealand to halt lending to foreign borrowers.

13th
ASB will no longer lend to borrowers with foreign income, unless the individual is a New Zealand citizen or resident.

The banking sector in New Zealand is recognised as being one of the most digitally innovative in the world, according to Forrester, a top global market research company.

Jul. 2016

19th
The RBNZ releases a consultation paper, proposing to increase LVR limits nationwide on all new mortgage lending.

20th
ANZ, ASB and Westpac publicly announce that they will voluntarily not accept new loan applications from property investors that do not meet the 60% LVR restriction. However, all pre-approvals will still be honoured, unless expired.

21st
BNZ and Kiwibank are the last of the major banks to voluntarily adopt stiffer restrictions for new lending to property investors, requiring at least a 40% deposit.

22nd
China Construction Bank receives an additional $140 million in funding from its Chinese parent in exchange for 100 million capital shares, raising its capital balance to roughly $200 million.

26th
In relation to an announcement made on June 3, The Co-operative Bank raised $15 million through the offer of unsecured debt securities. The amount is half of what it initially sought to raised (i.e. $30 million). The subordinated notes will be issued on 28th July 2016.

27th
Westpac's Australian parent, Westpac Banking Corporation, express its offer to borrow at least NZ$250 million from retail investors in New Zealand in exchange for unsecured subordinated fixed rate notes, subjected to unlimited oversubscriptions. The funds raised will be used to meet its APRA capital requirements.

Aug. 2016

2nd
Heartland Bank establishes a Share Sale Plan for shareholders with holdings of less than 10,000 shares.

11th
The RBNZ cuts the OCR by 25 bps to 2.00%.

19th
Moody's changes the long-term credit rating outlook of the big 4 New Zealand banks from 'stable' to 'negative', bringing it in-line to that of their Australian parents.

23rd
ANZ intends to offer 5 and 7 year unsubordinated unsecured bonds, with unlimited subscription, in a bid to raise at least $100 million for each term.

25th
S&P's expresses concern over the growing use of interest-only mortgage loans in New Zealand, citing that a fall in house prices could be 'particularly problematic'.

29th
Deutsche Bank AG relinquishes its New Zealand banking licence with the RBNZ, completing the wind-up of its New Zealand operations (which Deutsche Bank AG announced last year).

Sep. 2016

1st
Westpac launches CashNav app, the product of a collaboration with a New York Fintech company called 'Moven'.

5th
The Co-operative Bank sees their long-term issuer default rating by Fitch Ratings, upgraded by a notch to 'BBB'.

11th
Kiwibank increases its phone banking fees in a bid to encourage customers to use its online banking services for minor inquiries/matters.

22nd
The RBNZ leaves the OCR unchanged at 2.00%.

The RBNZ publishes a policy paper, summarising the feedback received from its consultation on the 'Publication of Submissions'.

23rd
The RBNZ releases its consultation paper on its proposed dashboard approach to quarterly financial disclosures by locally incorporated banks.

Oct. 2016

1st
New LVR rules comes into effect, restricting mortgage lending to residential property investors across New Zealand with LVR's greater than 60% to no more than 5%, and no more than 10% to owner-occupiers with LVR's greater than 80%.

5th
The class action lawsuit brought against ANZ New Zealand by 'Fair Play on Fees', citing unreasonable late credit card payment fees and unarranged overdraft fees, has been settled out-of-court settlement, with ANZ not having to admit to any fault.

7th
In a partnership with Xero, Callaghan Innocation and Creative HQ, Kiwibank launches New Zealand's first Fintech Accelerator, called the 'Kiwibank Fintech Accelerator'. It is a programme that aims to fund and support the growth of Kiwi Fintech start-ups.

9th
ANZ announces that from November onwards, customers will be given the option to 'opt-out' of unarranged overdrafts. ASB and BNZ are the only two other major banks in New Zealand that offers its customers such an option.

11th
Heartland Bank's 'BBB' long-term issuer credit rating, with a stable outlook, is affirmed by Fitch Ratings.

12th
BNZ confirms that it is currently considering plans to restructure parts of its business.

13th
ANZ becomes the first bank in New Zealand to offer Apple Pay for customers with a Visa Debit or personal ANZ Visa credit card.

17th
Kiwibank partners with 'i2c', a global provider of personalised payment and integrated commerce solutions, to develop prepaid gift and travel card programmes that provide features that enhances the payment experience.

25th
The RBNZ announces the release of formal OCR projections from November onwards. These projections will be incorporated as part of its Monetary Policy Statement releases.

28th
ANZ announces a reduction in several of its fees, but claims that it is not related to the class action lawsuit by 'Fair Play on Fees' that was settled out-of-court earlier this month.

31st
NZ Post announces the completion of the partial sale of Kiwi Group Holdings Limited (Kiwibank's holding company) to NZ Super Fund and Accident Compensation Corporation (ACC). The sale was initially proposed on 6 April 2016.

Nov. 2016

2nd
New Zealand's unemployment rate falls to 4.9% for the three months ended 30 September 2016, a first since 2008.

3rd
Following its expression of intent on 18 October 2016, ASB confirms the offering size of 'ASB Notes 2' to be $375 million. ASB has issued a warning that 'ASB Notes 2' is a relatively complex financial product that is not suited for the average investor.

7th
The Co-operative Bank launches its new 'fair rate' credit card, charging an interest rate of 12.95% for both purchases and cash advances, all for an annual fee of $20. The Co-operative Bank claims it to be the lowest interest rate of any other credit cards offered by New Zealand banks.

10th
ASB partners with Paymark to launch online EFTPOS.

The RBNZ cuts the OCR by 25 bps to 1.75%.

15th
BNZ changes the manner in which it calculates interest on late credit card payments. The changes brings them in-line with how interest is calculated at ANZ and Westpac.

18th
ASB increases its 'ASB Notes 2' offering size to $400 million, the maximum amount as stipulated by its disclosure statement. The 'ASB Notes 2' will be issued as scheduled on 30 November 2016.

28th
RBNZ formally warns TSB Bank for failing to review and to keep its anti-money laundering risk assessment up to date, between the period of 30 June 2013 and 9 June 2016. TSB agrees to take immediate steps to remedy the issue.

Dec. 2016

1st
BNZ is the first bank in New Zealand to offer Google's Android Pay service.

8th
The Co-operative Bank issues an additional $30 million in subordinated notes to retail investors, in a bid to shore-up its capital position.

9th
RBNZ orders an independent review of Westpac's capital model, after the release of its latest quarterly disclosure revealed that it had breached its conditions of registration.

12th
Heartland Bank announces its intention to raise up to $30 million in new capital to support growth and digital strategy. $20 million will be raised through a placement, while the remaining $10 million will be raised through its Share Purchase Plan.

13th
Heartland Bank completes its $20 million equity placement, for $1.46 per share.

15th
Fonterra establishes a 1.5 billion Yuan (approx. NZD$216 million) facility agreement with Bank of China, diversifying the funding sources of its Chinese operations.

Statistics New Zealand reports annual GDP growth of 3.0% for the year ended 30 June 2016.

21st
Following a consultation held in June, the RBNZ has published a policy paper confirming its stance to allow dual registration for small foreign banks that are not systemically important to New Zealand's financial stability.

23rd
Fonterra introduces a new price premium for winter milk contracts beginning for the winter of 2017.

Jan. 2017

11th
Industrial Commercial Bank of China joins the New Zealand Bankers' Association as its 16th member.

20th
S&P's affirms New Zealand's 'AA' sovereign foreign currency long-term rating.

31st
Heartland Bank partners with Spotcap, an online lender for SMEs, providing it with a funding facility (undisclosed) to support its growth strategy in Australia.

Feb. 2017

1st
Westpac announces a reduction in fees for several of its products and services.

2nd
RBNZ publishes the finalised policy paper concerning its review of the outsourcing policy for registered banks.

Registered banks – Sector performance

Profits down driven by challenging market conditions

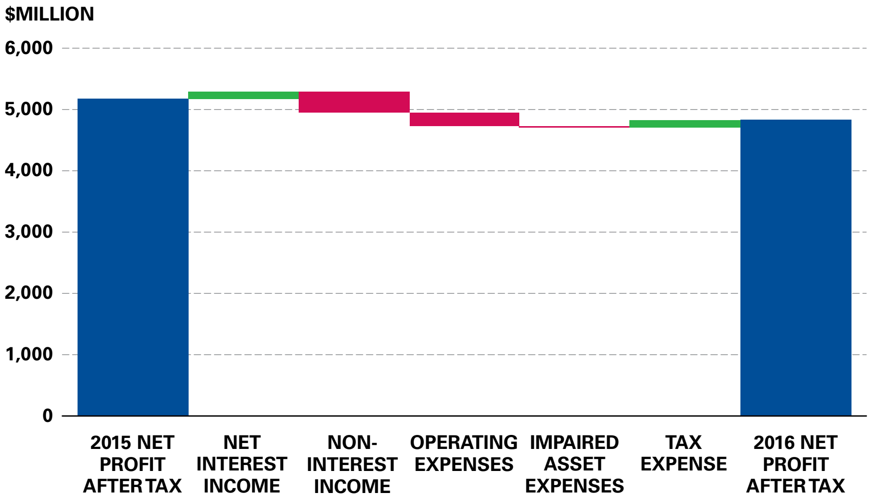
This past year has proven to be a challenging one for the banking sector as net profit after tax (NPAT) for the year was down on last year, decreasing by $334.38 million (6.46%) to $4.84 billion (see Figure 8). The current year's result highlights that record profits seen in previous years have come under pressure due to competitive pressures, resulting in margins being squeezed, and volatility in global markets making funding both more difficult and more expensive to raise, all at a time when both loan impairments and operating expenses are rising.

The decrease in profitability is largely attributable to a $350.20 million reduction in non-interest income and an increase of $223.42 million in operating expenses (including amortisation), which was offset by modest growth in net interest income of $127.41 million.

The 11.19% reduction in non-interest income, as a result of a decline in trading income and unfavourable fair value/hedging movements over financial instruments, had the largest impact on profitability. This income statement line is volatile, and with the exception of CBA, the other four major banks (ANZ, BNZ, Kiwibank and Westpac) saw a $520 million decrease in non-interest income.

On a more positive note, 10 out of 21 survey participants reported improved profitability for the year, which contributed an additional $134.03 million to this year's NPAT. Among these 10 survey participants, CBA was the only major bank that saw higher NPAT levels for this year with 4.25% ($37 million) NPAT growth to $908 million. CBA noted in its press release,[24] that the positive results were a product of sustained growth in key market segments and a continued focus on providing exceptional customer experience, citing an increase in sales made through digital channels as an example of this. These sales have more than doubled over the past two years as a result of improving mobile and digital experiences.

8 MOVEMENT IN NET PROFIT AFTER TAX



Operating expenses increased by $223.42 which also had a noticeable impact on profitably. An increase in amortisation of goodwill and other intangibles accounted for $60.81 million of the growth in operating expenses.

Between the major banks, ANZ and BNZ stood out with decreases in NPAT of $229 million (12.93%) and $125 million (12.04%), respectively. ANZ's reduction of NPAT can be attributed to a $325 million decline in non-interest income coupled with a $71 million increase in impaired asset expense, against net interest income growth of $149 million and a $105 million reduction in taxes. Similarly, BNZ's $125 million decrease in NPAT is mainly the result of a $185 million decrease in non-interest income and a $26 million growth in operating expenses (excluding amortisation), offset by a $22 million increase in net interest income and a reduction of impaired asset expense and tax expense of $8 million and $54 million, respectively. Although Westpac did see a decrease of $43 million in NPAT, this was mainly due to a $26 million increase in impairment charges and an increase in operating expenses (including amortisation) of $10 million.

Of the non-major banks, TSB Bank had the largest NPAT increase of $36.05 million (141.26%). TSB attributed its strong financial performance this year to the growth strategy of the bank supporting the launch of a new suite of transactional, savings and investment products to align their product offerings with perceived customer needs.[25] A reduction of impairment expenses also had an impact on the positive results, which saw TSB reporting a credit impairment gain of $8.72 million in the current year, including a $13.71 million write-back of a Solid Energy provision as the result of a revaluation of this debt.

TABLE 4: MOVEMENT IN INTEREST MARGINS	2016	2015	Movement
Entity	%	%	(bps)
Australia and New Zealand Banking Group Limited – New Zealand Banking Group	2.22%	2.26%	-4
Bank of Baroda (New Zealand) Limited	3.48%	3.73%	-25
Bank of China (New Zealand) Limited	2.21%	n/a	n/a
Bank of India (New Zealand) Limited	3.67%	4.21%	-54
Bank of New Zealand	2.19%	2.30%	-11
China Construction Bank (New Zealand) Limited	1.48%	n/a	n/a
Citibank, N.A. New Zealand Branch	1.69%	1.93%	-24
Commonwealth Bank of Australia New Zealand Banking Group	2.14%	2.30%	-16
Deutsche Bank AG, New Zealand Group	-3.03%	1.66%	-469
Heartland Bank Limited	4.79%	4.89%	-10
Industrial and Commercial Bank of China (New Zealand) Limited	0.89%	0.82%	7
JPMorgan Chase Bank, N.A. New Zealand Branch	0.85%	0.77%	8
Kiwibank Limited	2.07%	2.12%	-5
Kookmin Bank Auckland Branch	1.24%	1.66%	-42
Rabobank Nederland New Zealand Banking Group	2.30%	2.62%	-32
Southland Building Society	2.72%	2.91%	-19
The Bank of Tokyo-Mitsubishi UFJ Limited, Auckland Branch	0.37%	0.47%	-10
The Co-operative Bank Limited	2.71%	2.88%	-17
The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch	1.85%	1.82%	3
TSB Bank Limited	2.09%	2.19%	-10
Westpac Banking Corporation – New Zealand Division	2.12%	2.29%	-17
Sector Average	**2.15%**	**2.28%**	**-13**

n/a = not available

A summary of the financial performance of the survey participants was as follows:

- net interest income grew by a further $127.41 million (or 1.36%), to reach $9.49 billion;
- non-interest income saw a reduction of $350.20 million or 11.19%, declining to $2.78 billion;
- operating expenses (including amortisation) were up $223.42 million (4.56%), to $5.12 billion;
- impaired asset expense deteriorated by $21.59 million (or 4.93%); and
- tax expense was down by $133.42 million (6.75%), to $1.84 billion.

It is noted that certain prior year figures reported by some survey participants have been restated in the current year's financial statements. Unless otherwise stated within the commentary, all prior year figures utilised for the purpose of our analysis and calculation of ratios correspond to the original prior year balances reported in the prior year financial statements of the survey participants affected. Had the restated prior year balances reported in the current year's financial statements been utilised in this survey, some of the calculations of ratios and movements would have differed from the ones reported in this analysis. See endnotes 37 to 42 for more information about the entities affected.

TABLE 5: REGISTERED BANKS – DERIVATIVE CONTRACTS

Entity	Year	Interest rate contracts					Exchange rate contracts			
		Forwards	Swaps	Futures	Options	Total	Forwards	Swaps	Options	Total
ANZ	2016	41,507	1,170,478	78,988	3,969	1,294,942	63,473	144,501	4,627	212,601
	2015	*24,633*	*1,130,414*	*45,407*	*2,045*	*1,202,499*	*75,930*	*130,093*	*3,690*	*209,713*
BNZ	2016	14,351	395,083	224,541	322	634,297	64,487	49,047	6,004	119,538
	2015	*3,560*	*442,045*	*242,715*	*183*	*688,503*	*81,395*	*47,818*	*6,456*	*135,669*
CBA + ASB	2016	4,850	46,388	2,828	499	54,565	6,797	0	243	7,040
	2015	*14,477*	*33,574*	*1,250*	*82*	*49,383*	*7,365*	*2,713*	*315*	*10,393*
Kiwibank	2016	1,400	35,281	325	0	37,006	945	41	34	1,020
	2015	*1,800*	*37,506*	*1,075*	*0*	*40,381*	*978*	*36*	*37*	*1,051*
Westpac	2016	1,225	257,354	15,273	1,181	275,033	17,295	51,204	0	68,499
	2015	*112*	*350,798*	*8,821*	*215*	*359,946*	*27,540*	*46,538*	*0*	*74,078*
Total	**2016**	**61,933**	**1,869,303**	**321,630**	**5,971**	**2,295,843**	**152,052**	**244,752**	**10,874**	**408,698**
	2015	***44,582***	***1,994,337***	***299,268***	***2,525***	***2,340,712***	***193,208***	***227,198***	***10,498***	***430,904***

Margins continue to contract

The banking sector saw net interest margins (NIM) fall by 13 bps, from 2.28% to 2.15% in 2016, despite an increase in net interest income of 1.36% ($127.41 million) for the year (see Table 4). The decline in NIM for the banking sector was the result of a prevailing low interest rate environment and strong levels of competition, which continue to put downward pressure on lending margins. Out of the 19 survey participants, 16 reported a decline in NIMs for the year, and a further two entities – Bank of China and China Construction Bank – did not have comparatives.

This year, Deutsche Bank had the largest NIM drop of 468 bps to -3.03%, followed by Bank of India and Kookmin Bank with reductions of 54 bps and 42 bps, respectively. The decrease in NIM for Deutsche Bank can be associated with the winding up of its operations in New Zealand which led to a $96 million decrease in net interest income, resulting in a total net interest income loss of $63 million.

All of the five major banks also saw reductions to their NIMs for the year, with Westpac seeing the largest decrease of 17 bps, followed by CBA, BNZ, ANZ and Kiwibank, with decreases in the range of 16 bps to 4 bps. This range, however, is reduced to 12 bps to 4 bps if restated prior year figures were used for BNZ and CBA. Using restated 2015 comparatives, CBA's NIM had only contracted by 12 bps, decreasing from 2.26% (prior year restated NIM) to 2.14% in the current year. Despite declining NIMs, four major banks had a combined increase of $210 million in net interest income, with Westpac being the exception with a decrease of $7 million. The largest increase in net interest income came from ANZ, which was the result of a $796 million (17.54%) reduction in interest expense offset against a $647 million (8.72%) decrease in interest income. NIMs for the major banks remain clustered in the range of 2.07% to 2.22%.

Heartland Bank continues to have the strongest NIM at 4.79% due to the niche market in which they operate, particularly in the areas of reverse mortgages, asset financing and working capital markets.

However, it is important to point out that the NIM of 4.79% includes a 2015 pre-amalgamated interest earning assets figures within the calculation. Using 2015 restated amalgamated figures, Heartland Bank would have achieved normalised NIM of 4.41%, which is still the strongest in the banking sector.

The yield on lending continued to tighten due to the intense competition in lending assets, particularly in the area of residential mortgages, in addition to customers' preferences for lower margin fixed rate loans at a time when it is perceived that interest rates are at a low point in the cycle. The proportion of floating to fixed rate loans has continued to decrease in the past year by an additional 167 bps, to 22.76% as at November 2016.[26]

9 SEE FIGURE 9 – PAGE 32

There is a clear preference for one and two-year fixed rate loans, as they comprise almost two-thirds of total mortgage lending (66.79%).[27]

As a result, the increase in interest-earning assets of 6.85% did not translate into higher interest income as interest income decreased by 5.79% to a total of $22.07 billion.

The five major banks saw a decrease in interest income that amounted to $1.46 billion. The most significant decreases came from ANZ and BNZ, with a decline of $647 million and $393 million, respectively. Surprisingly, 12 of the 21 banks surveyed reported positive growth in interest income of $146.68 million collectively. This was, however, undone by the significant reductions from the major banks.

Despite lower interest income, the reduction in interest expense of 10.55% has positively impacted net interest income levels, which have increased by 1.36% to $9.49 billion.

Margins will continue to be under pressure in this low-interest rate environment as lending continues to grow. Additional downward margin pressures will be felt from increases in wholesale funding costs and competition for deposits (see the Funding mix section for further analysis). Banks, borrowers and depositors alike will face some interesting times as we move into 2017, with there being little likelihood of any OCR cuts being passed on, and further pressure on funding availability and rates. Banks are already warning of increasing interest rates for 2017.

Decrease in non-interest income impacted by market volatility

Unfavourable valuation adjustments and lower treasury earnings have negatively impacted profitability for the banking sector, contributing to a $350.20 million (11.19%) reduction in non-interest income.

Of the 21 survey participants, nine reported lower non-interest income for this year when compared to our previous survey, with three participants reporting a net loss from non-interest income activities. The decrease in non-interest income was primarily driven by the major banks, with four of them contributing a decrease in non-interest income of $520 million. CBA was the exception, delivering an additional $76 million (this reduces to $47 million if restated 2015 comparatives are used). CBA's growth in non-interest income is largely attributed to a $15 million reduction in losses from hedging instruments, a $11 million increase in funds management income, and an additional $16 million increase in other operating income.

Volatility in global markets, together with changes to a valuation methodology of financial instruments, had a significant impact on the non-interest income for ANZ as it reported a decrease of $325 million (28.09%). The reduction in non-interest income by ANZ was primarily resulting from a $250 million decrease in net trading gains and a $102 million decrease in income from hedging instruments. ANZ noted in its press release that changes to the methodology for credit valuation adjustments (CVA) in determining the fair value of derivatives, in order to align itself with evolving market practice, has negatively impacted its results this year.[28] BNZ's financials told a similar story, reporting a weaker market performance which resulted in a reduction of $185 million (26.54%) in its non-interest income, driven by a $90 million decrease in trading income from interest rate derivatives, additional losses from hedge accounting and trading derivatives that were $47 million higher, and a $92 million loss from fair value movements.

In relation to the other banks, Rabobank had the largest reduction in non-interest income of 45.84% ($16.56 million) when compared to the rest of the survey participants, derived from higher hedge accounting losses which were $29.5 million more than last year, resulting in a net loss of $52.69 million for non-interest income. This was due to a change in the measurement of hedging items for Rabobank for the financial year for 2016. Using restated the financial year comparatives for 2015 would have meant that Rabobank had a larger decrease in non-interest income of $18.54 million (54.30%). TSB Bank's reduction in non-interest income of 24.14% ($5.09 million) was due to income from 'investment in associate – held for sale' being no longer included in TSB Bank's financials, as it has since been transferred to a new group structure under the TSB Community Trust. Excluding the income effect from 'investment in associate', non-interest income for TSB increased from $15.45 million to $16.01 million.

Funding mix

Funding costs (interest expense/average interest bearing liabilities) for the banking sector faced a contraction of 62 bps, decreasing from 3.87% to 3.25%. Of the 21 banks, 12 reported a decrease in funding costs. The decrease in funding costs for the banking sector is the result of a 10.55% ($1.48 billion) reduction in interest expense, despite an increase in interest-bearing liabilities of $24.27 billion (6.46%) to $399.82 billion.

5 **SEE FIGURE 5 – PAGE 21**

While the results of these figures may initially seem to contradict recent remarks made by the Executives about rising funding costs, it is important to point out that these figures do not necessarily reflect the current situation within the funding market due to the disparity of the survey participants' year-end balance dates. This is particularly true for disclosure statements of non-major banks that have a year-end date that falls between 31 December 2015 and 30 June 2016, when funding costs were lower than they are now. Comments made by Executives in relation to rising interest costs relate more to the second half of 2016, and into 2017.

It is noted that the decrease in funding costs was primarily driven by the major banks that saw decreases in the range of 50 bps to 90 bps. Citibank and The Bank of Tokyo-Mitsubishi were the only other participants that disclosed lower interest expense levels, with decreases of $3.44 million and $18.38 million, respectively.

The decrease in funding (as a percentage) for the major banks was the result of the combined effect of lower interest expense levels and larger interest-bearing liabilities. It is noted that the increase in interest bearing liabilities among four of the major banks was substantially driven by higher levels of customer deposits and other borrowings.

The November 2016 RBNZ *Financial Stability Report* highlighted that since 2015, credit growth has increased, but household deposit growth has slowed, which has caused the gap between credit and household deposit growth levels to widen. In an attempt to close the gap between credit and household deposit growth, banks have begun to increase lending and deposit rates, which have resulted in higher deposit rates towards the end of 2016.

10 **SEE FIGURE 10 – PAGE 32**

The report also notes that the increase in funding costs, which has been passed on to borrowers through higher lending rates, may dampen credit growth and, therefore, narrow the gap between deposit and credit growth. However, if the gap between credit and household deposit growth continues to persist, banks will be required to increase market funding, adding to the estimated $40 billion of market funding to be rolled over in the medium term (according the November 2016 RBNZ *Financial Stability Report*).[29]

Competition within the local deposit market will continue to intensify as banks look to strengthen their funding mix and source their funding from more stable sources, such as household deposits and long-term market funding. However, given the small size of the domestic funding market, it is expected that a large proportion of the funds required will be raised from offshore markets. With increased volatility in the global financial market for the foreseeable future, further increases in funding costs can also be expected. One of the questions raised with Executives was whether the decrease in deposits experienced by some banks was the beginning of a structural change or more of a blip. Some Executives speculated that it was the beginning of a move away from deposits, caused in part by a greater flow of money into KiwiSaver and other investments, which was caused partly by the low deposit rates and partly by consumer preference in the younger demographic.

Lending asset continues to gain momentum

Over the past year, total assets for the banking sector have increased by $32.85 billion (or 7.03%), reaching a total of $500.32 billion for the sector. With lending growth for the year at $29.66 billion (or 8.10%), this was observed to be the fastest pace in growth during the last eight years and it took total loans to $395.71 billion.

11 **SEE FIGURE 11 – PAGE 32**

Strong lending growth was made possible by a rising housing market as the total value of New Zealand's housing stocks climbed to a value of just over $1 trillion for the year ended 30 September 2016, an increase of 16.17% during the year.[30]

All five major banks reported increases to their loan books in the range of 5.46% and 9.33%. In total, the major banks account for over 88.01% of the $29.66 billion in new lending for the year. With $6.47 billion in additional lending, CBA had the largest dollar increase in gross loans and advances, which were attributable to strong lending growth across all key portfolios, including business, commercial, rural, personal and home lending.

Loan growth between the big four banks appears to be equitably distributed, as ANZ, BNZ and Westpac achieved lending growth of $6.28 billion, $6.24 billion and $6.03 billion, respectively. BNZ's re-entry to the broker market meant that they had an additional $1.8 billion in home loans written through brokers this year.[31]

With the exception of Bank of China (due to an absence of prior year comparatives), the Chinese banks had the largest percentage increases in loan growth as they continued to establish their foothold in the New Zealand market. China Construction Bank and ICBC saw loan book growth of 7,919.15% ($303.15 million) and 342.27% ($294.96 million), respectively.

Of the 21 survey participants, only three banks reported decreases in gross loans and advances this year, including Deutsche Bank, Kookmin Bank and HSBC.

In terms of gross loans and advances, ANZ continues to dominate the lending space with a market share of 30.65%, down by 77 bps from 31.42% last year. Westpac's market share remained fairly stable with an increase of 9 bps to 19.21%, while BNZ and CBA saw the largest increases of the major banks of 17 bps and 22 bps, to 18.93% and 19.16%, respectively.

The composition of lending exposures remains largely unchanged from last year, with mortgage exposures being the single most dominant component of the banking sector's loan book. According to RBNZ data, mortgage lending represents 53.05% or $227.74 billion of total lending in the sector.

6 SEE FIGURE 6 – PAGE 21

Based on the most recent RBNZ data, dairy lending by the banking sector continues to grow, but at a slower pace of 6.18% ($2.33 billion) for the year ended 30 June 2016, compared to last year's growth of 9.25% ($3.20 billion).

Despite the dairy downturn earlier in the year, growth in dairy lending remains largely in-line with total lending growth in the agricultural sector as the proportion of dairy lending to total agricultural lending remains consistent at 66.77% (66.69% in 2015).

7 SEE FIGURE 7 – PAGE 21

Across the board, the majority of the banks have enjoyed strong lending growth this past year despite the threat of increasing competition from new market entrants and non-bank lenders. Going into 2017, lending growth will be challenged due to pressures on the funding side of the balance sheet. This means that the funding gap between local deposits raised and loans lent will have to be filled by funding from overseas sources, which is typically more expensive. The focus for lending growth will be on deals that provide an appropriate return. In addition, lower lending growth is to be expected in the near future, due to increased LVR restrictions by the RBNZ, restrictions of lending activities involving foreign borrowers and the voluntary exclusion of overseas income when performing debt servicing calculations by the major banks and some others. There will also be an increased emphasis on deals that provide good margins at risk levels that are appropriate, particularly as the banks' funding tightens.

Asset quality remains strong

Asset quality indicators show that total provision (i.e. collective and specific provision), as a percentage of average gross loans and advances, is currently sitting at 0.55%, a 3 bps improvement from the previous year.

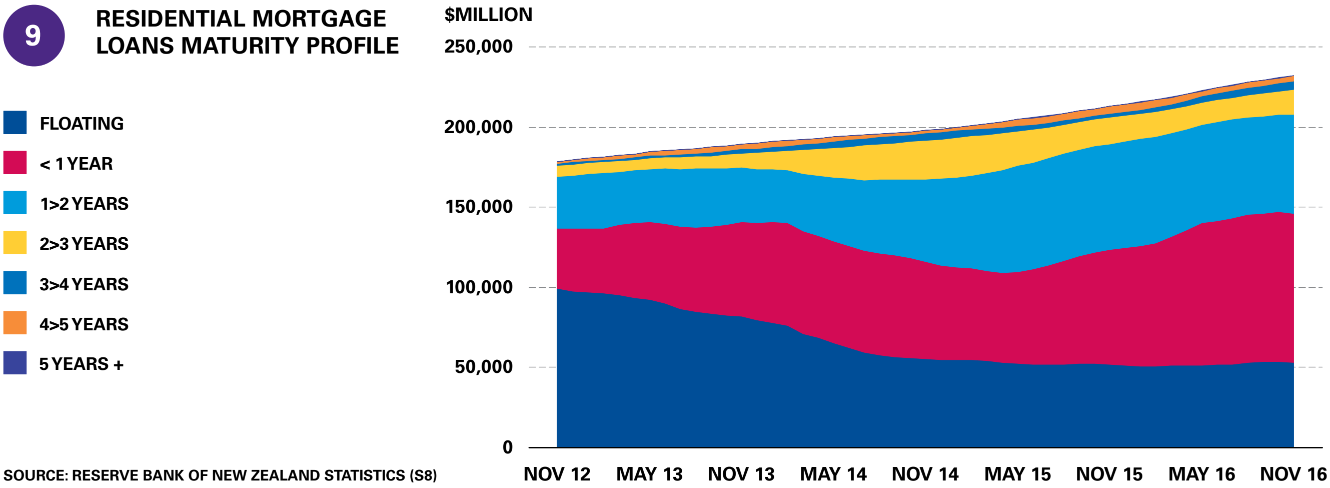
12 SEE FIGURE 12 – PAGE 33

The overall improvement in asset quality for the banking sector is attributable to specific provisioning levels decreasing by 36.11% to $441.55 million, partially offset by increases to collective provisioning that have only marginally increased by 13.84% or $199.01 million. The Bank of Tokyo-Mitsubishi recorded the largest decline in specific provisions as a direct result of the disposal of all its impaired loans, with specific provisions declining from $63.70 million to nil. Rabobank and HSBC had the next largest improvement towards specific provisioning levels, with decreases of $49.28 million and $19.86 million, respectively. Despite the dairy sector downturn, Rabobank achieved strong loan provision recoveries which outweighed new provisions taken during the year, resulting in a decrease in provisioning for the current year. The big four banks had a combined increase of $179 million (representing 89.94% of the banking sector's total increase) in collective provisioning to allow for additional risk in a growing lending book and the dairy downturn in the first half of the year.

In spite of a growing loan book, gross impaired assets and past due assets have fallen significantly by 16.73% ($294.10 million) and 23.38% ($159.73 million), to $1.46 billion and $523.37 million, respectively. With this, the ratio of past due assets to gross loans and advances have dropped from 0.19% to 0.14%. Similarly, the ratio of gross impaired assets to average gross loans and advances has improved by 12 bps to 0.38%.

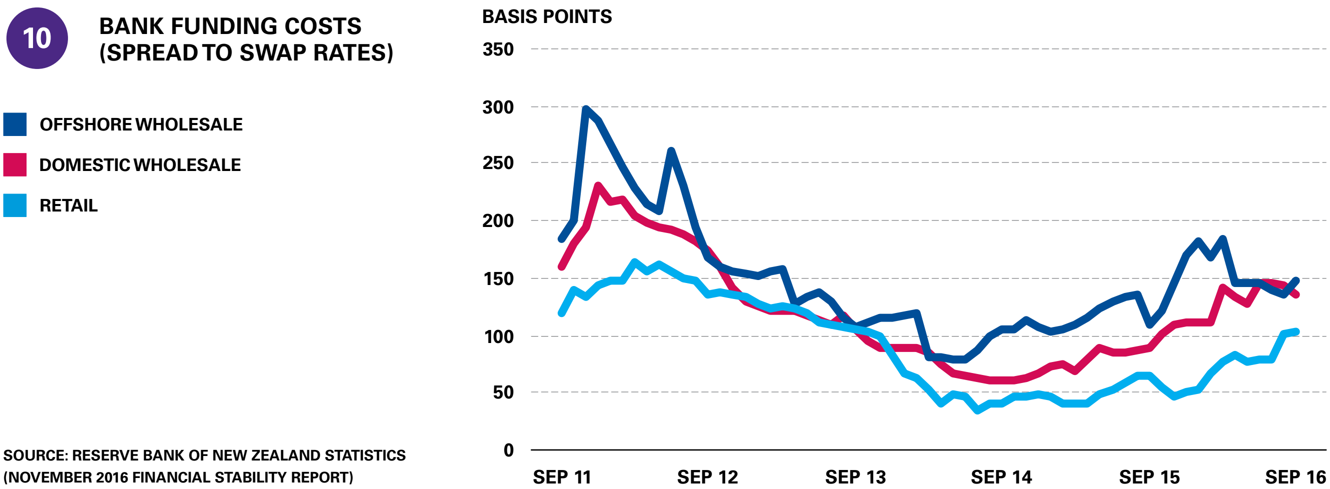
13 SEE FIGURE 13 – PAGE 33

9 RESIDENTIAL MORTGAGE LOANS MATURITY PROFILE



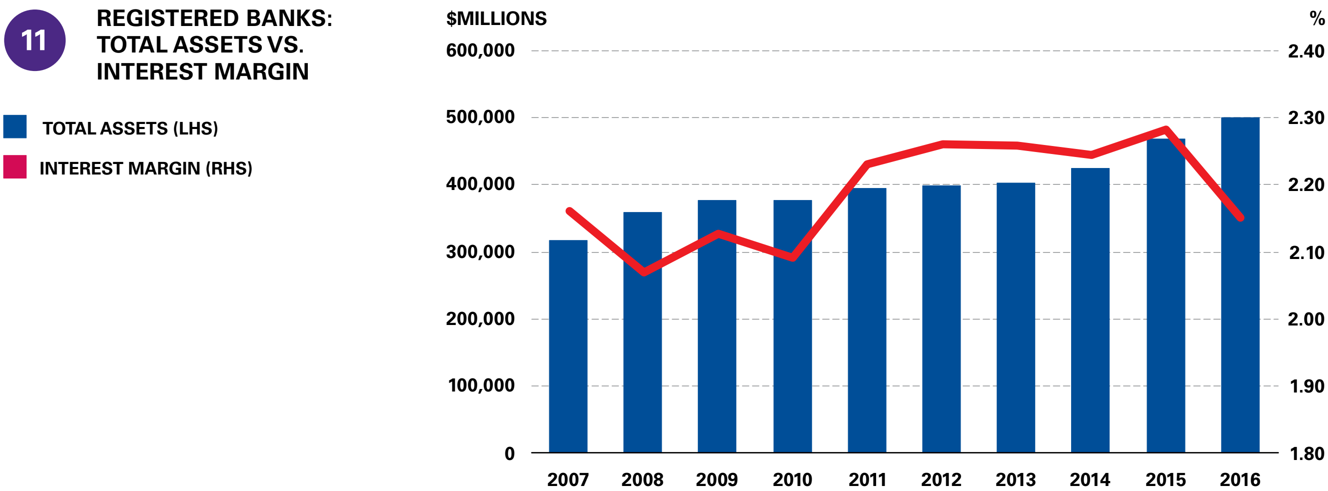
SOURCE: RESERVE BANK OF NEW ZEALAND STATISTICS (S8)

10 BANK FUNDING COSTS (SPREAD TO SWAP RATES)



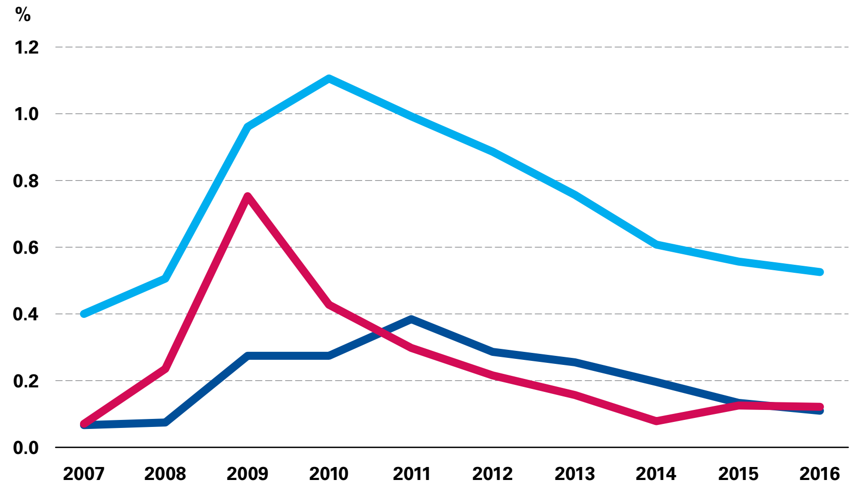
SOURCE: RESERVE BANK OF NEW ZEALAND STATISTICS (NOVEMBER 2016 FINANCIAL STABILITY REPORT)

11 REGISTERED BANKS: TOTAL ASSETS VS. INTEREST MARGIN



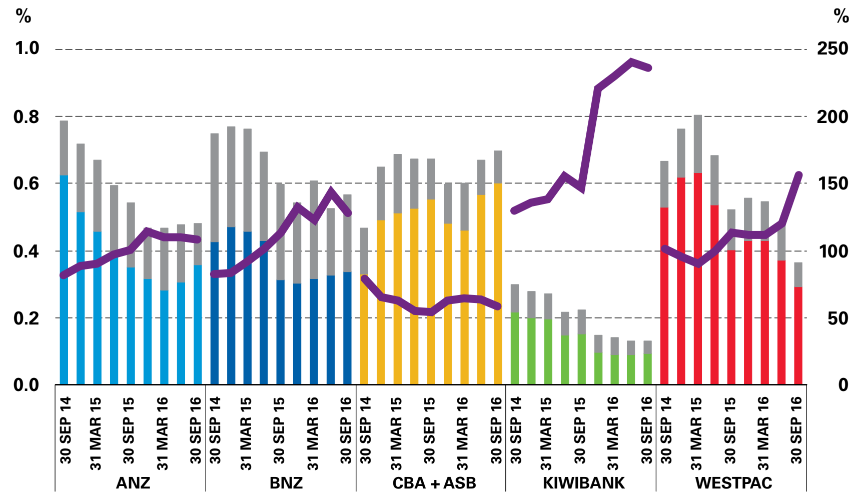
12 REGISTERED BANKS: IMPAIRED ASSET EXPENSE TO GROSS LOANS AND ADVANCES

- NET LOAN WRITE OFFS/AVERAGE GROSS LOANS AND ADVANCES
- IMPAIRED ASSET EXPENSE/ AVERAGE GROSS LOANS AND ADVANCES
- TOTAL PROVISIONS FOR DOUBTFUL DEBT/ GROSS LOANS AND ADVANCES



13 MAJOR BANKS: PAST DUE AND GROSS IMPAIRED ASSETS VS. GROSS LOANS AND ADVANCES

- GROSS IMPAIRED/GROSS LOANS AND ADVANCES (LHS)
- PAST DUE/GROSS LOANS AND ADVANCES (LHS)
- TOTAL PROVISIONS/PAST DUE AND GROSS IMPAIRED ASSETS (RHS)



14 REGISTERED BANKS: GROSS IMPAIRED AND PAST DUE ASSETS

- PAST DUE ASSETS (LHS)
- GROSS IMPAIRED ASSETS (LHS)
- SPECIFIC PROVISION/GROSS IMPAIRED AND PAST DUE ASSETS (RHS)
- TOTAL PROVISION/GROSS IMPAIRED AND PAST DUE ASSETS (RHS)

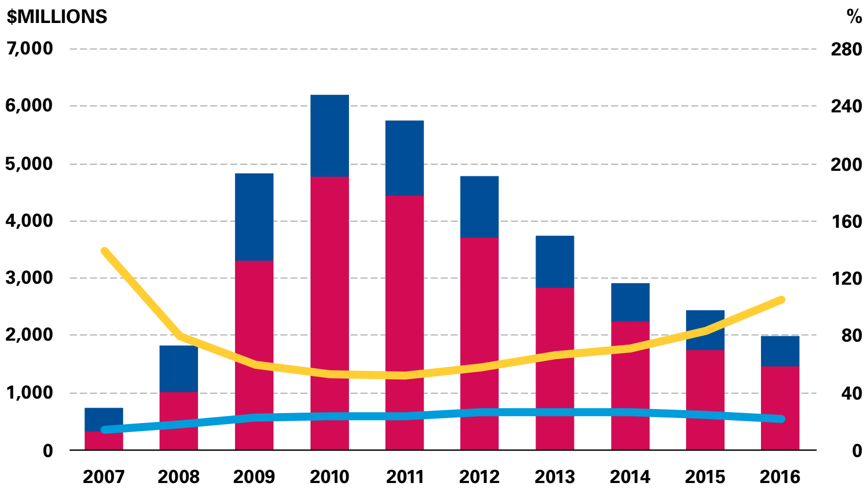


TABLE 6: MAJOR BANKS – PERSONNEL COST

Entity	2016			2015		
	Employee numbers	Personnel cost $Million	Cost/ average employees $000's	Employee numbers	Personnel cost $Million	Cost/ average employees $000's
ANZ	7,655	894	116	8,104	874	108
BNZ	5,019	476	97	4,841	449	93
CBA + ASB	4,770	502	107	4,469	487	109
Kiwibank	1,410	122	94	1,188	123	104
Westpac	4,267	465	106	4,497	468	104

However, the impaired asset expense for the year rose by 4.93% ($21.59 million) to $459.60 million. The increase in impairment expense is in line with an 8.10% growth in total gross loans. The impaired asset expense over the average gross loans ratio for the banking sector has remained unchanged from the previous year at 0.12%.

14 SEE FIGURE 14 – PAGE 33

ANZ saw the greatest individual increase in impaired asset expense of 93.42% to $147 million, through new and increased provisions and a reduction in write backs. The result for ANZ is attributable to the ongoing normalisation of provision levels in their portfolios, combined with lower levels of write-backs and recoveries than have been experienced in previous years. CBA and Westpac were similar, with an increase of $28 million to $129 million, and $26 million to $73 million, respectively. The increase in impaired asset expense for CBA and Westpac was due to movements in collective provisioning. On the other hand, BNZ and Kiwibank managed to reduce their impaired asset expense by 6.25% to $120 million and 15.38% to $11 million, respectively.

TSB saw their impaired asset expense levels change from a $56.05 million charge in the previous year to an $8.72 million recovery in the current year; however, this movement was not reflected within its specific/collective provisioning balance as it was directly netted against its 'Investment securities' balance. The impaired asset recovery includes a $13.71 million write back of a Solid Energy provision.

There is a general consensus that while asset quality remains strong, caution will need to be taken due to key areas of risk, stemming from dairy, property and global uncertainties, all of which will have a significant impact on the local economy.

Deterioration of the operating expense ratio due to lower operating income and higher costs

The focus on innovation initiatives and investment in new technologies, increased costs from regulatory compliance programmes, and personnel costs continue to be significant factors driving the higher operating expense to income ratios. Operating expenses (excluding amortisation) relative to operating income (i.e. operating expense ratio) increased from 37.32% to 39.39%, an increase of 207 bps in the last year.

The increase was caused by the combined effect of lower operating income levels and higher operating expenses (excluding amortisation). Operating income for the banking sector fell by 1.78% ($222.16 million) to $12.26 billion, and this could be attributed to a $350.20 million decline in non-interest income for the year. On the other hand, operating expenses (excluding amortisation) grew by 3.66% ($170.61 million), to reach total operating expenditures (excluding amortisation) of $4.83 billion. An additional $87.32 million in personnel costs recognised this year would account for nearly half of the increase in operating costs (see Table 6).

Of the 21 survey participants, 13 saw higher operating expense/operating income ratios. Among the major banks, BNZ registered the largest increase in its operating expense ratio, with an increase of 357 bps. Higher operating costs for BNZ were due to the continued investment in their key segments such as digital, small medium enterprises (SMEs), brokers and the Auckland housing market. On the other hand, CBA reported an 88 bps improvement to its operating expense ratio, decreasing from 36.56% to 35.68%, as a result of disciplined cost management and efficiency improvements despite the continued investments in technology and specialist frontline capabilities.

15 SEE FIGURE 15 – PAGE 37

It is worth noting that the big four banks continued to have one of the lowest operating ratios in the industry, ranging from 35.68% to 38.44%. The Bank of Tokyo-Mitsubishi is the only other bank that had a better operating ratio of 12.59%. As The Bank of Tokyo-Mitsubishi primarily caters to corporate customers, the average size of its loans are typically much larger in nature, allowing the bank to receive more in the way of interest income while sustaining a smaller workforce and footprint.

Higher operating expenses (excluding amortisation) were seen across all the major banks, ranging from 0.41% to 5.30%. Of the major banks, Kiwibank reported the greatest percentage increase of 5.30% as a result of significant investments in banking infrastructure and services in the integration of its new core IT operating system. Kiwibank noted in its press release that there have also been major changes to its retail network with branch upgrades and the opening of the first stand-alone Kiwibank branch in central Hamilton.[32]

In terms of dollar value, Westpac reported the greatest increase in operating expenses (excluding amortisation) of $41 million as a result of increased investment in service transformation as part of a new service strategy in place to enhance customer service.[33]

Bank of Baroda and The Bank of Tokyo-Mitsubishi were the only two banks who enjoyed a decrease in operating expenses (excluding amortisation) compared to last year, with a reduction of 5.26% ($167k) and 0.69% ($30k), respectively. Bank of Baroda's reduction was attributed to a decrease in employee benefits and other operating expenses (excluding amortisation), while The Bank of Tokyo-Mitsubishi's decrease was achieved through a decrease in general administration costs and other expenses.

Investment in technology and digital capabilities in a fast-changing technological environment will remain a critical area of investment for survey participants in order to improve customers experience and counteract the threat of market disruptors.

Return on equity/Return on assets

The banking sector is experiencing increasing difficulty in maintaining the current level of returns in the present market environment, as decreasing margins, higher operating expenses and rising bad debts continue to put downward pressure on the return on average equity (ROE) level. These challenges have resulted in the ROE level for the sector declining by 200 bps, from 15.96% to 13.96%. Only nine survey participants reported improvements in ROE levels, ranging from 12 bps to 2,421 bps. CBA is the only major bank that showed higher ROE levels this year, with a 100 bps increase on ROE levels of 15.79% from the previous year. The banking sector's performance of its return on average total tangible assets (ROA) ratio was also impacted negatively, as ROA levels for the sector as whole fell from 1.16% to 1.00%. The results reported so far, help us to understand the recent focus on maintaining/building current capital levels.

16 SEE FIGURE 16 – PAGE 37

The decline in ROE and ROA levels is largely the result of NPAT declining by 6.46% ($334.38 million), while total equity and total tangible assets have grown by 5.04% ($1.71 billion) and 7.03% ($32.85 billion), respectively.

CBA's 100 bps increase in ROE is attributable to a 4.25% ($37 million) increase in NPAT, despite its total equity growing by 3.33% ($177 million). ANZ, BNZ, Kiwibank and Westpac all saw reductions to their ROE in the range of 100 bps to 324 bps.

When looking at the ROA performance for the banking sector, we noted a similar story where only seven participants ended the year with higher ROA levels. This is largely attributable to higher NPAT levels that were able to increase at a faster rate than asset growth. Where banks reported lower ROA ratios for the year, this was generally the result of a reduction to their NPAT.

Going forward, Executives have commented that a big emphasis will be placed on improving and monitoring these levels of returns rather than just focusing on loan book growth. As a result of continuing pressures coming from competition, higher costs of funds and global volatility (affecting non-interest income), it is likely that ROA and ROE will continue to be under pressure from these areas.

Capital adequacy ratio

When looking at the banking sector, only 15 survey participants (subsidiaries/locally incorporated banks) have disclosed their risk weighted asset exposures, and as such, we are unable to comment on the capital adequacy position of the survey participants as a whole.

This year it was noted that 11 survey participants have had a decrease in their total capital and tier 1 capital ratios. However, despite that, their ratios still remain well above regulatory minimum requirements. As the Chinese and Indian banks have recently entered into the sector, it will take some time for them to build leverage as they grow their loan books and increase their funding bases (i.e. liabilities).

TABLE 7: MAJOR BANKS – FUNDS MANAGEMENT ACTIVITIES			
Entity	**2016 $Million**	**2015–2016 Movement %**	**2015 $Million**
ANZ	26,485	16.47%	22,740
BNZ	4,722	21.08%	3,900
CBA + ASB	8,917	18.53%	7,523
Kiwibank	3,525	-5.62%	3,735
Westpac	10,766	13.95%	9,448
Total	**54,415**	**14.93%**	**47,346**

For example, as a result of having a lower leverage position, the Chinese banks started the year with capital ratios of 424.78%, 133.43%, 36.33%. During the year these have declined in the range of 2,364 bps to 38,891 bps, to conclude the year at 34.87%, 14.00% and 12.69%, respectively.

Apart from the Chinese banks, Bank of Baroda and Bank of India (other recent registrations) saw significant reductions in their total capital ratio of 1,780 bps (to 94.20%) and 1,100 bps (to 70.00%), respectively. Despite the decrease, Bank of Baroda and Bank of India continue to have the highest total capital adequacy ratio. Between the major banks, BNZ, Kiwibank and Westpac had decreases of 63 bps (to 12.04%), 50 bps (to 12.90%), and 20 bps (to 13.10%), respectively. On the other hand, ANZ and CBA showed improvements of 100 bps (14.30%) and 160 bps (to 14.30%), respectively.

The tier 1 capital ratios follow a similar trend, with 11 survey participants having had a decrease in their respective tier 1 capital ratios.

Despite all this, New Zealand banks are still well capitalised. RBNZ data as at 30 September 2016 shows that the locally incorporated banks' common equity tier 1 (CET 1) capital ratio was 10.4% and the tier 1 capital ratio was 11.9 %, well above the minimum requirements of 4.5% for CET 1 and 6% for tier 1.[34]

17 SEE FIGURE 17 – PAGE 37

Over the past year, we have seen a significant amount of funds entering the banking sector through the use of capital raising efforts. Most notably, ANZ and ASB had seek to raise over $200 million and $400 million in additional funds through debt issuances, respectively. The Co-operative Bank raised up to $45 million in subordinated notes from the two capital raise held this year, and with Heartland Bank most recently completing a $20 million capital placement last December and with another $10 million currently underworks.

Funds under management

Despite unwanted media attention over its KiwiSaver schemes earlier in the year in relation to the nature of certain investments held, the funds management businesses of the banks have seen strong growth in their funds under management (FUM) operations. FUM levels have increased by a further 14.93% ($7.07 billion), reaching a year-end FUM balance of $54.42 billion (see Table 7).

Kiwibank again reported another reduction of $210 million (5.62%) in FUM, on top of a $150 million decrease from the previous year. Current FUM of $3.53 billion relates to funds held by a subsidiary, which operates Kiwibank PIE Unit Trusts, and is solely invested in term and call deposit investments with Kiwibank. As at 1 July 2016, Kiwibank no longer operates a KiwiSaver fund balance as it has transferred all of its assets and members to the 'Kiwi Wealth KiwiSaver Scheme', managed by Kiwi Wealth Limited (not a subsidiary of Kiwibank).

Continuing a similar trend to last year, the big four banks reported double digit-growth, with BNZ and CBA reporting the largest growth of 21.08% ($822 million) and 18.53% ($1.39 billion), respectively. BNZ's strong growth came on the back of an $872 million increase in portfolios managed on behalf of its customers. FUM growth for CBA came from wholly-owned subsidiaries, such as ASB Group Investments Limited, an investment administration and management company.

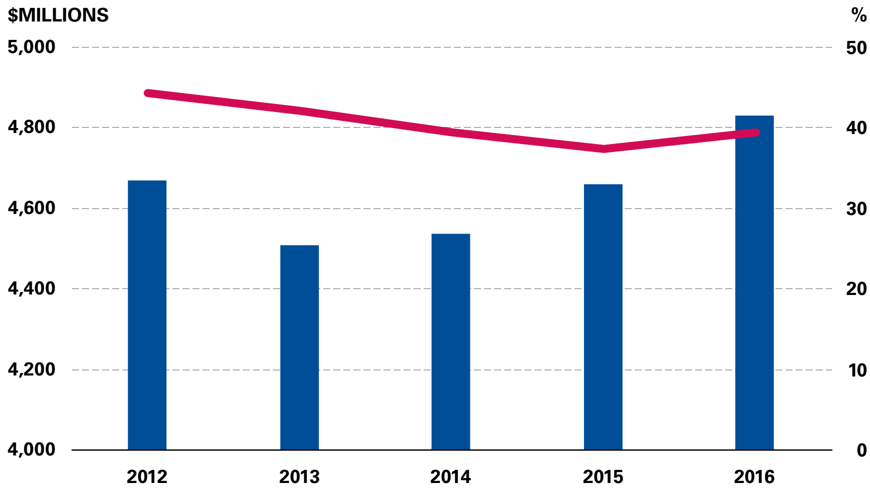
ANZ remains the biggest provider in the FUM sector, with a $3.75 billion (16.47%) growth in FUM to $26.49 billion. The growth in FUM is attributable to increases across the board, but an increase relating to KiwiSaver and other managed funds contributed an additional $2.07 billion, while growth from investment portfolios managed on behalf of customers amounted to $987 million.

Westpac also reported commendable growth of 13.95% growth ($1.32 billion) to FUM. Much of the increase came primarily from an $828 million increase in retirement plan funds, along with moderate increase of $235 million and $148 million in PIE funds and retail unit trusts, respectively.

15 REGISTERED BANKS: OPERATING EXPENSES VS. OPERATING EXPENSES TO OPERATING INCOME

SUM OF OPERATING EXPENSES (EXCLUDES ABNORMAL)

SUM OF OPERATING EXPENSES/ OPERATING INCOME

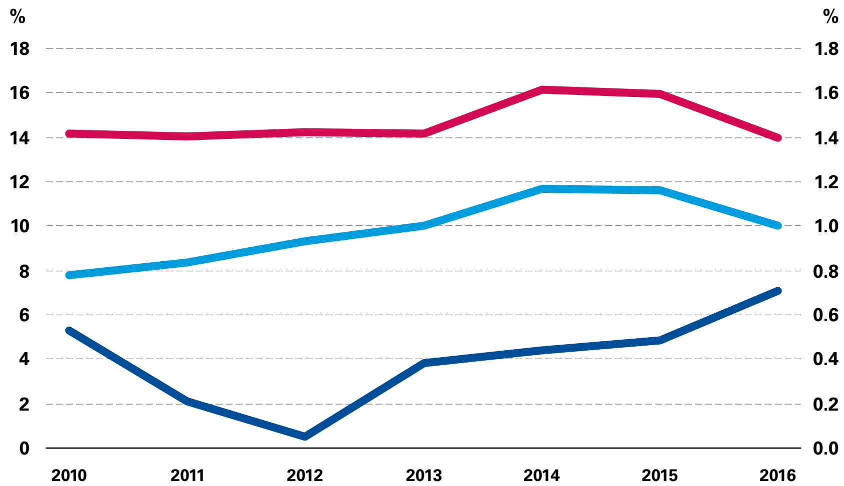


16 GROWTH IN GROSS LOANS & ADVANCES VS. RETURN ON ASSETS & RETURN ON EQUITY

GROWTH IN GROSS LOANS & ADVANCES (LHS)

RETURN ON EQUITY (LHS)

RETURN ON ASSETS (RHS)

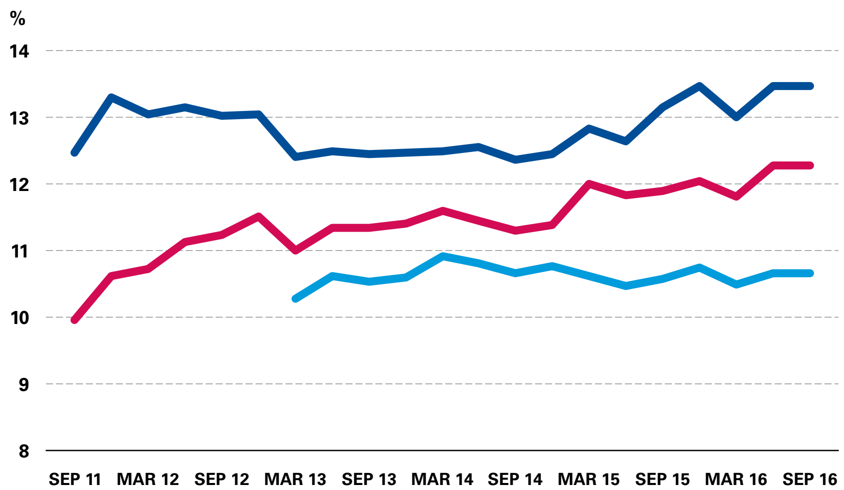


17 INCORPORATED BANKS: CAPITAL ADEQUACY RATIOS[35]

TOTAL CAPITAL RATIO

TIER 1 CAPITAL RATIO

COMMON EQUITY TIER 1 CAPITAL RATIO



SOURCE: RESERVE BANK OF NEW ZEALAND STATISTICS (G3)

Registered banks – Analysis of annual results

Analysis of financial statements							
Entity	**Location of head office**	**Balance date**	**Survey year**	**Rank by total assets**	**Total assets* $Million**	**Net assets $Million**	**Total capital adequacy ratio %**
Australia and New Zealand Banking Group Limited – New Zealand Banking Group[36]	Wellington	30-Sep-2016	2016	1	163,358	7,819	14.30
		30-Sep-2015	*2015*	*1*	*152,177*	*7,507*	*13.30*
Bank of Baroda (New Zealand) Limited	Auckland	31-Mar-2016	2016	21	92	45	94.20
		31-Mar-2015	*2015*	*20*	*77*	*44*	*112.00*
Bank of China (New Zealand) Limited	Auckland	31-Dec-2015	2016	19	208	56	34.87
		31-Dec-2014	*2015*	*21*	*68*	*62*	*424.78*
Bank of India (New Zealand) Limited	Auckland	31-Mar-2016	2016	20	101	52	70.00
		31-Mar-2015	*2015*	*19*	*86*	*52*	*81.00*
Bank of New Zealand[37]	Auckland	30-Sep-2016	2016	3	92,325	6,789	12.04
		30-Sep-2015	*2015*	*3*	*86,629*	*6,884*	*12.67*
China Construction Bank (New Zealand) Limited	Auckland	31-Dec-2015	2016	18	402	53	14.00
		31-Dec-2014	*2015*	*18*	*92*	*58*	*133.43*
Citibank, N.A. New Zealand Branch[38]	Auckland	31-Dec-2015	2016	14	1,974	195	15.44
		31-Dec-2014	*2015*	*13*	*1,980*	*196*	*14.81*
Commonwealth Bank of Australia New Zealand Banking Group[39]	Auckland	30-Jun-2016	2016	4	85,804	5,174	14.30
		30-Jun-2015	*2015*	*4*	*80,262*	*4,997*	*12.70*
Deutsche Bank AG, New Zealand Group	Auckland	31-Dec-2015	2016	11	3,184	121	15.40
		31-Dec-2014	*2015*	*12*	*2,132*	*152*	*16.00*
Heartland Bank Limited[40]	Auckland	30-Jun-2015	2016	9	3,502	453	13.78
		30-Jun-2014	*2015*	*11*	*2,778*	*353*	*12.86*
Industrial and Commercial Bank of China (New Zealand) Limited	Auckland	31-Dec-2015	2016	16	742	54	12.69
		31-Dec-2014	*2015*	*16*	*670*	*57*	*36.33*
JPMorgan Chase Bank, N.A. New Zealand Branch	Wellington	31-Dec-2015	2016	15	883	0	14.12
		31-Dec-2014	*2015*	*15*	*1,016*	*0*	*12.53*
Kiwibank Limited	Wellington	30-Jun-2016	2016	5	19,357	1,129	12.90
		30-Jun-2015	*2015*	*5*	*18,344*	*1,033*	*13.40*
Kookmin Bank Auckland Branch	Auckland	31-Dec-2015	2016	17	450	3	16.01
		31-Dec-2014	*2015*	*17*	*374*	*4*	*15.97*
Rabobank Nederland New Zealand Banking Group[41]	Wellington	31-Dec-2015	2016	6	14,485	1,480	23.20
		31-Dec-2014	*2015*	*6*	*13,555*	*1,340*	*21.30*
Southland Building Society	Invercargill	31-Mar-2016	2016	10	3,408	235	13.76
		31-Mar-2015	*2015*	*10*	*2,860*	*241*	*15.61*
The Bank of Tokyo-Mitsubishi UFJ Limited, Auckland Branch	Auckland	31-Mar-2016	2016	12	3,169	125	15.66
		31-Mar-2015	*2015*	*9*	*3,019*	*98*	*15.61*
The Co-operative Bank Limited	Wellington	31-Mar-2016	2016	13	2,041	157	15.80
		31-Mar-2015	*2015*	*14*	*1,806*	*150*	*16.50*
The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch	Auckland	31-Dec-2015	2016	8	5,575	39	18.60
		31-Dec-2014	*2015*	*8*	*5,292*	*28*	*15.70*
TSB Bank Limited[42]	New Plymouth	31-Mar-2016	2016	7	6,427	554	14.52
		31-Mar-2015	*2015*	*7*	*5,912*	*498*	*13.85*
Westpac Banking Corporation – New Zealand Division	Auckland	30-Sep-2016	2016	2	92,833	6,512	13.10
		30-Sep-2015	*2015*	*2*	*88,336*	*5,668*	*13.30*
Bank Sector Total			**2016**		**500,320**	**31,046**	**n/a**
			2015		***467,467***	***29,421***	***n/a***

* Total Assets = Total Assets - Goodwill - Other Intangibles
n/a = not available

Size & strength measures						Growth measures		
Tier 1 capital adequacy ratio %	Net loans and advances $Million	Customer deposits $Million	Number of employees	Number of branches	Number of owned ATMS	Increase in net profit after tax %	Increase in underlying profit %	Increase in total assets %
11.80	121,129	89,768	7,655	215	666	-12.93	-10.19	7.35
11.30	*114,843*	*83,134*	*7,724*	*225*	*684*	*3.51*	*8.62*	*12.58*
94.20	64	44	19	3	3	68.89	94.96	18.56
112.00	*49*	*32*	*20*	*3*	*3*	*-34.60*	*-20.93*	*10.94*
34.87	145	35	n/a	n/a	n/a	-655.08	-755.08	205.76
424.78	*0*	*0*	*n/a*	*n/a*	*n/a*	*0.00*	*0.00*	*0.00*
70.00	74	19	12	3	0	20.06	20.00	18.23
81.00	*62*	*12*	*11*	*3*	*0*	*32.62*	*31.06*	*24.12*
10.05	74,823	51,481	5,019	171	479	-12.04	-12.20	6.58
11.69	*68,590*	*46,729*	*4,841*	*173*	*474*	*22.12*	*19.39*	*8.94*
14.00	307	97	32	n/a	n/a	-571.00	-572.97	335.24
133.43	*4*	*1*	*17*	*n/a*	*n/a*	*0.00*	*0.00*	*0.00*
14.17	755	1,064	29	1	0	-5.44	-3.91	-0.30
13.65	*572*	*923*	*27*	*1*	*0*	*53.58*	*45.69*	*-9.61*
12.30	75,757	50,892	4,770	134	431	4.25	4.57	6.90
11.20	*69,288*	*49,138*	*4,630*	*134*	*462*	*3.08*	*0.73*	*11.18*
12.30	248	150	0	0	0	-75.00	-66.67	49.34
12.90	*273*	*83*	*29*	*0*	*0*	*500.00*	*650.00*	*-17.20*
13.79	3,130	2,283	363	7	0	32.25	32.35	26.05
12.79	*2,323*	*2,085*	*352*	*7*	*0*	*12.99*	*17.84*	*17.20*
12.69	381	127	37	1	n/a	0.64	-0.82	10.63
36.33	*86*	*9*	*23*	*1*	*n/a*	*-4,777.05*	*-4,701.64*	*999.21*
13.54	93	193	11	0	0	-37.50	-34.65	-13.04
11.82	*47*	*169*	*13*	*0*	*0*	*400.09*	*403.37*	*4.83*
10.70	16,733	14,743	1,410	258	241	-2.36	-4.08	5.52
11.00	*15,639*	*13,724*	*1,188*	*265*	*243*	*27.00*	*24.05*	*10.00*
13.74	122	207	13	1	0	-24.36	-24.78	20.19
13.38	*126*	*151*	*14*	*1*	*0*	*-25.27*	*-23.74*	*-10.60*
16.40	10,642	4,767	319	33	0	-24.77	-23.87	6.86
16.00	*10,001*	*4,696*	*305*	*32*	*0*	*-14.45*	*-12.64*	*11.18*
12.50	2,889	2,703	447	16	0	2.76	0.32	19.13
13.85	*2,407*	*2,436*	*428*	*17*	*0*	*24.29*	*25.64*	*2.64*
12.71	2,818	484	17	1	0	5,398.68	777.25	4.96
12.33	*2,625*	*201*	*17*	*1*	*0*	*96.93*	*82.44*	*-12.50*
15.70	1,807	1,788	311	34	0	15.52	20.83	13.01
16.40	*1,565*	*1,575*	*305*	*34*	*0*	*24.41*	*26.97*	*11.24*
16.60	3,589	3,252	217	1	0	27.36	26.80	5.35
14.40	*3,780*	*3,181*	*213*	*1*	*0*	*165.11*	*156.73*	*5.08*
14.52	3,848	5,813	388	27	45	141.26	152.81	8.71
13.53	*3,290*	*5,366*	*328*	*27*	*47*	*-48.92*	*-50.08*	*4.05*
11.20	75,912	57,541	4,267	189	620	-4.27	-5.15	5.09
11.40	*69,873*	*51,916*	*4,497*	*189*	*639*	*-1.28*	*9.82*	*8.85*
n/a	**395,268**	**287,453**	**25,336**	**1,095**	**2,485**	**-6.46**	**-0.06**	**0.07**
n/a	***365,444***	***265,561***	***24,982***	***1,114***	***2,552***	***0.07***	***0.10***	***0.10***

Registered banks – Analysis of annual results

Analysis of financial statements		Credit quality measures						
Entity	**Survey year**	**Impaired asset expense $Million**	**Past due assets $Million**	**Gross impaired assets $Million**	**Individual provision for doubtful debts/ Gross impaired assets %**	**Collective provision/ Net loans and advances %**	**Total provision for doubtful debts/ Gross loans and advances %**	**Impaired asset expense/ Average gross loans and advances %**
Australia and New Zealand Banking Group Limited – New Zealand Banking Group[36]	2016	147	152	433	35.57	0.39	0.52	0.12
	2015	*76*	*222*	*404*	*40.10*	*0.41*	*0.55*	*0.07*
Bank of Baroda (New Zealand) Limited	2016	0	0	0	100.00	0.41	0.58	0.11
	2015	*0*	*0*	*0*	*100.00*	*0.41*	*0.63*	*0.11*
Bank of China (New Zealand) Limited	2016	0	0	0	0.00	0.30	0.30	0.60
	2015	*0*	*0*	*0*	*0.00*	*0.00*	*0.00*	*0.00*
Bank of India (New Zealand) Limited	2016	0	0	0	0.00	0.41	0.41	0.07
	2015	*0*	*0*	*0*	*0.00*	*0.41*	*0.41*	*0.04*
Bank of New Zealand[37]	2016	120	173	253	39.53	0.59	0.73	0.17
	2015	*128*	*196*	*215*	*42.79*	*0.55*	*0.68*	*0.19*
China Construction Bank (New Zealand) Limited	2016	0	0	0	0.00	0.10	0.10	0.20
	2015	*0*	*0*	*0*	*0.00*	*0.08*	*0.08*	*0.00*
Citibank, N.A. New Zealand Branch[38]	2016	0	0	0	0.00	0.00	0.00	0.00
	2015	*0*	*0*	*0*	*0.00*	*0.00*	*0.00*	*0.00*
Commonwealth Bank of Australia New Zealand Banking Group[39]	2016	129	77	430	13.02	0.35	0.42	0.18
	2015	*101*	*100*	*365*	*14.79*	*0.29*	*0.37*	*0.15*
Deutsche Bank AG, New Zealand Group	2016	0	0	0	0.00	0.00	0.00	0.00
	2015	*0*	*0*	*0*	*0.00*	*0.00*	*0.00*	*0.00*
Heartland Bank Limited[40]	2016	14	22	37	13.23	0.52	0.67	0.49
	2015	*11*	*35*	*30*	*51.56*	*0.40*	*1.05*	*0.52*
Industrial and Commercial Bank of China (New Zealand) Limited	2016	1	0	0	0.00	0.33	0.33	0.33
	2015	*0*	*0*	*0*	*0.00*	*0.56*	*0.56*	*1.12*
JPMorgan Chase Bank, N.A. New Zealand Branch	2016	0	0	0	0.00	0.00	0.00	0.00
	2015	*0*	*0*	*0*	*0.00*	*0.00*	*0.00*	*0.00*
Kiwibank Limited	2016	11	7	15	60.00	0.26	0.32	0.07
	2015	*13*	*11*	*23*	*52.17*	*0.26*	*0.34*	*0.09*
Kookmin Bank Auckland Branch	2016	0	0	0	0.00	0.43	0.43	-0.03
	2015	*0*	*0*	*0*	*0.00*	*0.44*	*0.44*	*-0.06*
Rabobank Nederland New Zealand Banking Group[41]	2016	-6	25	49	14.01	0.14	0.21	-0.06
	2015	*-19*	*22*	*239*	*23.50*	*0.12*	*0.68*	*-0.19*
Southland Building Society	2016	13	3	9	30.35	0.57	0.66	0.50
	2015	*12*	*5*	*13*	*45.09*	*0.51*	*0.75*	*0.52*
The Bank of Tokyo-Mitsubishi UFJ Limited, Auckland Branch	2016	0	0	0	0.00	0.00	0.00	0.00
	2015	*30*	*0*	*64*	*100.00*	*0.00*	*2.37*	*1.04*
The Co-operative Bank Limited	2016	1	6	2	30.27	0.18	0.21	0.08
	2015	*1*	*7*	*1*	*61.74*	*0.20*	*0.26*	*0.07*
The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch	2016	-35	0	4	24.69	0.08	0.11	-0.95
	2015	*-18*	*0*	*122*	*17.00*	*0.14*	*0.68*	*-0.50*
TSB Bank Limited[42]	2016	-9	3	10	14.36	0.47	0.50	-0.24
	2015	*56*	*2*	*1*	*61.42*	*0.45*	*0.46*	*1.75*
Westpac Banking Corporation – New Zealand Division	2016	73	56	222	47.30	0.43	0.57	0.10
	2015	*47*	*83*	*282*	*41.84*	*0.43*	*0.59*	*0.07*
Bank Sector Total	**2016**	**460**	**523**	**1,464**	**30.16**	**0.41**	**0.53**	**0.12**
	2015	***438***	***683***	***1,758***	***34.18***	***0.39***	***0.56***	***0.12***

* Operating Expenses = Total Expenses - Interest Expense - Loan Write Offs and Bad Debts - Abnormal Expenses.

Profitability measures										Efficiency measures	
Total operating income $Million	Net interest income/ Average total assets %	Interest margin %	Interest spread %	Non-interest income/ Average total assets %	Net profit after tax $Million	Net profit after tax/ Average equity %	Net profit after tax/ Average total assets %	Underlying profit $Million	Underlying profit/ Average total assets %	Operating expenses*/ Average total assets %	Operating expenses/ Operating income %
3,861	1.92	2.22	1.85	0.53	1,542	14.00	0.98	2,230	1.41	0.94	38.44
4,037	*2.00*	*2.26*	*1.83*	*0.81*	*1,771*	*16.91*	*1.23*	*2,483*	*1.73*	*1.03*	*36.61*
4	3.35	3.48	1.32	1.89	1	3.14	1.65	1	1.60	3.56	67.91
4	*3.51*	*3.73*	*1.99*	*1.81*	*1*	*1.91*	*1.12*	*1*	*0.95*	*4.31*	*81.00*
3	2.18	2.21	1.87	-0.36	-6	-10.38	-4.46	-7	-5.05	6.55	361.27
1	*0.00*	*0.00*	*0.00*	*0.00*	*-1*	*0.00*	*0.00*	*-1*	*0.00*	*0.00*	*236.17*
4	3.60	3.67	1.18	0.52	1	1.43	0.79	1	1.11	2.96	71.78
4	*4.12*	*4.21*	*1.57*	*0.46*	*1*	*1.21*	*0.80*	*1*	*1.12*	*3.43*	*74.94*
2,269	1.96	2.19	1.79	0.57	913	13.00	1.02	1,303	1.46	0.95	37.29
2,432	*2.09*	*2.30*	*1.85*	*0.84*	*1,038*	*16.24*	*1.25*	*1,484*	*1.79*	*0.99*	*33.72*
3	1.46	1.48	1.03	-0.19	-5	-8.54	-1.92	-5	-1.91	3.06	241.57
1	*0.00*	*0.00*	*0.00*	*0.00*	*-1*	*0.00*	*0.00*	*-1*	*0.00*	*0.00*	*149.33*
47	1.67	1.69	1.44	0.71	20	10.22	1.01	28	1.41	0.98	40.91
45	*1.91*	*1.93*	*1.71*	*0.23*	*21*	*11.02*	*1.01*	*29*	*1.39*	*0.75*	*35.14*
2,228	2.07	2.14	1.76	0.61	908	16.79	1.09	1,304	1.57	0.96	35.68
2,125	*2.22*	*2.30*	*1.85*	*0.57*	*871*	*15.79*	*1.14*	*1,247*	*1.64*	*1.02*	*36.56*
44	-2.37	-3.03	-2.17	4.03	6	4.38	0.23	10	0.38	1.28	77.27
56	*1.40*	*1.66*	*1.76*	*0.98*	*24*	*17.14*	*1.02*	*30*	*1.27*	*1.10*	*46.43*
155	4.67	4.79	4.26	0.26	54	12.44	1.72	73	2.31	2.19	44.41
128	*4.73*	*4.89*	*4.34*	*0.25*	*41*	*11.11*	*1.59*	*55*	*2.13*	*2.41*	*48.47*
7	0.86	0.89	0.76	0.09	-3	-5.30	-0.42	-3	-0.42	1.26	132.47
4	*0.81*	*0.82*	*0.78*	*0.17*	*-3*	*-5.07*	*-0.81*	*-3*	*-0.80*	*1.65*	*168.02*
17	0.57	0.85	0.72	1.23	4	0.00	0.42	6	0.62	1.18	65.62
19	*0.58*	*0.77*	*0.71*	*1.36*	*6*	*0.00*	*0.64*	*9*	*0.91*	*1.03*	*53.25*
477	1.98	2.07	1.62	0.55	124	11.47	0.66	188	1.00	1.47	58.28
473	*2.06*	*2.12*	*1.60*	*0.64*	*127*	*12.48*	*0.73*	*196*	*1.12*	*1.51*	*55.81*
7	1.24	1.24	1.23	0.52	3	80.08	0.70	4	0.98	0.78	44.35
8	*1.65*	*1.66*	*1.64*	*0.47*	*4*	*74.25*	*0.96*	*5*	*1.36*	*0.78*	*36.89*
266	2.27	2.30	1.96	-0.38	111	7.88	0.79	161	1.14	0.79	41.92
295	*2.57*	*2.62*	*2.28*	*-0.28*	*148*	*11.66*	*1.15*	*211*	*1.64*	*0.81*	*35.18*
114	2.68	2.72	2.40	0.97	20	8.26	0.64	28	0.90	2.33	63.70
107	*2.87*	*2.91*	*2.57*	*0.90*	*19*	*8.13*	*0.69*	*28*	*1.00*	*2.34*	*62.09*
34	0.36	0.37	0.31	0.74	26	23.70	0.86	30	0.96	0.14	12.59
29	*0.46*	*0.47*	*0.40*	*0.45*	*0*	*-0.51*	*-0.02*	*-4*	*-0.14*	*0.13*	*14.61*
71	2.68	2.71	2.22	1.01	10	6.68	0.53	16	0.84	2.77	75.22
66	*2.85*	*2.88*	*2.35*	*1.02*	*9*	*6.06*	*0.52*	*13*	*0.78*	*3.02*	*78.23*
146	1.75	1.85	1.70	0.94	85	172.20	1.56	119	2.20	1.14	42.42
133	*1.74*	*1.82*	*1.71*	*0.84*	*66*	*300.37*	*1.29*	*94*	*1.82*	*1.11*	*42.89*
144	2.07	2.09	1.63	0.26	62	11.70	1.00	86	1.39	1.08	46.25
147	*2.17*	*2.19*	*1.74*	*0.36*	*26*	*5.23*	*0.44*	*34*	*0.59*	*0.98*	*38.62*
2,362	1.96	2.12	1.64	0.65	963	14.56	1.06	1,400	1.55	0.98	37.64
2,371	*2.10*	*2.29*	*1.79*	*0.70*	*1,006*	*17.21*	*1.19*	*1,476*	*1.74*	*1.00*	*35.77*
12,263	**1.96**	**2.15**	**1.76**	**0.57**	**4,839**	**13.96**	**1.00**	**6,973**	**1.44**	**1.00**	**39.39**
12,485	***2.10***	***2.28***	***1.84***	***0.70***	***5,174***	***15.96***	***1.16***	***7,388***	***1.66***	***1.05***	***37.32***

Registered banks – Analysis of annual results

Balance sheet breakdown		Assets ($Million)								
Entity	Balance date	Cash on hand, money at call and balances with other banks	Trading, investment securities, investments in subsidiaries and investment properties	Derivative financial instruments	Loans and advances (less provisions)	Balances with related parties	Fixed assets	Intangibles	Other assets	Total assets
2016										
Australia and New Zealand Banking Group Limited – New Zealand Banking Group	30-Sep	4,527	14,957	16,634	120,651	4,903	387	3,424	1,223	**166,706**
Bank of Baroda (New Zealand) Limited	31-Mar	22	0	0	64	3	0	0	1	**92**
Bank of China (New Zealand) Limited	31-Dec	61	0	0	145	0	1	0	1	**208**
Bank of India (New Zealand) Limited	31-Mar	22	0	0	74	4	1	0	0	**101**
Bank of New Zealand	30-Sep	4,098	4,703	7,319	74,378	934	165	216	728	**92,541**
China Construction Bank (New Zealand) Limited	31-Dec	85	0	1	307	7	2	0	0	**402**
Citibank, N.A. New Zealand Branch	31-Dec	524	0	0	755	117	1	0	578	**1,974**
Commonwealth Bank of Australia New Zealand Banking Group	30-Jun	2,110	5,529	1,275	75,492	667	187	449	408	**86,127**
Deutsche Bank AG, New Zealand Group	31-Dec	119	808	0	248	2,002	0	0	7	**3,184**
Heartland Bank Limited	30-Jun	84	236	0	3,114	0	9	58	46	**3,547**
Industrial and Commercial Bank of China (New Zealand) Limited	31-Dec	353	5	1	380	0	1	0	2	**742**
JPMorgan Chase Bank, N.A. New Zealand Branch	31-Dec	118	258	0	93	177	0	1	237	**884**
Kiwibank Limited	30-Jun	756	955	658	16,689	77	23	158	41	**19,357**
Kookmin Bank Auckland Branch	31-Dec	22	0	0	121	306	0	0	0	**450**
Rabobank Nederland New Zealand Banking Group	31-Dec	293	645	22	10,627	2,839	5	0	53	**14,485**
Southland Building Society	31-Mar	77	401	4	2,873	2	24	5	28	**3,412**
The Bank of Tokyo-Mitsubishi UFJ Limited, Auckland Branch	31-Mar	227	27	11	2,818	66	0	0	19	**3,169**
The Co-operative Bank Limited	31-Mar	198	9	4	1,804	0	8	13	6	**2,041**
The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch	31-Dec	353	447	208	3,586	961	1	16	18	**5,591**
TSB Bank Limited	31-Mar	118	2,449	0	3,830	0	19	4	7	**6,427**
Westpac Banking Corporation – New Zealand Division	30-Sep	2,316	7,834	4,838	75,582	1,218	161	650	759	**93,358**
Bank Sector Total		**16,483**	**39,264**	**30,975**	**393,631**	**14,292**	**997**	**4,993**	**4,163**	**504,798**

Liabilities ($Million)								Equity ($Million)					
Customer deposits	Balances with other banks and money market deposits	Debt securities	Derivative financial instruments	Balances with related parties	Subordinated debt	Other liabilities	Total liabilities	Share capital – ordinary shares	Head office account	Convertible debentures/ Perpetual preference shares	Other equity/Cash flow hedge reserves	Retained earnings	Total equity
89,768	2,053	29,207	17,096	13,614	2,336	1,465	**155,539**	8,044	11	0	62	3,050	**11,167**
44	0	0	0	2	0	0	**47**	40	0	0	0	5	**45**
35	25	0	1	88	0	3	**152**	63	0	0	0	-7	**56**
19	0	0	0	29	0	1	**49**	50	0	0	0	2	**52**
51,481	1,244	22,753	7,786	814	542	916	**85,536**	2,351	0	200	115	4,339	**7,005**
97	15	125	2	110	0	1	**349**	59	0	0	0	-5	**53**
1,064	23	0	0	684	0	7	**1,779**	29	34	0	0	133	**195**
50,892	452	18,527	1,741	3,265	5,134	619	**80,630**	704	462	1,034	448	2,849	**5,497**
150	460	494	0	1,946	0	13	**3,063**	20	0	0	3	99	**122**
2,283	0	717	6	0	0	43	**3,049**	421	0	0	-2	79	**498**
127	0	85	9	461	0	5	**687**	60	0	0	-6	0	**54**
193	0	224	0	54	0	412	**884**	0	0	0	0	0	**0**
14,743	135	2,207	725	43	258	117	**18,228**	400	0	0	113	616	**1,129**
207	117	0	0	122	0	1	**447**	0	3	0	0	0	**3**
4,767	0	3,120	27	5,023	0	68	**13,005**	551	204	0	0	725	**1,480**
2,703	150	199	42	0	39	39	**3,172**	0	0	0	-13	253	**240**
484	0	0	9	2,549	0	1	**3,044**	0	83	0	1	41	**125**
1,788	0	65	15	0	0	16	**1,884**	0	0	0	-5	162	**157**
3,252	186	844	105	1,106	0	44	**5,537**	0	54	0	1	0	**54**
5,813	0	0	11	0	0	49	**5,873**	10	0	0	15	530	**554**
57,541	616	15,977	6,236	3,525	1,091	1,335	**86,321**	143	1,913	0	-105	5,086	**7,037**
287,453	**5,476**	**94,543**	**33,811**	**33,436**	**9,400**	**5,155**	**469,274**	**12,945**	**2,763**	**1,234**	**626**	**17,956**	**35,525**

Registered banks – Analysis of annual results

Balance sheet breakdown		Assets ($Million)								
Entity	Balance date	Cash on hand, money at call and balances with other banks	Trading, investment securities, investments in subsidiaries and investment properties	Derivative financial instruments	Loans and advances (less provisions)	Balances with related parties	Fixed assets	Intangibles	Other assets	Total assets
2015										
Australia and New Zealand Banking Group Limited – New Zealand Banking Group	30-Sep	4,532	13,718	13,650	114,376	4,179	388	3,492	1,195	**155,530**
Bank of Baroda (New Zealand) Limited	31-Mar	23	0	0	49	3	1	0	1	**77**
Bank of China (New Zealand) Limited	31-Dec	67	0	0	0	0	1	0	0	**68**
Bank of India (New Zealand) Limited	31-Mar	18	0	0	62	4	1	0	0	**86**
Bank of New Zealand	30-Sep	3,643	4,918	7,895	68,216	1,259	176	158	522	**86,787**
China Construction Bank (New Zealand) Limited	31-Dec	76	0	0	4	12	1	0	0	**92**
Citibank, N.A. New Zealand Branch	31-Dec	450	751	0	572	143	1	0	62	**1,980**
Commonwealth Bank of Australia New Zealand Banking Group	30-Jun	3,174	4,675	1,759	69,087	641	189	438	622	**80,585**
Deutsche Bank AG, New Zealand Group	31-Dec	48	353	0	273	1,444	1	0	13	**2,132**
Heartland Bank Limited	30-Jun	32	323	0	2,314	29	5	26	70	**2,799**
Industrial and Commercial Bank of China (New Zealand) Limited	31-Dec	582	0	0	86	0	2	0	1	**670**
JPMorgan Chase Bank, N.A. New Zealand Branch	31-Dec	321	448	0	47	19	0	1	180	**1,016**
Kiwibank Limited	30-Jun	686	1,318	480	15,598	77	20	116	49	**18,344**
Kookmin Bank Auckland Branch	31-Dec	3	0	0	125	246	0	0	0	**374**
Rabobank Nederland New Zealand Banking Group	31-Dec	320	687	16	9,989	2,472	6	0	65	**13,555**
Southland Building Society	31-Mar	128	306	2	2,395	2	19	5	6	**2,863**
The Bank of Tokyo-Mitsubishi UFJ Limited, Auckland Branch	31-Mar	77	223	5	2,625	68	1	0	21	**3,019**
The Co-operative Bank Limited	31-Mar	209	10	2	1,562	0	8	11	5	**1,806**
The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch	31-Dec	426	495	116	3,775	448	1	18	30	**5,309**
TSB Bank Limited	31-Mar	107	2,450	1	3,275	0	16	4	59	**5,912**
Westpac Banking Corporation – New Zealand Division	30-Sep	1,107	7,636	5,459	69,576	3,451	164	658	810	**88,861**
Bank Sector Total		**16,028**	**38,311**	**29,384**	**364,006**	**14,498**	**1,000**	**4,927**	**3,712**	**471,866**

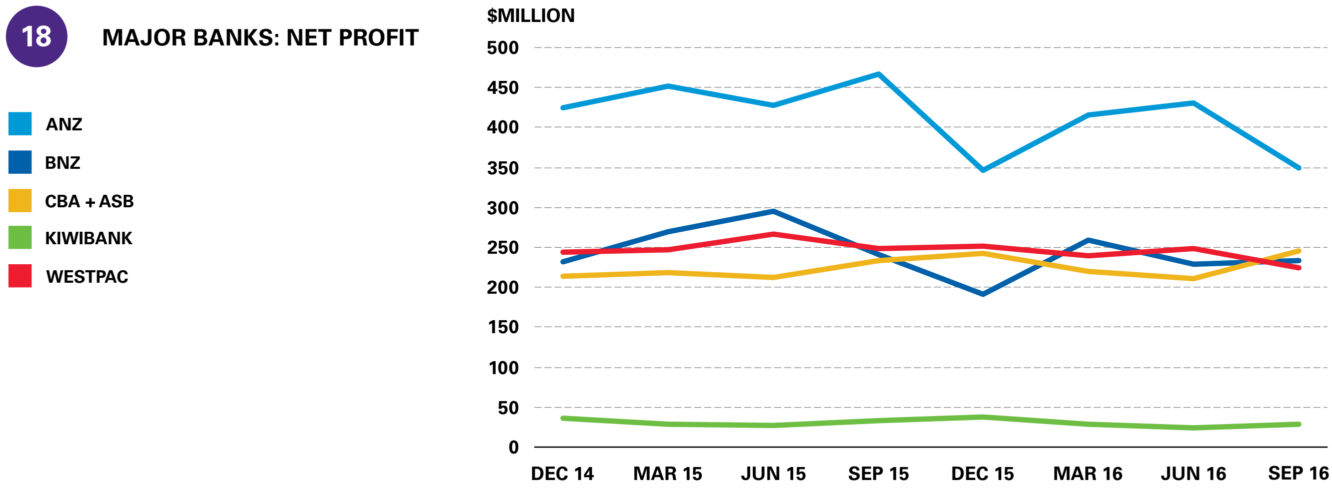
Liabilities ($Million)								Equity ($Million)					
Customer deposits	Balances with other banks and money market deposits	Debt securities	Derivative financial instruments	Balances with related parties	Subordinated debt	Other liabilities	Total liabilities	Share capital – ordinary shares	Head office account	Convertible debentures/ Perpetual preference shares	Other equity/Cash flow hedge reserves	Retained earnings	Total equity
83,134	2,417	26,848	13,926	14,093	2,381	1,871	**144,670**	8,047	11	0	-10	2,812	**10,860**
32	0	0	0	1	0	0	**34**	40	0	0	0	4	**44**
0	0	0	0	5	0	0	**6**	63	0	0	0	-1	**62**
12	0	0	0	21	0	0	**34**	50	0	0	0	2	**52**
46,729	1,439	21,183	8,310	1,095	0	989	**79,745**	2,351	0	650	96	3,945	**7,042**
1	33	0	0	1	0	0	**34**	59	0	0	0	-1	**58**
923	15	0	0	837	0	9	**1,785**	29	34	0	0	134	**196**
49,138	1,003	13,759	1,193	5,774	3,784	614	**75,265**	704	462	1,480	496	2,178	**5,320**
83	210	71	0	1,608	0	8	**1,980**	20	0	0	3	129	**152**
2,085	0	262	3	32	0	44	**2,426**	341	0	0	0	32	**373**
9	4	50	0	547	0	3	**613**	60	0	0	-3	0	**57**
169	0	397	0	259	0	192	**1,016**	0	0	0	0	0	**0**
13,724	325	2,397	475	22	255	113	**17,311**	400	0	0	101	532	**1,033**
151	189	0	0	30	0	1	**370**	0	4	0	0	0	**4**
4,696	0	2,787	35	4,624	0	72	**12,215**	551	169	0	0	620	**1,340**
2,436	0	65	10	39	41	28	**2,619**	0	0	0	5	238	**244**
201	0	0	8	2,710	0	1	**2,921**	0	83	0	1	15	**98**
1,575	0	61	6	0	0	15	**1,656**	0	0	0	-1	151	**150**
3,181	182	740	72	1,040	0	50	**5,265**	0	42	0	2	0	**44**
5,366	0	0	1	0	0	47	**5,414**	10	0	0	0	488	**498**
51,916	837	15,755	6,717	4,288	1,984	1,171	**82,668**	143	1,824	0	-102	4,328	**6,193**
265,561	**6,654**	**84,374**	**30,756**	**37,026**	**8,445**	**5,229**	**438,046**	**12,868**	**2,629**	**2,130**	**587**	**15,606**	**33,820**

Major banks - Quarterly analysis

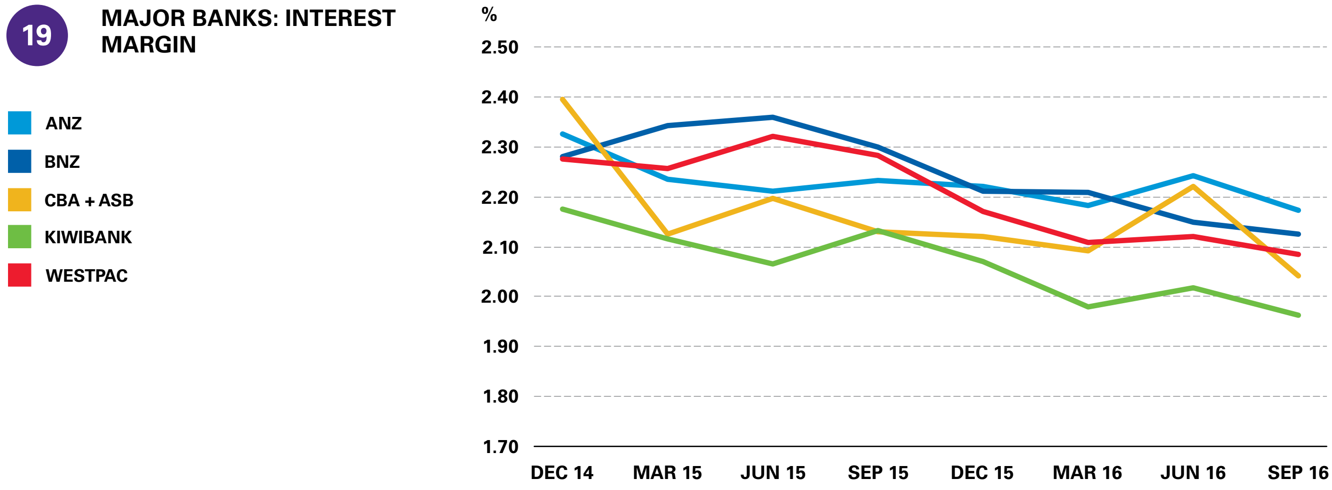
Entity	Size & strength measures							
	31 Dec 14	31 Mar 15	30 Jun 15	30 Sep 15	31 Dec 15	31 Mar 16	30 Jun 16	30 Sep 16
	Total assets[49] ($Million)							
ANZ[43]	135,290	140,253	150,664	152,038	152,289	160,801	163,538	163,282
BNZ[44]	79,658	81,926	85,657	86,629	86,819	89,913	91,906	92,325
CBA + ASB[45]	74,149	76,994	80,147	81,321	81,785	86,012	85,678	88,764
Heartland Bank[46]	2,543	2,623	2,772	2,825	3,290	3,334	3,489	3,595
Kiwibank	17,064	17,948	18,228	18,686	18,858	19,227	19,199	19,372
Southland Building Society	2,826	2,858	3,094	3,163	3,286	3,408	3,506	3,543
The Co-operative Bank Limited	1,770	1,795	1,838	1,896	1,971	2,029	2,109	2,179
TSB Bank Limited[47]	5,908	5,908	5,991	6,208	6,299	6,424	6,475	6,522
Westpac	82,442	82,087	87,455	88,203	88,416	90,309	91,518	92,708
Total	**401,649**	**412,392**	**435,846**	**440,968**	**443,014**	**461,455**	**467,418**	**472,291**
	Increase in gross loans and advances (%)							
ANZ[43]	1.53	1.75	3.60	0.86	1.51	1.47	1.94	0.43
BNZ[44]	1.16	1.57	1.01	1.72	2.35	2.24	1.80	2.46
CBA + ASB[45]	1.19	2.75	2.04	2.29	2.53	1.87	2.38	3.43
Heartland Bank[46]	4.50	4.10	4.11	3.21	22.19	3.02	3.29	4.01
Kiwibank	2.20	2.04	1.50	2.24	2.51	0.53	1.55	1.74
Southland Building Society	2.88	2.50	11.34	2.71	2.04	2.67	3.19	3.15
The Co-operative Bank Limited	2.93	2.19	3.24	4.28	4.23	2.87	4.01	4.97
TSB Bank Limited[47]	3.04	1.73	5.27	3.39	4.57	2.80	3.26	5.32
Westpac	1.67	1.51	1.57	1.99	1.38	2.22	2.88	1.86
Average	**1.50**	**1.90**	**2.34**	**1.65**	**1.85**	**1.85**	**2.22**	**1.90**
	Capital adequacy (%)							
ANZ[43, 48]	11.80	12.60	12.50	13.30	13.30	13.70	14.40	14.30
BNZ[44]	12.28	12.90	12.59	12.67	13.26	12.58	12.48	12.06
CBA + ASB[45]	12.70	12.10	12.70	13.30	14.10	13.70	14.30	12.70
Heartland Bank[46]	13.76	13.36	12.86	12.85	14.46	14.01	13.78	12.71
Kiwibank	13.30	12.40	13.40	12.80	12.80	12.90	12.90	12.80
Southland Building Society	16.07	15.61	14.59	14.21	14.27	13.76	13.50	13.63
The Co-operative Bank Limited	16.50	16.50	16.30	16.20	15.80	15.80	15.50	16.10
TSB Bank Limited[47]	13.48	13.85	13.71	15.77	14.86	14.52	14.62	14.59
Westpac[48]	11.60	12.10	12.40	13.30	13.90	14.00	14.00	13.10
	Net profit ($Million)							
ANZ[43]	425	452	427	467	347	416	430	349
BNZ[44]	232	270	295	241	192	259	229	233
CBA + ASB[45]	214	218	212	234	243	220	211	245
Heartland Bank[46]	10	11	10	10	15	14	15	14
Kiwibank	36	29	27	33	38	29	24	28
Southland Building Society	5	4	6	4	5	6	7	7
The Co-operative Bank Limited	3	2	2	3	3	2	2	3
TSB Bank Limited[47]	-18	16	13	25	13	10	14	14
Westpac	244	247	266	249	251	239	249	224
Total	**1,151**	**1,249**	**1,259**	**1,266**	**1,107**	**1,195**	**1,181**	**1,117**

Entity	Profitability measures							
	31 Dec 14	31 Mar 15	30 Jun 15	30 Sep 15	31 Dec 15	31 Mar 16	30 Jun 16	30 Sep 16
	Interest margin (%)							
ANZ[43]	2.33	2.23	2.21	2.23	2.22	2.18	2.24	2.17
BNZ[44]	2.28	2.34	2.36	2.30	2.21	2.21	2.15	2.12
CBA + ASB[45]	2.40	2.13	2.20	2.13	2.12	2.09	2.22	2.04
Heartland Bank[46]	5.06	4.91	4.83	4.81	5.18	4.58	4.53	4.46
Kiwibank	2.17	2.12	2.07	2.13	2.07	1.98	2.02	1.96
Southland Building Society	2.97	2.93	2.86	2.67	2.63	2.61	2.57	2.63
The Co-operative Bank Limited	2.90	2.80	2.81	2.77	2.71	2.61	2.51	2.46
TSB Bank Limited[47]	2.15	2.15	2.12	2.14	2.08	2.03	2.02	2.12
Westpac	2.28	2.26	2.32	2.28	2.17	2.11	2.12	2.08
Average	**2.34**	**2.26**	**2.28**	**2.25**	**2.21**	**2.17**	**2.20**	**2.13**
	Non-interest income/Total tangible assets (%)							
ANZ[43]	0.79	0.90	0.76	0.80	0.33	0.77	0.62	0.37
BNZ[44]	0.63	0.94	0.97	0.83	0.42	0.71	0.59	0.56
CBA + ASB[45]	0.63	0.70	0.53	0.66	0.77	0.57	0.47	0.62
Heartland Bank[46]	0.41	0.41	0.36	0.39	0.89	0.45	0.45	0.26
Kiwibank	0.73	0.57	0.57	0.59	0.62	0.55	0.46	0.56
Southland Building Society	0.96	1.03	0.98	0.95	1.03	0.97	1.00	1.00
The Co-operative Bank Limited	1.13	0.24	1.00	0.99	1.02	0.64	0.94	0.98
TSB Bank Limited[47]	0.35	0.40	0.24	0.38	0.20	0.21	0.21	0.35
Westpac	0.73	0.66	0.73	0.69	0.63	0.62	0.65	0.71
Average	**0.71**	**0.80**	**0.74**	**0.74**	**0.51**	**0.67**	**0.58**	**0.53**
	Impaired asset expense/Average gross loans and advances (%)							
ANZ[43]	0.05	0.07	0.10	0.06	0.09	0.08	0.18	0.14
BNZ[44]	0.02	0.26	0.10	0.38	0.22	0.23	0.15	0.08
CBA + ASB[45]	0.29	0.14	0.08	0.09	0.14	0.17	0.31	0.12
Heartland Bank[46]	0.52	0.44	0.74	0.56	0.34	0.41	0.63	0.49
Kiwibank	0.16	0.08	0.03	0.08	0.07	0.10	0.02	0.00
Southland Building Society	0.43	0.79	0.31	0.62	0.33	0.67	0.21	0.44
The Co-operative Bank Limited	0.07	0.05	0.16	0.04	0.08	0.05	0.08	0.16
TSB Bank Limited[47]	6.06	0.04	0.07	-1.47	0.08	0.31	0.07	0.12
Westpac	0.12	0.07	0.08	0.01	-0.01	0.06	0.02	0.32
Average	**0.17**	**0.13**	**0.09**	**0.11**	**0.11**	**0.13**	**0.16**	**0.16**
	Operating expenses/Operating income (%)							
ANZ[43]	39.02	36.61	38.03	36.34	43.30	42.41	36.61	43.98
BNZ[44]	39.67	32.91	34.47	35.81	42.26	34.94	39.69	40.28
CBA + ASB[45]	37.04	37.60	41.19	37.73	36.76	37.98	37.66	36.03
Heartland Bank[46]	48.13	47.14	48.45	49.94	49.59	43.96	42.55	43.51
Kiwibank	54.10	62.07	67.52	59.84	59.35	62.39	71.30	67.80
Southland Building Society	66.27	62.82	60.39	67.73	70.22	57.43	60.30	59.65
The Co-operative Bank Limited	77.95	78.63	80.40	77.65	73.38	81.41	80.27	75.07
TSB Bank Limited[47]	37.95	43.59	44.68	42.50	47.83	51.65	45.26	47.36
Westpac	38.97	37.89	38.95	43.11	40.48	40.80	41.25	38.92
Average	**39.98**	**37.90**	**39.80**	**39.52**	**42.52**	**41.07**	**40.33**	**42.02**

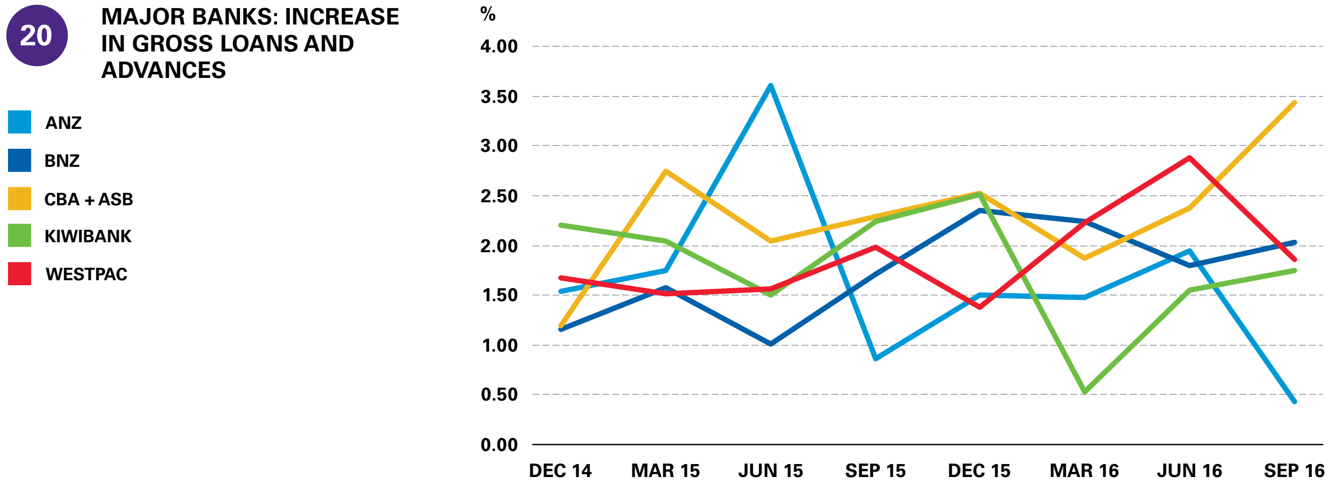
18 MAJOR BANKS: NET PROFIT



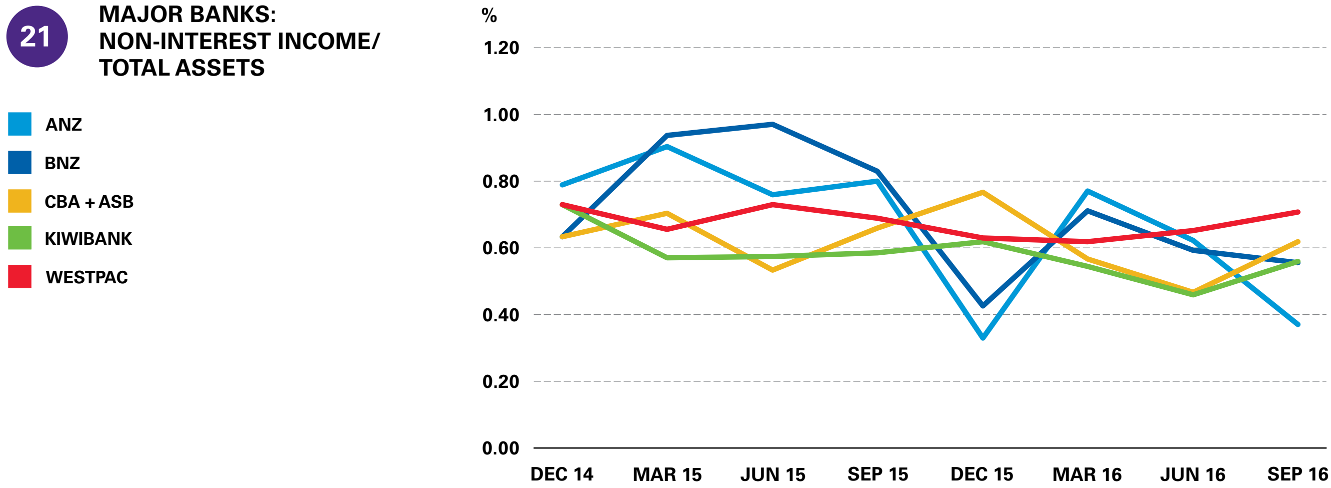
19 MAJOR BANKS: INTEREST MARGIN



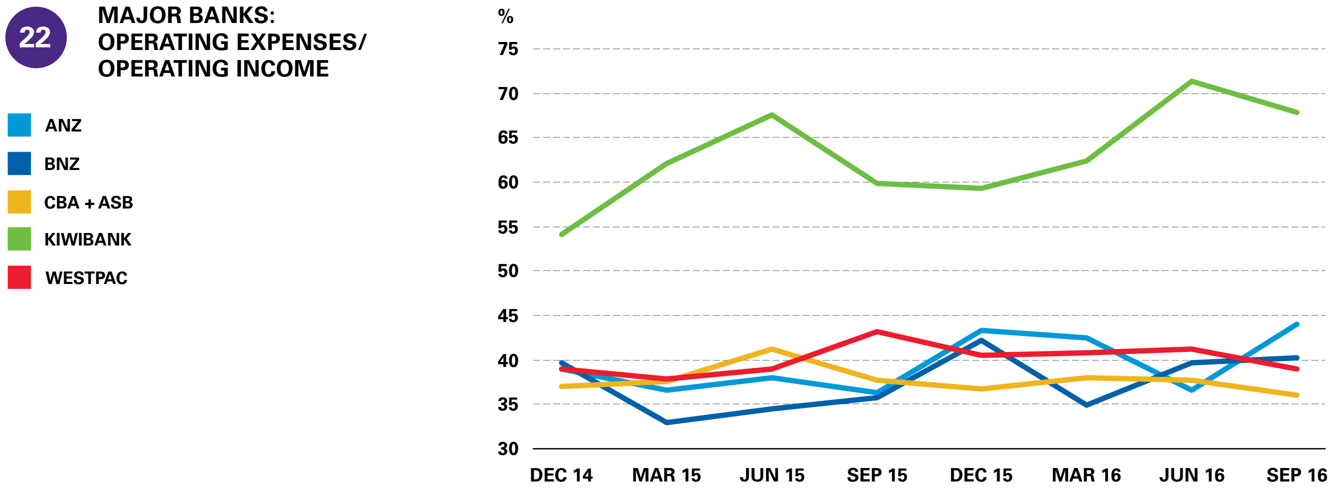
20 MAJOR BANKS: INCREASE IN GROSS LOANS AND ADVANCES



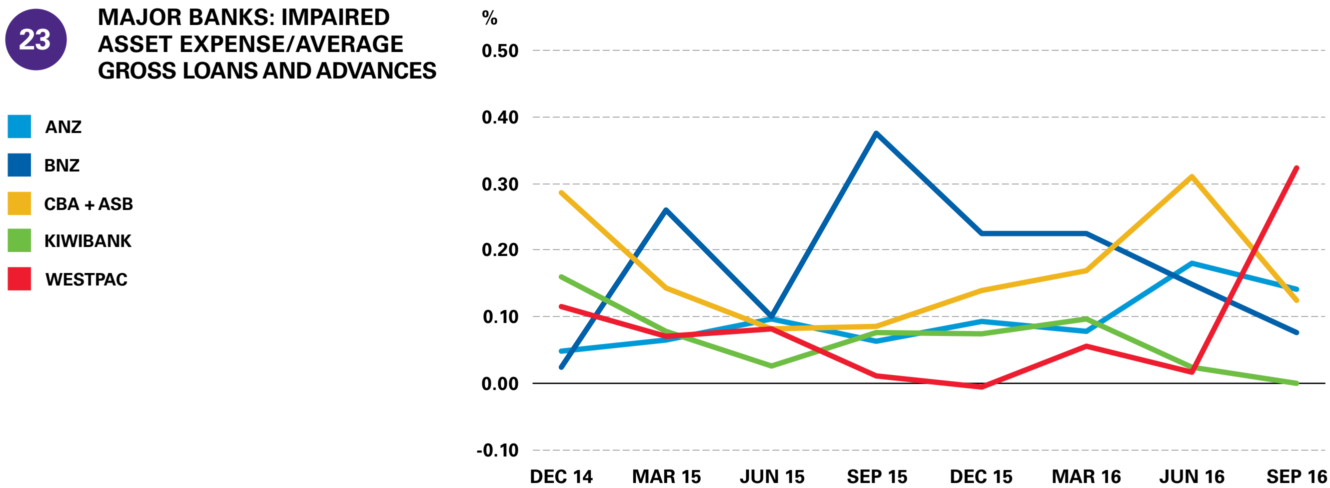
21 MAJOR BANKS: NON-INTEREST INCOME/ TOTAL ASSETS



22 MAJOR BANKS: OPERATING EXPENSES/ OPERATING INCOME



23 MAJOR BANKS: IMPAIRED ASSET EXPENSE/AVERAGE GROSS LOANS AND ADVANCES



Review of bank directors' attestation regime

Grant Spencer
Deputy Governor and
Head of Financial Stability
Reserve Bank of New Zealand

RESERVE BANK OF NEW ZEALAND
TE PŪTEA MATUA

Grant Spencer is the Deputy Governor and Head of Financial Stability with the Reserve Bank of New Zealand, and is Chair of the OECD's Financial Markets Committee.

The Financial Stability function of the Reserve Bank encompasses three departments: Prudential Supervision; Financial Markets and Macro Prudential. Together, they are responsible for formulating and implementing public policy to promote and maintain a sound and efficient financial system.

Grant has held executive positions with the ANZ Banking Group in New Zealand and Australia, and the International Monetary Fund (IMF) in Washington DC. He has also been Head of both the Economics and Financial Markets Departments within the Reserve Bank.

The bank directors' attestation regime has been a cornerstone of the Reserve Bank of New Zealand's approach to prudential supervision for two decades. Overall, we believe that it has stood the test of time well. Our discussions with directors indicate that directors take their responsibilities very seriously.

The Reserve Bank's approach to banking sector regulation and supervision is heavily focused on ensuring that bank directors and senior managers have the right incentives to manage their bank's risks (self-discipline), and ensuring that market participants have the appropriate information, incentives and mechanisms to influence the behaviour of banks in a way that also contributes to a sound and efficient banking sector (market discipline). Where material market failures exist, the Reserve Bank relies on formal rules and requirements to incentivise financial institutions to act in ways that align with the public interest (regulatory discipline).

We see the attestation regime as the key mechanism that supports and enhances self-discipline and, given how long it has been in place and the differing approaches adopted by banks, it is therefore timely to review how it is working in practice. We will be undertaking a thematic review of the regime in 2017, which is intended to assess the effectiveness and scope of the attestation approaches adopted by New Zealand incorporated registered banks, and the processes that bank directors use to fulfil their obligations under sections 81 to 82 of the Reserve Bank of New Zealand Act 1989 (the Reserve Bank Act).

The Reserve Bank uses thematic reviews to conduct in-depth reviews of areas of particular supervisory interest, including current or emerging risks within the banking sector. We do not presuppose that a thematic review will identify material compliance breaches or supervisory concerns. Recent thematic reviews have focused on problem loan identification and loss provisioning for the dairy sector, banks' Internal Capital Adequacy Assessment Processes (ICAAP), outsourcing arrangements, and credit origination policies and practices for housing and rural lending. For 2017, the Reserve Bank will undertake a thematic review to gain insights on attestation approaches and governance arrangements for New Zealand incorporated banks.

The requirements for directors to sign off on their banks' quarterly disclosure statements enhance the effectiveness of self-discipline and market discipline, by strengthening the accountability of bank directors and increasing the market's ability to assess the soundness and performance of banks. Currently, directors are required to attest in the quarterly disclosure statements that after due enquiry, they believe that:

— the disclosure statement contains all the required information, and is not false or misleading;
— all of the bank's conditions of registration have been complied with over the accounting period of the disclosure statement;
— credit exposures to connected persons were not contrary to the interests of the bank over that period; and
— the bank had systems in place to monitor and control adequately the material risks of the banking group, including credit risk, interest rate risk, currency risk, equity risk, liquidity risk, operational risk, and other business risks over the accounting period, and that those systems are being properly applied.

The Reserve Bank has always been clear that it places a heavy emphasis on the role of self-discipline and the critical nature of the directors' attestations in the quarterly disclosures, given that the Reserve Bank does not either conduct onsite supervision or regularly require independent verification of information provided by banks.[50] This was a theme that received considerable attention from the International Monetary Fund (IMF) during their recent New Zealand Financial Sector Assessment Programme (FSAP).[51]

The thematic review of the bank directors' attestation regime will help us assess the effectiveness of this distinct New Zealand approach. As such, its purpose is to:

a. assess the effectiveness of the director attestation regime established by the Reserve Bank of New Zealand Act 1989; and
b. improve the Reserve Bank's understanding of banks' general approaches to governance.

The review will involve consultants with expertise on bank corporate governance, who will work alongside Reserve Bank staff. Between 8 and 12 New Zealand incorporated banks will be included in the review, which has a target completion date of 30 June 2017. A range of information-gathering tools is likely to be used, including some of the following:

— a confidential survey of bank directors;
— face-to-face interviews with a cross-section of directors and relevant senior management involved in the attestation process;
— discussion of bank-specific case studies where attestation obligations would be expected to be a material consideration; and
— a desk-based review of information provided by banks that supports and enables directors to reach conclusions on the quarterly attestations.

The confidentiality of all information obtained will be protected under the provisions of section 105 of the Reserve Bank Act.

It is expected that the review will provide a comprehensive view of best industry practice with regards to the role of bank directors, and the scope and nature of their involvement in the attestation process. In particular, the findings of the review could contribute to future Reserve Bank guidance for bank directors regarding their attestation obligations, and may contribute to future refinements to the Banking Supervision policy on Corporate Governance.[52]

As with previous thematic reviews, the Reserve Bank will provide feedback to all banks on the general findings from the review, including anonymised examples of best practice across the banking sector. The review may also give rise to specific supervisory follow-ups where areas of concern are identified.

Sustainable performance requires good conduct

Liam Mason
Director of Regulation
Financial Markets Authority

FMA
FINANCIAL MARKETS AUTHORITY
TE MANA TATAI HOKOHOKO - NEW ZEALAND

Liam leads and oversees the licensing and supervision of all financial markets participants, from individual Authorised Financial Advisors through to KiwiSaver providers. He is also responsible for the FMA's compliance frameworks, contacts, and intelligence functions.

Liam has extensive experience in securities law and corporate governance matters, advising on securities and financial services law and policy, Crown entity governance and legal compliance.

The transition to the Financial Markets Conduct Act (FMC Act) is complete, 190 financial services firms are licensed, and the FMA is now a fully-fledged conduct regulator. For financial services providers, from 2017 onward, conduct regulation is the new normal.

Because conduct is at the core of the Act, it gives weight to the FMA's existing statutory mandate to monitor what financial providers do, and how they do it. So, it is important to be clear on how we will view and respond to conduct. That is why we have just published the final version of our conduct guide,[53] having considered submissions from a wide range of firms from the financial services industry during the consultation period.

The FIPS Survey is focussed on performance, and for the FMA it is critical to our strategy that we communicate our view that the conduct of financial services providers directly affects the consumers of those services, and therefore, that affects all New Zealanders.

High standards of conduct support fair, efficient, and transparent markets and – a good result for all of us – the confident participation in those markets of businesses, investors, and consumers. This benefits our economy and the vigour and sustainability of financial sector performance. So, the transformation to focus on conduct, which is at the heart of the FMC Act – and in the FMA's mandate – is also commercially astute for the financial services industry.

The conduct guide sets out that the FMA will take a risk-based approach to conduct regulation. We do this by assessing which financial services providers, and what types of conduct, are most likely to pose risks to fair, efficient and transparent markets – and also harm investors and consumers. Then we'll direct our regulatory attention and effort accordingly.

As we assess risk, our focus will be on whether the financial services providers we regulate have the interest of their customers at heart. In particular, it will be on how they demonstrate a commitment to good customer outcomes in the delivery of their products and services.

They recognise that sustainable success is based first on understanding the customer's need… then meeting it to the best of their ability.

It is not just the FMA saying this and taking this approach. Regulators in other parts of the world are saying it too, as are the global contemporaries of the local industry including, in some cases, their parent organisations. They recognise that sustainable success is based first on understanding the customer's need (including helping them to determine that need), then meeting it to the best of their ability.

And of course it's already second nature for many businesses to recognise the value of good customer service and relationship management – the overall promise of 'customer experience'. We have engaged with the industry to help them understand how what it is done for commercial reasons can also, with not much adjustment, help to build more confident New Zealand investors.

In fact, in many cases, it is the simple act of taking a corporate vision statement that sits on a plaque or poster near the lifts and putting it into effective practice on the front line.

Additionally, we are now engaging with investors to make them aware of their entitlements under the FMC Act and the minimum standards of service and behaviour they should expect when engaging with the financial services industry.

We will focus on providers' conduct through our intelligence-led supervision. So then, what does the FMA see as potential drivers of risk across the sector? We have reviewed our foundation document, the FMA's Strategic Risk Outlook, and set out the underlying strategic risks to achieving our regulatory outcomes, including conduct.

Strategic Risk Outlook 2017

The FMA has also published its updated Strategic Risk Outlook (SRO) this month. The outlook describes the consistency in our key priorities as we shift from FMC implementation into operating as a conduct-based regulator. While the seven priorities have remained the same, there have been developments to the underlying risks and drivers of risk.

We have also identified some developing themes that will remain on our radar. These are:

— regulating in an environment of rapid technological innovation and change;

— retail investor participation in complex or risky products;

— reviewing the boundary of our regulatory perimeter; and

— helping investor decision-making in changing market conditions.

These themes may not be new, but they are developing rapidly both at home and internationally. An example is foreign exchange trading services by overseas entities, and other unregulated products that operate deliberately outside New Zealand's jurisdiction yet still manage to entice Kiwi investors or consumers. This impacts our market integrity, and so we will continue to warn investors about these non-regulated companies and take action where we can against any overseas companies that are using New Zealand's good reputation for their gain.

The benefits are worth pursuing as long as the risks are appropriately managed.

Although we recognise that new technologies bring benefits to investors and business – more efficiency, lower business costs and better accessibility – the increased reliance on technology also brings risks. These include increased exposure to complex products for retail investors and data security vulnerabilities. The benefits are worth pursuing as long as the risks are appropriately managed. So we are supportive of technological innovation in financial services and have regulatory settings that are flexible and modern in order to promote and accommodate innovation within the framework of the FMC Act.

We have introduced to the updated SRO a deeper insight into the influences we take into account in deciding what risks are present. We hope that this, and understanding how we will view conduct, helps financial service providers understand not only what we are focusing our resources on, but also the results we are aiming for.

More legislation? Success is all about customer-centricity

Adele Wallace
Associate Director – Advisory
KPMG

Adele is an Associate Director in KPMG's Auckland practice specialising in conduct risk. Adele brings valuable insight and a rich range of experience in approaches to conduct risk across banking and general insurance through her extensive work in the regulatory practice at KPMG UK and her previous roles in the industry.

In our last review, we highlighted the raft of emerging legislation that was heading in the direction of the financial services industry. That legislation is now in force, so what does it mean for banking and most importantly, how is the regulatory environment changing? We may find the future could bring less 'black letter' legislation, replaced with a shifting focus towards overarching principles based on customer outcomes with a strong ethical culture at the heart of business. We discuss how you can go beyond the 'legislative burden' and instead, by harnessing the many drivers for improving consumer outcomes, can create innovation and opportunity in the market.

The financial services industry has recently seen a significant increase in both legislation and regulation and the industry is increasingly feeling the pressure. Both 2015 and 2016 have been busy years for legal, risk and compliance departments, so we take a look at some of the changes and consider some practical considerations for implementation.

Arguably, financial services have been most impacted by the Credit Contracts and Consumer Finance Amendment Act 2014 (CCCFA) that came into effect in June 2015. It strengthens consumer protection by defining lender responsibility principles (Responsible Lending Code) around affordability, providing customers with clear information and acting ethically. In addition, the sector has had to reconsider their fees in light of new requirements around how fees are calculated and charged and the requirement that these are 'reasonable'.

Amendments to the Fair Trading Act 1986 (FTA) came into effect in March 2015. These amendments represent the implementation of new unfair contract provisions, providing new rights for consumers and obligations for businesses. The requirements have triggered a number of organisations to launch extensive reviews of contractual terms and conditions across all products and draft new standardised terms and conditions.

Additionally, November 2016 signalled the end of the licensing process that began two years ago as part of wider financial services reforms to regulate the industry further. All fund managers, discretionary investment management service providers and derivatives issuers must meet new governance and capability standards under the Financial Markets Conduct Act 2014 (FMCA).

Now that we have emerged from this flurry of legislative change, we can reflect on the drivers behind their inception. It isn't hard to see that this legislative activity signalled a championing of the consumer and a concerted effort by regulators to improve the behaviours and interactions that companies have with their customers.

But regulatory reflections have revealed an interesting contradiction. Despite global increases in consumer-based legislation and regulation aimed at improving consumer experience, instances of misconduct continue. Arguably, instances have actually increased, which has driven a deterioration of trust and customers' perception of the value they get from their financial services provider.

Moving towards change in culture and conduct

Increasing the extent and coverage of legislation and regulation has failed to stem the tide of poor customer outcomes. The inherent culture in firms and focus on profit and shareholder value rather than customer outcomes are being seen as potential root causes. As a result, we are seeing regulatory approaches take a more holistic view of the entire organisation and a renewed focus on improving organisational culture and individual conduct.

There has been a groundswell of discussion and interest around 'conduct and culture' around the globe with the UK's Financial Conduct Authority taking the lead. Closer to home, the FMA have recently released a consultation paper on their view of conduct and how they will consider conduct in their supervision of providers. The consultation states that "*Good conduct is vital to fair, efficient and transparent markets, and ensures the confident and informed participation of businesses, investors and consumers.*" In Australia, APRA have released their insights into risk culture, and Australian Securities and Investments Commission's rhetoric is strongly levelled at firms' culture and tone from the top. As the international landscape continues to evolve and mature, we can expect further changes to the domestic landscape, but this is unlikely to be driven by the 'black letter' legislation that we have seen in recent years.

Instead, organisations will be asked to demonstrate how their culture and conduct consistently deliver good customer outcomes. They will need to provide evidence-based positive assurance that they are achieving good customer outcomes, rather than relying on simple negative assurance.

To many organisations and their risk advisors, the departure from the simple interpretation of black-letter legislation and reasonably fluid regulatory expectations has caused some discomfort and uncertainty. How should you go about understanding your organisation's culture and changing it? Who should take responsibility and where in the business should the change be driven? Are there instances of misconduct that you simply don't know about and what is driving this?

Success is all about customer-centricity and good customer outcomes

To succeed during this period, organisations will need to change their view of 'compliance' from a burden that simply needs to be ticked off or perfunctory adherence to regulation and instead consider good conduct and positive customer outcomes as the 'way things are done in this business'.

We see the focus on good conduct as a key driver of innovation which not only 'future proofs' a business … but which also strengthens the overall market and increases perceptions of integrity, building consumer trust and creating brand advocates.

Conduct risk

Conduct risk is the risk that strategic business decisions negatively impact on the ultimate customer. Usually, these are decisions that are made quite early in the value chain, for example, in strategy setting and product design. Conduct is all about balancing the financial interests of the company with the needs of the customer and driving trust and sustainable income by being more customer-centric.

Culture

Culture is what drives day-to-day behaviour. The accumulation of years of corporate history and the messages that senior leadership drive through the business, either through their own behaviours or expectations, that form part of the attitudes and beliefs around the organisation as to what constitutes expected performance. Organisations may believe that they have a strong system of controls to prevent inappropriate behaviour, but culture has a huge influence on an employee's course of action when faced with competing priorities.

Risk culture

Risk culture is the way the firm identifies and deals with those risks. It is all about creating an environment whereby risks can be identified and called out. This includes having the right people taking responsibility for risk, monitoring and managing risks that are emerging, and dealing with issues that have crystallised.

Organisations that are succeeding are taking a holistic view and really examining their strategies and business models. The world is changing fast, and customer expectations are increasing, so these businesses are harnessing the drive for change and taking a wider view by focusing on their longer-term strategies and strengthening relationships with customers rather than simply on short-term profit increase.

These are organisations who have realised that being customer-centric not only makes good business sense, but it is absolutely at the core of their business model and the source of future growth. They have identified that good culture and conduct is a differentiator in an industry where products and pricing are very similar, and they are starting to stand out for all the best reasons. We see the focus on good conduct as a key driver of innovation which not only 'future proofs' a business where new Fintech players, digital disruptors and peer-to-peer entities are starting to take market share by focusing on ethical behaviour and delivering to customer needs, but which also strengthens the overall market and increases perceptions of integrity, building consumer trust and creating brand advocates.

Change is driven from the top

Successful businesses are reviewing and re-evaluating their strategic priorities and their core business models to identify the potential risks to customer outcomes; they are looking at a broad blend of data and inputs to give them real insight. They are talking to their employees and their customers, looking at complaints and social media to see where those moments of truth are, discovering where they aren't delivering, identifying their root causes and defining what needs to change.

They are ensuring that customer-centricity is at their heart of everything they do, starting at the very top of the organisation and embedded into their business models, training, product design and performance management. At the same time, they are starting programmes which change the overall culture and measuring that customers are getting real value from their core business offerings.

Organisations may be missing a significant opportunity for improvement by innocently believing that they have a positive culture and conduct environment. Clearly, businesses don't overtly decide that their strategy will be to mislead customers; however, our experience is that sometimes poor customer outcomes are inadvertent or an unintended consequence of a decision made much higher up the value chain, and usually this is because there has failed to be a clear analysis or understanding of the potential risks to customers as a result of a decision.

It is clear that this absolutely starts at the top and the drive for change has to come from senior leadership and has to permeate through their decisions, behaviours and expectations, continually setting an example for the whole of the organisation.

Regulation is certainly one aspect of the pressure to improve customer outcomes, but it's clear that failing to move at pace to harness the myriad of other drivers: changing customer expectations; employee satisfaction; digital disruption; and increasing competition from Fintech entrants, could mean that traditional providers get left behind by failing to balance the divergent interests of the customer, employees, the company and the wider market. Now is the time to turn those risks into opportunities.

Turn risk into opportunity by harnessing customer centricity and the drivers of change

Digital disruption

Competition from new market entrants and Fintech are changing traditional distribution models.

Social media

Level of customer advocacy becomes more visible. Increased opportunities for client interaction.

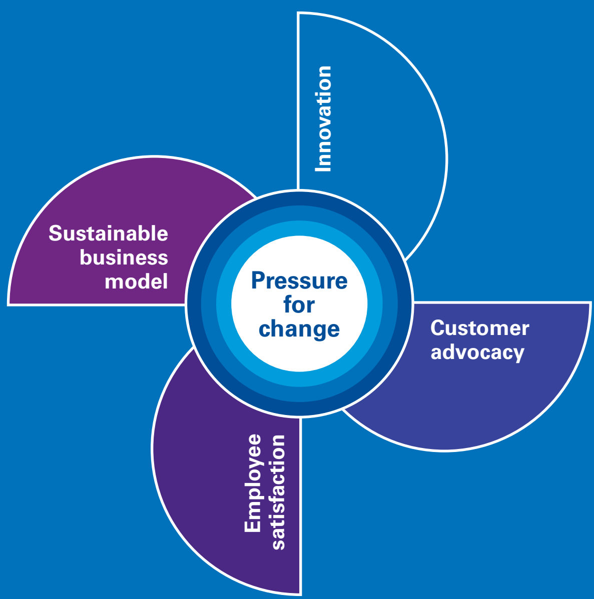
Customer expectations

Customers desire transparency and simple products that perform as expected. Trust in banks is at a low.

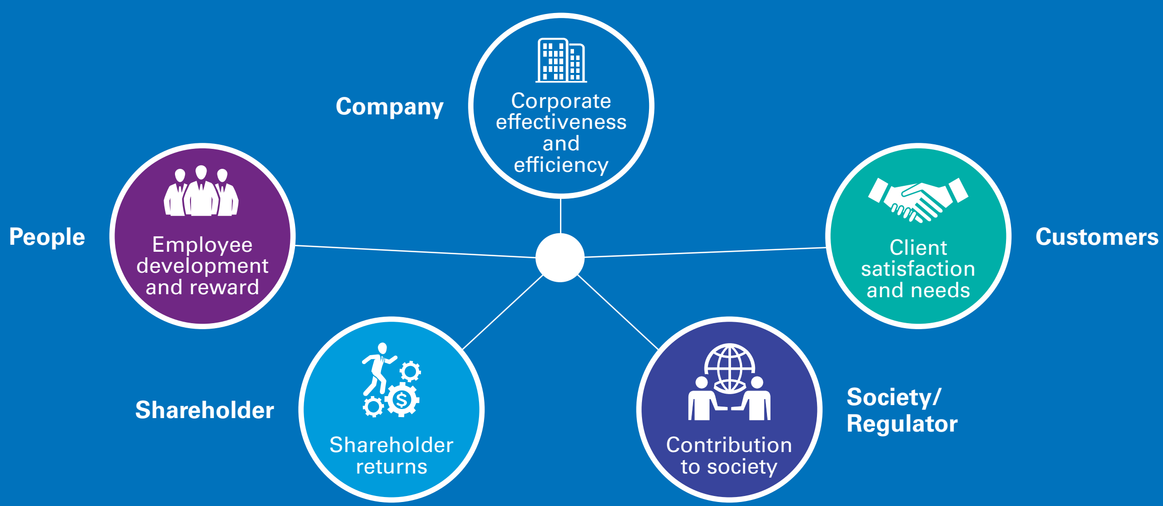
Regulatory intervention

Sustained regular and government investigation increases the risk of fines and unsustainable strategies.

EXTERNAL DRIVERS



DIVERGENT INTERESTS



Transforming the agri-food industry

Ian Proudfoot
Partner – Audit
Global Head of Agribusiness
KPMG

Ian joined KPMG in London in 1992 transferring to the New Zealand firm in 1996. Ian is the leader of KPMG's Agribusiness group in New Zealand, and Global Head of Agribusiness for the firm. He is author of the KPMG Agribusiness Agenda, a publication that, since 2010, has addressed the industry opportunities and challenges in New Zealand.

Since the publication of the KPMG Agribusiness Agenda, Ian has presented to numerous companies and industry groups on the strategic challenges facing New Zealand's primary industries. He is currently researching KPMG's Agribusiness Agenda for 2017.

The relief for many in the primary sector was palpable in the last quarter of 2016 as Global Dairy Trade (GDT) auction after GDT auction delivered sizeable price gains. The GDT index finished the year 67% above its low point on 5 April 2016. This has driven in a welcome increase in farm gate milk prices after a number of tough seasons, but leaves some big questions hanging over the future direction of the dairy industry.

For farmers, higher prices mean a return to profitability and stronger cash flows. For some, this delivers the ability to restart their lives, having cut everything but the bare essentials of life to the bone to survive the last two years. The sense of relief for suppliers to the industry is almost as great, because banker's price increases reduce the emotional and financial challenges of managing distressed loans and deliver opportunities to start supporting customers to grow.

Building a platform for a stronger industry

The last three years have been tough for dairy farmers, for many they will not recover the equity that has been lost until we are well into the 2020s, but I believe the industry has built the foundations for a stronger future. Having come through the last few years bruised, but with a reinvigorated desire to compete, the right decisions now will enable the dairy sector to capture more of the value it grows in a rapidly changing global market.

Many farmers… have been forced to focus on the fundamentals of their business.

Inside the farm gate, many farmers operating today have never had to face the challenge of such a sustained period of low prices. They have been forced to focus on the fundamentals of their business. In particular, they have learnt which costs have a direct nexus to growing a better product, and as a consequence, offer the potential to earn a higher return. Many farming businesses are run more effectively today than they were three years ago.

I also believe that there is increasing acceptance that simply growing more volume is not the answer to growing value. Many argue that we have, as a consequence, reached and probably passed peak milk production. Tightening environmental regulation and changes in community expectations will make future dairy farm conversions more difficult. As a consequence, discussions are starting on how land, irrigated during the dairy boom, can generate higher returns from the access to water in the future.

The opportunity to grow high value crops or raise alternative animals on the Canterbury Plains to secure premiums available globally for novel products gives farmers more choices over land use than they have had for decades.

There has also been some good progress on seeking to monetise the unique attributes of our dairy system. Synlait Milk's grass fed products for Munchkins in the US are a good example of recognising that others will place financial value on what we have historically taken for granted. Lewis Road Creamery has demonstrated that there is a place in the market for innovative, premium products. They have also showed that these can be successfully commercialised without the overhead burden that traditional stainless steel infrastructure places on a business through the use of modern, flexible business models.

There has also been some good progress on seeking to monetise the unique attributes of our dairy system.

These developments suggest that more people clearly understand what the pathway looks like to develop a dynamic, flexible, high performance dairy industry that is increasingly sheltered from commodity price movements.

We should never forget we are not alone

However, I am not hopeful that the industry will continue its progress towards capturing its potential as price pressures reduce. For many, unrelenting low prices highlighted the need to shift away from commodity markets to deliver more consistent, sustainable returns. There is a strong correlation between high prices and comfort with the status quo.

I fear that the momentum for structural change will slow until a time (which may not be too far into the future) that we again see cyclical commodity prices falling and the need for change comes back into focus.

The only problem with delaying change is that the rest of the world is moving forward regardless of what we choose to do or not to do in New Zealand. We are a small player in a large global system that is growing at faster rates than we are. This makes our traditional role in the market less relevant. As new export competitors emerge, new forms of milk are commercialised (we expect a cultured milk product to be commercialised during 2017, for example, natural milk grown without the environmental and welfare challenges associated with animals), governments support their domestic producers to deliver food security, and consumer preferences evolve, we run the risk of being left behind if we do not respond effectively.

It is critical that we recognise a price recovery driven by an upswing in commodity prices means nothing of substance has changed.

It is critical that we recognise a price recovery driven by an upswing in commodity prices means nothing of substance has changed. Prices are doing what they have always done – responding to demand and supply conditions rather than reflecting a material shift in the strategy of the industry. We cannot afford to be complacent to expect this price recovery to be any more permanent than previous price recoveries, particularly as supply can be dialled up faster today than was possible in the past to take advantage of peak prices (something that is already apparent, with the US milk pool already starting to grow in response to the recent price increases).

Commodity price movements must not deflect the industry from taking the steps that need to be taken to cement its future as the world's leading artisan producer of nutritious, sustainable, grass-fed dairy products.

What does that change agenda look like?

My view is that everything must start with the ultimate consumer of our products and the need to design and deliver the products that will fit within their lifestyles and shape the health outcomes that they are looking to achieve.

This means we need to be growing less milk (most probably a lot less milk) to provide processors with a greater ability to produce and deliver these value-added products. This is a major change for an industry that has used volume growth as the key benchmark to measure its success. To achieve an optimal supply position, it increasingly feels like the time is approaching for the repeal of the Dairy Industry Restructuring Act and its obligations which sustain uneconomic and environmentally marginal supply.

The industry needs to address how it invests as a priority to avoid being challenged by the same overcapacity issues that have beset the red meat sector for 20 years.

It also means that there needs to a significant reassessment of how the industry deploys capital. It is investment into brands, consumer experience, and world class innovation that will differentiate our products in the eyes of a consumer and secure stable and sustainable price premiums, rather than more stainless steel processing plants on the ground.

The industry needs to address how it invests as a priority to avoid being challenged by the same overcapacity issues that have beset the red meat sector for 20 years.

Recognition of the need to have open channels of communications with all stakeholders is critical. Premium consumers want to understand who is producing their food, what their values are and how they bring those values to life through their business. They also seek assurance about how a product's integrity is maintained across the supply chain and confidence that the product they buy is the product we sent. This means the industry needs to be open in telling its stories and about the opportunities to do better. It also needs to invest in the platforms that provide consumers total confidence over the integrity of the products they purchase. Product assurance is only one aspect of the digital transformation facing the primary sector. The fusion revolution (where digital, physical and biological technologies are being fused to create disruptive new solutions) is transforming every aspect of agri-food businesses. From the augmentation of a farmers intuition through data and analytics, to the mechanisation of tasks utilising robotics and unmanned vehicles and the use of blockchain to provide confidence over product integrity, the primary sector faces a significant period of investment; into both the technology, and the people needed to operate them, if it is to capture the opportunities available in the market.

The fusion revolution… is transforming every aspect of agri-food businesses.

Correctly scaled production, open communications and the best technology will not deliver an additional dollar to the farm gate if we do not understand our consumers and their dreams, aspirations and problems properly. It is only through deep connectivity with the people that will ultimately consume the food that we produce that we can create the products that solve the problems they face on a day-to-day basis. As a consequence, I believe the most important investment the industry can make is in becoming more connected with their consumers, by having more people embedded into the places that their consumers live.

The farmers that want to be part of a value chain that rewards them for doing the right things will make a difference.

There is not a single prescription that will work for every organisation. Each organisation will follow its own strategy, appropriately balancing a desire for return with the risk that it is prepared to take on. It is clear from our discussions that there are those that aspire to catch significantly more of the value they grow and as a consequence they are looking to shake up the value chains they are currently part of.

The farmers that want to be part of a value chain that rewards them for doing the right things will make a difference. The researcher with an innovative consumer solution will make a difference. The digital analyst with a game changing algorithm will make a difference. It is these and other change agents prepared to stand up to complacency and do things differently that will shape the pace of change in the industry. They will progressively detach the industry from the peaks and troughs of the commodity cycle and accelerate the arrival of a more prosperous future for our country.

Customers drive banking innovation

Karen Scott-Howman
Chief Executive,
New Zealand Bankers' Association

NEW ZEALAND BANKERS ASSOCIATION

Karen leads NZBA's commitment as the industry's voice to support a strong and stable banking system that benefits New Zealanders and the New Zealand economy.

Karen has over 15 years' professional experience in senior roles in both the private and public sectors. Before she became NZBA's Chief Executive, Karen was Chief Executive at the Broadcasting Standards Authority. She has extensive experience as an advocate on legal, regulatory and policy issues affecting the banking industry from her previous positions as Deputy Chief Executive and Head of Advocacy at NZBA, and as Regulatory Director when she first joined NZBA in 2009.

"The horse is here to stay but the automobile is only a novelty – a fad," said the Michigan Savings Bank president in 1903. He was advising Henry Ford's lawyer not to invest in the Ford Motor Company.

Where bankers may once have shunned technology, the opposite is true today. This century we've seen a massive leap in access to personal digital technology. That's clearly reflected in how we're now banking. These technological advances mean we're managing our money in ways that many did not foresee. What's behind these changes, and what does the future hold?

The extraordinary evolution of banking today is largely driven by changes in customer preferences, and competition both inside and outside the banking sector. Banks have embraced technology in the quest to provide an ever more seamless experience for their customers.

Remember the good old days? We used cheques a lot more, and made bank account deposits and withdrawals by visiting our local bank branch, filling in handwritten forms; all within civilised 'bankers' hours' from Monday to Friday. You might've found yourself caught short if you didn't withdraw enough cash for the weekend. Bank branches were an essential part of every community for both households and businesses.

Things started to change in the 1980s when ATMs appeared. You could finally get cash on the weekend! Since then innovation in banking hasn't stopped.

Now we take for granted 24/7 access to banking services. While banks have retained branch networks, the vast majority of banking transactions today are done through a range of other innovative channels. That includes being able to call your bank's contact centre from the comfort of your own home, or anywhere else for that matter, seven days a week. If you'd rather not speak to a customer service representative, you can do most of your banking yourself, either at home on a computer, or on the go with a banking app on your smartphone.

Banks are constantly improving the functionality of their internet and mobile banking channels. As well as meeting your everyday banking needs, online and mobile banking allows you access to a huge amount of the latest information about your bank's products and services, financial capability tools, and how they're contributing to your community.

Soon that wallet stuffed with cards will be a thing of the past. It will be possible to conduct most of your everyday transactions on your smartphone.

As little as five years ago, the thought of banking on your mobile phone would not have occurred to most of us. Now we can even make everyday payments using our mobile phones. The age of the mobile wallet is here. While contactless card payments still seem fresh and innovative, it's now possible to make contactless payments simply by waving your phone over the payment terminal. The mobile payment app on your smartphone holds your bank card information, which is used to make mobile payments.

Mobile payment apps also have the capability to store loyalty cards, public transport cards and special offer vouchers. Soon that wallet stuffed with cards will be a thing of the past. It will be possible to conduct most of your everyday transactions on your smartphone.

Current innovations are propelling us towards banking that is seamless and integrated with other personal technology. Nobody wants a mortgage; they want a home. Nobody wants a student loan; they want an education. In a similar way, banking is likely to become more focused on life events and personal aspirations, rather than financial transactions. Given the drive for seamlessness and convenience, it's quite possible that the future of banking means you won't even realise you're banking.

Current innovations are propelling us towards banking that is seamless and integrated with other personal technology.

This innovation in banking services has come in response to customer demand and behaviour. In a highly competitive environment, we have worked out that attracting and retaining customers is essential to our success. To do that we need to keep our customers happy. And to keep customers happy, we've vastly improved access to banking services. Better access to banking services mirrors the industry's customer satisfaction ratings. The latest Consumer NZ banking survey found that 86% of bank customers are satisfied with their bank.

While banks are constantly looking at what's next in providing even better access to banking services, we're also conscious of meeting the needs of all our customers.

That's why bank branches remain an important banking channel. While the look and feel of bank branches has changed over time, they still provide access to traditional banking services. The focus of branches these days, however, is more on providing advisory services. Branches also help us to maintain a physical brand presence in the communities that we're part of.

Customers overwhelmingly now prefer to use more convenient ways of banking, which means some branches no longer make commercial sense. They're often replaced with smart ATMs that can accept and count notes and coins, which are instantly available as cleared funds in your account.

Some banks are also providing digital educators, to help customers learn how to get the most out of online banking services.

Customers aren't the only ones driving changes in banking. Other digital enterprises are challenging banks in their own sector. They include peer-to-peer lenders and alternative payment platforms. Once again, it's about providing people with seamless and convenient financial services. Banks operate in a very competitive environment, which is good for both our customers and the industry. We welcome the entry of the 'Fintechs' because it encourages us to keep improving the experience of the all-important customers we seek to attract and keep.

It's an exciting time for banks and their customers. We can enjoy innovations undreamt of even a few years ago, while retaining traditional banking channels. Banking as we know it will continue to change over time, and customers will continue to drive those changes.

Get ready to embrace digital disruption

Steve Graham
Director – Head of Digital Futures
KPMG

Steve leads KPMG's Digital practice, specialising in foresight, innovation and design thinking. He provides strategic foresight and works with clients to develop future state frameworks and design outcomes based on stakeholder insights. Steve is also passionate about organisational change and the approach to systemic innovation adoption.

Digital disruption: two words that, when combined, often stir anxious provocation. According to the KPMG 2016 *Global CEO Outlook*, 82% of CEOs are concerned that their current products and services may not be relevant to customers three years from now. The root of the CEO apprehension may stem from the speed of digital change.

The exponential explosion of technology applications and the assumption that digital solutions are the panacea for all the corporate ills will only perpetuate the role of digital disruption. Despite this perpetuation, industry is being disrupted by more than just digital sources. Consequently, it's important to develop a comprehensive view of disruption that not only includes new technologies, but looks at new business models, simplification of processes, competitive threats, customer behaviour and the transformational mindset, which is critical to the way forward.

As the Head of Digital Futures at KPMG New Zealand, I am of the view that successful financial firms will systematically develop plausible future state scenarios. Perhaps some of the trends that are highlighted in this article will contribute to the framing of a transformed digital future.

Artificial Intelligence and Predictive Analytics = 'Chat Bots'

To illustrate the possible disruptive opportunities and increasing automation within banking and finance, we look at the emergence of sophisticated digital assistants, chat bots, built on artificial intelligence (AI) and predictive analytics. One of the first publicly released banking chat bots is from Bank of America, named Erica. Erica is meant to go live later this year, and banking customers will be able to interact using both text and voice.

The difference with Erica is that she pushes 'insightful' information toward users based on a better understanding of what they want, rather than only providing users with requested (pull) information.

Some believe the future of banking is here now.

AI is picking up momentum and, according to consulting firm Forrester, 6% of jobs will be lost to AI within the next five years, exacerbating a fear within the banking sector of being left behind. However, Forrester goes on to say that banks should avoid offering chat bots to customers for another two to three years, as they don't think the maturity of the technology is there yet.

Despite the Forrester prediction, some believe the future of banking is here now and is synonymous with the BankBot, a prototype application designed by the Polish digital design and communication agency K2. BankBot itself is a robotic bank teller, financial advisor, and personal assistant all in one. "It understands natural language, so you can ask BankBot to transfer money, open a new account, cancel a credit card, et cetera," says Maciek Lipiec from K2.

K2 proposes a new banking standard. No more waiting in a queue for the administrator behind the desk to log on, find your details and check your date of birth while simultaneously answering the phone. The administrator can now turn their attention to more important or exceptional activities.

Simplification of transaction processes

Banking experts agree that there will be significant cost reductions on the horizon due to technology solutions providing financial institutions with simplified transaction processing. The elimination of old vertical practices and statistical modelling will be made possible by highly effective algorithms based on AI, cognitive computing, big data, Internet of Things (IoT) and sensors. Anything predictable or repeatable will be automated by robots, leaving the human being to other forms of work.

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Change in competition

The innovative Fintech space is 'hot' and underpins the disruptive nature of change supported by new business models. Additionally, digitally focused organisations with strong balance sheets and significant networks of loyal customers – e.g. Apple, are potential competitive threats in the banking and finance space. Alibaba is already a competitor. Despite being recognised as the world's largest e-commerce business, the Chinese company went public and raised billions of dollars through the largest initial public offering in history within the US in 2015. Alibaba has established an all-digital online bank, with no physical branches and 24/7 operating hours.

Start-ups with high levels of automation, unconstrained by legacy IT systems, will be able to rapidly pivot according to customer desire, potentially attracting some of the most profitable customers from traditional banking firms. According to the popular business book *Exponential Organisations*, by Salim Ismail, "New organisations are ten times better, faster and cheaper than yours."

Lessons from other industries

Long-established industries – e.g. newspaper, photography and music, have all been decimated by technological change. Less high profile industries have also been digitally/technologically disrupted. Author Jeremy Rifkin notes the energy sector is in the throes of being disrupted, highlighting that the marginal cost of renewable energy is zero and therefore energy eventually becomes free. As this scenario unfolds, the impact on traditional revenue is significant. In Germany, in less than seven years 25% of electricity is now green electricity. How? A million buildings are using technology to convert to micro power plants. Germany is now producing significant 'free' energy, decoupling from the traditional grid and breaking the reliance on the multi-billion dollar global power and electricity companies – e.g. E.ON, EnBW. Did they anticipate the speed of change and erosion of market share? Which disruptors will break the reliance on traditional banking services?

The way forward

How do we govern amidst continuous technology change and the need for transformation? What can we do to prepare ourselves? How do we lead in a volatile, uncertain, complex and ambiguous emergent future?

New mental models are critical to the future of industry, in other words, thinking in a new way. Albert Einstein said, "We cannot solve problems with the same thinking that created them". Outdated mental models are intellectually bankrupting our future economic prosperity, so the time to reimagine the future is now.

The sheer pace of change and market disruptions are forcing leadership teams to create a more structured way to anticipate the future. The temptation to remain focused on the certainty of current operational approaches is understandable, but ultimately will they prove to be strategically effective? Perhaps this is why leaders worry so much about future relevance.

Leaders must talk about the vision of a digital future and recognise the inherent possibilities that change brings. It's also important to engage the disruptive thinkers within your organisation. Management guru Gary Hamel has said that young people, dissidents and those working on the geographic and mental peripheries of your organisation are the most interesting, free and open thinkers. Look for rebels. The good news is that they won't be difficult to find and they can be excellent participants in the development of future scenarios.

The need to embrace uncertainty and drive the strategic conversation is now more vital than ever. A strategic foresight framework provides the structure to achieve this. It enables leaders to explore future worlds, develop a collective understanding of preferred future state scenarios and challenge existing assumptions.

You may also choose to do nothing, and as one of my favourite cartoons illustrates: "Instead of risking anything new, let's play it safe by continuing our slow decline into obsolescence!"

Blockchain – time to understand the value

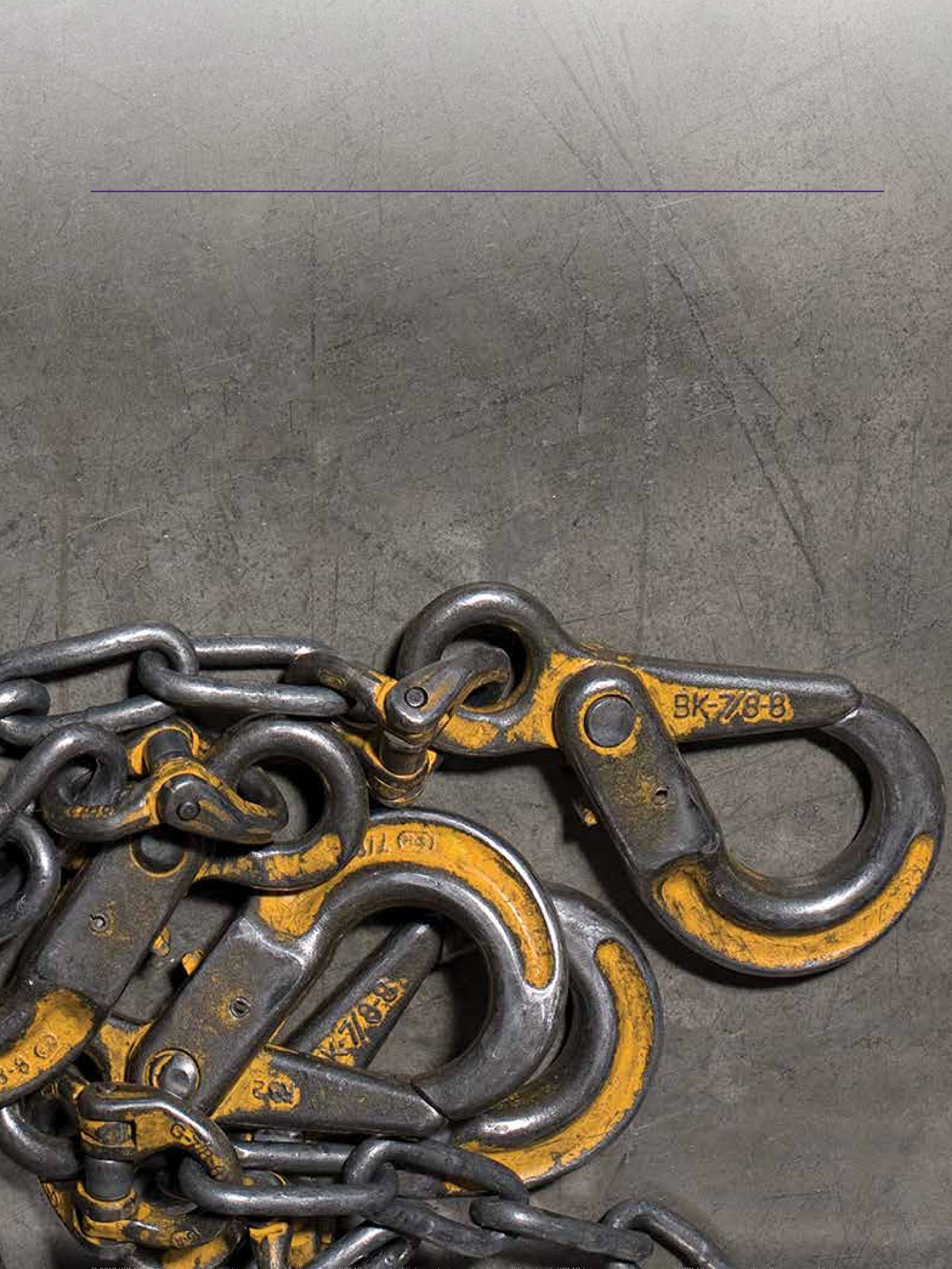
Mike Clarke
Partner – Head of IT Advisory
KPMG

Mike leads KPMG's IT Advisory practice in New Zealand, which is focused on IT Transformation to help organisations build the IT capability they need to meet their business ambitions. Having previously been a CIO, he brings a practical perspective to the challenges of transformation and is excited by the potential of digital platforms and emerging technologies such as Blockchain.

Interest in blockchain technologies is growing rapidly if measured by the total value of venture capital investment in blockchain technologies and Bitcoin (a new form of digital currency) companies. This interest in distributed ledger technologies is remarkable given that five years ago, it was barely a blip on investors' radars, known mostly for underpinning the Bitcoin digital currency.

Interest in blockchain gaining momentum

These days, a wide range of companies are exploring blockchain as the potential solution to numerous challenges both inside and outside the banking sector. During 2015, Citibank, Santander, Wells Fargo, HSBC and numerous other big banks announced partnerships with Fintech companies looking to leverage blockchain to make banking processes more efficient, timely and secure. Other organisations such as the Australian Stock Exchange have been public about their blockchain initiatives.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What is blockchain technology (also known as distributed ledger technology)?

The description below is from Blockgeeks.com.

Picture a spreadsheet that is duplicated thousands of times across a network of computers. Then imagine that this network is designed to update this spreadsheet regularly and you have a basic understanding of the blockchain.

Information held on a blockchain exists as a shared and continually reconciled database. This is a way of using the network that has obvious benefits. The blockchain database isn't stored in any single location, meaning the records it keeps are truly public and easily verifiable. No centralised version of this information exists for a hacker to corrupt. Hosted by millions of computers simultaneously, its data is accessible to anyone on the internet.

Some cases where blockchain technology could be utilised are:

- smart contracts;
- governance;
- supply chain auditing;
- prediction markets;
- protection of intellectual property;
- identity management;
- anti-money laundering (AML) and know your customer (KYC);
- land title registration; and
- stock trading.

These organisations, along with a number of others, believe the potential disruption blockchain could create – in terms of decreasing transaction times, self-automating smart contracts, lowering transaction costs, minimising fraud and opening the door to micro-transactions – is impossible to ignore. As a result, interest in blockchain is gaining momentum, with investment expected to grow throughout 2017.

Being honest about the challenges with blockchain

But does the potential live up to the hype? While blockchain's potential is interesting, there are substantial barriers that must be overcome in order to implement it successfully within banking and capital markets. Regulatory and market changes, in particular, could hamper blockchain's use on a global scale. Some analysts also suggest that blockchain has been burdened with excessive investor expectations – ones that cannot realistically be fulfilled. At the rate investment is growing, it's possible that investors looking for immediate, short-term success may be disappointed.

The technology is not a silver bullet that can solve every problem tomorrow. As with every technology, blockchain solutions will need time to be tested and to be adapted to the industry requirements at scale.

Corporate investors need to qualify their expectations when it comes to blockchain and the obstacles associated with achieving value. The technology is not a silver bullet that can solve every problem tomorrow. As with every technology, blockchain solutions will need time to be tested and to be adapted to the industry requirements at scale. We already see early adoption in some payments use cases, but as the complications grow with asset transfers, for example, more time will be needed to qualify the technology and understand the full implications.

To get the most value from blockchain, corporate investors need to encourage industry experts to define the problems blockchain can help resolve, find the best and most cost-effective technology solutions, and work through any limitations to scope, scalability, velocity and usability.

The key to success is the combination of the right skills:

- cryptography;
- distributed ledger technology;
- deep industry and regulatory experience and knowledge; and
- technologists who can effectively navigate clients through the current IT landscape.

There are challenges in each of these areas when it comes to deployment of distributed ledger solutions to the mainstream components of the banking system.

For example, many banks continue to work with legacy IT systems, which may not be capable of supporting blockchain initiatives or will provide significant challenges if linked to new blockchain technologies. In the area of payments, the technology based on Bitcoin consensus mechanism consumes more computing power and will require initially more resources than the current solutions used by many banks provide. Beyond these technical challenges, there are some specific areas where fundamental issues relating to business models need to be addressed.

In spite of these challenges, short-term blockchain opportunities do exist, and there remain many reasons to continue to pursue innovation in distributed ledger technologies as the potential benefits associated with a breakthrough down the road are great. One area we see the technology offering particular benefit in the short term is digital identity, or what others are calling a digital financial passport. Many banks are excited about this opportunity and can see positive improvements related to how digital identity is currently being facilitated and enabled at banks. Improvements in this area could enable better choice and portability of customers between financial institutions and ultimately higher customer satisfaction as individuals are able to take control over and gain benefit from their own identity. Beyond digital identity, there are a number of other important niches where blockchain could make early gains as well.

Now is the time for experimentation

Given how the technology is evolving, at KPMG we believe that now is the time for experimentation to understand the practical benefits. Corporates that encourage use-case testing – whether for the securities trading lifecycle, the processing of a loan or digital identity verification – and whoever can learn from this experimentation will be better positioned to understand, possibly adjust course and quickly achieve the most value.

In regard to testing, we see some early examples of this trend taking hold in the marketplace. A great number of the major financial services institutions we work with have proof of concept (POC) and prototype initiatives underway related to blockchain. Larger financial institutions are now considering how to test for scalability, validate initial hypotheses, build longer-term target operating models and enhance business cases based on their POC/prototype results.

Corporates that encourage use-case testing – whether for the securities trading lifecycle, the processing of a loan or digital identity verification – and whoever can learn from this experimentation will be better positioned to adjust course and achieve the most value.

We are also seeing work being done related to enhanced international payment capabilities as well as the application of distributed ledger principles to needs for identity management and other areas. It is clear that the move to test and experiment with distributed ledger technologies is well underway in financial services.

A balanced approach

Having said that, investors need to take a balanced approach to their blockchain investment strategies. To be the disruptor investors envision, blockchain protocols and solutions must evolve to support the reliability, efficiency and scalability requirements expected in the industry. It also needs to be a differentiator, rather than simply an enabler, and it needs to be adoptable by all parties in the banking supply chain – a fact that will require significant collaboration across industry, regulatory bodies and those supporting potential solutions.

In this regard, we see many organisations and engineers now undertaking deeper analysis on blockchain and a more balanced and pragmatic view emerging. We see ourselves as part of this group and advocate for selective and targeted experimentation as a first priority that will yield greater benefit down the road.

IFRS 9 - Rising to the challenge

Rajesh Megchiani
Director – Financial Risk Management
KPMG

Rajesh leads KPMG's financial instruments accounting advisory practice and has an in-depth understanding of the practical implications of IFRS 9 on the financial services sector. Rajesh has significant experience in advising clients on implementation of IFRS 9 and its interaction with treasury risk management strategies and regulatory capital. He sits on KPMG's financial instruments Asia Pacific topic team which discusses IFRS 9 implementation issues in the region and is able to bring practical insights to dealing with some of the complex issues financial institutions deal with.

The implementation date of IFRS 9 is fast approaching for registered banks in New Zealand. IFRS 9 *Financial Instruments* is expected to be one of the most significant standards to impact bank financial reporting since the introduction of IFRS in New Zealand. Banks in New Zealand should now have at least commenced their assessment of the impact of IFRS 9. Through this process, gaps relating to systems, data and resources should be identified and a roadmap for implementation developed.

In this article, we discuss the implementation status of IFRS 9 projects globally and in the region. We have also highlighted some of the practical challenges that banks face and how they are rising to these challenges.

Background to IFRS 9 and current status

IFRS 9, the new financial instruments accounting standard, will replace IAS 39 *Financial Instruments: Recognition and Measurement* and is effective for annual periods beginning on or after 1 January 2018.

The IAS 39 replacement project was largely driven by requests from the G20 following the global financial crisis, to reduce the complexity of accounting for financial instruments and to move to a more forward-looking model for the recognition of expected losses on financial assets.

The US Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) originally embarked on a project to have a single set of standards on financial instruments accounting. However, due to divergence on certain aspects of the project, particularly impairment, this was not achievable.

The IASB published the complete version of IFRS 9 on 24 July 2014 which was adopted by the External Reporting Board (XRB) in New Zealand on 4 September 2014. However, the macro hedging project that deals with the portfolio interest rate hedging carried out by banks is still being finalised by the IASB. Until the completion of this, banks have an accounting policy choice under IFRS 9 to continue applying the hedge accounting requirements under IAS 39.

Implementation status – globally and in the region

Globally, banks have begun to significantly intensify their implementation efforts towards the adoption of IFRS 9. A number of large global banks are well into their implementation projects, but equally, there are many who still have much work left to do. Almost all banks feel that they have less time for a parallel run than they originally anticipated. This is a bit of a concern as management may not have adequate time to assess the drivers for difference in the level of provisions when compared to IAS 39.

Globally, the regulators are very active in the IFRS 9 space.

In New Zealand, most of the larger banks have the advantage of relying on the IFRS 9 projects run by their parents. However, care should be taken to ensure that the impairment models developed for the New Zealand entities adequately reflect the impact on the specific characteristics of their portfolio in the context of the New Zealand economic environment and that local management is able to understand the differences between the regulatory and accounting expected loss models. For the other banks that do not have the advantage of relying on their parents to provide a solution, there is a relatively different challenge ahead of developing expected loss models that meet the requirements of IFRS 9.

There are significant disclosure implications of the standards.

Globally, the regulators are very active in the IFRS 9 space. Prudential, securities and audit regulators are watching very closely. They are expecting robust, high-quality implementation of the new requirements and transparent disclosure of the impacts.

There are significant disclosure implications of the standards. However, most of the banks are currently more focussed on determining their impairment methodology than on the related disclosures. The qualitative and quantitative disclosure requirements have extensively increased, and banks will soon need to design these new disclosures and identify gaps in the data that would need to be filled to meet the new disclosure requirements.

Impairment is on top of the agenda and will have an uneven impact on banks

Most of the time and effort on the IFRS 9 projects globally and within the region is being spent on the impairment aspects. This is consistent with the fact that this area is probably the most complex within the standard and difficult to interpret. IFRS 9 is a principles-based standard and generally does not prescribe specific details on methods of application. Hence, selecting techniques and estimating credit losses to develop or change existing regulatory expected loss models involves a high degree of management judgement and methods may vary between institutions. Strong governance and controls would be expected in the way judgement is exercised, with the oversight of the board audit committees throughout implementation.

IFRS 9 is a principles-based standard and generally does not prescribe specific details on methods of application.

The financial and operational impact of the new impairment requirements on banks in New Zealand will differ depending on whether they apply standardised or internal rating based (IRB) approaches for calculating regulatory capital.

Banks using IRB already use an expected loss approach, and hence the impact on capital may be minimal. However, these banks may be grappling with situations where the IFRS 9 expected losses may exceed the expected regulatory losses during an economic downturn, as IFRS 9 applies the 'point-in-time' approach compared to 'through-the-cycle' approach required by Basel.

Although IRB banks can leverage from the expected loss modelling currently carried out under Basel, we can see that operationally there are differences between Basel's and IFRS 9's 'expected loss' concepts which the IRB banks will need to work through. The banks that are using the IRB approach are Australian subsidiaries where most of IFRS 9 impairment model design work is being carried out by the Australian parent.

The availability of quality data and resources for implementation of IFRS 9 is a significant concern for standardised banks.

Standardised banks face a different challenge as the impairment for regulatory capital purposes is based on current 'incurred loss' accounting provisions under IAS 39, and hence any increase in the level of provisions is likely to have a direct impact on their regulatory capital ratio. Standardised banks may also be at a disadvantage as they don't currently have the systems and models to calculate expected loss like the IRB banks. The availability of quality data and resources for implementation of IFRS 9 is a significant concern for standardised banks. IFRS 9 does result in standardised banks having to put in complex expected loss models that, although they do not need to be accredited by most regulators, will still need to meet the requirement of the accounting standards which are not as prescribed as Basel and hence will be challenging.

…but other aspects of IFRS 9 should not be missed

Beyond impairment, banks have realised that they cannot underestimate the impact of classification and measurement aspects of the standard. Classification of financial assets will be based on the type of contractual cash flows and the business model for managing those assets. Banks should evaluate the terms of their existing financial assets, particularly loans and investment securities, to ensure that they are classified and measured appropriately. In some instances, certain financial assets that were previously measured at amortised cost are now required to be measured at fair value, which will introduce volatility in the income statement. Banks should also ensure that their new product approval process takes into consideration the implication of the new classification and measurement principles of IFRS 9. Some examples of features that banks are considering may impact the classification and measurement are as follows: prepayment options where the penalty for prepayment does not meet the reasonable compensation criteria of IFRS 9 and insurance bundled loan products. In addition, new processes may need to be put in place to assess the business model under which financial assets are held. For example, principles need to be established for sales within the held-to-collect business model under which investment portfolios are held, and processes need to be put in place to monitor these sales.

Banks have realised that they cannot underestimate the impact of classification and measurement aspects of the standard.

With respect to the new hedge accounting requirements, due to the deferral option available for banks, this is not an area many banks have focused on, and they are waiting for the macro hedge accounting project to be finalised. However, banks that do see volatility in the income statement under IAS 39 should consider whether there are opportunities to remove or reduce this under IFRS 9 which is aligned more closely with risk management strategies, for example, hedging of aggregated exposures and hedging using cross currency interest rate swaps.

Opportunity to align finance and risk data

Successful implementation of this standard will require leadership by both the CFO and the CRO to ensure that the impact of the standards is well understood and can be articulated to stakeholders. A number of organisations, both globally and locally, are looking to use this as an opportunity for risk and finance data aggregation.

The road towards the January 2018 deadline appears to be very bumpy.

If successfully implemented, it will encourage the finance and risk departments at financial institutions, who had historically operated somewhat in silos, to move towards convergence and start using the same underlying assumptions, practices and calculations to model future events. In the long run, it will hopefully lead to increased transparency for the stakeholders who will be able to get a more accurate understanding of the underlying risks of a bank through the financial statements they receive.

However, before the benefits of IFRS 9 can be realised, the road towards the January 2018 deadline appears to be very bumpy.

Interaction with regulatory stress testing and capital planning

The Bank of England recently made an announcement that all banks would have to calculate their 2017 stress-test results and capital planning under IFRS 9, which is believed to cause a larger hit to capital. However, it still indicates banks will soon need to be ready to build the requirements of IFRS 9 into their existing stress testing and capital planning models. It is a matter of time before the stress testing and capital planning carried out in New Zealand will need to incorporate the impacts of IFRS 9.

The need to engage with IFRS 9 becomes more pressing by the day.

The need to engage with IFRS 9 becomes more pressing by the day. Banks that have not yet started considering the implications should start straight away, and banks that have IFRS 9 projects in place should ensure that their plans are on track to address the key challenges and evolving interpretations of IFRS 9.

Generating a leading house price index

Bindi Norwell
Chief Executive
Real Estate Institute of New Zealand

REINZ
REAL ESTATE INSTITUTE OF NEW ZEALAND

Bindi is an experienced business leader and strategist who has worked in New Zealand, Australia and the UK. She has a strong background in digital media and technology and most recently, Executive Director of TNS Global, a customer and marketing insights-based consultancy working with a diverse network of New Zealand Companies.

Since commencing her role as CEO in December 2016, Bindi has been getting to know REINZ members, key industry stakeholders and partners. Bindi has also been involved in strategy, research and preparing the launch of some of REINZ new products and services.

Having collected real estate data for more than 25 years, the Real Estate Institute of New Zealand (REINZ) holds an invaluable set of house price information. Over recent years REINZ has invested in significant improvements and innovations in data capture to ensure this data was being leveraged to add value to its members and the industry. In 2016 REINZ partnered with the Reserve Bank of New Zealand (RBNZ) to enhance their existing House Price Index (HPI).

Measuring house price trends is a vital part of New Zealand's economic agenda and with housing typically being one of the largest investments people make in their lifetime, fluctuations in prices are important to help track and understand underlying market activity. This inevitably impacts on household wealth, and therefore, has a trickle-down effect to other areas of the economy. Figure 24 looks at the Tauranga City market over time. It shows how the tough economic environments of the early 2000s and the Global Financial Crisis were captured more completely by the HPI than the raw median price. The housing market is constantly in the media spotlight for this very reason and it is essential that the fundamentals behind the tools used to measure this sector are the best available.

24 SEE FIGURE 24 – PAGE 77

REINZ is fortunate that REINZ Chairman, Dame Rosanne Meo, has an existing working relationship with head of Motu and former chairman of the RBNZ, Dr. Arthur Grimes. Dr. Grimes has a good understanding of REINZ and current methods to measure housing activity. He understood the potential held in REINZ data and kindly introduced the REINZ team to Bernard Hodgetts and the Macro-Financial Team at the RBNZ. Through this introduction, a partnership was formed to do an empirical analysis on HPI methods using REINZ proprietary data.

The RBNZ reviewed four of the most common methodologies used globally to create a HPI which included: sale price assessment ratio (SPAR), hedonic, repeat sales and stratified median. All methodologies could have produced a reasonable result. However, the SPAR methodology proved to be the most accurate and flexible when data from all areas of the country were considered. It displayed the lowest month-to-month volatility, it was not subject to modelling changes over time and provided robust measurements of underlying house market values. As shown in Table 8 on page 75, a person's perspective of how the market is moving, and to what degree it is moving, is highly influenced by whether they observe median price movements, average price movements or the movements of a HPI. For an accurate representation of underlying market forces, we advocate using the REINZ HPI as it incorporates not only the market factors that influence changes in sales price, but also the market factors that influence the underlying value of the properties being sold.

This analysis was the first time that the RBNZ had utilised such a rich data source to compare common methodologies.

TABLE 8: YEAR-ON-YEAR PERCENTAGE COMPARISON: AVERAGE VS. MEDIAN VS. HPI – BY COUNCIL[54]

Date		Auckland City			Christchurch City			Tauranga City			Wellington City		
		Average sale price YoY	Median YoY	HPI YoY	Average sale price YoY	Median YoY	HPI YoY	Average sale price YoY	Median YoY	HPI YoY	Average sale price YoY	Median YoY	HPI YoY
2010	November	2.8%	2.9%	0.0%	-1.4%	1.2%	-1.4%	2.4%	-4.7%	-3.1%	-0.3%	1.2%	-1.4%
2011	November	0.0%	3.7%	7.2%	10.6%	6.4%	4.2%	-1.1%	0.8%	0.2%	-5.6%	-3.1%	-0.8%
2012	November	14.4%	12.6%	11.9%	-1.3%	4.3%	6.5%	-1.5%	-1.5%	2.6%	9.5%	6.4%	3.1%
2013	November	7.4%	8.3%	13.0%	10.8%	6.7%	10.6%	8.4%	8.4%	4.7%	5.0%	5.2%	1.9%
2014	November	13.6%	13.6%	11.8%	10.7%	11.0%	7.1%	6.8%	7.7%	2.7%	-1.7%	-1.3%	1.2%
2015	November	13.0%	8.6%	21.9%	0.8%	1.5%	1.7%	18.7%	17.5%	26.0%	3.5%	4.8%	8.1%
2016	November	20.8%	17.4%	12.2%	3.7%	2.5%	4.1%	28.3%	26.0%	21.5%	16.4%	16.9%	23.5%

Collecting unconditional sales data from 14,000 REINZ members is one of the clear advantages of REINZ data, it is more timely than council provided sales information and data. REINZ now has a HPI which is world class with the benefits of timeliness, accuracy of using up-to-the-moment data and the stability provided by having a national data set that is 25 years old. With the enhanced REINZ HPI process it is possible to generate an index specific to custom parameters, subject to the data population being large enough. For example, it is possible to generate an index for three bedroom houses in a suburb in Auckland. This flexibility makes the REINZ HPI highly valuable in market analysis.

Figure 25 shows another example of this flexibility with an index generated for council wards within Wellington, although this could be any geographical boundary or property attribute, such as bedrooms or school zones.

The ability to disaggregate an index enables users to have more confidence in the trends reported as outliers are managed and one-off items that can skew data are removed. It also presents reports that contain a higher level of market intelligence investigating a deeper level of market activity.

25 **SEE FIGURE 25 – PAGE 77**

REINZ are providing the new HPI as a complimentary service at a council level.

REINZ takes pride in its innovations in property data to maximise value to its members, key stakeholders and the Real Estate Industry.

By further leveraging the data available, the enhanced HPI is a quantum leap in the level and frequency of housing market reporting, bringing New Zealand in line with world class standards.

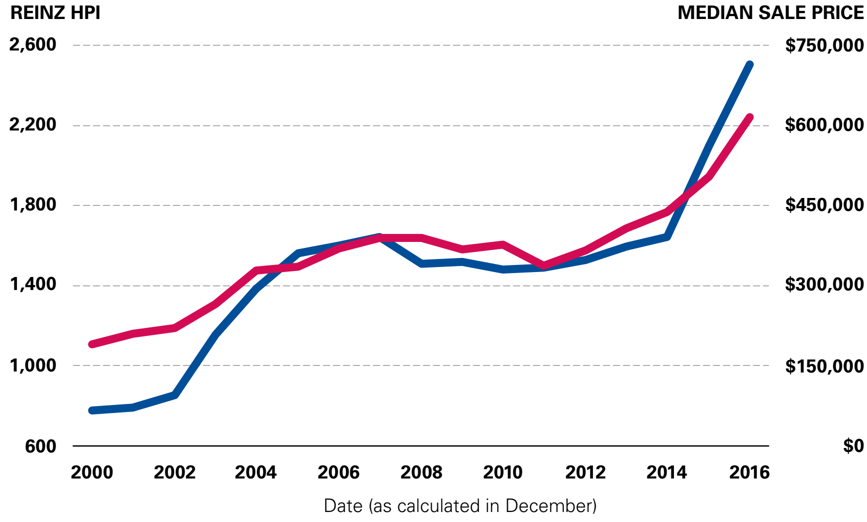
The new HPI is the tip of the iceberg for REINZ. The level of insights available will add tangible benefits to our understanding, and New Zealand's understanding of the housing market.

We are excited about sharing our enhanced HPI with our members, banks, economists and the public, to help make better informed decisions on the shape of the New Zealand housing market.

24 REINZ HOUSING PRICE INDEX TO MEDIAN SALE PRICE: TAURANGA CITY[55]

MEASURE TYPE

- REINZ HPI (LHS)
- MEDIAN SALE PRICE (RHS)

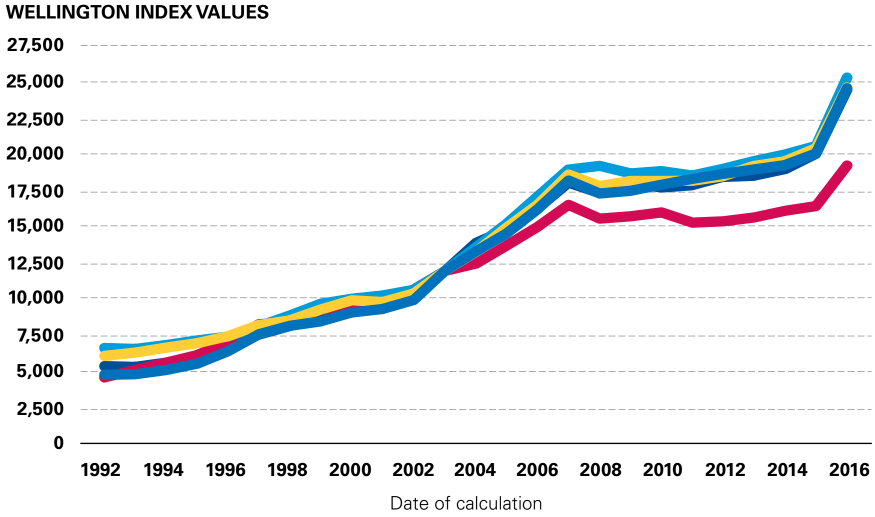


SOURCE: REINZ

25 REINZ HPI FOR WELLINGTON WARDS: TO DECEMBER 2016[56]

WELLINGTON WARDS

- EASTERN
- LAMBTON
- NORTHERN
- ONSLOW/WESTERN
- SOUTHERN



SOURCE: REINZ

Productivity is a strategic imperative for New Zealand banks

Dylan Marsh
Senior Manager – Advisory
KPMG

Dylan leads the Customer practice in KPMG's Performance Advisory team. He has experience and a passion for working with Financial Services leaders to improve and better position their businesses for the future. Dylan's expertise centres on profitability analytics, operating model design and operational improvement.

New Zealand banks have demonstrated a strong track record of stability and growth, ranked highly in cost-to-income ratio comparisons with international banking peers. This has come from a combination of robust increases in income, as well as disciplined management of costs and process improvement.

However, New Zealand banking now faces the greatest array of challenges in over 30 years. While the global financial crisis dented customer confidence and returns, the industry is now facing a barrage of challenges including 'lower for longer' levels of revenue growth and return on equity, regulatory change, disruption and disintermediation, heightened customer demand for better value products and services, and growing community concerns over the industry's conduct.

It is clear that a radically different approach to productivity… is required to release resources, create the financial capacity to invest in transformation and deliver acceptable financial results.

We strongly support the need to continue to invest in the medium term to address these demands, but it is clear that a radically different approach to productivity – akin to the sort of structural transformation last seen in the 1990s – is required to release resources, create the financial capacity to invest in transformation and deliver acceptable financial results.

Some of the drivers of the underlying structural cost problems include:

- **A shifting and broadening of customer expectations.** Groups of customers' expectations are shifting, creating a different and broader set of expectations and needs.
- **New competition.** New forms of competition are entering the market that are geared for innovation. They have the ability to cherry-pick markets and they are not constrained by physical infrastructure or geography
- **Increasing complexity.** Product portfolios have increased to provide a greater range of options to customers, raising complexity and increasing frontline time requirements which bring into question the profitability of different products.
- **Inconsistent use of internal and external services.** Sourcing vs. internal capability vs. specialisation vs. managed services adds complexity, bureaucracy and unnecessary cost burdens.
- The **regulatory and compliance burden** continues to grow unfettered.
- **Staffing and operating models.** Staffing levels and salaries have grown consistently over time with low spans of control, and a skew to non-customer facing roles, particularly in head office and supervisory functions.
- Reliance on **third party origination** results in sub-scale and inefficient physical distribution channels and service.

These pressures both focus senior leaders on optimising the current cost base for profitability while positioning the business to navigate future challenges. So how can banks rethink their approach to productivity to achieve both?

Typically, successful banks are pursuing cost productivity in a consistent way:

- **Leverage analytics and customer insights** to rationalise customer, channel, product and regional investment and make business decisions with certainty.
- **Improve customer satisfaction** by aligning acquisition and service processes to the needs of priority segments, creating a nimbler corporate core and management layer, and creating a culture of personal accountability.
- **Optimising channels** by designing cross-channel experiences that seamlessly fit into the lives of customers while being economical.
- **Customer coverage** refocused on sectors and segments that deliver value.
- **Revert to core** by exiting non-core businesses, products and markets.
- **Develop strategic outsourcing/ offshoring propositions and partnerships** to leverage scale and innovations.
- Obsess about **digitisation and simplification of end-to-end processes and products**.
- **Transform technology** through infrastructure, change delivery and system/platform rationalisation.

Leading financial services firms are tackling these challenges through clear business-wide strategies that are built on tangible insights and that draw from the innovation of others – both within financial services and from other sectors (e.g. technology).

What FATCA, GATCA and other tax changes will mean

Rachel Piper
Partner – Tax
KPMG

Rachel Piper is a Partner in KPMG's tax team, based in Auckland. Rachel has over 20 years' experience advising financial institutions, including retail banks, branch banks, leasing companies and other financial services providers. Rachel has also provided specialist advice on the tax treatment of financial instruments to a number of large New Zealand corporates and has extensive knowledge on the interaction between the tax rules for financial instruments and the IFRS treatment.

Darshana Elwela
National Director – Tax
KPMG

Darshana Elwela is KPMG's National Tax Director. Darshana joined KPMG in 2007 and has over 15 years' experience as a tax advisor and senior IRD policy official. He is based in Auckland and specialises in funds management and international taxation issues. In his role as KPMG's National Tax Director, Darshana is heavily involved in working with tax policy officials and Government on various tax policy changes, including on behalf of a range of clients.

FATCA and GATCA – or its official acronym AEOI/CRS – have, or will become part of the common parlance for the financial sector. They impose tax due diligence and reporting requirements for financial institutions on their customers and join the myriad of other KYC (Know your customer) regulations on the sector. This is on top of the normal reporting of interest and other investment income to the Inland Revenue, the scope of which is also being extended (but more on that later).

For New Zealand's financial institutions, this is part of the steady creep of new regulation, as tax authorities in New Zealand and around the world seek greater and more frequent reporting on customers, their assets, and their income. Technology has made it inevitable that customers and users expect access to their financial account information in real time. If you are a tax authority, you would be asking – why not me as well?

AEOI or 'automatic exchange of information' is an international initiative aimed at combating tax evasion from moving financial assets offshore. It places the heavy lifting – the need for reporting on non-resident customers' and their financial account information under a 'common reporting standard' (the CRS part) – on foreign financial institutions. New Zealand, along with about 100 other countries, has signed up to AEOI. New Zealand's commitment takes effect from

1 July 2017, with the first reporting of information by New Zealand financial institutions due in mid-2018.

While colloquially called GATCA, and inspired by and modelled on the US FATCA requirements, AEOI is not a FATCA clone. There are subtle but important differences. This will impact the design of your customer due diligence processes. Furthermore, separate reporting of financial account and account holder information under AEOI and FATCA to the Inland Revenue will be required (initially at least). This is likely to result in a duplication of processes. (In December last year, the Inland Revenue released draft guidance on how AEOI will apply, which sets out some of the issues for consideration.[57]

However, AEOI and FATCA are not the end of the story.

The New Zealand Government and the Inland Revenue have embarked on an ambitious journey, aimed at ensuring that New Zealand's tax system is purpose-fit for 21st century needs. This will change how taxpayers and intermediaries interact with the Inland Revenue (and vice versa).

The goal of Business Transformation is to make it simpler and faster for New Zealanders to pay their taxes, receive information, and have more certainty that their tax liabilities and entitlements are correct.

The use of technology is at the heart of the Inland Revenue's billion dollar 'Business Transformation' project. The goal of Business Transformation is to make it simpler and faster for New Zealanders to pay their taxes, receive information, and have more certainty that their tax liabilities and entitlements are correct.

Practically, this involves a combination of moving to the digital delivery of services and a greater reliance on various intermediaries and third parties in the tax system to source information on taxpayers.

For financial institutions, the key impact of Business Transformation will be more regular and greater reporting of customers' investment income information (such as interest) to the Inland Revenue. The Inland Revenue expects that there will be efficiency gains for it, taxpayers and the broader integrity of the tax system as a result.

Under proposals released last year, most financial institutions will need to report customers' investment income, tax and recipient details to Inland Revenue more frequently than they do now. That is, monthly or at the time of payment, compared with annually.

The Inland Revenue expects that there will be efficiency gains for it, taxpayers and the broader integrity of the tax system as a result.

This is so Inland Revenue can cross check information (such as whether the correct tax details and withholding rate have been supplied), use this information to calculate changes to customers' entitlements in 'real time', and pre-populate tax returns.

The new system relies on correct IRD numbers being held by financial institutions and if an IRD number is not provided by a customer, a new 45% non-declaration rate is proposed.

For financial institutions, there is an acknowledgement that there will be some transitional costs from updating their reporting and withholding systems. However, there is an underlying assumption that financial institutions will largely have the information required on hand and this, together with proposed reductions in their year-end reporting to investors, should help to offset some of the additional compliance costs.

Based on our experience, there may be significant costs to upgrading systems so that this information can be provided within the timeframes required, particularly where legacy systems are currently being used for withholding tax and reporting tax information.

In addition, financial institutions will also need to manage customer concerns and expectations regarding the accuracy of the information stored in their systems, particularly as the information provided may now impact customers' tax and social policy entitlements or liabilities in real time. This applies equally for tax KYC required under FATCA and AEOI.

The new investment income reporting proposals have been developed independently of the FATCA and AEOI initiatives. Given the overlap of information collected under these measures, there was the opportunity for rationalising reporting requirements to minimise duplication. Sadly, that opportunity appears to have been missed. As a result, financial institutions need to focus on each set of requirements and ensure that their systems are able to cope.

Banking industry forecasts

Christoph Schumacher
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Massey University

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

Professor Christoph Schumacher joined Massey University in 2003. He is Professor of Innovation and Economics at the university and Director of the Auckland Knowledge Exchange Hub.

Before coming to New Zealand he completed undergraduate and post-graduate degrees in Engineering, Economics and International Business at Karlsruhe University in Germany and the University of Auckland and a PhD in mathematical economics at Massey University. Christoph has previously worked as a business consultant in Germany and New Zealand.

Christoph's area of specialisation is game theory with research interests in mathematical economics, health economics and sports and economics. His work has been published in the *Journal of Health Economics*, *Applied Economics*, the *European Journal of Marketing*, the *Journal of Industrial Economics* and *Economics Letters*.

"A study of economics usually reveals that the best time to buy anything is last year."

Marty Allen, Comedian

In this section, we forecast the key performance drivers for the New Zealand banking industry, namely lending, net interest margin, and credit loss rate.

Based on these drivers, we provide an outlook for the banking industry's profit before tax. We use a combination of macroeconomic variables and time-series analysis to provide quarterly forecasts for the next two years ending in December 2018. In last year's survey, we introduced a VAR[58] model to our analysis as an alternative to the ARIMA[59] model we have used over the past five years. A VAR model enables us to investigate how interaction between our variables changes the forecast. The model worked well to forecast future profit before tax, and we have focused solely on the VAR model in this current issue. It is important to note that although macroeconomic indicators are not explicitly used in the VAR model, the impact of these indicators is already factored into past values of the performance drivers. The results of our analysis are displayed in Table 9 on page 83.

We then revisit the forecast provided in last year's survey to see how accurate it was, review the performance of the New Zealand economy in 2016, and provide an economic outlook for 2017.

26 SEE FIGURE 26 – PAGE 83

We expect the banking industry's profit before tax to dip slightly in the fourth quarter of 2016 (the actual data is not available yet). The dip is caused by an increase in the Credit Loss Rate (CLR) and flat Net Interest Margins (NIM). The increase in CLR may be due to an already overheated property market with banks taking on increasingly more lending. When we allow for interaction between the performance drivers, the expected growth for 2017 and 2018 is almost stagnant, rising from $1.67 billion in Q1 of 2017 to $1.71 billion in Q4 of 2018. The outlook is similar to the growth forecast of the New Zealand economy, very modest and almost stagnant. The fact that profits show growth at all is driven by an increase in lending volume, which offsets the continued increase in CLR.

27 SEE FIGURE 27 – PAGE 87

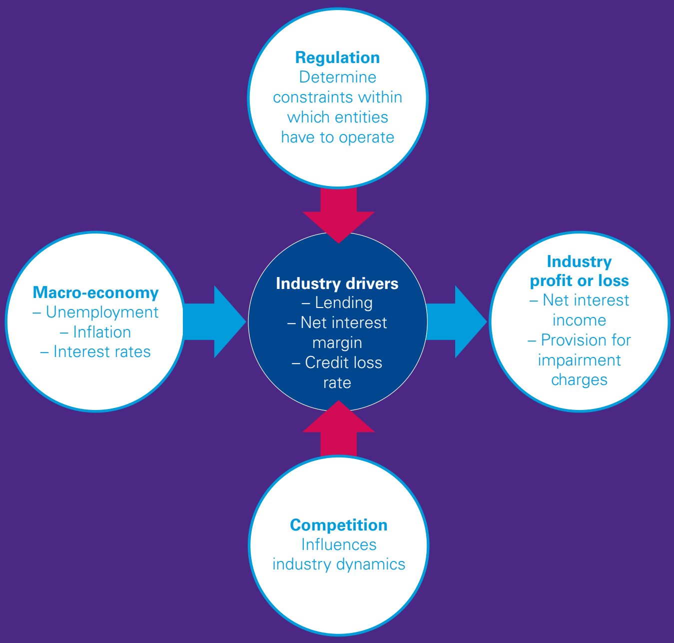
Let's now take a closer look at the industry performance drivers. In our VAR model, we use the collection of past values of our drivers and before tax profits; that is, a vector of time series, in order to predict future values. The key benefit of the VAR model is its ability to rely not only on previous values of past drivers, but also on previous values of profit thus providing a two-way interaction within the model.

The definitions of industry drivers are:

- **Lending** – the total volume of lending broadly defined, that is, all interest-earning assets.
- **Net interest margin** – the difference between interest income and interest expense, expressed as a percentage of lending.
- **Credit loss rate** – provision for credit impairment, expressed as a percentage of lending.

Total industry lending is expected to increase at a reasonable pace for the next two years. Our model sees lending volume increase from $445 billion to $496 billion. The Auckland housing market, although slowing slightly, refuses to cool down, encouraging further development in other main centres, particularly Hamilton and Tauranga. Continued rapid growth in population teamed with high housing demand fuels this lending increase which will continue well into 2017 and 2018.

26 FORECASTING APPROACH



In recent months, we have seen a conscious slowdown in lending by New Zealand banks. As cheaper sources of funding become scarce, consumers can expect interest rate increases as banks look to maintain low CLRs and manage the ongoing demand for housing related loans. Overall, however, we still anticipate an increase in lending volume, but possibly at a slower pace than in the previous year.

The possibility of a deliberate slowdown in the lending volume cannot be incorporated into the VAR forecast model as all previous lending figures suggest an upward trend.

TABLE 9: LIST OF MACRO-ECONOMIC INDICATORS

Macro variable	Description	Units	Source
gdp	Gross Domestic Product (expenditure based)	$mn, nominal index	RBNZ
bankbill90	90-day bank bills rate	%, annualised	RBNZ
govbond10y	10-year government bond yield	%, annualised	RBNZ
unemployed	Number of registered unemployed	Number	RBNZ
avgqhouseloancount	Average number of home loans approved	Number	RBNZ
estpop	Estimated population of New Zealand	Thousands	Statistics NZ
cpindx	Consumer Price Index	Index level	RBNZ
housepricendx	REINZ house price index	Index level	REINZ
weeklyearnings	Weekly earnings	$, nominal	Statistics NZ
nzstocksndx	New Zealand all stocks index	Index level	NZSE

This trend suggests that the lending growth indicator would be the most likely of the three drivers to cause fluctuation in the forecast of the banking industry's profit before tax provided in this section.

28 SEE FIGURE 28 – PAGE 87

NIMs are expected to remain fairly constant over the next two years. No new banks entered the New Zealand market this year and a relatively low risk business environment paired with a low OCR contributes to steady NIM figures. We anticipate NIMs to sit between 2.2% and 2.1% throughout 2017 and 2018.

The CLR has remained stable throughout 2015 and 2016. We expect this trend to continue in 2017 with a slight increase in 2018 (from 0.1% in Q4 of 2016 to 0.2% in Q4 of 2018). The increase, however, is marginal and overall the CLR is low due to the stringent lending policies of New Zealand's banks.

29 SEE FIGURE 29 – PAGE 87

30 SEE FIGURE 30 – PAGE 87

Changes in our macroeconomic indicators may impact the industry drivers used in our VAR model. The regression results suggest that changes in lending volume are inversely related to changes in unemployment. New Zealand's unemployment rate is expected to stabilise or decrease slightly in the coming years providing a stable platform for lending by banks. As the OCR remains at record lows, borrowing is cheaper which contributes to the anticipated increase in lending volume. Another factor that will likely exert a positive influence on the lending volumes of banks is the growth in New Zealand's population. Throughout 2015, New Zealand's population grew at its fastest rate in over a decade. Overall the country's population increased by 97,300 people or 2.1%, in the year to June 2016. The net migration of 69,100 people will especially contribute to the anticipated increase in lending volumes as more people will deposit their capital into New Zealand and utilise the lending facilities of our banks (natural increase of 28,200).[60]

Inflation is a key factor that is positively associated with the NIMs of banks. While inflation results in an increase in both bank lending and deposit rates, it tends to be the case that lending rates increase at a faster pace. This is because environments of higher inflation often entail greater credit risk, which banks then need to offset with greater margins. New Zealand's inflation rate in 2016 continued a slow descent to 0.4% at the end of 2016. Although the RBNZ has limited scope to deal with continually decreasing inflation, recent developments in the US economy have put pressure on the Federal Reserve to hike interest rates, which would see a downward movement in the Kiwi dollar. Indeed, if this occurs and the positive relationship between NIMs and inflation continues, then it is expected that NIMs will stabilise and may even relax slightly. Forecast stagnant NIMs combined with slight increases in CLRs are the key factors that, we believe, will moderate the growth of the banking industry's profits over the next two years.

TABLE 10: FORECASTING RESULTS VAR

VAR industry driver		2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4
		Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Lending ($Billion)	Upper CI				450	464	477	489	501	514	526	538	550
	Forecast	448	454	458	437	445	453	460	468	475	482	489	496
	Lower CI				424	427	430	433	437	440	443	446	448
Net Interest Margin (%)	Upper CI				2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
	Forecast	2.19%	2.00%	2.11%	2.2%	2.2%	2.2%	2.2%	2.1%	2.1%	2.1%	2.1%	2.1%
	Lower CI				2.0%	2.0%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
Credit Loss Rate (%)	Upper CI				0.2%	0.3%	0.3%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%
	Forecast	0.08%	0.10%	0.11%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%
	Lower CI				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Profit Before Tax ($Billion)*	Forecast	1.77	1.71	1.62	1.68	1.67	1.67	1.67	1.68	1.68	1.69	1.70	1.71

* Note: Forecasts for profit before-tax will seem less than in the forecasts of previous publications due to the fact that the figures are not annualised.

Interest rates are expected to fall even further, which historically leads to a drop in the CLR (a drop in interest rates puts less pressure on borrowers resulting in a lower number of defaults). However, this trend may be dominated by an increase in household debt in 2016. In September 2015, household debt as a percentage of disposable income was 160%, up from 156.2% earlier in the year. By June 2016 the figure reached 165%. Although the present levels of household debt are not particularly alarming compared with other countries, the rate at which households become increasingly leveraged is a factor to watch. This is possibly reflected in the slight increase in the CLR. Another related factor that deserves consideration is rural debt-to-income ratios. Last year, weak commodity prices resulted in decreasing dairy exports straining rural borrowers. However, the outlook for dairy exports into 2017 is good and forecasted milk prices should see the agricultural sector gaining ground on last year's weak performance.

See Table 10 on page 84 with Forecasting Results VAR.

Despite their obvious importance, we do not attempt to take into account regulatory changes in this analysis. This is a limitation since regulatory changes can clearly have a large impact on lending volume, margins, and CLRs. Preventative lending measures such as increased LVRs have not eased in 2016. Instead, there have been further indications that the RBNZ will continue to tighten lending regulations as it attempts to balance out low inflation using the OCR. Fiscal policy has looked to aid the already heated housing market by selling off state-owned housing, but has done little to support the RBNZ in their bid to boost inflation.

Comparing our 2016 forecast of industry drivers and industry profit before tax[61] with how these drivers actually fared in 2016, we find that all our predictions are well within the 95% confidence interval. Profits were slightly higher than anticipated in the first two quarters as a result of a marginally lower CLR in Q1 and Q2 and a slightly higher NIM in Q1. However, as a result of a drop of the OCR in August and November by 0.25, profits fell slightly below our prediction in Q3. Our forecast of the lending volume (marginal rise throughout the year) was accurate.

We now take a closer look at the performance of the New Zealand economy. In 2016, the New Zealand economy bounced back from weak GDP growth in 2015 with a 3.6% increase of real GDP. This stems from a 6.9% decrease in unemployment in 2016 and continued business confidence. Additionally, a rise in private consumption supported GDP growth with boosted household spending. The November earthquakes in the central North Island saw GDP take an initial hit, but with over $3 billion in demolition and reparations, in the long term this could see increases in both GDP and employment.

Initial reactions to tightened lending regulations have subsided in 2016 with renewed demand for housing spreading into other main centres in New Zealand. Specifically, Tauranga has seen dramatic increases in construction and housing demand as Auckland housing prices become increasingly unaffordable. In terms of dwelling consent volumes, numbers in Wellington have increased by 7.5% while growth in other areas in modest with Canterbury experiencing slightly negative growth, a continued trend from previous years.

The New Zealand dollar strengthened through most of 2016 on the back of interest rates of around 2% – the highest in the G10. The demand for our dollar was further supported by a rebound of dairy prices, a rise in tourism numbers and a 10% increase in demand for kiwifruit, apples, wine and seafood. The strong dollar, however, has put a lot of pressure on the export and import-competing sectors – export volumes decreased by 16% even with dairy prices on the rise and conversely the increased buying power of the dollar saw imports increase by 14%. Overall, the terms of trade decreased by 1.8%. In its 22 September 2016 statement, the RBNZ expressed concerns about the high exchange rate and indicated that it will take action. This was followed by a reduction of the OCR in November. While the New Zealand dollar is expected to stay strong, indications are that it will trade a little lower in the near future.

Globally, 2016 has been an interesting year. Political developments in Britain with the 'Brexit' and in the US with their recent elections have cast some uncertainty over the economy for the next few years. These developments could affect New Zealand trade, migration and travel with these countries. Further struggles in the European powerhouses of France and Germany, with terrorism and the refugee crisis, could cause extra strain on their already overburdened economies. The Chinese economy seems to have stabilized somewhat since 2015 as fears of unsustainable growth subside while tension in the Middle East and Russia continues to build.

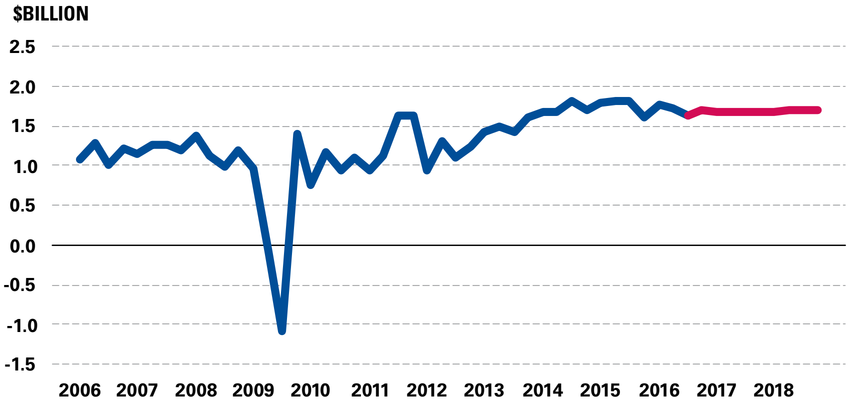
Overall, the New Zealand economy is in good shape with modest GDP growth expectations, a stabilising unemployment rate, low inflation and a low OCR. Stabilised dairy prices may contribute to the ongoing stability of net exports and GDP growth. Potential risk factors to our GDP growth are a slowdown of lending volume and international uncertainties related to trade and immigration with Britain and the United States. Furthermore, the continued strengthening of the NZ-AUD exchange rate may hurt export volumes to Australia, one of our largest trading partners.

While the recent decline in oil prices will surely hurt oil-producing countries, it will offer benefits to New Zealand. That is, New Zealand oil prices have quite a strong cost-push effect on consumer prices, largely driven by higher transport services costs. If oil prices continue to decline, consumers should not only expect cheaper petrol prices, but also cheaper prices for consumer goods that undergo substantial transportation.

To conclude, the banking industry and the New Zealand economy are in good shape. The industry outlook closely follows the economic performance of New Zealand; our banks continue to generate healthy profits while also maintaining strong capital ratios. However, profit growth is expected to be very modest or stagnant, similar to the anticipated GDP growth.

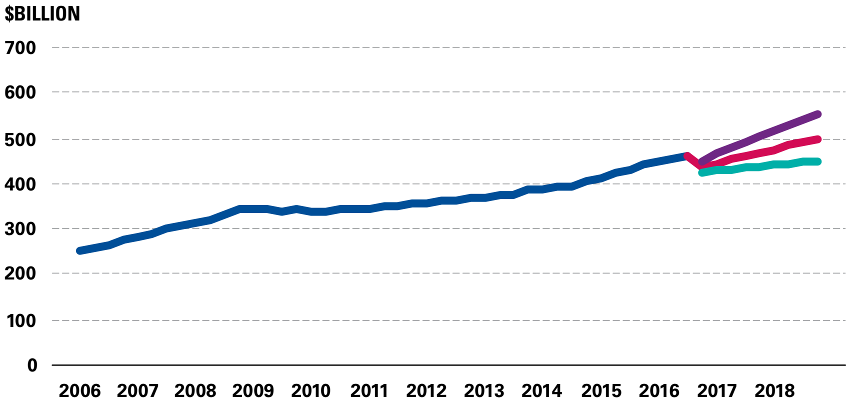
27 VAR PROFIT BEFORE TAX

- PROFIT BEFORE TAX (ACTUAL)
- PROFIT BEFORE TAX (FORECAST)



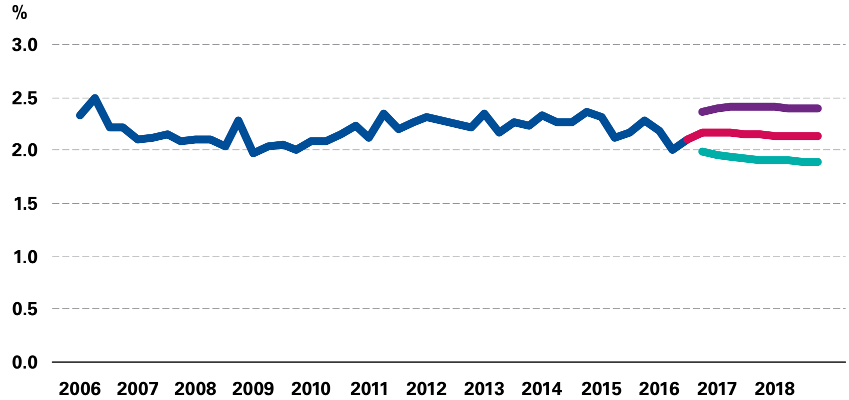
28 VAR INDUSTRY LENDING

- LENDING (ACTUAL)
- LENDING (FORECAST)
- UPPER 95% CONFIDENCE INTERVAL
- LOWER 95% CONFIDENCE INTERVAL



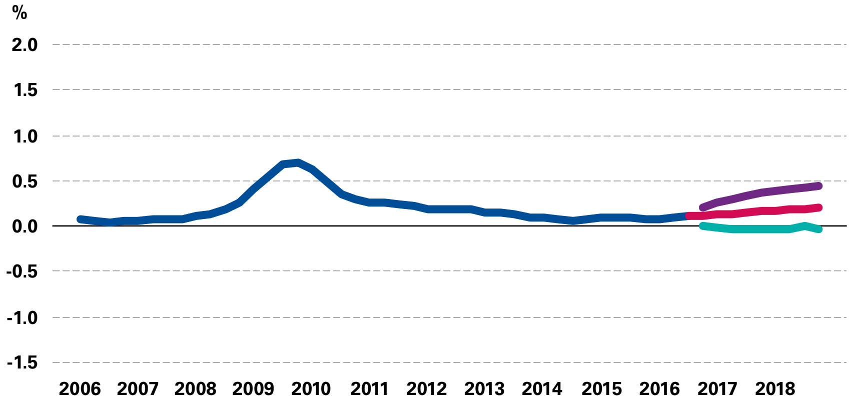
29 VAR INDUSTRY NET INTEREST MARGIN

- NET INTEREST MARGIN (ACTUAL)
- NET INTEREST MARGIN (FORECAST)
- UPPER 95% CONFIDENCE INTERVAL
- LOWER 95% CONFIDENCE INTERVAL



30 VAR CREDIT LOSS RATE

- CREDIT LOSS RATE (ACTUAL)
- CREDIT LOSS RATE (FORECAST)
- UPPER 95% CONFIDENCE INTERVAL
- LOWER 95% CONFIDENCE INTERVAL



Non-banks industry overview


Social network

Non-banks – Industry overview

John Kensington
Partner – Audit
Head of Banking and Finance
KPMG

John has been with KPMG's Financial Services audit team for 30-plus years, 21 of these as a partner working with a wide range of financial services audit clients, specialising in banks and finance companies.

John has a wealth of experience in auditing and accounting for banking products and services including treasury, retail offerings, corporate loans and loan provisioning. He is currently Head of KPMG's Banking and Finance team, Head of Financial Services Audit and editor of this publication. John is also a Trustee of the Kidscan Charitable Trust, and Deputy Chairman of the New Zealand Audit and Assurance Standards Board (NZAuASB) and a member of the External Reporting Board (XRB). John is also a member of CAANZ and the Institute of Directors.

The non-bank sector has once again delivered a strong performance with current year net profit after tax (NPAT) increasing by 8.17% to $207.78 million.

However, if we were to exclude NPAT of $8.14 million for EFN (New Zealand) Limited due to the lack of comparative data (EFN purchased the equipment finance and fleet solutions business from GE Capital and was incorporated on 27 July 2015), normalised[62] NPAT showed a more modest growth of 3.93% or $7.55 million. Normalised NPAT growth was driven by an increase in net interest income and non-interest income of $19.67 million (3.68%) and $10.30 million (6.41%), respectively. Record high vehicle sales, on the back of strong momentum from the prior year, certainly had an impact on the increase in profitability for the sector as five out of the seven vehicle finance companies reported a combined NPAT growth of $9.98 million. Finance companies have also enjoyed an increase in profits on the back of strong loan growth. Credit union results were mixed, with half of them experiencing an increase in profits while the other half experienced a reduction.

Record high vehicle sales, on the back of strong momentum from the prior year, certainly had an impact on the increase in profitability for the sector.

Normalised net interest margin (NIM) for the sector continues to be under pressure in 2016 due to a prevailing competitive market caused by a mixture of continued low mortgage rates (particularly for credit unions and finance companies), the growth of peer-to-peer (P2P) lending, and tighter funding channels. Normalised NIM (excluding the results of EFN (New Zealand) Limited) fell by 24 basis points (bps) to 5.85% for the current year (5.68% for the whole sector including EFN). Lower funding costs were not sufficient to counteract the competitive pressures that were pushing lending rates down.

The sector's loan book has seen another year of strong growth and low impairment levels. Total gross loans and advances grew by 13.70% or $1.06 billion, for which EFN accounted for $0.42 billion. This result supports Executives' comments around the amount of good quality lending that is still very much available just outside the edge of the banking sector's 'blackbox'[63] and the perceived tightening of the size of the 'blackbox' as banks focussed more closely on their mortgage lending.

Total gross loans and advances grew by 13.70% or $1.06 billion.

The sector's operating expense over operating income ratio has remained fairly consistent with last year's level, with a marginal improvement from 56.13% to 55.43%. Operating costs remained in line with operating income growth; however, the coming years could see a surge in operating costs as survey participants increase their spending in developing and investing more resources into their front-end technological capabilities to remain competitive and provide a better customer experience.

Many survey participants talked about the importance of a digital strategy to achieve this better customer experience by delivering loans and scoring and managing credit more quickly.

In many respects the non-bank sector continues to operate as it has in the past, focusing efforts on their area of speciality/niche where they are most comfortable. Participants do not feel that they have experienced as much in the way of competition from the banks or disruption, other than from the P2P lenders; however, all agree that the next wave of disruptors will come from the Fintech space.

Operating costs remained in line with operating income growth.

Executives have noticed a voluntary tightening of the credit market coming from the banking sector. The banking sector is expressing some level of anxiety over the property market and is taking a cautious approach in extending its exposure to the property market. The main question that is probably on everyone's mind right now is just how much longer can property prices in New Zealand grow at unsustainable rates? Lenders fear that sharply falling property prices could challenge the market and, if severe enough, result in mortgage's security values coming under pressure. The currently high employment rates, and low interest rates and confidence brought about by home balance sheet strengthening, have no doubt helped to minimise these issues to date.

This is a clear signal from the banking sector to expect tougher times ahead.

The Reserve Bank of New Zealand (RBNZ) has taken a more concerted approach to slow the property market together with IRD-imposed bank accounts, IRD number requirements, and increased lending restrictions. This, together with changes to capital requirements, inter-subsidiary lending guidelines, and voluntary impositions by the four banks on the use of offshore income might be finally starting to slow the market. To date this is just anecdotal evidence from the real estate industry. It will be interesting to see what Bank Executives will have to say in our bank survey in this regard when we meet them later this month and early next year.

Non-bank deposit takers (NBDTs) are experiencing strong competition coming from banks within the local deposit market.

The tightening of the credit market has, in turn, caused a flow-on effect onto some participants of the non-bank sector in recent months, as they have begun to find it more challenging to secure the necessary funds they require. Non-bank deposit takers (NBDTs) are experiencing strong competition coming from banks within the local deposit market and have found themselves challenged to match the special deposit interest rates being offered by banks.

Finance companies that are backed and funded by a bank are also being cautioned that they can no longer borrow the same level of funds at the same historically low interest rates that they have enjoyed. This is a clear signal from the banking sector to expect tougher times ahead as they shore up their capital balances and source additional deposits, while also trying to rein in lending growth.

Competition comes from all fronts and takes different forms

The finance company sector is an ever-changing landscape that never fails to bring about an engaging discussion on competition during the interviews with survey participants. The sale of Fisher & Paykel and GE Capital, the rise of the P2P lending sector, house price growth giving people a sense of home balance sheet improvement, growing use of Fintech applications, changing consumer behaviour and increased LVR restrictions are just some of the more obvious elements that are changing the landscape in which survey participants operate.

Competitive pressures are currently being felt by market participants on both ends of the spectrum.

Competitive pressures are currently being felt by market participants on both ends of the spectrum: the lending and the funding side. From the lending side, there is competition between the non-bank sector and the banking sector for high-quality loans that pay an appropriate yield. Although there is less competition from banks for newly originated mortgage loans, especially at the higher LVR's, Executives have pointed out that the non-bank sector is experiencing a higher than usual level of 'churn'. The majority of the Executives are of the opinion that the banks are being more aggressive this year in taking away loans from the sector participants, particularly in cases where that loan did not previously meet the banks' lending criteria, but now does because the customer has since paid down some of the loan balance and enjoyed a security valuation increase.

These loans initially started out with a non-bank entity as opposed to a bank, as the borrower might have had a minor credit issue (e.g. a late repayment history on a loan) and/or a high LVR. But after a year or two, the borrower has gone on to build up a strong credit history, and with house price inflation, the LVR on their mortgage now falls within the bank's lending criteria.

From the lending side, there is competition between the non-bank sector and the banking sector for high-quality loans that pay an appropriate yield.

In relation to the LVR restrictions that were put in place this year, the new set of rules presented the non-bank sector with an opportunity to capitalise on mortgage loans that were previously unavailable to them. In recent months, some Executives have seen a record number of mortgage loan enquiries being received where LVRs were higher than the applicable 60% or 80% for either investors or occupiers, respectively. Executives said that they have had to turn many enquiries away as they have not historically done any lending in this space. Despite having the ability to enter the LVR > 60% or 80% mortgage lending space, sector participants do not have an unlimited appetite to do so due to the risks involved. Survey participants do believe that there is still a generous amount of responsible lending that can be done just on the edge of the bank's 'blackbox', and that they should be focusing their resources and efforts in those areas.

One area that the banks continue to venture into is the personal financing space.

Sector participants perceived that the banking sector's 'blackbox' has not fundamentally changed from last year, but what they are seeing is that the banking sector is being more selective in its approval process for mortgage loans. Some Executives do foresee further voluntary credit tightening by the major banks in the upcoming months, amidst the risk of global uncertainty and pressure on the availability of funding.

One area that the banks continue to venture into is the personal financing space. The banks' behaviour in this space appears to be unusual as, according to some Executives, it appears that some banks are turning away mortgage loans that do not quite fit the 'blackbox', but are then providing credit card and debt consolidation loans, which could be considered a riskier lending space.

From the funding side, there is a pronounced dip in the level of wholesale offshore funding that is currently available to the sector's participants.

On the funding side, there is a pronounced dip in the level of wholesale offshore funding that is currently available to the sector's participants, when compared to the same period last year. Executives have noted that they are finding it increasingly difficult to compete with the banks in the local deposit market, especially when the banks carry out special six-to-nine-month deposit offers at a rate that is on par with what credit unions and building societies are offering their members. Executives within both the banking and non-bank sectors have been echoing their concerns over rising funding costs and the increased reliance on the offshore funding market. They put the blame on increased geopolitical and global economic instability over the past year.

This puts credit unions and building societies in a particularly challenging position, as their legal structure limits them as to where they are legally allowed to source funds. Credit unions and building societies are only allowed to source funds from mutual parties and, as such, attracting sufficient funds from the local deposit market is vital for their growth and profitability, and this is increasingly a challenge.

Finance companies are encountering more instances whereby potential borrowers think that having security on personal loan is neither necessary nor required.

The P2P sector has continued to have a significant impact on the way the non-bank sector operates. Some Executives have found that the growing presence and accessibility of the P2P sector to potential borrowers have begun to change the average borrower's behaviour and expectations in the market. Most noticeably, finance companies are encountering more instances whereby potential borrowers think that having security on a personal loan is neither necessary nor required. In this respect, the non-bank sector is finding it increasingly hard to compete with the P2P sector as borrowers seem to be more inclined to go with a lender that will not require any security to be held against the loan.

The digital offerings that these entities have are also mentioned as highlighting how important speed and ease of dealing is to the consumer. However, it is possible that this advantage might be short-lived as other non-bank entities acquire similar channels.

Regulation embedded in the culture

Several Executives have expressed a positive stance towards having a more rigorous regulatory environment. They believe that current regulation such as the Credit Contract and Consumer Finance Act 2003 (CCCFA), Anti-Money Laundering and Countering Financing of Terrorism Act 2009 (AML) and Financial Markets Conduct Act 2013 (FMC), while costly and time-consuming to implement, have become business as usual and are warranted in order to ensure that unscrupulous entities are kept out of the market and that a level playing field is maintained.

Other survey participants noted that in the current market, with deposit rates being at historically low levels, the ability to have access to the NBDT market may have some advantages. In the last few surveys, many Executives had commented that having the NBDT status was expensive and demanding to maintain, but now many see it as a good tool to have available in order to diversify its funding and tap into a very large sector of the market that is starting to become aware of just how low interest rates are and how long they have been at those levels. It will be interesting to see what messages are received from the banks when we interview them for the second half of the survey, as in recent weeks, following these comments by non-bank participants, a number of entities in both the bank and non-bank sector have indicated that deposit rates could be about to rise.

Conduct risk is in the front of Executives' minds, with many expressing that the sector is moving to be more conduct risk regulated.

Conduct risk is in the front of Executives' minds, with many expressing that the sector is moving to be more conduct risk regulated. The feeling expressed was that New Zealand has yet to be hit by quite the same wave of issues in this area as some overseas jurisdictions. One of the themes arising from the survey interviews was that most Executives were surprisingly confident that their organisation was not at risk in this area and that they had things fairly well covered. While they might think that their organisation would not do some of the things that have caused consternation in overseas jurisdictions, one thing to be aware of is that the landscape is changing rapidly in this area and behaviours that are accepted or even 'business as usual' today might not be appropriate tomorrow or in a digital world. A simple negative tweet or Facebook post from an unhappy customer could lead to local, national or even global exposure of the issue in such an explosive and viral manner that the resultant damage is difficult to contain.

There is an expectation among survey participants that regulations such as the CCCFA and FMC could be refined further to avoid unnecessary burdens on the lender. For instance, one of the Executives believed that it is unnecessary to establish a whole new AML process for a customer that has, at one point in time, had a loan with the entity, has paid it off and is now returning for another loan.

Regulatory pressures can also come from unexpected fronts and have unforeseen complications, as is the case with finance companies that have securitised vehicles funded by banks. These entities appear as though they are being pushed to comply with the same rules that banks do, as the bank lender is required to apply the same lending and capital requirements to loans that they are indirectly funding through finance companies.

In recent months, there has been much discussion in the media and between regulators and key stakeholders in the financial market about the implementation of Debt-to-Income (DTI) mortgage restrictions in New Zealand. This could be the next hurdle for the finance companies to implement and Executives are anxious about what form this would take and how it would be implemented. Their unease has since been alleviated momentarily as RBNZ Governor, Graeme Wheeler, recently announced in November that the RBNZ has no intention to introduce DTI measures as of yet.[64] This remark was made based on recent data that showed that the housing market is beginning to demonstrate signs of relief from inflationary pressure. It is not clear if this is the result of the new LVR restrictions that went into effect in October, or whether it is the result of banks taking a proactive effort to rein in higher LVR lending. However, with that being said, the RBNZ is still continuing to seek permission from the Government to include DTI measures in its toolbox so as to be able to bring them to use in a timely manner when the right circumstance or situation calls for it.[65]

Motor Trade Finance's appeal of the recent ruling made against it was dismissed by the Supreme Court in May. The sector has been keeping a close eye on this case for a while, and this development has now established a precedence on how participants should be structuring their credit fee charges on consumer loan contracts. In response to this, the Commerce Commission in September of this year released a set of draft guidelines that outlines a set of principles which lenders could adopt to be compliant with the CCCFA. The guidelines stipulate that lenders, regardless of type or form, are only allowed to charge fees by way of recovering reasonable specific direct transaction costs incurred in instituting a consumer loan contract.

However, it is important to note that the guidelines from the Commission are not legally binding and it is ultimately the lender's responsibility to exercise professional judgement in determining a fee structure that is compliant with the CCCFA. The Commission is currently seeking feedback from the public and the industry, with the intention to finalise the guidelines by early 2017.

The P2P lending sector has also been under scrutiny by the Commission.

The P2P lending sector has also been under scrutiny by the Commission since the Commission decided to formally bring civil proceedings against Harmoney in August 2016. The Commission is doing this to formally seek a ruling from the Auckland High Court that will clear the confusion as to whether 'platform fees' charged to borrowers should be subjected to the CCCFA.[66] An unfavourable ruling could bring into question the sustainability of the current P2P model.

The uncertainty has arisen as the platforms and the legislation under which they were licenced are new and untested. The initial concept of a P2P lender, and therefore the legislation under which they were licenced, is that the platform doesn't do the lending, and therefore they are not able to charge interest (only a lender is able to do that) and the extension is that as a result they are able to charge fees, but they should not be prescribed by the CCCFA as those fees relate to where lending interest is also earned. A potential worst case scenario would see the platform unable to earn interest and only charge fees in accordance with the CCCFA; this would mean they would have a business model under which they may not be able to recover their costs as the fee levels would be prescribed and there would be no interest earned to offset any other costs. Those subscribing to this view argue that such a model would never work and this cannot be what was envisaged and is not the way things work in other jurisdictions. The other view is that a consumer loan is a consumer loan no matter how it is executed and there should be the same protections and guidelines. Clearly, this is open to interpretation both ways, and this is why all lenders, P2P and others, and the regulators, are keen to see clarification.

Opportunities and challenges

A recurrent theme among survey participants this year was the sentiment towards the property market. Contrary to what many would think, most of the Executives do not see the new LVR restrictions on the banking sector as an opportunity to expand their market share and those that do acknowledge that it must be done carefully. While finance companies do sometimes operate in spaces that fall just outside of the banking sector's 'blackbox', the Executives emphasised that their focus in the property market has been responsible and not solely on loans with a high LVR. In regard to apartment projects, the non-bank sector as a whole is erring on the side of caution as they tread lightly into what is a relatively new lending market in Auckland.

A number of participants were considering how a partnership with a Fintech might bring some new product or service to market.

The use of partnerships was another theme that consistently emerged from comments made by Executives this year. Partnerships with other key members within a value chain, either horizontally or vertically, to come to a mutually beneficial arrangement that will help promote further sales and business growth for both parties were mentioned, possibly showing that the Executives do realise their business will have to change, but acknowledge that they do not know exactly how. In particular, a number of participants were considering how a partnership with a Fintech might bring some new product or service to the market. The challenge with this lies in ensuring that the right kind of partnership is established with organisations that share the same values and vision as themselves.

A good example of this concept is Flexi Card (formerly known as Fisher & Paykel Finance), who has partnered with MasterCard and Farmers to develop the Q MasterCard and Farmers Finance Card. The partnership has allowed Flexi Card to leverage on MasterCard's robust digital security programme to secure their credit cards, and give its customers access to a greater range of retailers throughout New Zealand and the rest of the world. In addition, the Farmers Finance Card entitles its members to exclusive offers that would not otherwise be available to them. MasterCard benefits by receiving increased transaction fee revenue when more transactions are processed through the use of the Q MasterCard. Farmers, on the other hand, will likely enjoy higher sales as its customers are now able to finance large purchases with greater ease.

Non-bank participants are also making a conscious effort to explore beyond their conventional operating model to find potential products that will complement the service/product offering for which their customer initially approached them. For the vehicle financing industry, this means identifying additional value-added services/products that they can add onto the purchase of a vehicle. This could range from providing extended warranties, liability insurance, maintenance service contracts, parts, accessories and finance. Turners' purchase of Autosure from Suncorp in November is a good illustration of this movement within the finance company market.

Executives from a range of organisations have identified the potential for a captive insurer market whereby the entity provides a loan, and some form of insurance is established with the individual.

With the future digitalisation of the industry, incumbent players also need to be prepared to change as the industry does.

While this strategy may have helped increase sales for the time being, if not managed appropriately it could divert much-needed resources and attention away from core activities. In addition, with the future digitalisation of the industry, incumbent players also need to be prepared to change to survive as the industry does.

Another area that Executives all commented on was the risk of a cyber attack and how important it was to have a coordinated approach to staying up with the latest intrusion techniques and sources due to the increasing frequency and complexity of cyber attacks. All the Executives spoke of the need to spend more time and effort to protect against intrusion and, in particular, the need to stay abreast of where and how attacks were being launched. Many expressed a mix of nervous confidence and concern about their entity's defences, but all of them noted that it was an area where they would undoubtedly be tested in the future. The development of each new product or distribution channel, while necessary to enhance the customer experience, brings with it another area needing to be protected from cyber threats.

The relationship between Fintech and disruptors

In last year's publication, many of the Executives surveyed agreed that the growth of the P2P sector would be a disruptor to the non-bank sector. In just a year, significant changes have taken place within the personal/consumer lending space that have been brought about by the entry of P2P lenders into the market. Survey participants agree on the increasing importance of Fintech technologies to the non-bank sector. Executives expect Fintech innovations to give rise to disruption in the foreseeable future. In response to the likely threat, several Executives have gone on to mention how they are taking a proactive approach to seeking out collaborative opportunities with Fintech companies and even banks to assist them. The aim of the new partnerships is to assist them in developing sophisticated Fintech capabilities of their own, or to set themselves up to be ready for the next wave of disruptors that is expected to arrive from the Fintech industry.

Survey participants agree on the increasing importance of Fintech technologies to the non-bank sector.

The two major lessons to date from the P2P platform have been:

1. Building a faster and more streamlined 'know your customer' and deposit and loan processing system through the use of automation, starting from the submission of the application through to the disbursement/receipt of funds, right through to the process for collecting and allocating repayment and dealing with arrears and defaults. The one click away technology-driven front end that speeds things up was frequently mentioned.
2. Encouraging financial literacy by providing customers with interactive tools and data that will educate and enable them to make well-informed financial decisions.

It is crucial that before an entity embarks on a Fintech campaign, it properly considers whether the implementation would complement existing service/product offerings and support the sale of more business, or whether it would replace it.

Another judgement that needs to be considered is when to 'turn off' the old model and rely solely on the new model for doing business. In addition, it is important to recognise that the true power of the disruptor is not at the high-tech front end as a transaction enabler, but deeper where existing margins are reduced and/or shared by all participants together with the risk. To date, the disruptors have displayed the initial technologies well, but are only just starting to move into the risk and reward share space.

Companies that have yet to embrace data analytics might find themselves lagging behind, or even out of business, as they struggle to keep up with competitors.

The expansion of the use of data is a shift from solely using data analytics to identify new business opportunities through the analysis of transactions, to taking it to the next level by developing technological capabilities to predict and capitalise on those opportunities.

In the future, companies that have yet to embrace data analytics might find themselves lagging behind, or even out of business, as they struggle to keep up with competitors.

While having the entire lending process transitioned to an online platform may reduce processing time, it is not without its risks. The ability to capture generic information about the loan applicant through an online platform is one thing, but being able to meet the applicant face to face allows the decision maker to obtain the necessary depth of information specific to the individual's situation in order to make a responsible and properly informed lending decision. Lenders will need to consider the trade-off between the speed and ease of getting a loan out to a customer, and ensuring that the necessary and appropriate level of checks have been performed in accordance with the responsible lending code. For example, a non-English speaking person who does not truly understand the documentation may be quickly identified in a person-to-person application, but might not be picked up during an online application process.

With today's society being more consumer driven, the demand from borrowers for easier and quicker access to funds and from depositors for a different type of return, will only build. As the non-bank sector moves its lending and deposit processes online, it will be intriguing to see how the sector will address the trade-off between loan growth, socially responsible lending, and the sharing of risk.

The way finance is obtained and provided could change radically. Uber, Amazon and Netflix have all seen traditional customer views and models challenged. The same will happen in the finance space. People don't actually want a mortgage, they want a home that suits their needs, but the way that things currently work is that when they are young they struggle to afford a home; as the children grow they live in what they can afford (a smaller home than they would like); and they finally afford the family home they want just as the family has grown up. What if finance could change to enable intergenerational groups to leverage value in the parents' home to allow the second generation to enjoy a bigger home sooner?

At the consumer finance end of the market the day will come when, as you pass a retail store, your device will automatically know where you are and a financier will let you know the credit you have so that you enter the store with a pre-approved limit to purchase an item your device has guided you to, because a Fintech has used data about your past actions and preferences to select the product for you.

Organic growth vs. inorganic growth

The sales of GE Capital and Fisher & Paykel Finance were the key highlights in last year's publication. As at 30 September 2016, the sales of these respective entities have been completed, and the new entities are now in full operation under their new structure.

In contrast to last year, we have not seen much in the way of acquisitions or mergers. In the earlier part of the year, however, speculation about the sale of UDC Finance was floated in the media,[67] and this prompted Macquarie Group and Heartland Bank to announce their interest in purchasing UDC should the finance company be put up for sale by its parent company, ANZ NZ Bank. In May, ANZ NZ CEO David Hisco firmly reiterated that ANZ's ownership in UDC is currently undergoing a strategic review and that no plans have been drawn up for its sale.[68] He did not, however, rule out the possibility of a sale following the conclusion of its review. Most recently, in August S&P's downgraded UDC's long-term issuer credit rating by three notches based on the expectation that UDC will be sold within the next year and Heartland's CEO reiterated that UDC would be a good fit within its business.

The non-bank sector is truly a tough lending space.

The non-bank sector is truly a tough lending space, an area where not only is there a myriad of competitors, both old and new, but every so often the banks also have the tendency to enter into the sector if they spot an opportunity to do some quality lending or raise much-needed domestic deposits.

Despite the challenges they face, Executives have explained that they are perfectly comfortable with where they are currently sitting in the sector. They remain content with operating in the niche where they readily consider themselves as being good at what they do, in an area where there is still a potential for steady margin and lending growth. This year, the main focus has been on organic growth. This means growing the business in a way that is sustainable in the long term for all key stakeholders (i.e. both borrowers and lenders), being selective about where they invest their money or who they lend to, and nurturing lasting relationships with key stakeholders that will ultimately drive repeat business.

There is also a general consensus amongst Executives that increased regulation, significant operational issues or the lack of strategic resources will be the main catalysts that will drive the next big round of acquisitions or mergers within the non-bank sector in New Zealand.

The future

As a result of world events over the past year, many Executives have expressed some level of apprehension as to how New Zealand's financial market will be impacted in the upcoming months, largely due to:

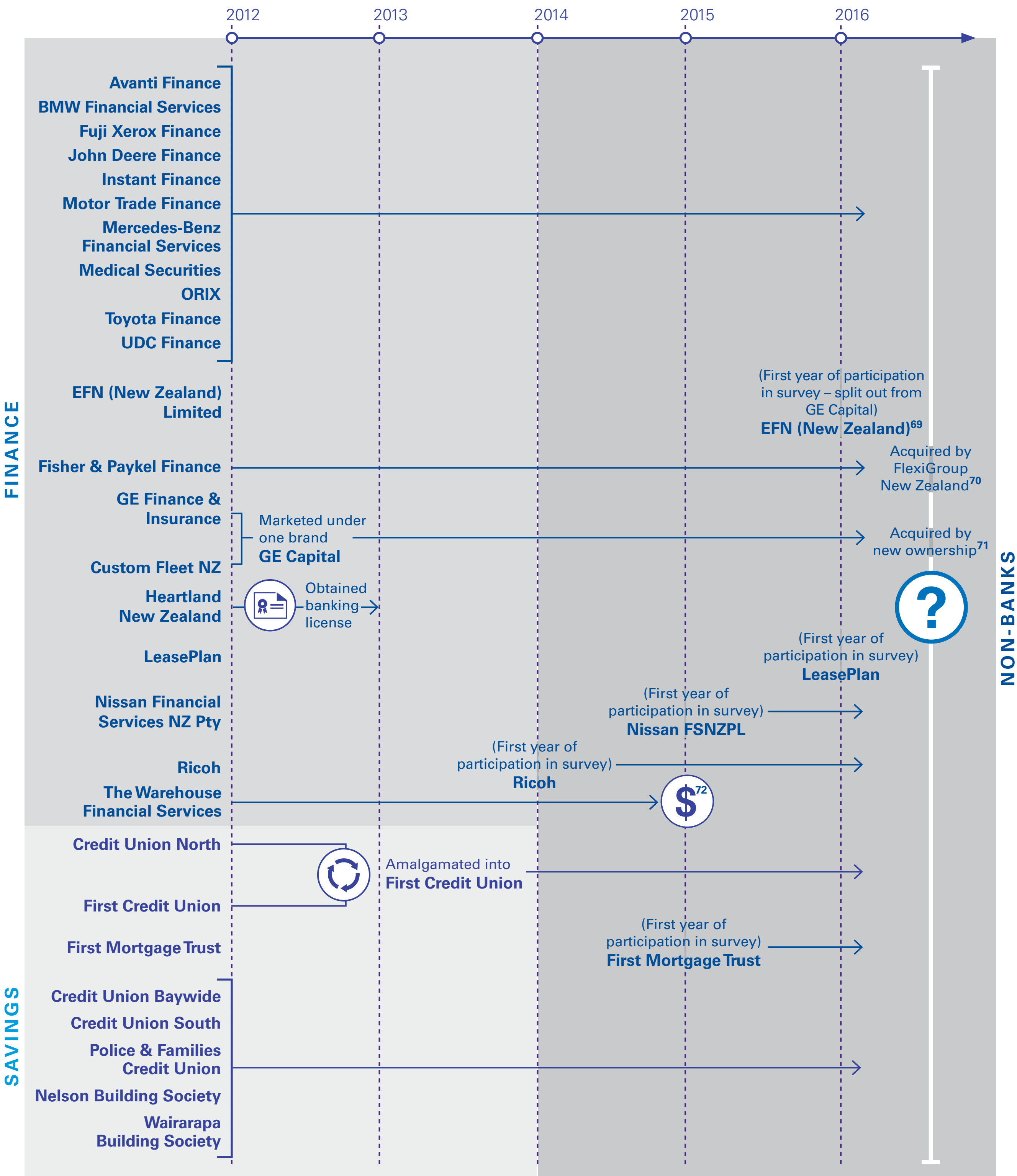
1. Ambiguity over how EU and global trade relations with the UK will look like following Brexit, and most recently;
2. US president-elect, Donald Trump, and what his American protectionist policies could mean to both global economic and military stability, should he decide to follow through with them.

Increasing geopolitical and economic uncertainty has caused Executives to be certain of one thing: a continued rise in offshore funding costs during the foreseeable months. This could place further tension on the local deposit market as both the bank and non-bank sector continue to step up efforts to secure sufficient funding.

New Zealand continues to track well economically after another relatively benign year, with high employment levels and low interest rates for yet another year. However, this has left many Executives pondering whether the sector is adequately prepared to deal with another financial crisis such as the Global Financial Crisis (GFC), and just how much longer will these good times last. In short, they see the New Zealand economy as being in a good place locally and, if it is to be affected, they generally believe it will be as a result of the contagion effect of a global issue.

Lastly, the future will bring greater collaboration in the finance industry in order to remain competitive in an industry that continues to evolve. As a result, strategic partnerships are expected to develop between market participants as the nature of delivery of the customer experience changes and disruptors challenge existing models.

Looking back at the non-bank sector



GE Capital New Zealand structure given the change in ownership

	Business Divisions Under GE Capital (Prior to Sale)	Branding Under New Ownership	Details of GE Capital's Sale	Public Disclosure of Financial Statements Under New Ownership
GE Capital (New Zealand)	Commercial Distribution Finance	Wells Fargo Commercial Distribution Finance (Ultimate Parent – Wells Fargo & Company)	On 31 October 2015, Wells Fargo & Company announced the purchase of GE Capital's Commercial Distribution Finance division for an undisclosed amount.	Not available
	Equipment Finance	EFN (New Zealand) Limited (Ultimate Parent – Element Financial Corporation)	On 29 June 2015, Element Financial Corporation purchased GE Capital's fleet management in the US, Mexico, Australia and New Zealand for US$6.9 billion. The sale also included a portion of GE Capital's New Zealand Equipment Finance division. On 10 November 2015, GE Capital sold the remaining portion of its Australian and New Zealand commercial lending and leasing portfolios to Sankaty Advisors for an undisclosed amount.	Available
	Fleet Solutions			
	Legacy Solutions (GE Money)	Latitude Financial Services (Ultimate Parent – KVD Singapore Pte Ltd)	On 15 March 2015, investment manager Varde Partners, private equity firm KKR, and Deutsche Bank purchased both the New Zealand and Australian consumer finance division of GE Capital (GE Money) for A$8.2 billion.	Not available

Non-banks – Timeline of events[73]

Jan. 2016

28th
The RBNZ leaves the Official Cash Rate (OCR) unchanged at 2.50%.

Feb. 2016

17th
The RBNZ approves Scorecard Pty Limited to be the fourth credit rating agency to provide credit ratings for NBDTs in New Zealand. The other three credit rating agencies include Standard & Poor's (S&P's), Moody's and Fitch Ratings.

29th
The sale of LeasePlan New Zealand Limited to LP Group BV receives approval from the Overseas Investment Office.

Mar. 2016

10th
The RBNZ cuts the OCR by 25 bps to 2.25%.

Apr. 2016

21st
S&P's places UDC Finance's 'AA-' long-term credit rating on a negative outlook.

28th
The RBNZ leaves the OCR unchanged at 2.25%.

PledgeMe becomes the fifth P2P lender in New Zealand after having its licence approved by the Financial Markets Authority (FMA).

May 2016

4th
ANZ NZ CEO, David Hisco, affirms that UDC Finance is not for sale.

6th
RBNZ statistics reports a record high of $1.7 billion of mortgage lending approved in a single week.

12th
Motor Trade Finance's appeal over the recent ruling made against it for charging unreasonable fees on loan contracts is dismissed by the Supreme Court.

Harmoney revises its fee structure, replacing the service fee on repayments with a lender fee that will only be charged on the interest earned by the lender.

Jun. 2016

9th
The RBNZ leaves the OCR unchanged at 2.25%.

Jul. 2016

6th
Ricoh announces a partnership with 2 Degrees as it seeks to expand its managed IT service business.

14th
Lending Crowd seeks to raise $5 million in capital for marketing and product development initiatives.

22nd
Former Wairarapa Building Society employee found to have been misappropriating funds; no member accounts were affected.

Aug. 2016

1st
The Commerce Commission formally files charges against Harmoney under the Fair Trading Act for misleading consumers into believing they had been pre-approved for a personal loan. Harmoney pleads guilty to those charges, for which it could potentially face a six-figure fine.

Wells Fargo completes acquisition of GE Capital's Commercial Distribution Finance business in Australia and New Zealand.

11th
The RBNZ cuts the OCR by 25 bps to 2.00%.

25th
S&P's expresses concern over the growing use of interest-only mortgage loans in New Zealand.

29th
The Commerce Commission formally files civil proceedings against Harmoney in a bid to get the Auckland High Court to clarify how the Credit Contract and Consumer Finance Act 2003 (CCCFA) applies to consumer loans offered through peer-to-peer lenders.

Sep. 2016

6th
In response to the recent ruling against Motor Trade Finance in May, the Commerce Commission releases draft guidance outlining what amount of consumer credit fees may be constituted as reasonable.

13th
Fisher & Paykel Finance announces its new branding as Flexi Cards after having been acquired by Flexi Group last year, along with the announcement of its partnership with MasterCard to launch the Q MasterCard. Flexi Cards is the first non-bank to be granted a MasterCard issuing licence in New Zealand.

15th
Motor Trade Finance announces additional borrowings of $220 million from institutional investors, by way of securitising its finance receivables.

Warehouse Money's Visa cards receive A+ certification after having met Payment Card Industry Data Security Standards.

22nd
The RBNZ leaves the OCR unchanged at 2.00%.

30th
The RBNZ approves Medical Securities Limited's request to cancel its NBDT licence.

Oct. 2016

1st
New LVR rules come into effect, restricting mortgage lending to residential property investors across New Zealand with LVR greater than 60% to no more than 5%, and no more than 10% to owner-occupiers with LVR greater than 80%.

14th
Heartland invests $4 million into Harmoney to boost its stake to 13%.

17th
Fitch Ratings gives Credit Union Baywide its first credit rating at 'BB' for long-term debt issues.

25th
S&P's downgrades UDC Finance's long-term credit rating by three notches, from AA- to A-, due to its potential sale. No formal announcement has been made by its parent company, Australia & New Zealand Banking Group, as to the sale of UDC Finance.

The RBNZ announces its intention to release formal OCR projections from November onwards.

28th
Fitch Ratings re-establishes an 'A' long-term issuer rating for the Australian parent company of John Deere Financial Limited.

Nov. 2016

1st
The FMA approves Citizens Brokerage Limited's license to operate as a P2P lender in New Zealand.

2nd
New Zealand's unemployment rate falls to 4.9% for the three months ended 30 September 2016, a first since 2008.

3rd
New vehicle registrations in New Zealand for the month of October top the 14,000 mark to hit a 32-year high.

7th
Trade Me purchases an additional $670,000 in shares to maintain a 14.4% shareholding in Harmoney.

10th
The RBNZ cuts the OCR by 25 bps to 1.75%.

11th
SCFL Management Limited, wholly owned by Southern Cross Financial Holdings Limited, receives its license from the FMA to operate in New Zealand as a P2P lender.

22nd
Tuners purchases Autosure insurance business from Suncorp Group for $34 million.

Financial Services Federation

Lyn McMorran
Executive Director
Financial Services Federation Inc.

FS
FINANCIAL SERVICES FEDERATION

Lyn McMorran is the Executive Director of the Financial Services Federation Inc., which is the industry body representing responsible finance and leasing providers in New Zealand (www.fsf.org.nz). Prior to joining the FSF in 2012, Lyn was Area Manager for Westpac's Private Bank in the Lower North and South Islands.

A Certified Financial Planner, Lyn is a past President of the Institute of Financial Advisers of New Zealand.

Lyn holds a Graduate Certificate in Management and a Post-Graduate Diploma in Business Studies (Personal Financial Planning) and is a Fellow of both the Institute of Financial Advisers and the Financial Services Institute of Australasia. She is also a Trustee of the Skylight Trust and a Commissioner for the Insurance and Savings Ombudsman disputes resolution scheme.

Last year, I wrote an article for inclusion in the KPMG Financial Institutions Performance Survey which largely reflected on what Financial Services Federation (FSF) members had been doing. This seemed appropriate at the time, particularly as in 2015 the FSF celebrated the 50th anniversary of our founding. Also, because we felt we were coming to the end of the 'once-in-a-lifetime' regulatory reform of the financial services sector forced upon us by the events of the Global Financial Crisis.

At that time, we were hopeful that in 2016 we would be able to let our compliance obligations take care of themselves because systems and processes were largely in place and that we would be able to turn our attention to innovation and business growth.

How that has actually panned out has been interesting, and it's fair to say the results have been mixed.

It certainly has not been the case that the need to respond to regulatory matters has diminished, with the FSF having provided more than a dozen submissions on behalf of members this year to date. These have included responses to the Options Paper on possible changes to the Financial Advisers Act, Phase 2 of the Anti-Money Laundering and Countering Financing of Terrorism regime, the Consumer Guarantees (Removal of Unrelated Lender Liability) Amendment Bill and the Commerce Commission's draft guidance on consumer credit fees – among others.

With exposure drafts of amended Financial Advisers and Anti-Money Laundering legislation expected to be consulted on and enacted in 2017 (again, among others), I'm not prepared this year to tempt fate by saying that our regulatory reform days are behind us, or even that they are tapering off.

In regard to the former of these, in particular, we still remain hopeful that common sense will prevail and that the provision of consumer credit will be removed from the scope of an amended Financial Advisers Act. Under the current Act, consumer credit is a category two product and any 'advice' provided in relation to this, such as the suitability of a loan for the borrower's purposes, how it might be structured to suit their needs, or helping them to understand their obligations under a loan agreement, is covered by both the Financial Advisers Act (FAA) and the Credit Contracts and Consumer Finance Act (CCCFA). We believe this overlapping regulation is an anomaly that the amended FAA could take the opportunity to fix.

Realistically, we believe the reforms to the CCCFA and the introduction of the Responsible Lending Code provide the necessary consumer protections around the provision of consumer credit, and this Act would always take precedence over the FAA if any concerns arose from the regulator as to the provision of credit 'advice'.

One area of particular concern to some of them has been the increase and greater sophistication of identity and other types of fraud that they have been subjected to.

The upside, however, is that it has not at all been about compliance for our members this year and certainly the mood among them is that 2016 has been a good year for lending with volumes high and arrears low.

One area of particular concern to some of them has been the increase and greater sophistication of identity and other types of fraud that they have been subjected to. Greater vigilance has been required to spot these instances because the documentation being provided is of such high quality that this has not been easy.

The FSF as a body is now looking at ways in which we can facilitate more information sharing amongst our members to try to prevent instances of identity fraud or the use of fraudulent account information to verify loan affordability.

The future is certainly in digitally providing consumers with access to credit. The demand is most certainly there for borrowers to be able to access credit through their online devices without having to use a branch network. They want money when they want it and fast.

The difficulty for lenders is in being able to meet the consumer demand while still satisfying the regulator that they are meeting their responsibilities as responsible lenders. The Commerce Commission rightly feels that consumers deserve the same protections no matter what channel they use to access products and services.

There are many technology providers who can help lenders meet their Lender Responsibility Principle obligations when transacting with their customers digitally. For example, there are ways to satisfactorily achieve electronic identity verification, to access borrowers' bank account data to verify income and expenditure and determine whether the loan is affordable, and for the borrower to electronically sign loan agreements.

The gap is in providing lenders with the certainty that borrowers are making an informed decision and that they do in fact understand the terms and conditions of the lending agreement they are entering into, when the lender is not able to assess that understanding face-to-face. We all know how easy it is when accessing products and services on-line to tick the box that says that we have read the terms and conditions without having read them at all – it's a question of wanting to buy the product and move on.

We understand that the tick-box approach will not be good enough in the lending situation, particularly when it comes to the protection of those customers who might be regarded as being vulnerable, for example, when they are people for whom English is a second language. So, as a Federation, we are looking to help members to formulate the means to meet their responsible lending obligations and still be able to innovate and offer their customers access to products via a variety of channels.

We understand that the tick-box approach will not be good enough in the lending situation.

This is important to our members because we, like the regulators, believe that consumers are entitled to the same protections regardless of the channel they use to interact with lenders, and for that reason we have also been reasonably vocal about the fact that care needs to be taken not to be seduced by the idea of 'disruptors' in the industry that then allows them an easier ride in respect to compliance. In our view, a loan is a loan whether it's provided by a lender in a branch, via a platform by an intermediary such as a peer-to-peer lender, via on-line means, or whatever. The only difference is the channel by which the loan is accessed.

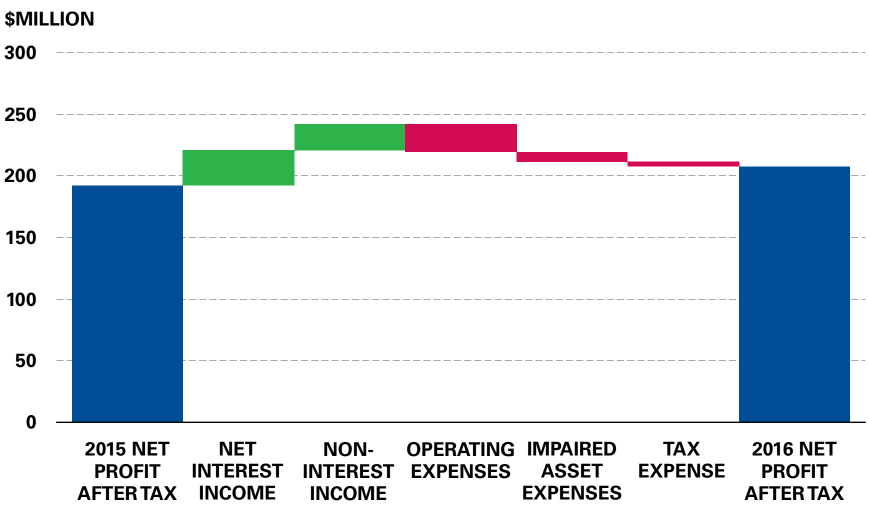
There is clearly plenty to occupy us and, like many, particularly after the events of recent days in North Canterbury and Wellington, we will be pleased to welcome in 2017 with whatever that has in store for us.

Non-banks – Sector performance

The non-bank sector showed an 8.17% growth in overall reported net profit, up by $15.70 million to $207.78 million.

Out of the 23 participants, 15 reported higher profit levels, and 10 of those achieved double-digit growth. Despite tighter margins due to a decrease in lending rates and market volatility creating cost of funds pressure, the non-bank sector demonstrated steady growth in net interest income and non-interest income that led to the increase in profitability.

31 MOVEMENT IN NET PROFIT AFTER TAX



Non-banks' profitability increases on the back of strong loan growth

Non-bank survey participants had a strong year in 2016 with the sector achieving an increase in net profit of $15.70 million to $207.78 million compared to the previous year. If we ignore the impact of EFN (New Zealand) Limited, which is included in the survey for the first time since it started operations on 27 July 2015, the sector showed a normalised[74] growth of 3.93% to $199.64 million. Out of the 23 participants, 15 reported positive increases to NPAT levels. Nissan Financial Services and Wairarapa Building Society were the standout performers this year with triple-digit NPAT growth of 201.90% (from $1.26 million to $3.81 million) and 467.92% (from $106k to $602k), respectively.

Nissan Financial Services, in its second full year of operation, is continuing to show significant growth as it continues to establish its footing within the local vehicle financing sector in New Zealand, supporting the sale of its vehicle brand and the Nissan dealership network. Nissan Financial Services' NPAT growth of 201.90% was driven by increased net interest income of $4.98 million or 98.17%, alongside net interest margin (NIM) growth of 45 bps to 4.04%. Similarly, Wairarapa Building Society had a $317k or 13.32% increase in net interest income this year.

Other notable mentions are Avanti Finance, First Mortgage Trust, Medical Securities, Mercedes-Benz Financial Services, Ricoh and Toyota Finance, all of whom achieved NPAT growth ranging from 23.11% to 44.51%. The top three performers, in terms of dollar value increases ranging from $3.15 million to $3.75 million, were Avanti, Mercedes-Benz Financial Services and Toyota Finance.

In contrast, Fuji Xerox Finance reported a $10.66 million reduction in net profit for the year, dropping from a $3.95 million net profit in 2015 to a $6.71 million net loss in 2016. Fuji Xerox Finance is the only participant that reported a loss this year. The contraction in NPAT was driven by several factors, including a $2.57 million (10.66%) reduction in interest income, a contraction

TABLE 11: PERFORMANCE METRICS		Total
Increase in total assets		17.40%
Increase in net profit after tax (npat)		8.17%
Movement of impaired asset expense (as a percentage of average gross loans and advances)	bps	4
Decrease in interest margin	bps	-41
Decrease in NPAT/Average total assets	bps	-9
Decrease in NPAT/Average equity	bps	-23

of 138 bps in NIM to 2.79%, a further $1.05 million reduction in non-interest income, and lastly, a steep increase of $10.25 million (from $635k) in impairment expense. Positively, Fuji Xerox Finance reported a 7.72% or $441k reduction in operating expenses.

With reports of record vehicle sales in the media over the past couple months, a closer look at this segment of the sector revealed that five of the seven vehicle financing companies contributed a total of $9.98 million towards normalised (excluding EFN) NPAT growth for the non-bank sector. BMW Financial Services and ORIX were the only ones that reported reductions in profits from last year of 24.57% ($2.32 million) and 0.84% ($132k), respectively. Weaker performance from BMW Financial Services stemmed from a decrease of $1.43 million in net interest income, the majority of which came from a decline in interest income as interest expense remained flat. Worsening credit quality also had a significant impact on the deterioration of its NPAT as impairment expenses rose $952k for the year, followed by a marginal reduction in non-interest income of $259k as well.

In relation to non-interest income, we continue to see the same theme from previous years, with vehicle financing companies contributing over $12.57 million to the overall $10.30 million (6.41%) growth in normalised non-interest income. The largest increase in non-interest income came from Toyota Finance, Nissan Financial Services and LeasePlan, which reported increases of $5.66 million, $3.40 million and $2.95 million, respectively.

Overall, the non-bank sector delivered plenty of positives this year as over half of our survey participants improved their profitability, despite new challenges that arose and tougher competitive pressures from P2P lenders and the banking sector.

Summary of non-bank sector profitability measurements (see Figure 31 – page 104):

— NPAT grew by $15.70 million or 8.17%, to achieve $207.78 million (normalised growth of 3.93%).

— Net interest income went up by $29.78 million, to reach $563.72 million (normalised increase of $19.67 million or 3.68%).

— Non-interest income increased by $20.92 million, to reach $181.53 million (normalised gain of $10.30 million).

— Impairment asset expense increased by $7.83 million, climbing to a total of $47.80 million (normalised of $7.47 million or an 18.70% hike in impaired asset expense).

— Operating expenses increased by $23.20 million.

— Tax expense went up by $3.98 million.

Net interest margin continues to contract

Participants in the sector are finding it increasingly difficult to maintain their NIMs. This year, only 7 out of the 23 survey participants were able to increase their NIM levels, with one participant's NIM staying flat. Normalised NIM contracted by 24 bps, declining from 6.09% to 5.85%. Margin pressures primarily stemmed from lower lending rates as a result of ever-increasing competition within the sector, without sufficient relief from the lending side of the equation.

Normalised interest income for the sector is up $20.82 million or 2.43%, while normalised interest earning assets increased to $9.78 billion, a growth rate of 6.93% or $633.34 million.

Of the seven survey participants that saw NIM growth, Ricoh and Instant Finance were the top performers, with increases of 121 bps and 105 bps, respectively. The remaining five competitors recorded improvements in the range of 2 to 45 bps. These two, along with Nissan Financial Services who had the 3rd highest NIM gain of 45 bps, were the only participants who were able to benefit from both favourable lending and funding conditions (i.e. achieving a higher interest income over interest earning asset ratio, while simultaneously driving down its interest expense over interest bearing liability ratio).

On the other hand, Avanti Finance and Fuji Xerox Finance had the largest NIM declines of 96 bps to 9.98% and 138 bps to 2.79%, respectively.

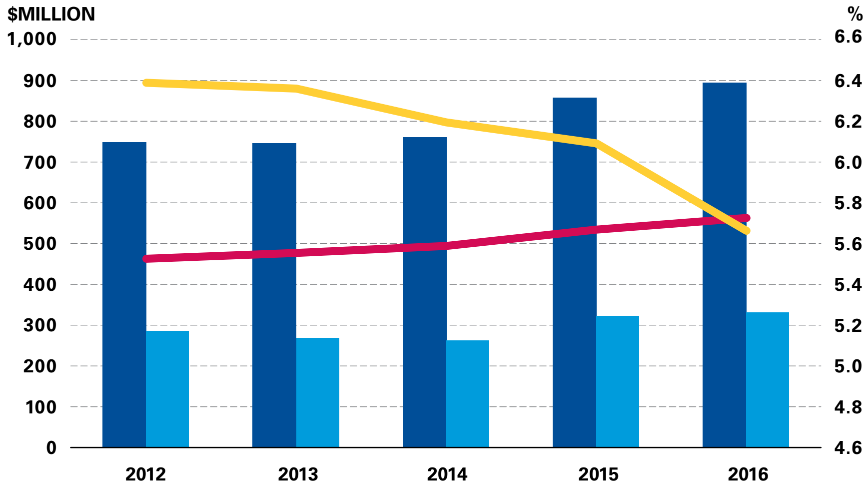
Instant Finance continues to have the highest NIM at 22.30%, followed by ORIX at 12.22% and Fisher & Paykel Finance at 11.30%. On the other end, Wairarapa Building Society, Nelson Building Society, and Fuji Xerox Finance held the weakest NIMs at 2.25%, 2.30% and 2.79%, respectively.

32 SEE FIGURE 32 – PAGE 106

Despite normalised NIM levels reducing this year, normalised interest income grew by 2.43% for the year, compared to an impressive 12.73% growth last year. Nissan Financial Services and Avanti Finance once again saw impressive results this year with increases in interest income of $8.66 million and $8.57 million, up from last year by 84.18% and 37.13%,

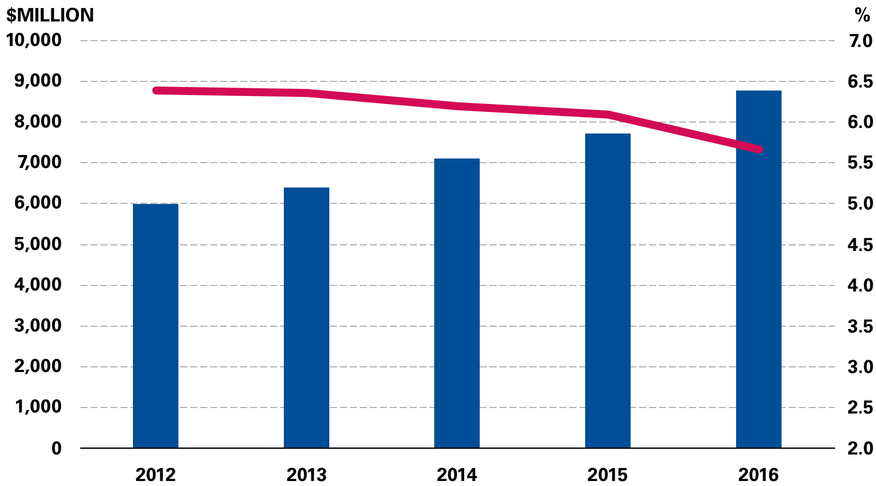
32 NET INTEREST INCOME ANALYSIS

- INTEREST INCOME (LHS)
- INTEREST EXPENSE (LHS)
- NET INTEREST INCOME (LHS)
- NET INTEREST MARGIN (RHS)



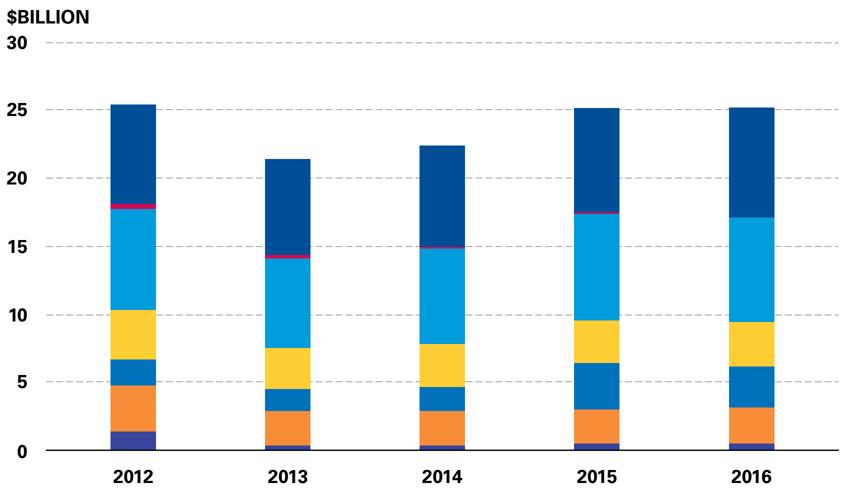
33 GROSS LOANS AND ADVANCES VS. NET INTEREST MARGIN

- GROSS LOANS AND ADVANCES (LHS)
- NET INTEREST MARGIN (RHS)



34 LENDING BY NON-BANK SECTOR

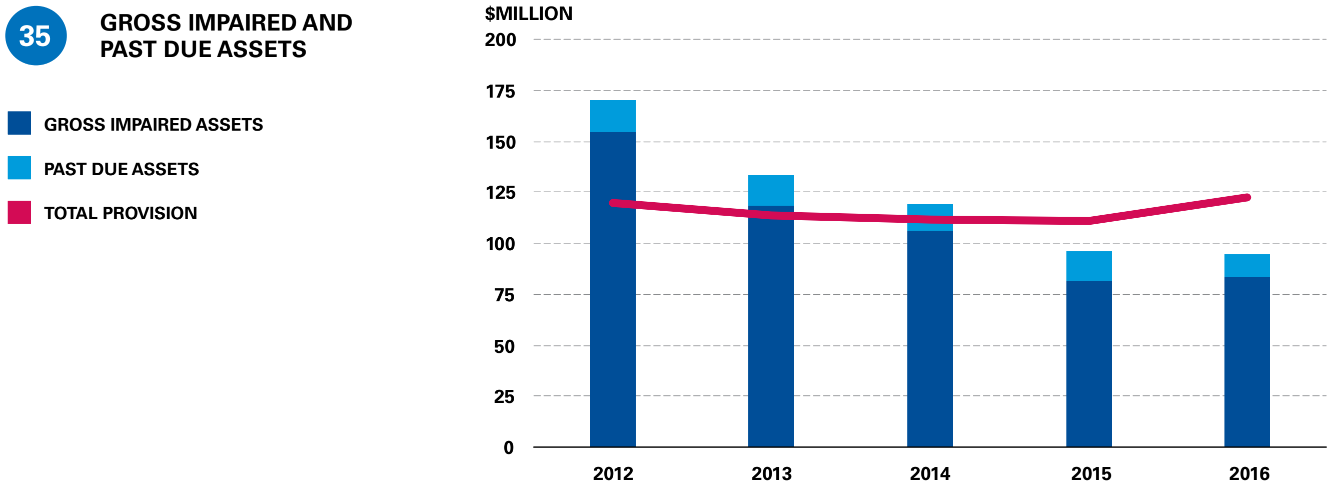
- CONSUMER
- FINANCE INSTITUTIONS (NON-REGISTERED BANKS)
- OTHER BUSINESS
- PROPERTY & BUSINESS SERVICES
- FINANCE INSTITUTIONS (REGISTERED BANKS)
- HOUSING
- AGRICULTURE



SOURCE: RESERVE BANK OF NEW ZEALAND STATISTICS

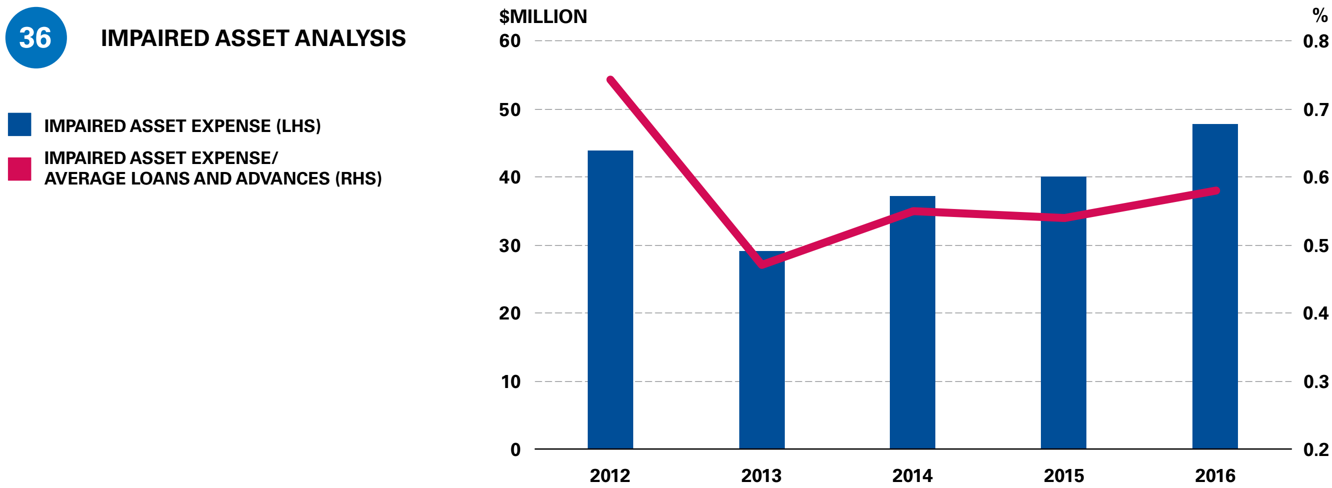
35

GROSS IMPAIRED AND PAST DUE ASSETS



36

IMPAIRED ASSET ANALYSIS



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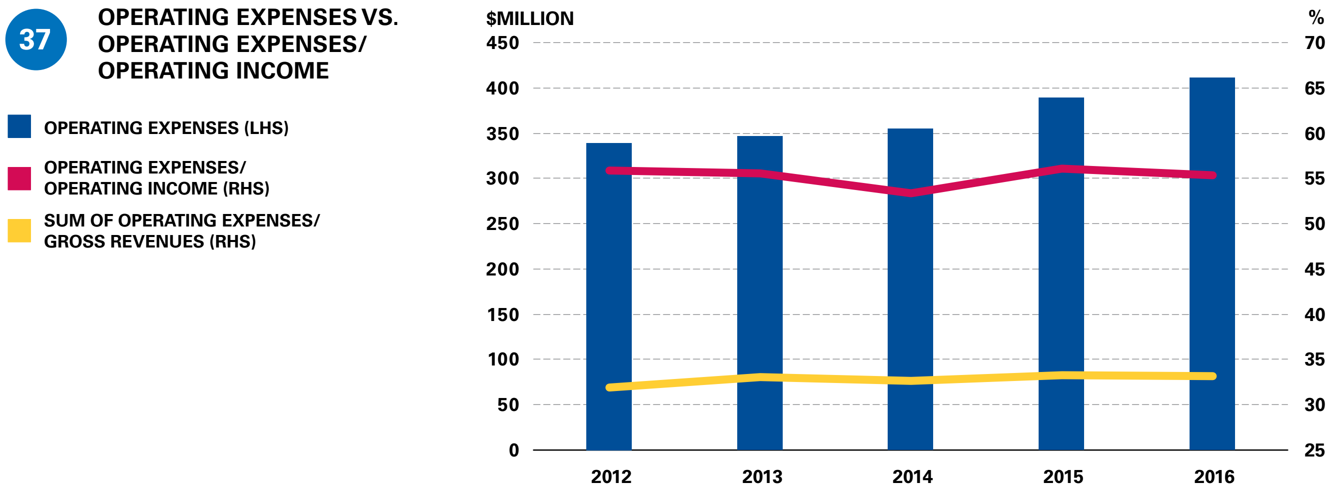
OPERATING EXPENSES VS. OPERATING EXPENSES/ OPERATING INCOME



respectively. Of the 23 participants surveyed, 15 saw increases in interest income for the year.

Going forward, the sector will no longer be able to rely on lower funding costs to alleviate the pressures felt on the lending side, as the cost of funds will likely come under further pressure. Non-banks' Executives have commented on the expected rise of offshore wholesale funding costs as investors demand higher returns during these increasingly uncertain times. The competition for funds within the local deposit market will drive up funding costs, as the major banks are no longer able to rely on their Australian parents to provide as much funding as they have previously. Regulatory developments across the Tasman over the past year have meant that Australian banks have reduced funding levels to their New Zealand subsidiaries. This was to ensure that they remained compliant with rules that restricted the bank's non-equity exposure to 5%, and for them to shore up funds to meet the capital requirements as set out by APS 110 and APS 120.

Total assets continue to grow

The sector continues to achieve strong asset growth as total assets climbed a further $1.63 billion to $11.01 billion, a rise of 17.40% over last year. It should be noted that $982.25 million relates to the inclusion of EFN in this year's survey, for which no comparatives are available since this is its first year of operation. Asset growth continues to be fuelled by the increase in the sector's loan book as gross loans and advances increased from $7.72 billion to $8.77 billion.

33 SEE FIGURE 33 – PAGE 106

TABLE 12: GROSS LOANS Entity	2016 $'000	2015 $'000	Movement $'000	Movement %
Avanti Finance Limited	239,940	152,977	86,963	56.85%
BMW Financial Services New Zealand Limited	353,714	369,427	-15,713	-4.25%
Credit Union Baywide	213,276	215,041	-1,765	-0.82%
Credit Union South	107,894	93,867	14,027	14.94%
EFN (New Zealand) Limited	424,684	n/a	n/a	n/a
First Credit Union	181,295	183,340	-2,045	-1.12%
First Mortgage Trust	284,282	219,436	64,846	29.55%
Fisher & Paykel Finance Holdings Limited	694,193	656,469	37,724	5.75%
Fuji Xerox Finance Limited	427,213	438,111	-10,898	-2.49%
Instant Finance Limited	95,722	92,210	3,512	3.81%
John Deere Financial Limited	151,550	144,503	7,047	4.88%
LeasePlan New Zealand Limited	8,588	5,491	3,097	56.40%
Medical Securities Limited	134,618	159,464	-24,846	-15.58%
Mercedes-Benz Financial Services	545,557	513,722	31,835	6.20%
Motor Trade Finance Limited	540,565	517,250	23,315	4.51%
Nelson Building Society	402,168	361,228	40,940	11.33%
Nissan Financial Services NZ Pty Limited	297,572	202,437	95,135	46.99%
ORIX New Zealand Limited	37,504	35,614	1,890	5.31%
Police & Families Credit Union	60,701	64,400	-3,699	-5.74%
Ricoh New Zealand Limited	86,239	88,651	-2,412	-2.72%
Toyota Finance New Zealand Limited	776,512	720,654	55,858	7.75%
UDC Finance Limited	2,601,939	2,378,692	223,247	9.39%
Wairarapa Building Society	108,787	104,013	4,774	4.59%
Sector Total	**8,774,513**	**7,716,997**	**1,057,516**	**13.70%**

n/a = not available

Avanti Finance, First Mortgage Trust, Nelson Building Society, Nissan Financial Services and UDC Finance registered the largest growth in interest earning assets in the range of $75.55 million to $224.17 million. Collectively, these five participants account for over 91.24% of the $633.34 million increase in interest earning assets (excluding EFN).

Of the 15 participants that had larger loan books this year, Avanti Finance and Nissan Financial Services stood out as having the highest growth rates in terms of both dollar and percentage increases to their loan books. After a triple-digit percentage growth of 150.28% last year, Nissan Financial Services went on to add a further $95.14 million to its loan book, up by more than 46.99%. Similarly, Avanti Finance grew its loan book to $239.94 million, an increase of $86.96 million. The bulk of Avanti's growth was derived from an increase in its mortgage book, a space in which it has only established a presence in the last two years.

UDC Finance reported the highest dollar growth of $223.25 million to total gross loans of $2.60 billion, the largest among our survey participants. LeasePlan had a growth rate of 56.40% to a loan book of $8.59 million; this was the second fastest growth rate when compared to Avanti Finance who achieved a growth rate of 56.85%.

EFN (New Zealand), who was previously known as part of the fleet solutions and equipment finance division of GE Capital, has the third largest total asset holdings of $982.25 million, but only the seventh-highest gross loans and advances balance at $424.68 million.

TABLE 13: MOVEMENT IN INTEREST MARGIN Entity	2016 %	2015 %	Movement (bps)
Avanti Finance Limited	9.98	10.94	-96
BMW Financial Services New Zealand Limited	6.82	7.20	-38
Credit Union Baywide	4.73	5.16	-43
Credit Union South	7.69	8.08	-39
EFN (New Zealand) Limited	n/a	n/a	n/a
First Credit Union	4.01	4.57	-56
First Mortgage Trust	7.17	7.69	-52
Fisher & Paykel Finance Holdings Limited	11.30	11.01	29
Fuji Xerox Finance Limited	2.79	4.17	-138
Instant Finance Limited	22.30	21.25	105
John Deere Financial Limited	3.63	3.63	0
LeasePlan New Zealand Limited	9.67	9.91	-24
Medical Securities Limited	4.03	3.68	35
Mercedes-Benz Financial Services	4.13	4.23	-10
Motor Trade Finance Limited	8.61	9.06	-45
Nelson Building Society	2.30	2.57	-27
Nissan Financial Services NZ Pty Limited	4.04	3.59	45
ORIX New Zealand Limited	12.22	12.35	-12
Police & Families Credit Union	4.58	4.78	-20
Ricoh New Zealand Limited	9.52	8.30	122
Toyota Finance New Zealand Limited	4.50	4.43	7
UDC Finance Limited	4.50	4.87	-37
Wairarapa Building Society	2.25	2.22	3
Sector Average	**5.68**	**6.09**	**-41**

n/a = not available

In terms of market share for gross loans and advances (excluding EFN), UDC Finance continues to the hold the lead at 31.16% with a 34 bps increase this year. Avanti Finance and Nissan Financial Services had the largest gains of 89 bps and 94 bps, respectively, as would be expected given the magnitude of their increase as mentioned above. Overall, 15 of our 23 survey participants had a shrinking market share for gross loans and advances.

34 **SEE FIGURE 34 – PAGE 106**

The ongoing expansion of the sector's gross loans and advances balance is a testament to the strong consumer confidence levels in New Zealand at the moment. Consumer confidence levels in the New Zealand market are impacted by record low interest rates, high employment levels and general confidence from the strengthening of the household balance sheet.

Asset quality

Although competition in the lending market continues to be intense, non-banks' Executives have stressed that they will not compromise on asset quality in order to write more loans. The current focus on market discipline and responsible lending is not just a talking point resulting from recent legislation. Executives do remember the pattern from the post-GFC era, and not fondly.

Asset quality for the sector softened with a slight deterioration coming through from credit quality measurements. Although impairment expense and total bad debt provision levels for the sector rose in the current year, the increase is not large in the context of the size and growth of the sector's loan book. Impaired asset expense increased by $7.83 million (19.60%) to $47.80 million from last year, while total impairment provision increased for the year by 10.53% to $122.70 million. The increase in impairment provision was the result of specific provisions rising from $35.54 million in 2015 to $45.77 million in 2016, for which an increase of $10.25 million by Fuji Xerox Finance was the main cause. The collective provision for the year increased to $76.94 million, a $1.46 million (or 1.94%) increase from the previous year.

35 **SEE FIGURE 35 – PAGE 107**

As in previous years, credit quality has improved year on year. The percentage of gross loans and advances over impairment provision improved slightly for the year at 1.40%, a movement of -4 bps from last year. Of those surveyed, 15 out of 23 showed an impairment provision to gross loans and advances ratio that was unchanged or lower by an amount in the range of 0 to 127 bps. ORIX had the largest improvement in terms of basis points and percentage change, decreasing its impairment provision to gross loans and advances ratio by 127 bps, from 1.37% to 0.10%.

36 **SEE FIGURE 36 – PAGE 107**

Impaired asset expense as a percentage of gross loans and advances rose by 2 bps over the current year, from 0.52% to 0.54%. However, excluding Fuji Xerox Finance, which had an abnormal increase in impaired asset expense of $10.25 million (or 1,613.39%), impairment expense for the sector would have decreased by $2.41 million (or 6.13%). At that level, impaired asset expense as a percentage of gross loans and advances would have improved by 10 bps, decreasing from 0.52% to 0.42%. Mercedes-Benz Financial Services and UDC Finance had the largest decreases in impaired asset expense of $4.06 million and $3.01 million, respectively. Overall, 15 out of 23 participants had an impaired asset expense over gross loans and advances ratio in the range of 0% to 0.91%.

While the sector continues to report positive recurring trends in asset quality year after year, the Executives all explained that this was an area that they will continue to monitor carefully: the adequacy of provisions held in light of a growing loan book.

Improved operating efficiency ratio despite higher operating costs

Operating expense for the sector rose by 5.95% to $413.08 million, and of the $23.20 million increase, EFN accounted for $10.48 million. On the other hand, the non-bank sector also reported higher operating income levels of 7.30% or $50.71 million, to reach $745.26 million. The inclusion of EFN had an impact on this result as EFN contributed $20.74 million in additional operating income, more than 40% of the total increase.

Despite higher operating costs, the sector achieved better than expected operating efficiencies, as the operating expense over operating income ratio decreased by 70 bps, from 56.13% to 55.43%. In isolating the effect of EFN on our calculation of this year's operating efficiency ratio, it was noted that exclusion of EFN only had a minor impact, as the sector still delivered 56 bps in efficiency savings as normalised operating expense to operating income fell from 56.13% to 55.57%.

37 **SEE FIGURE 37 – PAGE 107**

Operating costs often tend to be highly fixed in nature, comprising of items such as employee remuneration costs and administration expenses (e.g. overhead and rent). Whereas operating income can be considered to be more variable/volatile in nature due to its susceptibility to interest rate changes, fair value adjustments, and a myriad of other factors that can drastically change an entity's operating income level from year to year, despite having no fundamental change to its operations.

At an individual level, the results were a bit mixed, with 12 out of 23 participants showing an improved operating efficiency ratio. Nelson Building Society, Motor Trade Finance, ORIX and UDC Finance were the only entities whose operating efficiency ratio remained largely consistent with last year, with changes of just 2 bps, 20 bps, 9 bps and 20 bps, respectively. Looking into the detail, 10 entities had an operating ratio that was better than the industry average of 55.43%. Of those, First Mortgage Trust, Nissan Financial Services and UDC Finance had the best operating ratios at 24.06%, 18.26% and 26.25%, respectively. Given that the ultimate objective of a credit union is not to make a profit, but rather to maximise interest paid to its members (i.e. interest expense), it is reasonable that they would have the highest operating expense over operating income ratio within the sector.

In light of comments from Executives about investing more in the way of Fintech to further develop their front end technological capabilities, it is expected that operating costs will continue to increase in the future. Partnerships with Fintech companies and/or banks will be on the agenda of non-banks' Executives in order to leverage the IT capabilities and resources that they already have in place, in exchange for a small fee for the use of its innovation. Non-bank entities are aware that the banking sector has made significant headway in this area as Fintech entities are becoming an increasing threat to them in the markets where they traditionally operate. Therefore, it is likely to see partnerships with these types of entities as beneficial to combat disruptors and protect their customer base.

Where is P2P lending at today?

In the previous year, we profiled P2P lending explaining what it is, how it works, where it is going, and its potential place in New Zealand's financial market.

At this stage, it is still too early to comment on the financial performance of P2P lenders as a segment of the non-bank sector, as the platforms are not required to report their performance. The conditions of their license require them to report the results of the entity that manages the platform. Although Harmoney is not required to disclose any information relating to its platform, it has taken the initiative to do so. However, the figures disclosed have not been audited.

In the current year, the FMA has granted PledgeMe Limited, Citizens Brokerage Limited and SCFL Management Limited licenses to operate in New Zealand as P2P lenders. The P2P subsector also includes Lend Me, Lending Crowd and Squirrel Money, all of whom received their license from the FMA last year and have since begun operations.

As P2P lending begins to establish a foothold in New Zealand, it is becoming evident that there is no hard and fast rule to dictate how a P2P lender ought to operate or what it should look like. This flexibility works in favour of P2P lenders as it allows them to exercise creativity in differentiating themselves from the competition and in developing a competitive advantage. Several of our survey participants have noted an impact from the growing presence and influence of P2P lenders in the market, particularly around:

1. the speed with which they are able to process and complete a client loan or deposit application; and
2. borrowers expecting to be able to borrow without providing security.

The increase in P2P lending is largely attributable to Harmoney's growing presence with over $357 million in lending done through its platform to date. This is considerably higher than the combined lending of its competitors. Despite Executives being impressed with the technological capabilities of P2P lenders in developing a sophisticated and impressive front-end technologies, they continue to express reservations as to the quality of lending that is taking place given that lending decisions are being made in minutes and the reliance on credit scoring models.

On the regulatory side, legal actions that have been brought against Harmoney during the year could have significant implications for the P2P market. The most significant of these are the civil proceedings brought against Harmoney by the Commerce Commission in a bid to get the Auckland High Court to clarify how the Credit Contract and Consumer Finance Act 2003 (CCCFA) applies to personal loans offered through P2P lenders. The draft consumer credit fee guideline that was recently published in September states that under the CCCFA, the fees charged by lenders under a consumer credit contract 'can not generate profit or recover more than the costs permitted by the Act'.[75]

Harmoney's position has been that the whole premise of a P2P lender is that, in providing a platform where borrowers are matched to potential investors for a fixed fee, the CCCFA does not apply to the platform as it is not the party undertaking the lending. An unfavourable ruling for Harmoney – that the CCCFA does apply – could have a significant impact on the structure and compliance regimes of its business. The developments in this area will be something to watch.

In the previous year, we asked questions about how P2P lenders would provide visibility into loan performances and the extent to which credit losses are being recognised. Harmoney has made significant headway in this area by presenting key performance metrics such as loan performance by credit grade (i.e. default and arrears rate), realised annual return by investor type and distribution of loans by grade.[76] Squirrel Money has done this to a more limited extent by providing investors with information about the current lending book size, the amount in arrears, the value of write-offs, and the size of the reserve fund. Harmoney has had the benefit of a larger pool of transactional data from which they can leverage, whereas newer companies will require a little more time to obtain more transactional data before they can provide meaningful and insightful information disclosures of a similar nature.

P2P lenders could have an incentive to provide such disclosures as it promotes investor confidence and encourages them to provide the funds that are needed to meet the demands of the platform's borrowers. Such disclosures will help give investors insight as to the accuracy of the P2P lender's credit rating model and the potential level of returns they can expect. P2P lenders that do not make such voluntary disclosures as part of their business model may stand to lose out in this respect. One question that will be asked is whether this information is reliable and presented in a consistent manner (i.e. all P2P lenders use commonly understood forms of accounting principles such as NZ GAAP and NZ IFRS). When we talk about presenting reliable figures, we may also mean figures that have been audited. To date, the only accounts that the P2P lenders are required to present and have audited are those of the company that manages the lending platform. From those early accounts, we will notice losses typically incurred by new companies as they incur setup costs.

On 10 October 2016, the FMA released a consultation paper 'Regulatory Returns for Prescribed Intermediary Services'. Submission closed on 28 October 2016. The paper proposes what information P2P and Crowdfunding providers should provide to the FMA in their regulatory returns. This information is designed to help the FMA access the platform's performance and to consider whether its license requires any additional terms. It is however, unlikely that the information will be made public.

Several Executives have questioned whether P2P lending in New Zealand is sustainable. The main reasons for this are the:

1. low business margins due to fees being their only source of revenue;
2. high churn rate of 30–40% with borrowers being able to either obtain cheaper refinancing options or electing to pay off the loan quicker; and
3. difficulty in achieving economies of scale at a level required to turn a healthy profit due to low business margins and the limited size of New Zealand's financial market.

One P2P Executive we spoke to holds the opinion that P2P lending can only survive in the near term as an add-on to the back of another business to support its growth. In addition to its core business offering, the lender might offer a P2P complementary service until it is at a point where it is profitable enough to stand alone. This was also supported by the view that to survive in the P2P industry the lender must move beyond just being a faster, one-click front end customer touch point and reporting platform. The P2P lender must also provide an enhanced overall customer experience by regularly incorporating new and sophisticated technological innovations, and by sharing with its customers the rewards (and risks) that come from being a disruptor of the finance industry. This will mean providing faster access to becoming a customer, faster completion of loans and deposits, rates that are more suitable, access to different risk-return profiles, finance when and for things the consumer wants, and all that right now, and done more fairly vis a vis risk and reward. In its early phase of growth, the focus of the P2P market has been to integrate state of the art technologies into their lending platform to provide an enhanced customer experience based around automation and speed of interaction.

Going forward, the next phase for the industry will be to focus its efforts on leveraging the technologies that it has in place to support a more meaningful total customer experience and a sharing of the risks and rewards.

It therefore still remains to be seen whether the comment made by Neil Roberts, CEO of Harmoney, is still valid, namely that the New Zealand market has the potential to develop into a $10 billion per year lending industry if the P2P market gets the right support from business leaders, regulators and investors.[77] Only time will tell who holds the right view.

Non-banks – Analysis of annual results[78]

Entity	Rank by total assets	Balance date	Year	Size: Total assets $000
Avanti Finance Limited	15	31-Mar	2016	245,398
			2015	*158,614*
BMW Financial Services New Zealand Limited	9	31-Dec	2015	358,164
			2014	*376,204*
Credit Union Baywide	14	30-Jun	2016	293,580
			2015	*266,031*
Credit Union South	21	30-Jun	2016	129,857
			2015	*124,749*
EFN (New Zealand) Limited	3	31-Dec	2015	982,253
First Credit Union	11	30-Jun	2016	334,421
			2015	*295,007*
First Mortgage Trust	10	31-Mar	2016	353,831
			2015	*277,951*
Fisher & Paykel Finance Holdings Limited	4	31-Dec	2015	786,224
			2014	*753,399*
Fuji Xerox Finance Limited	8	31-Mar	2016	443,537
			2015	*452,025*
Instant Finance Limited	23	31-Mar	2016	99,415
			2015	*96,643*
John Deere Financial Limited	17	31-Oct	2015	157,905
			2014	*150,733*
LeasePlan New Zealand Limited	13	31-Dec	2015	300,359
			2014	*279,400*
Medical Securities Limited	18	31-Mar	2016	141,199
			2015	*197,815*
Mercedes-Benz Financial Services	6	31-Dec	2015	567,045
			2014	*521,923*
Motor Trade Finance Limited	5	30-Sep	2016	596,520
			2015	*566,501*
Nelson Building Society	7	31-Mar	2016	558,666
			2015	*459,706*
Nissan Financial Services NZ Pty Limited	12	31-Mar	2016	302,254
			2015	*206,839*
ORIX New Zealand Limited	16	31-Mar	2016	229,862
			2015	*236,893*
Police & Families Credit Union	22	30-Jun	2016	118,835
			2015	*108,829*
Ricoh New Zealand Limited[79]	20	31-Mar	2016	136,592
			2015	*153,421*
Toyota Finance New Zealand Limited	2	31-Mar	2016	1,069,499
			2015	*1,129,650*
UDC Finance Limited	1	30-Sep	2016	2,665,019
			2015	*2,440,613*
Wairarapa Building Society	19	31-Mar	2016	139,189
			2015	*124,537*
Sector Total			**2016**	**11,009,624**
			2015	***9,377,483***

n/d = not disclosed; n/a = not available

& strength measures		Growth measures			
Net assets $000	**Net loans and advances $000**	**Increase in net profit after tax %**	**Increase in total assets %**	**Impaired asset expense $000**	**Provision for doubtful debts/ Gross loans & advances %**
33,664	235,526	44.51	54.71	3,607	1.84
25,633	*148,874*	*-15.87*	*45.61*	*2,525*	*2.68*
25,772	344,100	-24.57	-4.80	2,922	2.72
18,645	*361,500*	*17.65*	*4.59*	*1,970*	*2.15*
38,674	212,550	16.17	10.36	202	0.34
36,669	*213,588*	*0.23*	*5.56*	*412*	*0.68*
21,132	107,250	-47.43	4.09	983	0.60
20,748	*92,945*	*130.47*	*10.51*	*559*	*0.98*
8,234	424,248	n/a	n/a	361	0.10
53,683	178,836	-23.34	13.36	395	1.36
49,955	*180,613*	*57.98*	*18.37*	*661*	*1.49*
351,567	283,332	23.11	27.30	225	0.33
276,174	*218,586*	*32.10*	*24.84*	*514*	*0.39*
79,246	674,598	-1.37	4.36	14,608	2.82
80,000	*639,236*	*42.06*	*6.89*	*13,340*	*2.63*
34,256	416,333	-269.81	-1.88	10,880	2.55
40,965	*437,476*	*-73.30*	*25.10*	*635*	*0.14*
27,487	91,894	18.13	2.87	2,380	4.00
25,771	*88,490*	*11.48*	*9.17*	*2,365*	*4.03*
17,066	151,550	6.43	4.76	0	0.00
14,765	*144,503*	*-28.17*	*11.17*	*0*	*0.00*
88,851	8,588	4.61	7.50	51	n/d
76,015	*5,491*	*-14.81*	*10.06*	*22*	*n/d*
26,140	134,465	32.81	-28.62	-111	0.11
38,188	*159,161*	*-39.15*	*-2.49*	*-129*	*0.19*
47,011	538,436	38.86	8.65	-845	1.31
35,841	*504,549*	*-10.03*	*12.42*	*3,217*	*1.79*
85,174	535,237	3.27	5.30	95	0.99
82,621	*512,151*	*13.01*	*4.73*	*105*	*0.99*
36,323	401,258	6.83	21.53	287	0.23
30,724	*360,478*	*17.51*	*10.98*	*354*	*0.21*
6,202	294,946	201.90	46.13	1,765	0.88
2,395	*201,212*	*2,435.19*	*134.75*	*1,294*	*0.61*
162,666	37,465	-0.84	-2.97	-406	0.10
147,342	*35,126*	*-5.33*	*3.19*	*-245*	*1.37*
21,133	60,591	-10.95	9.19	8	0.18
19,319	*64,284*	*26.30*	*10.56*	*-30*	*0.18*
65,557	84,578	26.18	-10.97	1,679	1.93
56,542	*87,732*	*-23.49*	*12.50*	*640*	*1.04*
146,272	754,412	29.45	-5.32	1,183	2.85
142,521	*698,954*	*-55.47*	*-0.81*	*1,273*	*3.01*
423,999	2,573,030	2.61	9.19	7,418	1.11
365,462	*2,347,163*	*10.68*	*3.66*	*10,427*	*1.33*
16,746	108,587	467.92	11.77	112	0.18
16,128	*103,870*	*-62.54*	*9.09*	*56*	*0.14*
1,816,855	**8,651,810**	**8.17**	**17.40**	**47,799**	**1.40**
1,602,423	***7,605,982***	***-5.91***	***8.64***	***39,965***	***1.44***

Non-banks – Analysis of annual results[78]

		Credit quality measures			
Entity	**Year**	**Past due assets $000**	**Gross impaired assets $000**	**Impaired asset expense/ Average loans & advances %**	**Net interest margin %**
Avanti Finance Limited	2016	1,345	14,205	1.84	9.98
	2015	*1,193*	*13,481*	*1.95*	*10.94*
BMW Financial Services New Zealand Limited	2015	n/d	n/d	0.81	6.82
	2014	*n/d*	*n/d*	*0.55*	*7.20*
Credit Union Baywide	2016	n/d	1,189	0.09	4.73
	2015	*n/d*	*4,414*	*0.20*	*5.16*
Credit Union South	2016	n/d	3,320	0.97	7.69
	2015	*n/d*	*1,858*	*0.63*	*8.08*
EFN (New Zealand) Limited	2015	4,388	n/d	n/a	n/a
First Credit Union	2016	786	5,155	0.22	4.01
	2015	*1,628*	*4,437*	*0.40*	*4.57*
First Mortgage Trust	2016	1,600	0	0.09	7.17
	2015	*4,388*	*0*	*0.25*	*7.69*
Fisher & Paykel Finance Holdings Limited	2015	n/d	25,502	2.16	11.30
	2014	*n/d*	*21,645*	*2.10*	*11.01*
Fuji Xerox Finance Limited	2016	n/d	n/d	2.51	2.79
	2015	*n/d*	*n/d*	*0.16*	*4.17*
Instant Finance Limited	2016	0	5,787	2.53	22.30
	2015	*0*	*5,739*	*2.69*	*21.25*
John Deere Financial Limited	2015	n/d	n/d	0.00	3.63
	2014	*n/d*	*n/d*	*0.00*	*3.63*
LeasePlan New Zealand Limited	2015	n/d	n/d	0.72	9.67
	2014	*n/d*	*n/d*	*0.35*	*9.91*
Medical Securities Limited	2016	12	n/d	-0.08	4.03
	2015	*183*	*n/d*	*-0.08*	*3.68*
Mercedes-Benz Financial Services	2015	n/d	n/d	-0.16	4.13
	2014	*n/d*	*n/d*	*0.67*	*4.23*
Motor Trade Finance Limited	2016	45	216	0.02	8.61
	2015	*77*	*55*	*0.02*	*9.06*
Nelson Building Society	2016	4	150	0.08	2.30
	2015	*112*	*0*	*0.10*	*2.57*
Nissan Financial Services NZ Pty Limited	2016	n/d	n/d	0.71	4.04
	2015	*n/d*	*n/d*	*0.91*	*3.59*
ORIX New Zealand Limited	2016	n/d	0	-1.11	12.22
	2015	*n/d*	*26*	*-0.71*	*12.35*
Police & Families Credit Union	2016	0	20	0.01	4.58
	2015	*110*	*35*	*-0.05*	*4.78*
Ricoh New Zealand Limited[80]	2016	n/d	3,645	1.92	9.52
	2015	*n/d*	*3,285*	*0.75*	*8.30*
Toyota Finance New Zealand Limited	2016	64	2,794	0.16	4.50
	2015	*87*	*3,234*	*0.17*	*4.43*
UDC Finance Limited	2016	1,230	17,657	0.30	4.50
	2015	*6,369*	*18,919*	*0.45*	*4.87*
Wairarapa Building Society	2016	1,279	3,845	0.11	2.25
	2015	*462*	*4,173*	*0.06*	*2.22*
Sector Total	**2016**	**10,753**	**83,485**	**0.58**	**5.68**
	2015	***14,609***	***81,301***	***0.54***	***6.09***

n/d = not disclosed; n/a = not available

	Profitability measures				Efficiency measures	
Interest spread %	Net profit after tax $000	Underlying profit $000	NPAT/Average total assets %	NPAT/Average equity %	Operating expenses/Gross revenues[80] %	Operating expenses/ Operating income %
8.86	11,231	15,603	5.56	37.88	27.35	37.78
9.39	*7,772*	*10,764*	*5.81*	*33.52*	*32.40*	*44.24*
6.37	7,128	9,900	1.94	32.10	31.30	50.62
6.74	*9,450*	*13,139*	*2.57*	*47.44*	*28.35*	*45.37*
4.22	2,004	2,004	0.72	5.32	55.95	86.46
4.63	*1,725*	*1,725*	*0.67*	*4.82*	*58.08*	*87.10*
7.15	338	338	0.27	1.61	74.37	91.41
7.56	*643*	*643*	*0.54*	*3.16*	*76.49*	*91.97*
n/a	8,143	9,898	n/a	n/a	20.55	50.53
3.44	1,859	1,859	0.59	3.59	57.18	87.77
3.98	*2,425*	*2,425*	*0.89*	*5.39*	*55.49*	*82.69*
7.17	16,672	16,861	5.28	5.31	24.06	24.06
7.69	*13,542*	*14,134*	*5.41*	*5.45*	*23.06*	*23.06*
10.99	23,739	33,143	3.08	20.94	39.95	54.59
10.59	*24,068*	*33,522*	*3.30*	*20.33*	*38.43*	*53.24*
2.55	-6,709	-8,680	-1.50	-17.84	31.67	70.55
3.97	*3,951*	*6,631*	*0.97*	*10.13*	*28.19*	*44.01*
19.80	8,463	11,930	8.63	27.43	52.24	60.73
18.53	*7,164*	*10,298*	*7.74*	*24.44*	*53.01*	*62.55*
3.28	2,301	3,191	1.49	14.46	22.34	42.58
3.34	*2,162*	*3,008*	*1.51*	*15.80*	*22.85*	*41.48*
9.67	6,836	9,528	2.36	8.29	34.10	76.01
9.91	*6,535*	*9,160*	*2.45*	*8.98*	*31.79*	*74.04*
3.17	1,352	1,878	0.80	4.20	40.63	75.55
2.83	*1,018*	*1,415*	*0.51*	*2.70*	*42.48*	*83.21*
3.72	11,264	15,687	2.07	27.19	17.32	33.45
3.83	*8,112*	*11,128*	*1.65*	*22.13*	*16.23*	*30.88*
7.71	7,169	10,109	1.23	8.54	57.55	83.14
8.07	*6,942*	*9,999*	*1.25*	*8.50*	*55.61*	*82.94*
2.06	2,753	3,841	0.54	8.21	26.59	67.50
2.32	*2,577*	*3,587*	*0.59*	*9.06*	*28.34*	*67.52*
3.83	3,807	11,736	1.50	88.57	15.89	18.26
3.42	*1,261*	*4,806*	*0.86*	*71.47*	*19.80*	*25.08*
9.20	15,663	21,764	6.71	10.10	18.03	41.82
9.25	*15,795*	*21,950*	*6.77*	*11.32*	*17.26*	*41.91*
4.08	1,813	1,813	1.59	8.96	44.70	66.27
4.21	*2,036*	*2,035*	*1.96*	*11.13*	*40.18*	*61.29*
8.73	6,334	8,482	4.37	10.33	81.14	83.57
7.44	*5,020*	*7,538*	*3.46*	*9.19*	*83.67*	*87.13*
3.87	16,483	21,298	1.50	11.42	22.08	57.83
3.77	*12,733*	*17,112*	*1.12*	*8.46*	*20.61*	*61.99*
3.83	58,537	81,417	2.29	14.83	15.25	26.25
4.14	*57,050*	*79,323*	*2.38*	*16.14*	*14.89*	*26.45*
2.00	602	773	0.46	3.66	32.69	74.96
1.99	*106*	*359*	*0.09*	*0.66*	*33.90*	*84.81*
4.97	**207,782**	**284,373**	**2.04**	**11.89**	**33.32**	**55.43**
5.29	***192,087***	***264,701***	***2.13***	***12.12***	***33.27***	***56.13***

Cyber security: It's not just about technology

Philip Whitmore
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A partner within KPMG's IT Advisory team, Philip leads KPMG's cyber security and technology risk practices. Philip helps organisations gain insights from their data, maximising the benefits presented by 'big data', and managing their IT-related risks, including around cyber security. His detailed IT advisory and assurance knowledge and experience is complemented by his internal audit, fraud and business process controls background.

Philip sits on the boards and steering committees for a range of professional bodies, including the Information Systems Security Certification Consortium $(ISC)^2$ and the Information Systems Audit and Control Association (ISACA).

Philip works with organisations to help them understand the impact of new technology on their business and how to mitigate risks posed.

Cyber security is an important concern for every financial services organisation. Daily occurrences demonstrate the risk posed by cyber attackers – from individual, opportunistic hackers, to professional and organised groups of cyber criminals with strategies for systematically stealing monies and intellectual property.

Financial services organisations are a prime target for cyber attacks and management faces the task of ensuring that their organisation understands the risks and sets the right priorities. This is no easy task in light of the technical jargon involved and the pace of change.

Focusing on technology alone to address these issues is not enough. Effectively managing cyber risk means putting in place the right governance and the right supporting processes, along with the right enabling technology.

This complexity, however, cannot be an excuse for management to divest responsibility to technical 'experts'. It is essential that leaders take control of allocating resources to deal with cyber security, actively manage governance and decision-making over cyber security, and build an informed and knowledgeable organisational culture.

Outlined below are the essential insights for management to get the basics right: the world of cyber crime today, the five common cyber security mistakes and the critical dimensions of a strong cyber security model.

Understanding the cyber risk

The amount of data continues to grow exponentially, as does the rate at which organisations share data through online networks. Billions of machines – tablets, smartphones, ATMs, environmental control systems, and other Internet of Things – are all linked together, increasing inter-dependencies exponentially. Organisations increasingly open their information technology (IT) systems to a range of machines and lose direct control of data security. Furthermore, business continuity, both in society and within companies, is increasingly dependent on IT. Disruption to these core processes can have a major impact on service availability.

Not all organisations are necessarily easy targets for cyber criminals.

Cyber criminals are very aware of these vulnerabilities. Driven by a wide range of motivations – from pure financial gain, to raising the profile of an ideology, to espionage or terrorism – individual hackers, activists, organised criminals and governments are attacking government networks with increasing volume and severity.

What is true for any financial services organisation is that cyber crime risks can be controlled.

But while the cyber threat is very real and its impact can be debilitating, the media often sketches an alarmist picture of cyber security, creating a culture of disproportionate fear. Not all organisations are necessarily easy targets for cyber criminals. For example, a small or mid-sized company has a very different risk profile than that of a multinational organisation.


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Organisations can reduce the risks to their business by building up capabilities in three critical areas – prevention, detection and response

Prevention

Prevention begins with governance and organisation. It is about installing fundamental measures, including placing responsibility for dealing with cyber security within the organisation and developing awareness training for key staff.

Detection

Through monitoring of critical events and incidents, an organisation can strengthen its technological detection measures. Monitoring and data mining together form an excellent instrument to detect strange patterns in data traffic, to find the location on which the attacks focus and to observe system performance.

Response

Response refers to activating a well-rehearsed plan as soon as evidence of a possible attack occurs. During an attack, the organisation should be able to directly deactivate all technology affected. When developing a response and recovery plan, an organisation should perceive cyber security as a continuous process and not as a one-off solution.

What is true for any financial services organisation is that cyber crime risks can be controlled. Cyber criminals are not invincible geniuses and, while they can cause real damage to your business, you can take steps to protect yourself against them. You may not be able to achieve 100 percent security, but by treating cyber security as 'business as usual' and balancing investment between risks and potential impacts, your organisation will be well prepared to combat cyber crime.

The five most common cyber security mistakes

To many financial services organisations, cyber security is a bit of a mystery. This lack of understanding has created many misconceptions among management about how to approach cyber security. From our years of experience, we have seen the following five cyber security mistakes repeated over and over – often with drastic results.

Mistake #1: 'We have to achieve 100 percent security'

Reality: 100 percent security is neither feasible nor the appropriate goal

Almost every airline company claims that flight safety is its highest priority while recognising that there is an inherent risk in flying. The same applies to cyber security. Whether it remains private or is made public, almost every financial services organisation will, unfortunately, be impacted by cyber crime.

Almost every financial services organisation will unfortunately be impacted by cyber crime.

Developing the awareness that 100 percent protection against cyber crime is neither a feasible nor an appropriate goal is already an important step towards a more effective strategy, because it allows you to make choices about your defensive posture. A good defensive posture is based on understanding the threat (i.e. the criminal) relative to organisational vulnerability (prevention), establishing mechanisms to detect an imminent or actual breach (detection) and establishing a capability that immediately deals with incidents (response) to minimise loss.

The emphasis at most New Zealand financial services organisations is often skewed towards prevention – the equivalent to building impenetrable walls to keep the intruders out. Once you understand that perfect security is an illusion and that cyber security is 'business as usual', you also understand that just as much emphasis needs to be placed on detection and response. After a cyber crime incident, which may vary from the theft of information to a disruptive attack on core systems, an organisation must be able to minimise losses and resolve vulnerabilities.

Mistake #2: 'When we invest in best-of-class technical tools, we are safe'

Reality: Effective cyber security is less dependent on technology than you think

The world of cyber security is dominated by IT companies that sell technical products. These tools are essential for basic security and must be integrated into the technology architecture, but they are not the basis of a holistic and robust cyber security strategy. The investment in technical tools should be the output, not the driver, of cyber security strategy.

Good security starts with developing a robust cyber defence capability. Although this is generally led by the IT department, the knowledge and awareness of the end user is critical. The human factor is and remains, for both IT professionals and the end user, the weakest link in relation to security. Investment in the best tools will only deliver a return when people understand their responsibilities to keep the systems safe. Social engineering, in which hackers manipulate employees to gain access to systems, is still one of the main risks that financial services organisations face.

The world of cyber security is dominated by IT companies that sell technical products.

Technology cannot help in this regard, and it is essential that management takes ownership of dealing with this challenge. They have to show genuine interest and be willing to study how best to engage with the workforce to educate staff and build awareness of the threat of cyber attacks. This is often about changing the culture so that employees are alert to the risks and are proactive in raising concerns.

Mistake #3: 'Our weapons have to be better than those of the hackers'

Reality: Your security strategy should primarily be determined by your goals, not those of your attackers

The fight against cyber crime is an example of an unwinnable race. The attackers keep developing new methods and technology, and the defence is always one step behind.

So, is it useful to keep investing in increasingly sophisticated tools to prevent an attack? So is it useful to keep investing in increasingly sophisticated tools to prevent attack?

It is critical for management to adopt a flexible, proactive and strategic approach to cyber security.

While it is important to keep up-to-date and to obtain insights into the intention of attackers and their methods, it is critical for management to adopt a flexible, proactive and strategic approach to cyber security. Given the immeasurable value of a financial services organisation's information assets and the severe implication of any loss to the core business, cyber security strategy needs to prioritise investment into critical asset protection, rather than the latest technology or system to detect every niche threat.

First and foremost, management needs to understand what kinds of attackers their business attracts and why. An organisation may perceive the value of its assets differently than a criminal. How willing are you to accept risks to certain assets over others? Which systems and people store your key assets, keeping in mind that business and technology have developed together and are therefore co-dependent on each other's security?

Mistake #4: 'Cyber security compliance is all about effective monitoring'

Reality: The ability to learn is just as important as the ability to monitor

Reality shows that cyber security is very much driven by compliance. This is understandable because financial services organisations have to accommodate a growing range of regulations. However, it is counterproductive to view compliance as the ultimate goal of cyber security policy.

Only a financial services organisation that is capable of understanding external developments and incident trends, and using this insight to inform policy and strategy, will be successful in combating cyber crime in the long term. Therefore, effective cyber security strategy should be based on continuous learning and improvement.

Effective cyber security strategy should be based on continuous learning and improvement.

Financial service organisations need to understand how threats evolve and how to anticipate them. This approach is ultimately more cost-effective in the long term than developing ever-higher security 'walls'. This goes beyond the monitoring of infrastructure; it is about smart analysis of external and internal patterns in order to understand the reality of the threat and the short, medium and long-term risk implications. This insight should enable organisations to make sensible security investment choices. Unfortunately, most organisations do not take a strategic approach and do not collect and use the internal data available to them.

Financial services organisations need to ensure that incidents are evaluated in such a way that lessons can be learned. In practice, however, actions are driven by real-time incidents and often are not recorded or evaluated. This destroys the ability of the organisation to learn and put better security arrangements in place in the future.

The same applies to monitoring attacks. In many cases, financial services organisations have certain monitoring capabilities, but the findings are not always shared with the wider organisation. No lessons, or insufficient lessons, are learned from the information received. Furthermore, monitoring needs to be underpinned by an intelligence requirement. Only if you understand what you want to monitor does monitoring become an effective tool to detect attacks.

Financial services organisations also need to develop an enterprise-wide method for assessing and reporting cyber security risks. This requires protocols to determine risk levels and escalations, and methods for equipping the board with insight into strategic cyber risks and the impacts to core business.

Mistake #5: 'We need to recruit the best professionals to defend ourselves against cyber crime'

Reality: Cyber security is not a department, but an attitude

Cyber security is often seen as the responsibility of a team of specialists in the IT department. This mindset may result in a false sense of security and lead to the wider organisation not taking responsibility.

The real challenge is to make cyber security a mainstream approach. This means, for example, that cyber security should become part of the boardroom agenda. It also means, that cyber security should have a central place when developing new IT systems, and not, as is often the case with most organisations, be given attention only at the end of such projects.

The six dimensions of cyber security

As management, you want to know whether your organisation has an adequate approach to cyber security. This involves considering six key dimensions that together provide a comprehensive and in-depth view of an organisation's cyber maturity.

1. Leadership and Governance

Is the organisation's leadership demonstrating due diligence, ownership and effective management of risk?

2. Human Factors

What is the level and integration of a security culture that empowers and ensures the right people, skills, culture and knowledge?

3. Information Risk Management

How robust is the approach to achieve comprehensive and effective risk management of information throughout the organisation and its delivery and supply partners?

4. Business Continuity

Have we made preparations for a security event and do we have the ability to prevent or minimise the impact through successful crisis and stakeholder management?

5. Operations and Technology

What is the level of control measures implemented to address identified risks and minimise the impact of compromise?

6. Legal and Compliance

Are we complying with relevant regulatory standards and guidance?

Addressing all six of these key dimensions can lead to a holistic cyber security model, providing the following advantages to any organisation:

- Minimising the risk of an attack on an organisation by an outside cyber criminal, as well as limiting the impact of successful attacks.
- Better information on cyber crime trends and incidents to facilitate decision making.
- Clearer communication on the theme of cyber security, enabling everyone to know his or her responsibilities and what needs to be done when an incident has occurred or is suspected.
- Improved reputation, as an organisation that is well prepared and has given careful consideration to its cyber security is better placed to reassure its stakeholders.
- Increased knowledge of competence in relation to cyber security.


Legal and
Compliance
Leadership
and Governance
Human Factors
Information
Risk Management
Business
Continuity
Operations
and Technology

Registered banks - ownership and credit ratings as at 8 February 2017

			Long-term credit rating					
Registered banks	**Ultimate shareholding**	**%**	**Standard & Poor's**		**Moody's**		**Fitch Ratings**	
ANZ Bank New Zealand Limited	Australia and New Zealand Banking Group Limited	100	AA-	Negative	Aa3	Negative	AA-	Stable
ASB Bank Limited	Commonwealth Bank of Australia	100	AA-	Negative	Aa3	Negative	AA-	Stable
Australia and New Zealand Banking Group Limited – New Zealand Branch[81]	Australia and New Zealand Banking Group Limited	100	AA-	Negative	Aa2	Negative	AA-	Stable
Bank of Baroda (New Zealand) Limited[82]	Bank of Baroda (India)	100			Baa3	Positive	BBB-	Stable
Bank of China (New Zealand) Limited[83]	Bank of China Limited (China)	100	A	Stable	A1	Negative	A	Stable
Bank of India (New Zealand) Limited[84]	Bank of India (India)	100	BB+	Stable	Baa3	Positive	BBB-	Stable
Bank of New Zealand	National Australia Bank Limited	100	AA-	Negative	Aa3	Negative	AA-	Stable
China Construction Bank (New Zealand) Limited[85]	China Construction Bank Corporation	100	A	Stable	A1	Negative	A	Stable
Citibank, N.A. New Zealand Branch and Associated Banking Group[86]	Citigroup Inc.	100	A+	Stable	A1	Stable	A+	Stable
Commonwealth Bank of Australia – New Zealand Branch[87]	Commonwealth Bank of Australia	100	AA-	Negative	Aa2	Negative	AA-	Stable
Heartland Bank Limited	Heartland New Zealand Limited	100					BBB	Stable
Industrial and Commercial Bank of China (New Zealand) Limited[88]	Industrial and Commercial Bank of China Limited (ICBC)	100	A	Stable	A1	Negative	A	Stable
JPMorgan Chase Bank, N.A. New Zealand Branch[89]	JPMorgan Chase & Co.	100	A+	Stable	Aa2	Stable	AA-	Stable
Kiwibank Limited	New Zealand Post NZ Super Fund[90] Accident Compensation Corporation (ACC)[90]	53 25 22	A+	Watch Neg	Aa3	Under review – for possible downgrade	AA	Watch Neg
Kookmin Bank Auckland Branch[91]	KB Financial Group Inc.	100	A+	Stable	A1	Stable	A	Stable
Rabobank Nederland New Zealand Banking Group[92]	Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A.	100	A+	Stable	Aa2	Negative	AA-	Stable
Rabobank New Zealand Limited	Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A.	100	A	Stable				
Southland Building Society	Mutual	100					BBB	Stable
The Bank of Tokyo-Mitsubishi UFJ Limited, Auckland Branch[93]	The Bank of Tokyo-Mitsubishi UFJ, Limited	100	A+	Negative	A1	Stable	A	Negative
The Co-operative Bank Limited	Mutual	100					BBB	Stable
The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch[94]	HSBC Holdings plc	100	AA-	Stable	Aa2	Negative	AA-	Stable
TSB Bank Limited	TSB Community Trust	100					A-	Stable
Westpac Banking Corporation – New Zealand Division[95]	Westpac Banking Corporation	100	AA-	Negative	Aa2	Negative	AA-	Stable
Westpac New Zealand Limited	Westpac Banking Corporation	100	AA-	Negative	Aa3	Negative	AA-	Stable

Non-banks - Credit ratings

as at 9 December 2016

	Standard & Poor's		Fitch Ratings		Moody's		Rating and Investment	
	Rating	Outlook	Rating	Outlook	Rating	Outlook	Rating	Outlook
Avanti Finance Limited	BB	Stable						
BMW Financial Services New Zealand Limited[96]	A+	Stable			A2	Positive		
Credit Union Baywide			BB	Stable				
Credit Union South	BB-	Stable						
EFN (New Zealand) Limited[97]								
First Credit Union	BB-	Positive						
First Mortgage Trust								
Fisher & Paykel Finance Holdings Limited[98]								
Fuji Xerox Finance Limited[99]							AA	Stable
Instant Finance Limited								
John Deere Financial Limited[100]			A	Stable	A2	Negative		
Leaseplan New Zealand Limited[101]	BBB-	Stable	BBB+	Stable	Baa1	Stable		
Medical Securities Limited								
Mercedes-Benz Financial Services[102]	A	Stable	A-	Stable	A3	Positive		
Motor Trade Finance Limited								
Nelson Building Society			BB+	Stable				
Nissan Financial Services NZ Pty Limited[103]	A-	Positive	BBB+	Stable	A3	Stable	A+	Stable
ORIX New Zealand Limited[104]	A-	Negative	A-	Stable	Baa1	Stable	A+	Stable
Police & Families Credit Union	BB+	Stable						
Ricoh New Zealand Limited[105]	A-	Negative					AA-	Negative
Toyota Finance New Zealand Limited[106]	AA-	Stable	A	Stable	Aa3	Stable	AA+	Stable
UDC Finance Limited	A-	Watch Neg						
Wairarapa Building Society			BB+	Stable				

Non-banks – Ownership

as at 9 December 2016

Non-bank entity	Ultimate shareholding	%
Avanti Finance Limited	Various investment/ nominee companies	100
BMW Financial Services New Zealand Limited	BMW AG (Germany)	100
Credit Union Baywide	Various depositors	100
Credit Union South	Various depositors	100
EFN (New Zealand) Limited	EFN (Netherlands) Cooperatief U.A.	100
First Credit Union	Various depositors	100
First Mortgage Trust	Various unitholders	100
Fisher & Paykel Finance Holdings Limited	FlexiGroup Limited (Australia)	100
Fuji Xerox Finance Limited	Fuji Xerox Co. Ltd (Japan)	100
Instant Finance Limited	Various Private Shareholders	100
John Deere Financial Limited	Deere & Company (USA)	100
LeasePlan New Zealand Limited	LeasePlan Corporation (Netherlands)	100
Medical Securities Limited	Medical Assurance Society New Zealand Limited	100

Non-bank entity	Ultimate shareholding	%
Mercedes-Benz Financial Services New Zealand Limited	Daimler AG (Germany)	100
Motor Trade Finance Limited	Various Licensed Motor Vehicle Dealers	100
Nelson Building Society	Various depositors	100
Nissan Financial Services NZ Pty Limited	Nissan Motor Co. Ltd (Japan)	100
ORIX New Zealand Limited	ORIX Corporation (Japan)	100
Police & Families Credit Union	Various depositors	100
Ricoh New Zealand Limited	Ricoh Co. Ltd (Japan)	100
Toyota Finance New Zealand Limited	Toyota Motor Corporation (Japan)	100
UDC Finance Limited	Australia and New Zealand Banking Group (Australia)	100
Wairarapa Building Society	Various depositors	100

Descriptions of the credit rating grades

Long-term credit rating grades assigned by Standard & Poor's	Description of the steps in the Standard & Poor's credit rating grades for the rating of the long-term senior unsecured obligations payable in New Zealand, in New Zealand dollars.
AAA	Extremely strong capacity to meet financial commitments. Highest rating.
AA	Very strong capacity to meet financial commitments.
A	Strong capacity to meet financial commitments, but somewhat susceptible to adverse economic conditions and changes in circumstances.
BBB	Adequate capacity to meet financial commitments, but more subject to adverse economic conditions.
BB	Less vulnerable in the near-term, but faces major ongoing uncertainties to adverse business, financial and economic conditions.
B	More vulnerable to adverse business, financial and economic conditions, but currently has the capacity to meet financial commitments.
CCC	Currently vulnerable and dependent on favourable business, financial and economic conditions to meet financial commitments.
CC	Currently highly vulnerable. Default has not yet occurred but is expected to be a virtual certainty.
Plus (+) or Minus (-)	The ratings AA to CCC may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.
BB, B, CCC, and CC	Borrowers rated BB, B, CCC and CC are regarded as having significant speculative characteristics. BB indicates the least degree of speculation and CC the highest. While such borrowers will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.
Assigned by Moody's Investors Service	Moody's Investors Service appends numerical modifiers 1, 2 and 3 in each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic category, the modifier 2 indicates a mid-range ranking and the modifier 3 indicates the lower end of that generic category.
Assigned by Fitch Ratings	Fitch Ratings applies 'investment grade' rates 'AAA' to 'BBB' to indicate relatively low to moderate credit risk, while for those in the 'speculative' or 'non-investment grade' categories which have either signalled a higher level of credit risk or that a default has already occurred, Fitch Ratings applies a 'BB' to 'D' rating. The modifiers '+' or '-' may be appended to a rating to denote relative status within the major rating categories. Credit ratings express risk in relative rank order, which is to say they are ordinal measures of credit risk and not predictive of a specific frequency of default or loss.

Definitions

Terms and ratios used in this survey	Definitions used in this survey
Gross impaired assets	Includes all impaired assets, restructured assets, and assets acquired through the enforcement of security, but excludes past due assets.
Gross loans and advances	Includes loans and advances, lease receivables (net of unearned income) and accrued interest receivable (where identifiable), but excludes amounts due from banks, marketable securities, loans to related parties, sundry debtors and prepayments.
Gross revenue	Includes gross interest income, gross operating lease and net other income.
Impaired asset expense	The charge to the Profit and Loss Account for bad debts and provisions for doubtful debts, which is net of recoveries (where identifiable).
Interest bearing liabilities	Customer deposits (including accrued interest payable where identifiable), balances with banks, debt securities, subordinated debt and balances with related parties.
Interest earning assets	Cash on hand, money on call and balances with banks, trading and investment securities, net loans and advances (including accrued interest receivable where identifiable), leased assets net of depreciation and balances with related parties.
Interest expense	Includes all forms of interest or returns paid on debt instruments.
Interest spread	Difference between the average interest rate on average interest earning assets, and the average interest rate on average interest bearing liabilities.
Net assets	Total assets less total liabilities.
Net interest income	Interest income (including net income from acting as a lessor) less interest expense.
Net interest margin	Net interest income divided by average interest earning assets.
Net loans and advances	Loans and advances, net of provision for doubtful debts.
Operating expense	Includes all expenses charged to arrive at net profit before tax (excluding interest expense, impaired asset expense, subvention payments, direct expense related to other income (where identifiable), depreciation of leased assets where a lessor, and amortisation of goodwill and other intangibles (including software).
Operating income	Net interest income, net operating lease income and net other income (where direct expense related to other income is identifiable).
Past due assets	Includes any asset which has not been operated by the counterparty within its key terms for 90 days and which is not an impaired or restructured asset.
Provision for doubtful debts	Includes both collective and individual provisions for bad and doubtful debts.
Total assets	Excludes goodwill assets (unless specifically defined).
Ultimate shareholding	Identifies the ultimate holding company rather than any intermediate holding companies.
Underlying profit	Operating income less operating expense and impaired asset expense. Items of a non-recurring nature, unrelated to the ongoing operations of the entity, are excluded.
Definitions for operating income and operating expense have been adjusted in the current year to provide further clarity as to the calculation of these figures. In certain circumstances, direct expenses relating to other income have been reallocated from operating expense to operating income to ensure consistent presentation of income comparatives between entities. This would subsequently affect the calculation and analysis of performance ratios that are being driven by these figures.	

Endnotes

1. Our analysis of registered banks is from the view of the top geographic entity in New Zealand for each banking group and comprises 21 entities. The following entities hold a separate registered bank licence and are included within top level banking groups for the purposes of our analysis: ANZ Bank New Zealand Limited, ASB Bank Limited, Rabobank New Zealand Limited, and Westpac New Zealand Limited.
2. http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Financial%20stability%20reports/2016/fsr-nov2016.pdf – see page 26 of the report.
3. http://www.nzherald.co.nz/kapiti-news/news/article.cfm?c_id=1503789&objectid=11717550.
4. https://home.kpmg.com/content/dam/kpmg/uk/pdf/2016/10/meet-eva.pdf.
5. http://www.rbnz.govt.nz/-/media/ReserveBank/Files/regulation-and-supervision/banks/consultations/Final-consultation-outsourcing-policy-for-registered-banks-May2016.pdf?la=en (see page 6, paragraph 22).
6. http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Policy-development/Banks/Outsourcing-policy-for-registered-banks/Summary-of-submissions-outsourcing-policy-registered-banks-Feb17.pdf?la=en.
7. http://www.radionz.co.nz/news/national/311225/kiwisavers-fund-cluster-bombs,-land-mines.
8. http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11708202.
9. http://www.radionz.co.nz/news/national/312409/bnz-latest-to-review-kiwisaver-weapons-investments.
10. http://www.stats.govt.nz/browse_for_stats/economic_indicators/GDP/GrossDomesticProduct_HOTPSep16qtr.aspx – see data spreadsheet.
11. http://m.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11752869.
12. http://www.stats.govt.nz/browse_for_stats/income-and-work/employment_and_unemployment/LabourMarketStatistics_HOTPsep16qtr.aspx.
13. http://www.stuff.co.nz/business/75443924/international-tourism-overtakes-dairy-to-regain-top-spot-as-our-biggest-export-earner.
14. http://www.treasury.govt.nz/economy/mei/may16/03.htm.
15. https://www.globaldairytrade.info/en/product-results/.
16. https://www.globaldairytrade.info/en/product-results/.
17. https://www.rabobank.com/en/press/search/2016/20161222-rabobank-global-dairy-quarterly-q4-2016-supply-crunch-bites.html.
18. https://www3.fonterra.com/nz/en/our-financials/farmgate-milk-prices.html.
19. https://www.rabobank.co.nz/media-releases/2016/161006-drop-in-global-dairy-supply-expected-to-fuel-price-recovery-into-2017/.
20. http://www.interest.co.nz/rural-data/dairy-industry-payout-history.
21. https://www.reinz.co.nz/Media/Default/Statistic%20Documents/2017/Residential/December%202016/Press%20Release/REINZ%20Residential%20Press%20Release%20-%20December%202016-1.pdf.
22. http://www.stuff.co.nz/business/85708630/Six-months-on-Bill-English-demands-more-information-on-debt-to-income-ratios.
23. The related articles are hyperlinked to provide the reader with the ability to access the respective news releases.
24. http://reports.asb.co.nz/report/article/22714/18770/0/asb-fy16-annual-results-press-release.html.
25. https://www.tsbbank.co.nz/about/news/annual-report/2016.
26. http://www.rbnz.govt.nz/statistics/s8.
27. http://www.rbnz.govt.nz/statistics/s8.
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29. http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Financial%20stability%20reports/2016/fsr-nov2016.pdf – see page 22 of the report.
30. http://www.rbnz.govt.nz/statistics/m10.
31. https://www.bnz.co.nz/about-us/media/2016/investment-delivers-strong-volume-growth-for-bnz.
32. https://www.kiwibank.co.nz/about-us/press-releases/2016-08-26-financial-results-forkiwi-group-holdings/.
33. https://www.westpac.co.nz/who-we-are/newsroom/media-releases-2/07-november-2016/.
34. http://www.rbnz.govt.nz/statistics/g3.
35. The RBNZ only started compiling data for Common equity tier 1 capital ratio from March 2013 onwards, as part of the adoption of Basel III requirements.
36. A revision on the application of accounting policies for capitalisation of expenditure on internally generated software assets was made, effective 1 October 2015. This has affected comparatives for amortization of goodwill and other intangibles. Prior period comparatives (data and ratios) do not reflect this change and as such, ratios calculated in this survey may differ if restated 30 September 2015 figures and its prior period comparatives had been used for the purpose of analysis.
37. Effective from 30 September 2016 onwards, Bank of New Zealand changed its methodology for the calculation of interest earning assets (to exclude mortgage offset account). Prior period comparatives (data and ratios) do not reflect the change in methodology and as such, ratios calculated in this survey may differ if restated June 2016 figures and its prior period comparatives had been used for the purpose of analysis.
38. Total capital and tier 1 capital ratios have been restated for 31 December 2014. However, for the purpose of analysis prior period comparatives (data and ratios) do not reflect this change and as such, ratios calculated in this survey may differ if restated 30 September 2015 figures and its prior period comparatives had been used for the purpose of analysis.
39. As at 1 July 2015, interest from certain derivatives (transacted as economic hedges) are recorded as part of net interest earnings instead of other income. In addition, fixed rate prepayment cost recoveries have been reclassified from other income to interest income in order to align with industry practice, effective for the period ended 30 June 2016 onwards. Prior period comparatives (data and ratios) do not reflect the change in methodology and as such, ratios calculated in this survey may differ if restated 31 March 2016 figures and its prior period comparatives had been used for the purpose of analysis.
40. Heartland Bank Limited amalgamated with one of its wholly owned subsidiaries, effective from 31 December 2015. Prior period comparatives (data and ratios) do not reflect the amalgamation and as such, ratios calculated in this survey may differ if restated 30 September 2015 figures and its prior period comparatives had been used for the purpose of analysis.

41. As at 30 June 2015, a correction in the measurement of hedging items was made which mainly resulted in prior year restatements for non-interest income, NPAT, interest earning assets and interest bearing liabilities. Prior period comparatives (data and ratios) do not reflect these changes and as such, ratios calculated in this survey may differ if restated 31 March 2015 figures and its prior period comparatives had been used for the purpose of analysis.
42. Most recently on 1 April 2015, 'Investment in associates – held for sale' was transferred to a new group structure under TSB Community Trust. In addition to this, certain comparatives in relation to interest income, interest expense, other operating income and other operating expenses have been restated on numerous occasions in the last few periods. Prior period comparatives (data and ratios) do not reflect these changes and as such, ratios calculated in this survey may differ if restated 30 June 2016 figures and its prior period comparatives had been used for the purpose of analysis.
43. A revision on the application of accounting policies for capitalisation of expenditure on internally generated software assets was made, effective 1 October 2015. This has affected comparatives for amortization of goodwill and other intangibles. Prior period comparatives (data and ratios) do not reflect this change and as such, ratios calculated in this survey may differ if restated 30 September 2015 figures and its prior period comparatives had been used for the purpose of analysis.
44. Effective from 30 September 2016 onwards, Bank of New Zealand changed its methodology for the calculation of interest earning assets (to exclude mortgage offset account). Prior period comparatives (data and ratios) do not reflect the change in methodology and as such, ratios calculated in this survey may differ if restated 30 June 2016 figures and its prior period comparatives had been used for the purpose of analysis.
45. As at 1 July 2015, interest from certain derivatives (transacted as economic hedges) are recorded as part of net interest earnings instead of other income. In addition, fixed rate prepayment cost recoveries have been reclassified from other income to interest income in order to align with industry practice, effective for the period ended 30 June 2016 onwards. Prior period comparatives (data and ratios) do not reflect the change in methodology and as such, ratios calculated in this survey may differ if restated 31 March 2016 figures and its prior period comparatives had been used for the purpose of analysis.
46. Heartland Bank Limited amalgamated with one of its wholly owned subsidiaries, effective from 31 December 2015. Prior period comparatives (data and ratios) do not reflect the amalgamation and as such, ratios calculated in this survey may differ if restated 30 September 2015 figures and its prior period comparatives had been used for the purpose of analysis.
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48. The capital adequacy ratio's reported are for the overseas banking group.
49. Total Assets = Total Assets - Intangible Assets.
50. For a discussion of the Reserve Bank's approach to prudential supervision, refer to a speech delivered by Toby Fiennes at the NZ Bankers' Association in Auckland in September 2016: http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Speeches/2016/NZs-evolving-approach-to-prudential-supervision.pdf.
51. For more information on the 2016 New Zealand Financial Sector Assessment Programme, refer to: http://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/2016/2016apr79-7.pdf.
52. BS 14 (Corporate Governance) policy can be accessed on the Reserve Bank website: http://www.rbnz.govt.nz/-/media/ReserveBank/Files/regulation-and-supervision/banks/banking-supervision-handbook/4269713.pdf?la=en.
53. https://fma.govt.nz/assets/Guidance/_versions/9210/170202-A-guide-to-the-FMAs-view-of-conduct.1.pdf.
54. A comparison between average price change, median price change and housing price index change, broken down by council on a year-on-year basis. An HPI is best used to assess underlying house price trends, while median sale price gives a sense of how expensive houses are in any given market. Although easy for consumers to understand, averages lack the strengths of the other measures when assessing market price changes and not utilised in REINZ statistics.
55. Shows the trends of an HPI and raw median sale price on an annual basis. When the market is weak the index is more sensitive than the median and captures the true state of activity in the housing market.
56. Shows the trend for the REINZ HPI calculated every month for Wellington council wards. This is one example of how the REINZ HPI can be disaggregated to low levels providing flexible data options for users. The disaggregation can use location or property attributes that may affect market segmentations.
57. http://taxpolicy.ird.govt.nz/news/2016-12-21-aeoi-draft-guidance-document.
58. Vector Autoregression.
59. Autoregressive Integrated Moving Average.
60. http://www.stats.govt.nz/browse_for_stats/population/Migration/IntTravelAndMigration_HOTPJun16/Commentary.aspx.
61. https://home.kpmg.com/content/dam/kpmg/pdf/2016/02/2016-FIPS-Banks-Interactive.pdf.
62. Certain figures and performance metrics referenced within this commentary have been 'normalised' for the purpose of excluding the current year comparatives of EFN (New Zealand) Limited, so as to provide a more accurate picture of the current trends for the non-bank sector.
63. The banks' 'blackbox' refers to the perceived model that some survey participants believe that the bank(s) operate within, being an approval process that scores a loan candidate across a range of areas such as, but not limited to, repayment ability, loan-to-value ratio (LVR), security offered, credit history, savings history, and the reason for the loan. If the candidate meets all the necessary criteria appropriately, they will be approved for a loan very quickly, but if one criteria is not met, they might not be approved. This can lead to 'qualifying loans' being competitively sought after by banks, favourable terms being offered and, as a result, loans can be very quickly approved. However, loans that have an apparent issue with a criteria might be declined.

These loans might be able to be structured by a lender who is prepared to understand and research the issue(s) in a way that makes them a manageable risk until such time as the anomaly is resolved. The structuring could include: additional security, an interest-only period, or a requirement for delayed and then accelerated payments.

64. http://www.stuff.co.nz/business/86350842/rbnz-says-housing-market-has-turned-meaning-debt-to-income-rules-not-needed-for-now.
65. http://www.interest.co.nz/news/84167/rbnz-keen-bolster-its-macro-prudential-arsenal-debt-income-ratio-limiting-tool-what-might.
66. http://www.comcom.govt.nz/consumer-credit/consumer-credit-media-releases/detail/2016/commission-asks-the-court-to-clarify-how-credit-law-applies-to-harmoney.
67. http://www.stuff.co.nz/business/industries/79057498/Heartland-absolutely-interested-in-UDC-Finance-as-ANZ-Bank-mulls-sale.
68. http://www.interest.co.nz/business/81382/no-sales-process-being-run-udc-anz-nz-ceo-david-hisco-says-adding-somebody-stirring.
69. EFN (New Zealand) Limited formerly operated under the GE Capital brand as part of Custom Fleet and Equipment Finance New Zealand prior to its sale. See table on page 99 for further information pertaining to its sale.
70. Fisher & Paykel Finance was sold on 27 October 2015 to Australian Financial Services FlexiGroup for $315 million. Under new ownership, they have been rebranded as Flexi Cards Limited as of September 2016.
71. On page 99 is a table detailing the sale of GE Capital New Zealand, and its new structure given the change in ownership.
72. Since its acquisition in the previous year, the financial performance of The Warehouse Financial Services is now reported as part of the 31 July 2016 year-end consolidated figures for the Warehouse Group (parent company). Therefore, there are no publicly-available standalone financial statements for 'The Warehouse Financial Services Limited' and as such the entity will no longer be part of the survey.
73. The related articles are hyperlinked to provide the reader with the ability to access the respective news releases.
74. Certain figures and performance metrics referenced within this commentary have been 'normalised' for the purpose of excluding the current year comparatives of EFN (New Zealand) Limited, so as to provide a more accurate picture of the current trends for the non-bank sector.
75. http://www.comcom.govt.nz/consumer-credit/guidelines-post/guidelines-for-credit-fees/.
76. https://www.harmoney.co.nz/investors/marketplace-statistics.
77. http://www.stuff.co.nz/business/86358599/Copy-Brits-to-get-a-10-billion-peer-to-peer-lending-industry-tech-conference-told.
78. Certain prior year figures have been adjusted to ensure consistent treatment in the calculation of performance metrics between entities, and to more accurately reflect the updated definitions on page 128. Please see the notes on page 128 for further details regarding the change. The performance metrics that were affected: net interest margin, interest spread, and operating expense over operating income ratio.
79. Ricoh New Zealand Limited transitioned to 'Tier 2 NZ IFRS RDR' reporting framework, effective 31 March 2016. As such, data and ratios on 31 March 2015 comparatives used for the purpose of analysis do not reflect Ricoh's transition to the new reporting framework. Ratios calculated in this survey may differ if 31 March 2015 restated comparatives had been used for the purpose of analysis.
80. The 'operating expenses over gross revenues' ratio is presumed to be a more appropriate benchmark for efficiency measures. As such, it has replaced the 'operating expenses over average total assets' ratio in the current year.
81. Rating of Parent, Australia and New Zealand Banking Group Limited (Australia) – S&P's, Moody's and Fitch.
82. Rating of Parent, Bank of Baroda (India) – Moody's.
83. Rating of Parent, Bank of China Limited (China) – S&P's and Fitch.
84. Rating of Parent, Bank of India (India) – Moody's and Fitch.
85. Rating of Parent, China Construction Bank Corporation (China) – Fitch.
86. Rating of Parent, Citibank N.A. (United States) – S&P's, Moody's and Fitch.
87. Rating of Parent, Commonwealth Bank of Australia (Australia) – S&P's, Moody's and Fitch.
88. Rating of Parent, Industrial and Commercial Bank of China Limited (China) – S&P's and Fitch.
89. Rating of Parent, JPMorgan Chase Bank N.A. (United States) – S&P's, Moody's and Fitch.
90. The entities listed above are state owned enterprises which are wholly owned by the New Zealand Government.
91. Rating of Parent, Kookmin Bank (South Korea) – S&P's, Moody's and Fitch.
92. Rating of Parent, Coöperatieve Rabobank U.A. (Netherlands) – S&P's, Moody's and Fitch.
93. Rating of Parent, The Bank of Tokyo-Mitsubishi UFJ, Limited (Japan) – S&P's, Moody's and Fitch.
94. Rating of Parent, The Hongkong and Shanghai Banking Corporation Limited (Hong Kong) – S&P's and Fitch.
95. Rating of Parent, Westpac Banking Corporation (Australia) – S&P's, Moody's and Fitch.
96. Rating of parent company BMW AG (Germany).
97. Rating of parent company Element Fleet Management Corporation (Netherlands).
98. Rating of new parent company FlexiGroup Limited (Australia).
99. Rating of parent company Fuji Xerox Co. Ltd (Japan).
100. Rating of parent company John Deere Financial Limited Australia.
101. Rating of parent company LeasePlan Corporation N.V. (Netherlands).
102. Rating of parent company Daimler AG (Germany).
103. Rating of parent company Nissan Motor Co. Limited (Japan).
104. Rating of parent company ORIX Corporation (Japan).
105. Rating of parent company Ricoh Co. Limited (Japan).
106. Rating of parent company Toyota Motor Corporation (Japan).

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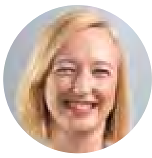

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ISSN 0113-4655