FIPS

Financial Institutions Performance Survey Review of 2017

1

7.35%
growth in NPAT

2

3.68%
escalation in operating expenses

3

1.17%
rise in net interest income

4

9 bps
decline in net interest margins

5

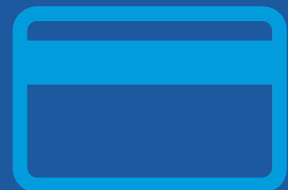
4.68%
increase in gross lending

6

40 bps
drop in average funding costs

7

7.30%
drop in gross impaired assets



8

3.94%
decrease in provisions

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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 2017 represents the 31st year that KPMG has provided in-depth insights into New Zealand's banking sector. In this edition, we will be presenting industry commentary and analysis on the performance of the New Zealand registered banks, together with a range of topical articles from other key stakeholders such as industry experts, regulators and our own business leaders.

The survey covers registered banks with balance dates between 1 October 2016 and 30 September 2017. As a result, registered banks with the balance date of 31 December will have their 31 December 2016 financial results included in this year's survey as their most recent results. The banks with 31 December balance dates are Bank of China, China Construction Bank, Citibank, Industrial and Commercial Bank of China, JPMorgan Chase Bank, Kookmin Bank, Rabobank and The Hongkong and Shanghai Banking Corporation.

TABLE 1: ENTITY MOVEMENTS

	Who's out	Who's in
Banks: 24[1]	Deutsche Bank AG, New Zealand Group	— Nil

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.

In late 2017, we published and launched our Non-bank Financial Institutions Performance Survey (Non-bank FIPS) separately, as opposed to the combined Banks and Non-Banks launch in prior years. Accordingly, the Non-bank FIPS document is no longer appended to the rear of this publication. The Non-bank FIPS document can be downloaded from KPMG's website and located at the following link: https://home.kpmg.com/nz/en/home/insights/2017/12/fips-non-banks--review-of-2017.html.

Following the announcement of its withdrawal from New Zealand, Deutsche Bank has since surrendered its banking license to the Reserve Bank of New Zealand (Reserve Bank or RBNZ) in August of 2016. Hence, Deutsche Bank is no longer included in this publication.

We wish to thank the survey participants for their valued contributions in the following two ways: for the additional information provided and for the time made available to meet and discuss the industry issues with us.

Massey University continues to be a partner and key contributor to the compilation of this publication by assisting with the data collection and drafting the banks' profit forecasting section of this survey. We thank them for their continued assistance and contribution.

External contributors continue to play a vital role in our publication by providing insight on key issues and developments that we might not otherwise have. We would like to acknowledge the contributors from the RBNZ, the Financial Markets Authority (FMA), and New Zealand Bankers' Association (NZBA) for their exceptional contributions toward the compilation of this publication.

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

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A KPMG view from the editor

John Kensington
Partner – Audit
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KPMG

Following on from a trying and volatile 2016, industry profits rebounded in 2017.

In some respects, the year appears to have been as if it were one of two halves. During the first half of the year, the advent of revisions to Australian Prudential Standards (APS) 110 *Capital Adequacy* and APS 120 *Securitisation* led to intense competition for deposits, thus resulting in some banks refinancing and altering internal policies while slowing their lending books' growth. Meanwhile, the second half of the year saw lending growth accelerate again, although more slowly than historic levels. The New Zealand economy still remains strong in spite of some uncertainty, particularly around issues pertaining to the housing market and construction. Nevertheless, other pockets such as tourism, and the primary sector performed well on the back of stronger commodity prices and a weaker NZD. Unemployment is at an all-time low. Views remain mixed around the potential effects arising from some of the new coalition government's policies, as their policies have contributed to further to the feelings of uncertainty, especially when regarding immigration and foreign ownership. A cautious approach is required so as to not deter foreign investment, the migration of skilled workers, and tourists, all of which are key contributors to New Zealand's economic growth. There was a very real feeling that things are on hold in a 'wait and see' pattern.

The key takeaways from the 2017 year highlighted by the survey are as follows:

- One aspect that continues to underpin the banking sector's performance is the strength of its balance sheet.
- In contrast to 2016, the banking sector produced an impressive increase in profitability. The combination of growth in net interest income and non-interest income, as well as a significant increase in asset quality, has contributed to this record result. These changes outweighed the increase in operating expenses.
- The sector margin decreased by 9 basis points (bps) from 2.17% to 2.08%. This decline was caused primarily by increased competition on the lending side offset with partial relief on the funding side.
- Asset quality is going from strength to strength with the ratio of total provisions to average gross loans and advances decreasing 5 bps this year. This reduction, combined with a significant decline in impairment expense due to banks tightening their selection criteria, has resulted in the positive outcome of better asset quality.
- Non-major banking participants have noticed the effect of the stricter Australian regulations on capital levels in New Zealand, a development which has led to slower lending by the Australian-owned banks in the sector than they used to practice. The major banks have reiterated that prior years' trends of low lending rates and high volume growth will be unlikely to continue.
- It is clear that banks are still trying to understand the 'customer of tomorrow', they are trying to align their strategy in a customer centric environment. The subtle move from 'customer service' to 'customer experience' is crucial to ensure that overall customer satisfaction is reached.
- Fintech continues to be a hot topic. The industry acknowledges that one major aspect of customer centricity is appropriately aligning Fintech with the needs and wants of customers. Although customers have emphasised that digital solutions and Fintech are priorities when choosing a bank, any issues that arise, however, must be handled with efficiency and by a human (if necessary). Most banks agreed that a successful Fintech launch or uptake would involve partnerships with overseas-parent-owned innovation labs or with Fintech start-ups.
- One area that always provides animated discussion is regulation. The current period has been no exception. At present, outsourcing still remains the biggest area of focus. Also, a number of large banks noted that outsourcing is a much bigger task than they initially thought. The new dashboard approach for quarterly reporting is yet another hot topic for many. A number of banks are supportive of the approach, but called for more consistent definitions than previously provided; additionally, they raised some concerns regarding confidential information being controlled on a third party website.
- The implementation of NZ IFRS 9 *Financial Instruments* has begun, with banks set to notice an impact resulting from a credit model recognising 'expected loss' rather than the previous 'incurred loss'. BNZ is on the forefront of implementation and impacts have been felt on their bottom line.

A careful examination of the future reveals that the banking sector is facing a time of increased challenges and uncertainty.

- Two prospective areas of prime interest will be how the new government operates during its first year in office and how possible new legislation changes (such as exclusion of foreign investment home ownership, the impact on immigration numbers and the possible flow on to tourism) will impact on the economy and the banking sector.
- The local regulatory space is going to grow and gain momentum with a number of changes that will soon come into effect, as the RBNZ's dashboard approach starts being used, the outsourcing policy continues to be implemented, and changing over-the-counter (OTC) derivatives margin requirements also gain momentum.
- The constant threat of disruption and the growth of digitisation in the banking sector are issues that continue to be a challenge as the sector builds its pace. All Executives have said they will continue to digitise their offerings. Some survey participants remarked that the most successful initiative would likely be in the form of partnerships with Fintech start-ups, as banks do not have the time, money, or resources to successfully create their own projects.
- In regards to Fintech and digitisation, although having an automated online process is desirable, when an issue goes awry, customers want to talk to a person and help them resolve the issue at that moment rather than read a webpage of frequently asked questions. Fortunately, banks are beginning to recognise this trend and note that the customer experience cannot be a branch solely full of automated machines yet.

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Industry overview

A number of key themes were continually brought up and discussed in the conversations we had with survey participants. These themes, as well as other relevant observations impacting the sector, are discussed in detail below.

'Customer experience' underpins the bank of the future

One of the key focuses for banks is customer centricity. A solid understanding of the customer of today – and the customer of the future – is unmistakeably required to ensure that product and technological innovations which are developed and launched are *relevant*. Customer centricity necessitates properly understanding the identity of the customer and customers' expectations, needs and behaviours. Many survey participants remarked on the effect of technology and the need to continue to innovate to keep up with changing customer expectations. Clearly, the profile of the 'customer of tomorrow' – one that might shun the tired and lengthy paper-based application process in favour of instant digital interactions – is driving the strategies and changes of today.

Many survey participants remarked on the effect of technology and the need to continue to innovate

Buzzwords and beyond

The banking sector is gazing into its 'crystal ball', seeking to determine what the customer of tomorrow expects and values in relation to financial products, tools and platforms. The ability to digitise, innovate and adapt to customer demands is crucial to the survival of any company. This criteria includes mortgage-focussed banks which operate according to long-standing, time-tested models, as the speed of both the changes in customer demands, and the speed in which the customer expects their bank to adapt, are increasing.

Digital interactions are *de rigueur*. Digitisation and other themes/tools such as Artificial Intelligence (AI), machine learning, Robotic Process Automation (RPA), digital labour, 'Crowd Funding', the 'sharing economy', 'cloud computing', the 'Internet of Things', and hyper-personalisation, are at least partly influenced by a customer-centric, millennial-serving approach which banks are being urged to embrace in order to stay competitive.

In a relatively short time, this lexicon has infiltrated our current daily lives through products and services such as Apple Pay, Siri, Alexa, Uber, and Google Drive. Furthermore, one should recall that, while the term 'millennial' is commonplace when describing current-day customer experience standards of 16–35 year olds, millennials' expectations and behaviours have been largely adopted by most other generations and are now seen more as a way of thinking.

This fast paced integrated way of transacting is embraced by those that are 'time poor', social media rich and tech savvy because it gives them back time to do things that are important to them.

Such a demand for tech solutions comes with a warning – when the app, AI or logarithm gives the millennial-thinking customer an answer or an outcome they dislike, there needs to be an equally quick resolution to the problem raised. This group does not want to read 20 frequently asked questions (FAQs) or wait in a call centre queue. Since they want instant gratification and solutions, if they do not receive it, they will change their service provider as they have no loyalty to a particular brand or service provider.

Banks are *open* for business

Since the concept of 'open banking' is trending around the world, why should New Zealand be far behind? 'Open banking' is being tipped as the "invisible banking reform that could fundamentally change how people manage money" and how new entrants might enter the market.[2]

Since the concept of 'open banking' is trending around the world, why should New Zealand be far behind?

For further details around the concept of open banking, please read the article included in this publication on page 50 which has been written by KPMG's Financial Services Sector Driver, Nicola Raynes.

But are we side-stepping the branch?

An ever increasing number of customers are side-stepping the branch altogether and using multiple so-called 'glass platforms' (iPads, smartphones and computers) to manage their finances. However, banks that respond by abandoning branches altogether have sometimes left a sour taste in the local community's mouths.

Some survey participants with a significant 'bricks-and-mortar' presence commented on their branch network and indicated that they may start, or, in some cases, continue, to gradually rationalise both the way they provide service in the branch and the branches' opening hours over time. The major banks appear to believe that their online, telephone banking and smart ATM service offerings can form an almost-complete suite of services together. However, as anyone who has waded through a seemingly endless list of FAQs or had a circular discussion with a 'Chabot' can attest to, customers still want the human touch when the app or machine is just not working or giving the answer they want, or they need to make a significant financial decision such as obtaining a mortgage or life insurance.

Customers still want the human touch when the app or machine is just not working or giving the answer they want, or they need to make a significant financial decision

Nevertheless, this issue is possibly an area of opportunity. For example, an innovative tool or platform could step in and lower the perceived trade-off between the speed and impersonal nature of a fully digital application process, and the reassurance and comfort that can be found in a good customer service relationship.

Disruption is coming, but from where?

Survey participants' opinions around and approaches to Fintech were diverse. Approaches towards Fintech ran the gamut from participants who had developed apps and savvy front ends and self-identified as tech innovators, to participants that do not have the budget to implement any significant tech solutions.

The most common agreed-on approach from other participants was that their approach would be based around partnerships with local or overseas-parent-owned innovation labs or Fintech start-ups.

Banks which might have initially been wary of the disruptive force of start-ups have now come to recognise their own strengths in the form of some barriers to start-ups' entry into the market, barriers which are enforced through regulation and scale. Regardless of whether the next wave of Fintech will be a go-alone project by a bank, arrive by way of a start-up disruptor, or emerge in the form of a partnership, it is clear that any tech solution will need to broker a happy marriage between design/creative genius, operational/strategic fit, and potentially regulatory compliance, while placing the customer at the centre of all of it.

Does automation mean hands-free?

Aside from transforming the customer experience, digital tools such as machine learning, AI, and RPA can also be used to transform the way and speed with which information is processed. Implementing these tools can free up staff and management to concentrate on tasks where judgement is required or areas where they can add value.

Aside from taking care of the routine processing tasks, cutting-edge technology can also be leveraged to assist banks in achieving or maintaining compliance with regulations, to perform 'know-your-customer' (KYC) procedures, and to detect fraud.

Chained together

Blockchain (distributed ledger processing) has garnered much attention in recent years, with the 'face' of Blockchain, also known as Bitcoin, attracting more excitement day by day. Just a couple of months ago, for the first time ever in New Zealand, a property was listed for sale using Bitcoin instead of fiat currency. This pioneering local feat happened in Kaiuma Bay, Marlborough Sounds, and attracted a great deal of attention.[3]

Blockchain is much more than just cryptocurrency, as the concept also lends itself to providing a pragmatic solution to clearing and settling payments.

Some investors view Bitcoin as a kind of store of value and therefore an alternative to gold, with worldwide supply of the digital currency being limited (akin to a scare commodity) to 21 million Bitcoins. Despite this constraint on supply, recent price growth has been somewhat stymied through regulators ramping up their scrutiny of the digital currency exchanges around the world. When examining the aspect of demand-side pressures, however, we see that Bitcoin has been linked to criminal activities such as money laundering, drug smuggling, and the illegal arms trade, due to its transactional and regulatory anonymity.

Nevertheless, market participants would do well to recall that Blockchain is much more than just cryptocurrency as the concept also lends itself to providing a pragmatic solution to clearing and settling payments.

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In fact, in 2017, New Zealand's KlickEx group teamed up with IBM and US-based Blockchain network, Stellar, and announced that it had set up a Blockchain-based service to financial institutions.

The developers of this system claim that it will accelerate the speed at which international payments are processed and reduce the cost of performing such transactions. According to the founders, this system "has been designed to augment financial flows worldwide for all payment types and values and allows financial institutions to choose the settlement network of their choice for the exchange of central bank-issued digital assets."[4]

Bots: the beginning

Across the Tasman and in other advanced economies, banks and wealth advisors have had success in implementing so-called 'robo-advice'. In the third quarter of 2017, the Financial Markets Authority (FMA) announced that they would fast-track the changes required to allow 'robo-advice' (i.e. financial advice dispensed by a non-natural person) and that firms would be able to apply to the FMA for leave to do this from early 2018 onwards.[5]

The FMA announced that they would fast-track the changes required to allow 'robo-advice'.

This 'fast-track' follows on from a consultation phase, during which the regulator received 49 submissions. Most respondents indicated that they are in support of 'robo-advice' arriving sooner than on the previously proposed date of April 2019.

According to the FMA, this exemption to allow 'robo-advice' is expected to "foster innovation and improve consumer access to advice".[5]

While the FMA "decided not to impose financial limits on personalised 'robo-advice' and the eligible product list has been expanded to include mortgages and personal insurance products", applicants will be required to "provide the FMA with good character declarations for directors and senior managers as well as information showing they have the capability and competence to provide the 'robo-advice' service." These requirements will be put in place to ensure that the standards guiding the 'robo-advice' service are consistent with the standards applied to authorised financial advisors.[5]

At the time of writing, we have yet see the launch of 'robo-advice' in the local market. We look forward to what will happen in this regard, not only in the anticipation of 'robo-advice' improving the general public's access to crucial financial advice about matters such as KiwiSaver funds, but also assessing the uptake of this by customers who seem to demand something in the spectrum of automated and fast, yet personal and flexible.

How do you keep a machine on the straight and narrow?

Before we become too engrossed by the digital revolution to think clearly, we should consider the many potential risks associated with it. In relation to regulatory compliance, some important questions that should pique our interest would be as follows:

1. Is it possible to perform effective KYC procedures and jump through all the Anti-Money Laundering and Countering Financing of Terrorism (AML/CFT) hoops if the customer is effectively embodied in a few taps and keystrokes?
2. Should we not seek to keep other matters such as cyber-security and data privacy regulations at top of mind?
3. If operational and financial controls will need to evolve as the technology used evolves, how can we defend the bank against risks such as hacking, plus seek to prevent the inevitable fallout of financial losses, business disruptions, and reputational 'black marks' that tend to have long-lasting and far-reaching consequences.

Conducting the train

Recently, Australian banks have come under intense public and media scrutiny, the result of which has been a Royal Commission Inquiry into alleged misconduct. According to an article from Bloomberg News, the "banks have been damaged by a string of scandals over the provision of misleading financial advice, attempted rate rigging and the alleged improper refusal of insurance claims".

Recently, Australian banks have come under intense public and media scrutiny, the result of which has been a Royal Commission Inquiry into alleged misconduct.

The Royal Commission Inquiry comes after more than a year of dithering, during which the big four Australian banks and the Australian Prime Minister opposed the inquiry. However, the government eventually considered launching the inquiry to be a matter of necessity, due to the "national interest for the political uncertainty [caused by the crisis] to end".[6]

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Local banks, particularly the big four who are subsidiaries of the Aussie big four banks (CBA, NAB, Westpac and ANZ) which are caught in this inquiry, would hardly like to wake up to similar headlines and suffer the resulting damage to their reputations. Due to this, New Zealand's banks have conduct risk at front and centre of mind at all levels.

Some in the industry see this a chance to bring some balance to the debate around banks, especially because bank bashing is a popular pastime in Australia and while some behaviours and instances of misconduct might be apparent, the commission will also give the banks the chance to show both sides of the story.

What's lighting up the global stage?

The International Monetary Fund (IMF) issued its biannual World Economic Outlook in October 2017.[7] In this report, the IMF projected that global growth will put on a great show by rising to 3.7% in 2018, up 0.1% from the earlier forecast in April 2017 (see Figure 1), up on a forecast 2017 growth rate of 3.6% and a sluggish actual growth rate of 3.2% in 2016. As shown in Figure 1, the rosy spotlight over global growth is supported by large-scale growth in advanced economies in addition to strong and seemingly more stable growth in China and other emerging markets.

Global growth is supported by large-scale growth in advanced economies in addition to strong and seemingly more stable growth in China and other emerging markets.

Nevertheless, the IMF stated that "…while the baseline outlook is strengthening, growth remains weak in many countries." Furthermore, the IMF noted a few significant hazards that could lead to a darker spell emanating from many concerns such as the following: a more rapid and sizeable tightening of monetary policy than that which is currently expected, the persistence of low inflation levels (see Figure 2), observed shifts towards protectionism evident in nationalist parties gains' in recent elections and in the Brexit referendum, and geopolitical tensions.

Due to the risk of possible aggression from either North Korea or the USA, geopolitical tension is high and would likely result in a significant spike in the IMF's geopolitical risk monitor (see Figure 3).

NZ Inc.: In the ring and punching above its weight

The *Global Competitiveness Report 2017–2018*, a report published annually by the World Economic Forum (WEF), was released in September 2017.[8] New Zealand's comparative advantages over other economies – and, arguably, the country's ability to 'punch above its weight' – were clearly reflected in the country's ranking at 13th of 137 countries.

New Zealand's comparative advantages over other economies – and, arguably, the country's ability to 'punch above its weight' – were clearly reflected in the country's ranking at 13th.

Areas where New Zealand was praised through high rankings within the 'Top 10' of the surveyed countries were as follows: 'Financial market development' (1st place), 'Institutions' (3rd place), 'Labour market efficiency' (5th place), 'Health and primary education' (6th place), 'Higher Education and training' (7th place), and 'Goods market efficiency' (9th place).

Within these broad 'pillars', the global organisation complimented the country on its particular areas of financial strength which were 'Ease of access to loans' and 'Soundness of banks'. The study gave the Commerce Commission credit by praising the 'Effectiveness of the anti-monopoly policy', and also appeared to approve of certain government policies reflected in the high rankings of the ease of starting a business, the 'Diversion of public funds', and the 'Transparency of government policy making'.

Businesses' policies and structures, such as the 'Ethical behaviour of firms', the 'Efficacy of corporate boards' and 'Strength of investor protection' (the last one is likely due to a mix between regulation and business policy), were also lauded. These polices and structures support the view that local banks are taking conduct and reputational risks seriously through ensuring that governance and internal controls meet acceptable standards.

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…But NZ Inc. could slip up in the future

Nevertheless, key issues in what could be termed 'forward-looking' areas were also noted in the WEF's report. Aside from the low ranking in the 'Market size' pillar (64th) which is not unexpected given the land area and population size of the country, additional pillars where New Zealand earned comparatively low rankings were as follows: 'Infrastructure' (23rd), 'Business sophistication' (24th) and 'Innovation' (20th).[8]

It should be noted that, while these were New Zealand's lower scores, the country was still within the top 17%.

The survey also separately highlighted the 'Most problematic factors for doing business'. Of these considerations, at least two of the top five concerns (those two concerns being the 'Insufficient capacity to innovate' and the limitations on the 'Access to financing') might have a direct and discernible effect on, and be reflective of, the banking sector, amongst others. The remaining three matters in the top five on the list of concerns were as follows: an 'Inadequate supply of infrastructure', the 'Inefficient government bureaucracy' and an 'Inadequately educated workforce'.

The ability of business leaders and the government to both deal with these challenging problems, and to handle each issue separately without exacerbating the other issues, remains to be seen.

Will we have the people to grow?

To be competitive on the global stage, there is a need to embrace diversity. Time and again, the valuable benefits of diversity in the form of different perspectives and experiences have been lauded.

What direction the immigration policy of the coalition government will eventually follow is currently uncertain, what they decide will have an impact on the demographics of the workforce of 'NZ Inc.'

A number of survey participants commented on their own reliance (and the broader economy's reliance) on skilled labour immigrants.

Aside from the impact on diversity, the skills shortages faced by Aotearoa mean that any proposed changes to immigration rules or a deliberate restraint placed on immigration numbers would need to be carefully deliberated in order to ensure that economic growth is not compromised. A number of survey participants commented on their own reliance (and the broader economy's reliance) on skilled labour immigrants, especially as the cycle of Kiwi emigration across the ditch and elsewhere increases as global growth improves.

In its published immigration policy statement, the Labour Party alludes to the fact that they will continue to welcome migrants to the country, but has noted with concern that the apparent level of investment in housing, plus other infrastructure and public services, has not kept pace with the migration level. The Labour Party stated that these changes have "contributed to the housing crisis, put pressure on hospitals and schools, and added to the congestion on roads".[9]

What the new government needs is to be careful not to overreact and, in doing so, reduce the positive influences of immigration.

Otherwise, their actions could slow, stall, or (worse still) send the New Zealand economy backwards, the very economy it needs to be growing to pay for its ambitious social programme and to create the opportunities for New Zealanders it talks about. One of the dangers of its anti-immigration rhetoric is that not only can such rhetoric be misunderstood, but it can also make workers, investors and tourists alike all feel unwelcome.

Survey participants noted a genuine slowing of the economy and loss of business confidence since the election, seemingly while businesses adopt a 'wait and see' approach to business.

Restrictions proposed on foreign home ownership or investment

The new coalition government has created a great of clamour around overseas investment rules. The Overseas Investment Amendment Bill passed its first reading in Parliament in December, and has been referred to the Finance and Expenditure select committee.

Associate Finance Minister, David Parker, said the law "recognises and reaffirms that it is not a right for an overseas buyer to purchase a house here". The reforms would result in residential land being classified as 'sensitive' land under the Overseas Investment Act, a classification which would mean that the property could only be purchased by citizens or permanent residents of New Zealand or Australia; other buyers would need the prior approval of the Overseas Investment Office (OIO).[10]

New Zealand is a young nation without great pools of wealth, it needs capital and access to it from other countries to help keep growing its economy.

The majority of survey participants discussed this matter and indicated that moving from electioneering policies into actual reform may be somewhat tricky and would require a careful and considered approach. Given the predicted surge in applications being referred to the OIO, survey participants also suggested that the OIO would need to concentrate on achieving processing efficiencies or receive significant staffing increases to make sure that a backlog is not created.

A slow moving backlog will be another piece of the discouragement jigsaw facing foreigners. One important aspect of this issue is to make sure that, against this backdrop, the new government's policies refrain from discouraging the investment we need to launch some of our infrastructure projects. We should also remember that, since New Zealand is a young nation without great pools of wealth, it needs capital and access to it from other countries to help keep growing its economy.

Is housing still hot?

In the past few years, house price inflation (see Figures 4, 5 and 6) has been predominately Auckland-driven, with other regions, especially Tauranga and Wellington, picking up in the last year or so. These regions were at least partially driven by a high net migration inflow (see Figure 7) and demand that exceeds supply. Whether the high net migration figures we have observed over the past few years will continue is questionable, especially given the policies discussed during the election of the parties in the Labour-led coalition government.

It remains to be seen whether any future legislative change which curbs immigration figures would result in a decrease in inflationary pressures in a market that already appears to be cooling somewhat due to various other reasons (based on median house prices (see Figure 4), sales volumes (see Figure 5) and days to sell (see Figure 6)). Potential factors that could further impact the housing market are if the Labour Party's policies to increase supply and moderate demand-side price pressures from foreign and tax speculators' activities are put in place.

It remains to be seen whether any future legislative change which curbs immigration figures would result in a decrease in inflationary pressures.

Affording a 'shoe in' on the property ladder

For a market where most banks' portfolios are dominated by mortgage lending, what is happening in the housing market is always a topical issue. For most banks' retail customers, housing affordability, especially in Auckland, is often a topic of debate, as we saw in last year's election campaigns and coalition talks.

Housing affordability, especially in Auckland, is often a topic of debate, as we saw in last year's election.

In October 2017, Statistics New Zealand released an informative and insightful publication entitled *Household income and housing cost statistics: Year ended June 2017.*[11]

This report revealed that national average annual household income from all regular sources increased by 50.50% over the 10 year period to June 2017, while average weekly housing costs which great at a slightly higher rate of 56% over the same period. The picture was rosier for households over the shorter term – i.e. in the year ended June 2017, average annual household income increased by 9.06%, while average annual housing costs declined by 0.33%, albeit at a fairly high level (historically speaking). As a percentage of household income, housing costs also reduced from an average rate of 17.3% (in the year ended June 2016) to an average rate of 15.8% (in the year ended June 2017), driven by rising household incomes with fairly flat average housing costs.

November 2017 FSR: A bit more rope to play with?

On 29 November 2017, the RBNZ released its semi-annual Financial Stability Report (FSR). In this report, the RBNZ stated that New Zealand's financial system still maintains a steady footing and that, although the financial system remains exposed to a number of risks, these risks have reduced over the past six months. The regulatory body noted that the key risks affecting the financial system are housing market vulnerabilities, dairy sector indebtedness and the banking system's exposure to volatility in international funding markets.

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The RBNZ also performed a 'Policy Assessment' in relation to the loan-to-value ratio (LVR) restrictions imposed, and opted to (with effect from 1 January 2018) loosen these restrictions somewhat by increasing the percentage of each bank's new mortgage lending to owner occupiers at LVRs in excess of 80% (from 10% to 15%), and allowing each bank to lend 5% of all new mortgage lending at a higher than usual LVR of 65% (currently 60%) to investors. On this point, the FSR noted that "LVR restrictions will be adjusted gradually over time, provided that financial stability risks remain contained. Gradual adjustment to policy will reduce the risk of resurgence in the housing market and a deterioration in lending standards."[12]

Survey participants and market commentators have mixed views around the impact of loosening the LVR rules.

Survey participants and market commentators have mixed views around the impact of loosening the LVR rules. Some Executives of the major banks were a little surprised as the relaxation had arrived sooner than expected. Most survey participants felt that the impact on their current lending mix would be minimal and that they would continue to work according to their current internal risk models which set lower targets than the RBNZ's.

We are still making mortgages

The combination of banks' conscious moves towards selective, sustainable lending and the LVR rules implemented in the third quarter of 2016 has resulted in slower lending growth compared to that of previous years.

This development is clearly shown in mortgage growth rate percentages; growth in this sector of the market has reduced from 9.23% in 2016 to 5.54% in 2017 ($241.62 billion in lending) as shown in Figure 8. Personal lending continues to grow for the banking sector as the economic environment remains strong with low inflation, low unemployment, and a housing market that is still close to cyclical highs, thus helping consumer confidence remain high. Business lending continues to show strong growth (6.18% for the year ended 31 December 2017), but at a slower rate compared to that of 2016. The major change was the major banks' slower lending growth over the year than it had previously experienced.

Banks' conscious moves towards selective, sustainable lending and the LVR rules implemented in the third quarter of 2016 has resulted in sluggish lending growth, compared to that of previous years.

Funding the advance

Low cost, easily accessible funding has become scarcer than before, following revisions to Australian Prudential Standards (APS) 110 Capital Adequacy and APS 120 Securitisation which resulted in a reduction in the funding able to be provided by the big four Australian banks to their New Zealand subsidiaries. Funding costs also may be pressured upwards in the future given the inflationary pressures across the globe and in New Zealand, and a rise in interest rates probably will not come as a surprise.

The combination of these cost and supply pressures makes it appear as though the liquid cash of retail depositors is the 'kingmaker' as far as funding is concerned, especially in the current low-yield environment.

Many survey participants espoused the notion that, since the historic love affair with looking after the borrower may be over, depositors may be the ones that now start to 'feel the love'.

Local economy: Steady as she goes?

New Zealand's Gross Domestic Product (GDP), and other macro fundamentals such as the Consumer Price Index (CPI) and unemployment, appear to be quite steady and optimistic. The IMF forecasts annual GDP growth for New Zealand for the 2018 calendar year of 3.0%, down 50 bps from the forecast level of 3.5% and lower than the 2016 growth of 3.6% (see Figure 2).

However, as shown in Figure 2, this growth still compares favourably with the average growth forecasts for advanced economies. The IMF expects New Zealand's CPI for 2018 to show a reading of 2.0% for annual price growth, a result which is right at the midpoint of the RBNZ's target range and is down 20 bps from a forecast level of 2.2% in 2017. As shown in Figure 2, this result is in line with the forecasts for other advanced economies. The IMF have predicted that unemployment in New Zealand will decrease marginally, from a rate of 5.1% in 2016 to 4.9% in 2017, and continue on a downward trajectory in 2018.[7]

The (uncertain) winds of political change

The lead up to and outcome of the election has led to uncertainty as well. There are mixed views in the business sector around the various impacts the new coalition government may have, not only around immigration, but also with respect to government spending and increases in lower decile incomes through changes to minimum wages and student allowances.

There are mixed views in the business sector around the various impacts the new coalition government may have.

This uncertainty is reflected in the recent negative reading on the business confidence index. The ANZ Business Confidence Index declined to -38 in December, only slightly up from -39 in November 2017, well down from 0.0 in September 2017 and +22 in December 2016.[13, 14, 15]

Further pessimism is reflected in the current account deficit which is expected to widen to 3.8% of GDP in 2017, an increase from a projected deficit of 3.6% in 2017 and a recorded deficit of 2.8% in 2016. This sort of thinking seems somewhat contrary to the current currency weakness and visitor arrivals which are boosting returns from tourism.

In some pockets such as construction, property development and residential property prices, it seems as though growth and/or prices seem to have either slowed down or reversed, a phenomenon nowhere more observed than in Auckland. However, export-led industries, such as commodities, remain relatively solid and are poised to benefit further from the recent NZD currency weakness.

NZ IFRS 9: Called up from the bench

NZ IFRS 9 *Financial Instruments* (IFRS 9), with an effective date for years beginning on or after 1 January 2018, is a big hitter to be called up this year. The impact of the standard on results is expected to be significant as banks move from an 'incurred loss' to an 'expected loss' credit model. Survey participants are mostly well advanced in preparation to implement the new standard's complex requirements. Since BNZ has transitioned early to the new standard, it has felt the impact on its bottom line. The standard will have an effect on the comparability of provisioning and provisioning-related numbers going forward. This impact on survey participants' results will be noted and analysed, where possible, in future editions of this publication.

Regulatory microscope

Regulation continues to be a key area of focus for New Zealand banks. Whilst a number of consultations have now closed and policy decisions are final, challenges remain over the coming years to implement these policy decisions and grapple with new consultations which will also take a number of years to finalise and transition in to.

As mentioned in the quarterly FIPS editions during the year, the 'Dashboard' approach to quarterly reporting remains a topical area. In late 2016 the RBNZ floated the idea by means of a public consultation. A 'Dashboard' approach aims to reduce the amount of information disclosed in off-quarter disclosure statements, thereby reducing costs and driving the focus of content to information that would be most useful to key stakeholders.

The 'Dashboard' approach to quarterly reporting remains a topical area.

In 2017, the RBNZ released the finalised policy decision on the Dashboard approach, with the first 'live' dashboard completed with Q1 2018 data to be published at the end of May 2018.[16]

The RBNZ also finalised the revised *Outsourcing Policy* in September 2017, which came into force on 1 October 2017. The revised policy sets out requirements that banks need to meet when outsourcing particular functions and services to third party and related party service providers and seeks to ensure the bank can operate in a stand-alone fashion in the event of functional failures by these providers. The RBNZ noted it will work with banks to ensure compliance with the policy within the five year deadline.[17]

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Turning to Anti-Money Laundering and Countering Financing Terrorism (AML/CFT) compliance, in April, the RBNZ issued a *Sector Risk Assessment* paper in which it noted that the overall inherent money laundering (ML) risk rating for banks was 'High' compared to the 'Medium' rating assigned to non-bank deposit taking institutions. The 'High' risk rating assigned to banks is a result of the characteristics of the banking sector – i.e. the large number of customers, high frequency of transactions, and high value of transactions, combined with the widespread exposure to international transactions.[18]

On 1 November New Zealand's Prescribed Transaction Reporting regime commenced requiring financial institutions to report large cash and international funds transactions to the New Zealand Police Financial Intelligence Unit.[19]

In December AML supervisors updated several AML/CFT guidelines to update on phase two reforms[20] and in an attempt to bring clarity to areas of regulation bringing particular pain to organisations compliance efforts.

A guideline around electronic verification of identity set out supervisory expectations which, while helpful, will make it more difficult for some institutions to move forward with non- face-to-face verification.[21]

Earlier this year the RBNZ issued its *Issues and Options Paper* in relation to the review of the capital adequacy framework, outlining the premise of the review and its possible policy options. This extensive review is continuing, and will do for some time. This initial *Issues and Options Paper* has been followed by two more papers: *Capital Review Paper 2: What should qualify as bank capital? Issues and Options* in July 2017 and *Review of the Capital Adequacy Framework for locally incorporated banks: calculation of risk weighted assets* in December 2017.

Paper 2 was discussed in previous FIPS editions and the RBNZ has now made 'in-principle' decisions around the definition of capital following public consultation. These are:

- Proceed to remove contingent debt and contingent preference shares from the definition of capital.
- Accept non-redeemable, non-contingent, perpetual preference shares as Additional Tier 1 (AT1) capital.
- Accept redeemable, non-contingent preference shares and long-term subordinated debt as Tier 2 capital.
- Allow options for a Tier 1 capital instrument that can be issued by mutual societies.

These decisions will have a large impact on New Zealand's registered banks' capital structures should they proceed in the current form. Banks will need to grandfather and replace contingent AT1 and Tier 2 capital, a time-consuming and costly exercise. The paper issued just before Christmas is still under consultation and presents the options the RBNZ are looking at for the calculation of credit, market and operational risk weighted assets (RWA).

The Basel Committee's work in this area (recently finalised) forms the basis of the options laid out, alongside the preservation of New Zealand-specific implementation points. Banks are undertaking significant work to ascertain the impact of the options presented, but as with any regulatory change in this area, the devil will be in the detail as the RBNZ continues to consult with the sector and develop-out its proposals.

The twin policy objectives of FSLAB are to improve the quality of and accessibility to financial advice.

Another large area of review is the Financial Advisers Act. As part of the regular statutory cycle, the Financial Advisers Act is currently under review, which has resulted in the drafting of the Financial Services Legislation Amendment Bill (FSLAB). FSLAB has had its first reading in Parliament and has started the Select Committee process. The proposal is that FSLAB is rolled into the Financial Markets Conduct Act (FMCA), which means all financial advice providers will need to be licensed by the Financial Markets Authority like other market participants.

Given FMCA's and the FMA's focus on conduct, it is not surprising that the regulation of financial advice activities should also be shifting in the same direction. Client-centricity and good client outcomes are key areas for FSLAB and also the Code of Conduct for financial advice activities that will sit alongside the legislation. The twin policy objectives of FSLAB are to improve the quality of and accessibility to financial advice in New Zealand. One of the most innovative aspects of the legislation is the removal of the requirement for personalised advice to be delivered by a human adviser.

It will be interesting to see how the introduction of 'robo-advice' in New Zealand changes the provision of financial advice, and how good conduct and client-centric outcomes can be applied to an automated service. This could come quicker than we think, as FMA has released a draft exemption to allow providers to enter the market before FSLAB is passed into law.

Lastly, with regard to changing OTC derivatives margin requirements, the NZBA is working with its members and the New Zealand Financial Markets Association (NZFMA) on an issue that concerns reforms being made in G20 countries in relation to requirements to post margin for derivatives that are not centrally cleared (uncleared derivatives). During the year the RBNZ and Ministry of Business, Innovation and Employment issued a public consultation and the RBNZ is currently analysing responses with a policy decision expected early this year.[22] Additionally, the RBNZ granted the registration and operation of China Construction Bank Corporation in New Zealand as a branch. This provides further evidence that RBNZ are looking to increase the competitive forces in the market and are open to the registration of small foreign, non-systemically important banks.

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Timeline of events[23]

Jan. 2017

17th
ANZ Bank New Zealand Limited names Stewart Taylor as their new Chief Financial Officer.

19th
Heartland Bank names David Mackrell as their new Chief Financial Officer.

31st
Heartland Bank announces they will be providing a facility to fund online lender Spotcap's Australian growth plans.

Feb. 2017

7th
Grant Spencer is appointed as Acting Governor of the RBNZ to serve after the conclusion of Mr Wheeler's term until a new Governor is appointed.

14th
The first bank to launch Android pay in New Zealand is BNZ. Such technology allows anyone with an near-field communication (NFC)-enabled Android device to pay in store with a tap of their phone.

20th
The Privacy Commission rules against Westpac's argument that the bank does not need a legal order before handing over customers' personal banking details to the police. Westpac had claimed that customers voided their rights to privacy when they signed the bank's 'terms and conditions'.

22nd
Heartland Bank re-enters the mainstream mortgage market by offering services on its online platform.

Mar. 2017

10th
Kiwibank announces that Chairman Rob Morrison and Deputy Chair Rhoda Phillippo have resigned. Susan Macken, a Director of the bank, is appointed Kiwibank's new Chair, with effect from 13 April 2017.

16th
SBS Bank announces that, in April, it will launch a mobile banking app for customers.

17th
In response to customers' preferences shifting towards digital banking solutions, BNZ announces a number of branch closures and reduced hours in other branches.

22nd
After AMP and Westpac confirm that they have withdrawn investments in tobacco companies, ASB KiwiSaver remains the last major KiwiSaver provider to continue holding investments in such companies.

31st
Three of the big four Australasian banks lose a fight with Apple over Apple Pay in Australia. The ruling by the Australian Competition and Consumer Commission prevents banks from passing on Apple's fees to customers.

Apr. 2017

3rd
ANZ announces that it will introduce voice biometrics by mid-2017; it intends this measure as a further element of security to help prevent fraud.

6th
New Zealand Post sells a collective 45% of Kiwibank shares to ACC and NZ Superannuation Fund for $495 million.

7th
The Reserve Bank releases an update on its assessment of money laundering and terrorism financing risks.

26th
SBS Bank launches a mobile banking app for customers' use.

May 2017

1st
The Co-operative Bank names its General Manager of Customer Banking, David Cunningham, as its new Chief Executive.

10th
The RBNZ announces that, as the outlook for the dairy sector improves, bank lending to the agricultural sector is shrinking.

11th
At a recent Blockchain New Zealand conference, a visiting Blockchain expert posits that shutting down cryptocurrency bank accounts is not the way to deal with competitive threats.

12th
The Reserve Bank expects credit growth to slow as banks fight more aggressively for deposits to fund their expanding loan books.

30th
The Reserve Bank confirms that Kiwibank's two capital instruments no longer qualify as regulatory capital under the capital adequacy framework.

31st
When releasing the Reserve Bank's May *Financial Stability Report*, Reserve Bank Governor, Graeme Wheeler, said that New Zealand's financial system remains sound and the risks facing the system have reduced in the past six months.

Jun. 2017

7th
ANZ spends $2 million to compensate KiwiSavers for 'processing errors' as at least 51,000 members did not receive full tax credits.

SBS Bank announces a new partnership with Australian company Sandstone Technology to offer a new digital banking service.

8th
The Reserve Bank releases a consultation paper on debt to income limits.

9th
TSB Bank discloses having lent $50 million to date through peer-to-peer (P2P) lender Harmoney.

11th
According to global research firm Forrester, New Zealand banks' mobile platforms are falling behind those of their Australian counterparts.

20th
International ratings agency Moody's Investors Service downgrades the credit ratings of the four big New Zealand banks in line with downgrades of their Australian parents, citing concerns about the housing market across the Tasman as a reason for doing so.

Jul. 2017

8th
As the big four banks continue to close their doors to foreign applicants, finance companies, Chinese banks, and other non-bank lenders remain open to foreigners seeking mortgages to buy New Zealand property.

24th
SBS Bank conditionally purchases The Warehouse Group Financial Services for $18 million.

26th
The Co-operative Bank names Bevan Miller as their new Chief Financial Officer.

Aug. 2017

17th
The Hongkong and Shanghai Banking Corporation offers a two-year mortgage rate of 3.79% for premium customers. The bank states that, in more than fifty years, this rate is the lowest residential mortgage rate in New Zealand.

19th
TSB Bank purchases Fisher Funds, the fifth largest KiwiSaver operation that manages approximately $3.6 billion of investors' savings.

22nd
Kiwibank Chief Executive, Paul Brock, resigns after being with the bank for more than 17 years.

A former BNZ worker has been charged with dishonestly using bank documents to secure more than $1.5 million in home loans.

29th
The Reserve Bank appoints Sean Mills as Assistant Governor and Head of Operations.

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Sep. 2017

20th
The Reserve Bank introduces a revised outsourcing policy. The revised policy sets requirements that banks need to meet when outsourcing particular functions and services, especially if the service provider is a related party of the bank.

22nd
The FMA toughens its approach to the misuse of Financial Services Providers Register (FSPR), saying they will not only target New Zealand directors of FSPR businesses who encourage or facilitate abuse of the FSPR but also intends to hold them personally liable.

Oct. 2017

2nd
TSB Bank announces that it has rebranded itself as 'TSB'.

Barbara Chapman, ASB's Chief Executive, announces she will step down next year; she has functioned in this role since 2011.

18th
Former Prime Minister, Sir John Key, is named as Chairman of ANZ New Zealand.

23rd
Analysts note that they are wary of the impact that a cooling property market will have on banks' profits.

29th
David Hisco, ANZ's Chief Executive, says the New Zealand property market has peaked.

Nov. 2017

1st
China Construction Bank joins New Zealand Bankers' Association, thus bringing the total membership to seventeen banks.

2nd
Angela Mentis is appointed as Managing Director and Chief Executive of BNZ.

7th
The Hongkong and Shanghai Banking Corporation (HSBC) announces its withdrawal from the South Island by closing its Christchurch branch by the end of November. The Wellington office, however, will service South Island customers.

A review of the Reserve Bank is set to broaden its focus to a dual mandate by targeting the control of both inflation and employment.

8th
TSB announces that its Chief Executive, Kevin Murphy, will retire in January after almost a decade working in that role.

TSB names Murray Bain as their new acting Chief Executive Officer.

9th
Heartland Bank seeks to raise $59 million of new equity through a rights issue.

ASB's latest housing confidence survey shows that house price expectations have fallen for the fifth quarter in a row to a six-year low.

15th
Westpac's minimum regulatory capital requirements increase after Westpac failed to comply with regulatory obligations relating to its status as an internal models bank.

Rabobank announces the resignation of its Chief Executive Daryl Johnson.

20th
First NZ Capital agrees to buy ANZ's online trading platform for an undisclosed sum.

23rd
Some banks lash out at the Reserve Bank's proposed debt-to-income (DTI) ratio tool. The Co-operative Bank claims DTI is a 'blunt, unproven instrument', ANZ declares it to be 'fundamentally flawed', and HSBC says it is 'useful as indicative tool, [but] shouldn't be mandatory or decisive'.

29th
The Reserve Bank eases loan-to-value ratio (LVR) restrictions with effect from 1 January 2018.

Dec. 2017

1st
BNZ announces the appointment of Mandy Rutherford as Chief Finance Officer, effective 5 March 2018.

Kiwibank names Mark Stephen as their new acting Chief Financial Officer.

6th
Despite major upturns in dairy prices, there has been a noticeable lag in the flow through to income with farmers instead financing deferred maintenance. This has caused an increase in industry debt.

7th
While 10% of farmers in the dairy industry feel more pressure from their banks than they would like to, Federated Farmers notes that average mortgages in the agri-sector have remained stable.

11th
Adrian Orr, Chief Executive of New Zealand Superannuation Fund, is appointed as new Reserve Bank Governor from March 2018.

12th
New Zealand's first Bitcoin real-estate transaction sparks global attention.

14th
The Australian central bank considers establishing a digital currency.

15th
ASB names Vittoria Shortt as their new Chief Executive Officer.

18th
Rabobank names Todd Charteris as their new Chief Executive Officer.

21st
China Construction Bank registers to provide banking services as a branch in New Zealand.

Internal models approach for credit risk used by the big 4 banks will survive the RBNZ's capital review, but increased transparency and heightened conservatism is foreshadowed.

Jan. 2018

15th
ANZ's deal to sell UDC Finance to Chinese-owned company HNA is blocked by the Overseas Investment Office.

16th
A Treasury-commissioned Reserve Bank review finds 'strong case' for reform that would strengthen its decision making process and improve accountability.

The New Zealand dollar climbs above 73 US cents for the first time in four months following a higher euro on the back of an optimistic EU outlook.

17th
Craigs Investment Partners says that shares in Australian banks are underperforming compared to those in the rest of the market.

In the wake of an easing in home-loan restrictions, mortgage brokers point to early signs of the major banks opening their doors to more low-deposit borrowers than before.

The big four banks sell their stakes in Paymark to Paris-listed Ingenico Group for $190 million.

22nd
Heartland Bank rekindles interest in the UDC sale.

31st
Global ratings agency Standard & Poor's has affirmed New Zealand's 'AA' sovereign credit rating, saying the new government's plan to lift spending will be a bigger contributor to growth in the future, but are funded through cancelled tax cuts and won't undermine the outlook.

All 146 KiwiSaver products offered by 16 providers generated a positive return for their investors in 2017 as strong gains on equity markets with the local benchmark S&P/NZX 50 Index jumping 22%, Morningstar research shows.

Feb. 2018

2nd
Low business and consumer confidence levels, coupled with the Government's emphasis on investment into rail over roading, will see economic growth begin to taper off in early 2019, say economist Gareth Kiernan from Infometrics.

9th
Mortgage fraudster, Kang (Thomas) Huang, who dishonestly obtained $52 million of loans involving about 75 properties in Hamilton and Auckland, has been sentenced to four year and seven months in prison.

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Some of the significant management changes in the sector

This year, more than any other, we have seen the industry's leadership change. Below we have captured the change at the CEO and CFO level. We welcome those new to their role and extend our gratitude to those who have departed for their contributions to the survey. It will be interesting to see what impact, if any, these changes have on the sector.

Entity	Position	As at January 2017	Changes up to March 2018
ANZ Bank New Zealand Limited	CEO	David Hisco	
	CFO	Antonia Watson	Stewart Taylor
ASB Bank Limited	CEO	Barbara Chapman	Vittoria Shortt
	CFO	Jon Raby	
Bank of Baroda (New Zealand) Limited	Managing Director	Prahlad Das Gupta	Anupam Srivastava
Bank of China (New Zealand) Limited	CEO	David Wang	
Bank of India (New Zealand) Limited	Managing Director	Ranjitkumar Amarendra Jha	
Bank of New Zealand	CEO	Anthony Healy	Angela Mentis
	CFO	Adrieene Duarte	Mandy Rutherford
China Construction Bank (New Zealand) Limited	CEO	Li Xingyao	
Citibank, N.A. New Zealand Branch	CEO	Derek Syme	
Heartland Bank	CEO	Jeff Greenslade	
	CFO	Simon Owen	David Mackrell
Industrial and Commercial Bank of China (New Zealand) Limited	CEO	Karen Hou	
JPMorgan Chase Bank, N.A. New Zealand Branch	CEO	Mark Lawrence	
Kiwibank Limited	CEO	Paul Brock	Mark Stephen (Acting)
	CFO	Gary Crawford	
Kookmin Bank Auckland Branch	General Manager	Yong Hun Song	
Rabobank Nederland New Zealand Branch	CEO	Daryl Johnson	Todd Charteris
Southland Building Society	CEO	Shaun Drylie	
	CFO	Tim Loan	
The Bank of Tokyo-Mitsubishi UFJ Limited, Auckland Branch	General Manager	Mike Ryff	Takamitsu Murakami
The Co-operative Bank	CEO	Bruce McLauchlan	David Cunningham
	CFO	Gareth Fleming	Bevan Miller
The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch	CEO	Chris Russell	
TSB Bank Limited	CEO	Kevin Murphy	Murray Bain (Acting)*
	CFO	Roddy Bennett	
Westpac New Zealand Limited	CEO	David McLean	
	CFO	Jason Clifton	Ian Hankins (Acting)
New Zealand Super Fund	CEO	Adrian Orr	
	Chief Investment Officer	Matt Whineray	
Reserve Bank of New Zealand	Governor	Graeme Wheeler	Adrian Orr

* New CEO will be announced any day

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Sector performance

Net profit after tax

The New Zealand banking sector produced a record profit result with an overall increase in net profit after tax (NPAT) of 7.35% ($355.11 million) to $5.19 billion, was the highest in the survey's history, completely reversing last year's $316.38 million reduction. The current year's result highlights the relatively stable economy combined with continued strong loan growth and improved asset quality, albeit with a continued decrease in margin.

The increase in profitability is largely attributable to the combined impact of a $281.93 million (61.34%) reduction in impaired asset expense and a $268.66 million (10.05%) increase in non-interest income. The reduction in impaired asset expense is largely a result of an improved dairy sector credit quality and a relatively stable economy over the past twelve months. Favourable gains on financial instruments further helped by increasing non-interest income for the majority of survey participants.

The gains mentioned above were somewhat offset by an increase in operating expenses (including amortisation) of 2.50% ($127.44 million). The main contributors to this increase were Kiwibank's $90.00 million software impairment (which is discussed in more detail later) and a $38.30 million (1.42%) increase in personnel expenses. Even though banks continue to focus on containing costs and improving efficiencies as loan books continue to expand, 75% of survey participants experienced a rise in operating expenses.

Net interest income rose slightly by 1.17% ($111.53 million), which was attributable to interest expense decreasing proportionally more than the decline in interest income. Interest expense fell by 7.37% ($918.39 million), while interest income fell by 3.67% ($806.86 million).

Amongst the major banks, the big four (ANZ, BNZ, Commonwealth Bank of Australia New Zealand (CBA) and Westpac) collectively contributed $451.00 million of the growth in NPAT. Conversely, the fifth major bank (Kiwibank) reported a 57.26% ($71.00 million) decrease in NPAT which was significantly impacted by software impairment of $65 million (after tax).

The three Chinese Banks registered the most impressive NPAT growth in percentage terms, with increases of 73.63% (Bank of China), 137.94% (China Construction Bank) and 138.97% Industrial and Commercial Bank of China (ICBC).

JPMorgan Chase Bank and Southland Building Society produced the next largest NPAT percentage increases of the non-major banks of 36.92% ($1.47 million) and 37.43% ($7.48 million) respectively as fee and commission income increased for both participants, and SBS's interest expense dropped back down from a peak in 2016.

The financial performance of the survey participants can be summarised as follows:

- Net interest income grew by an additional $111.53 million (1.17%) to reach $9.66 billion;
- Non-interest income increased by 10.05% ($268.66 million) to $2.94 billion;
- Operating expenses (including amortisation) rose by 2.50% ($127.44 million) to $5.22 billion;
- Impaired asset expense reduced by 61.34% ($281.93 million) to $177.67 million;
- Tax expense grew by $179.57 million (9.76% to $2.02 billion).

Net interest margin

The banking sector saw net interest margins (NIM) fall by 9 bps from 2.17% to 2.08%, despite net interest income increasing by 1.17% ($111.53 million) for the year (see Table 3). As mentioned in a number of press releases, the decline in NIM for the banking sector was the result of volatile offshore funding costs and customer preferences shifting towards fixed rate loans. Out of the twenty survey participants, seventeen reported a decrease in their NIM this year.

All five major banks reported reductions in their NIM for the year, with CBA and Kiwibank showing an equally volatile change of 16 bps. Although the big four banks managed to increase the total net interest income by $107 million, faster growth in interest-earning assets came at the expense of a decline in NIM. ANZ continues to hold the top spot in the net income metric, recording a net income of $3.08 billion with BNZ in second place at $1.79 billion.

In 2017, Bank of China reported the largest decrease in NIM of 74 bps as net interest income rose by 75.47% ($2.27 million) while interest earning assets grew by a monumental 148.19% ($305.55 million) as the bank continues to establish a rung on the sector's ladder. Conversely, Industrial and Commercial Bank of China (ICBC) witnessed a 130 bps increase in their NIM in 2017, largely due to an astronomical increase in net interest income of 170.54% ($10.34 million), an amount which is the largest percentage increase amongst all survey participants. In continuation from 2016, Heartland has the strongest NIM of 4.45% due to the niche market in which it operates, particularly in the areas of reverse mortgages, asset financing and working capital markets.

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 & advances
2017	1.42%	7.35%	1.04%	2.08%	39.46%	0.04%
2016	6.35%	-6.58%	1.00%	2.17%	39.25%	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%

TABLE 3: MOVEMENT IN INTEREST MARGINS

Entity	2017 %	2016 %	Movement (bps)
Australia and New Zealand Banking Group Limited – New Zealand Banking Group	2.17%	2.22%	-5
Bank of Baroda (New Zealand) Limited	2.90%	3.48%	-58
Bank of China (New Zealand) Limited	1.47%	2.21%	-74
Bank of India (New Zealand) Limited	3.06%	3.67%	-61
Bank of New Zealand	2.10%	2.19%	-9
China Construction Bank (New Zealand) Limited	1.38%	1.48%	-10
Citibank, N.A. New Zealand Branch	1.69%	1.69%	0
Commonwealth Bank of Australia New Zealand Banking Group	1.98%	2.14%	-16
Heartland Bank Limited	4.45%	4.79%	-34
Industrial and Commercial Bank of China (New Zealand) Limited	2.19%	0.89%	130
JPMorgan Chase Bank, N.A. New Zealand Branch	1.25%	0.85%	40
Kiwibank Limited	1.91%	2.07%	-16
Kookmin Bank Auckland Branch	1.25%	1.24%	1
Rabobank Nederland New Zealand Banking Group	2.08%	2.30%	-22
Southland Building Society	2.49%	2.72%	-23
The Bank of Tokyo-Mitsubishi UFJ Limited – Auckland Branch	0.33%	0.37%	-4
The Co-operative Bank	2.39%	2.71%	-32
The Hongkong and Shanghai Banking Corporation Limited – New Zealand Branch	1.60%	1.85%	-25
TSB Bank Limited	2.01%	2.09%	-8
Westpac Banking Corporation New Zealand Banking Group	2.02%	2.12%	-10
Sector Average	**2.08%**	**2.17%**	**-9**

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TABLE 4: REGISTERED BANKS – ANALYSIS OF PERFORMANCE OF BANKS	New Zealand incorporated banks		New Zealand branch banks		All banks	
	2017	2016	2017	2016	2017	2016
Increase in total tangible assets	2.13%	8.26%	-0.96%	-60.15%	1.42%	6.35%
Increase in operating income	3.48%	-1.69%	-11.22%	-39.48%	3.12%	-2.13%
Increase in net profit after tax	8.66%	-6.94%	-32.97%	-31.35%	7.35%	-6.58%
Increase in gross loans and advances	5.44%	9.23%	3.59%	-39.20%	4.68%	8.04%
Net profit after tax/Average total tangible assets	1.06%	1.02%	0.77%	0.65%	1.04%	1.00%
Net profit after tax/Average equity	13.08%	12.67%	24.90%	15.95%	14.43%	13.96%
Net interest income/Average total tangible assets	2.03%	2.09%	1.14%	0.71%	1.93%	1.98%
Non-interest income/Average total tangible assets	0.56%	0.54%	0.72%	0.48%	0.59%	0.55%
Operating expenses/Average total tangible assets	1.03%	1.04%	0.84%	0.47%	0.99%	0.99%
Operating expenses/Operating income	39.79%	39.54%	44.97%	39.75%	39.46%	39.25%
Impaired asset expense/Average gross loans and advances	0.05%	0.13%	-0.02%	-0.36%	0.04%	0.12%
Collective provision/Net loans and advances	0.40%	0.43%	0.02%	0.05%	0.39%	0.41%
Total provision for doubtful debts/Gross loans and advances	0.49%	0.54%	0.04%	0.06%	0.48%	0.53%

Although 2017 did not bring with it quite as severe a drop in NIM as what occurred in 2016 (in which NIM reduced by 11 bps), the trend of decreasing yields has continued as more and more customers switch to lower margin fixed-rate loans. Many executives remarked that interest rates remain close to cyclical lows.

Non-interest income

In 2017, fifteen of the twenty survey participants reported increases in non-interest income resulting in non-interest income rising by 10.05% ($268.66 million) to reach $2.94 billion. Driving this increase was favourable valuation adjustments on financial instruments and higher trading income, which have almost completely reserved last year's 13.98% contraction in non-interest income.

The increase in non-interest income was driven by the five major banks. These banks all reported increases in non-interest income and collectively contributed $214.00 million of the $286.66 million total increase.

Of the non-major banks, Bank of China, China Construction Bank, and Rabobank achieved the highest percentage increases in non-interest income, reporting exceptional surges of 785.86%, 451.56%, and 118.77%, respectively.

These significant increases in non-interest income are due to these banks moving from negative revaluations in the 2016 survey to positive revaluations in the 2017 survey. An analysis of the financial statements of Bank of China revealed that non-interest income was powered by lending- and facility-related fee income and foreign currency exchange gains. Rabobank's financials tell a similar story. We note that, since Bank of China and China Construction Bank are relatively new registered banks, these increases are off a relatively small base.

In contrast, another Chinese owned bank ICBC, and The Bank of Tokyo-Mitsubishi recorded the largest declines (in percentage terms) in non-interest income of 222.26% and 43.75%, respectively.

ICBC's sharp decline was due to a positive result in 2016 reversing to a negative result in 2017; this downturn was driven by losses on held-for-trading derivatives.

Total assets

This year, total assets for the banking sector have continued to grow, reaching a new high of $504.19 billion. However, this growth rate of 1.42% or $7.06 billion during the year is down from the high growth rates seen in previous years of 7.03% in 2016 and 10.09% in 2015. Gross loans and advances for the sector grew by 4.68% ($18.50 billion) to $413.96 billion. This growth is relatively low compared to last year's growth of 8.12%, and 2015's growth of 7.07%. Of the twenty survey participants, five participants reported decreases in total assets including ANZ (-5.13%), Rabobank (-1.23%), and The Hongkong and Shanghai Banking Corporation (HSBC) (-9.05%). Rabobank and HSBC were the only survey participants to observe reductions in the size of their loan books.

During our interviews, Executives of the smaller banks noted that, in the first half of the year particularly, the major banks had appeared to be less competitive in the lending market. Empirical evidence supports this claim, with the major banks accounting for 82.34% of the total loan growth for the year compared to 92.24% in the prior year. The slowing lending growth in these banks' lending is likely to be driven mainly by the Australian parent banks reducing the level of funding provided to their New Zealand subsidiaries due to the changes to capital requirements as set out in the amended Australian Prudential Standards (APS) 110 *Capital Adequacy* and APS 120 *Securitisation*.

All five major banks reported increases in their loan books of between 1.05% and 7.57%. For the second year in a row, CBA recorded the largest dollar-value increase in gross loans and advances of $5.74 billion (7.57%), a result which was attributable to home loans increasing by 7% while business, commercial, and rural lending was up by 11%[24].

Following CBA, BNZ reported growth of $5.10 billion (6.81%) driven by housing and business lending. ANZ, the leader in terms of market-share, reported the most modest percentage increase (1.05% or $1.27 billion) of all the major banks and an $8.38 billion (5.13%) decrease in total assets. The decline in ANZ's total assets was not due to a change in gross loans and advances, which actually remained relatively stable, but was mainly due to a decrease in derivative assets.

With respect to the results of the smaller banks, consistent with the prior year, the Chinese banks posted the largest percentage-based increases in loan book growth as they all continue to establish a foothold in the local market by following aggressive business development strategies. China Construction Bank reported the largest percentage increase of 142.75% to bring its loan book to $745.16 million, followed by Bank of China which reported a 138.32% increase to bring its loan book value to $345.92 million. ICBC, which has been in the local market for a few years now, nevertheless still achieved a massive 84.81% increase in loans, lifting its loan book to a level of $704.38 million. Other non-major banks remarked on the intensity with which the Chinese banks have been competing.

In terms of gross loans and advances, all of the big four banks held onto their respective market share rankings. With a market share of 29.61%, ANZ continues to dominate the lending space, down from last year's 30.67%. While Westpac followed suit with a decrease of 37 bps to 18.85%, CBA and BNZ saw increases of 53 bps and 39 bps to 19.70% and 19.33%, respectively.

Funding costs

Funding costs (interest expense as a ratio of average interest-bearing liabilities) for the banking sector declined by 40 bps, decreasing from 3.22% to 2.82%, a result which is the lowest ever recorded in the history of this survey.

Of the twenty banks surveyed, sixteen reported a decrease in funding costs as interest expense for the sector reduced by 7.37% ($918.39 million), despite interest-bearing liabilities increasing by 5.96% ($23.67 billion). This year, Executives remarked on the reduction in funding costs and noted that they had observed less pressure on the funding side of the equation compared with that of previous years, particularly in the second half of the year.

Collectively, the five major banks had a $767.00 million decrease in interest expense despite increasing their interest-bearing debt by $21.52 billion. The major banks that led the charge in the falling funding costs trend were Kiwibank, Westpac, and ANZ; these banks reported decreases of 53 bps, 45 bps and 40 bps, respectively.

Our analysis of the smaller banks' results revealed a mixed bag. Some of the smaller banks, like the Chinese banks (which are ICBC, Bank of China and China Construction Bank) reported substantial increases in interest expense and interest-bearing liabilities. Bank of China's funding costs climbed higher by 155 bps as interest expense rose by an astronomical 1,253.23% ($6.22 million) on the back of sharply larger customer deposits and amounts payable to other financial institutions. The annual change in interest expense reported by the remaining minor banks was tamer than that announced by the Bank of China.

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TABLE 5: REGISTERED BANKS – NON-PERFORMING LOANS	2017	2016	2015	2014
Past due assets to gross loans and advances	0.14%	0.13%	0.19%	0.19%
Gross impaired assets to gross loans and advances	0.33%	0.37%	0.48%	0.66%
Total	**0.47%**	**0.50%**	**0.67%**	**0.85%**

Competition within the local deposit market will likely continue to intensify as banks look to pursue cheaper funding sources. However, the small size of the deposit market in New Zealand means that most banks will still need to rely on external sources of funding to some extent. Whether that funding comes from an overseas parent or from the wholesale market will depend on the individual bank's support network and may be influenced by recent changes to Australian prudential legislation, specifically for the big four banks.

Asset quality

Although the banking sector has seen strong asset growth during the year, Executives have continued to stress that asset quality will not be compromised to simply fulfil demand.

Asset quality for the sector has significantly improved as evidenced by the reduction in impaired asset expense of $281.93 million (61.34%) to $177.67 million, as ten of the survey participants reported reductions. The big four Australian banks were key drivers for this movement. They collectively reported a $336.00 million decrease in impaired asset expense, with Westpac reporting a $149 million reduction to reach a recovery of $76 million. This result was aided by a recovery in the dairy sector together with improvements in the corporate market segment.

Kiwibank reported a significant improvement, with a 154.55% ($17 million) decrease in impaired asset expense resulting in a $6 million recovery. This amount stemmed from a $10 million reduction in collective impairment, across all segments. When looking at the ratio of impaired asset expense to gross loans and advances, the sector reported a decrease of 8 bps to 0.04% (the lowest since 2007), as gross loans and advances rose by 4.68%, while impaired asset expenses reduced by 61.34%.

Total provisions as a percentage of average gross loans and advances improved over the year, with a 5 bps reduction to 0.49%. The overall improvement in asset quality for the banking sector is attributable to both specific provisioning, decreasing by 15.18% ($58.18 million) to $383.37 million; and collective provisioning, reducing by 1.45% ($23.79 million) to $1.61 billion. Westpac recorded the largest decrease in specific provisioning of $57.00 million (118.75%) making up 97.97% of the total decline in specific provisioning, as corporate specific provisions reduced by $59.00 million.

With the exception of BNZ, all the major banks reported reductions in collective provisions, contributing a total movement of $87.00 million which was offset by BNZ's $34.00 million increase in collective provisions. BNZ's increase was driven by higher provisioning in the residential mortgage and corporate books; however, we note that BNZ have early adopted NZ IFRS 9, an approach which will have had an impact on their provisioning levels. Rabobank achieved strong reductions in specific provisions of 61.24% which were offset by a $19.59 million (130.36%) increase in collective provisioning due to challenging dairy conditions experienced in the 2016 season.[25]

There is an increase in past due assets in the banking sector of 14.15% ($74.03 million) to $597.40 million. While this is still relatively low compared to historical levels, it is the first increase since 2009, and may be a lead indicator of increases in impaired assets in the future.

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TABLE 6: MAJOR BANKS – PERSONNEL COST						
Entity	2017			2016		
	Employee numbers	Personnel cost $Million	Cost/ average employees $000's	Employee numbers	Personnel cost $Million	Cost/ average employees $000's
ANZ	7,565	856	112	7,655	894	117
BNZ	4,787	493	101	5,019	476	95
CBA	4,717	509	107	4,770	502	105
Kiwibank	1,493	141	97	1,410	122	87
Westpac	4,332	482	112	4,267	465	109

Operating expenses

Investment in new technology and increased regulatory and personnel costs as loan books continue to grow led to a slight increase in the banking sector's cost to income (operating expenses versus operating income) ratio.

In 2017, the cost to income ratio increased by 21 bps from 39.25% to 39.46%. Overall, the sector enjoyed a 3.12% ($381.04 million) increase in operating income. Nearly three-quarters of this hike can be attributed to the $268.66 million (10.05%) increase in non-interest income. Conversely, operating expenses grew by 3.68% ($176.32 million), of which a significant part correlate with Kiwibank's $90.00 million impairment loss relating to the information technology (IT) modernisation project known as CoreMod. In a press release, the state-owned bank said that, due to rapidly changing technology and customers' preferences shifting towards digital banking experiences, a review of the CoreMod project is currently underway and that "while this review is being completed, a decision has been made to impair the value of the work in progress which currently sits on the balance sheet as an intangible asset."[26, 27]

Personnel expenses also grew by 1.42% ($38.30 million), thus contributing to the relatively high increase in operating expenses.

Of the twenty survey participants, eight participants recorded an increase in their cost to income ratio. Kiwibank reported the largest increase of all survey participants of 2,370 bps as operating expense rose by 45.68% ($127.00 million). This increase was largely driven by the impairment discussed earlier while operating income rose proportionally less by 3.56% ($17.00 million). On the contrary, ANZ announced a 286 bps (38.44% to 35.58%) decrease in their operating expense ratio; they noted that this decline was due to their "strong team discipline, high productivity and digital push"[28], efforts which have ultimately decreased operating expenses (by 4.25%) while conserving customer satisfaction.

CBA also reported a decrease in its operating expense ratio, as operating income rose by 3.10% with operating expenses remaining relatively flat with an increase of 0.25%. The big four banks continue to hold some of the lowest operating expense ratios in the industry, ranging from 34.70% (CBA) to 38.91% (Westpac).

Rabobank and The Bank of Tokyo-Mitsubishi recorded the best operating expense ratios for the non-major banks at 38.17% and 18.01%, respectively. The impressive operating expense ratio realised by Rabobank is driven by the non-interest income increase of $62.58 million, with a predominantly recognised revaluation of hedging instruments. The Bank of Tokyo-Mitsubishi continues to rely on its corporate-heavy client base (who generate larger loans than retail clients) while also allowing the bank to keep spending low.

The evolving technology required for banks to stay competitive in a digital market has affected the industry players in either two ways. Firstly, with an increased level of cost developing the new technology required to compete in the digital market; and secondly, the efficiencies gained from the lower variable costs involved in servicing the customer through the digital platforms.

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TABLE 7: MAJOR BANKS – FUNDS MANAGEMENT ACTIVITIES

Entity	2017 $Million	2016–2017 Movement %	2016 $Million
ANZ	28,490	7.57%	26,485
BNZ	5,791	22.64%	4,722
CBA	10,730	20.33%	8,917
Kiwibank	6,373	4.85%	6,078
Westpac	11,979	11.27%	10,766
Total	**63,363**	**11.23%**	**56,968**

Return on equity/Return on assets

The banking sector has enjoyed growth in its return on equity (ROE) in 2017 of 46 bps to 14.43%, thus bouncing back from 2016's drop of 2.00%. Both CBA and ANZ increased their ROE by 228 bps and 184 bps, respectively. ANZ's press release mentioned that "the strength in some parts of the economy also meant fewer bad loans"[28], a development which then resulted in a reduction in impairment expense and provisioning levels. Whilst Westpac had a reduction of 31 bps, three out of the biggest four banks experienced growth in their ROE. Notably, HSBC and Kookmin Bank achieved the largest ROE ratios of 116.60% and 103.99% as both banks hold the lowest equity levels of all survey participants, noting that these banks are overseas branches rather than locally incorporated subsidiaries, and are thus not required to hold capital.

In 2017, the return on assets (ROA) ratio for the sector increased by 3 bps to 1.04% off the back of a decrease of 16 bps in 2016.

The growth in ROE and ROA levels is largely the result of NPAT increasing by 7.35% ($335.11 million), while total equity and assets grew proportionally less at 3.17% ($1.12 billion) and 1.42%($7.06 billion) respectively. Going forward, Executives have noted that emphasis will be placed on continuing the improvement of the ROE and ROA by working to continue to clean up loan books and contain costs.

Funds under management

The funds under management (FUM) of the major banks remained strong, increasing by 11.23% ($6.40 billion) to $63.36 billion (see Table 7).

Both BNZ and CBA continued to show the largest growth in FUM of 22.64% ($1.07 billion) and 20.33% ($1.81 billion), respectively.

ANZ still dominates the FUM subsector, and further increased their managed funds by $2.01 billion to reach $28.49 billion this year. The key driver of the growth was attributed to ANZ's own KiwiSaver fund, a fund which contributed $1.75 billion in FUM growth.

Westpac's FUM also grew by a healthy 11.27% ($1.21 billion) as the bank's retirement plans and its Term PIE Fund grew by $840 million and $381 million, respectively.

Capital adequacy ratio

In 2017, twelve survey participants reported increases in their total capital, and eleven banks reported increases in their Tier 1 capital ratios. While the Chinese and Indian banks continue to establish a firmer footing in the sector than they previously had, leverage and liabilities will grow as loan books grow. As expected, the Indian banks, Bank of Baroda and Bank of India reported the largest reductions in their total capital ratios of 1,699 bps (to 77.21%) and 1,200 bps (to 58%), respectively. Despite these decreases, Bank of Baroda and Bank of India continue to have the highest total capital adequacy ratios. The reductions of the capital ratios are driven by the banks continuing to lend out more of their capital base.

Of the total capital ratios of the major banks, CBA was the only bank to report a reduction of 10 bps (to 14.20%), while BNZ and Westpac saw the largest increases of 132 bps (to 13.36%) and 170 bps (to 14.80%). Both ANZ and Kiwibank noted increases of 50 bps to 14.80% and 13.40%, respectively.

New Zealand banks are still well capitalised, as we expected. As at 30 September 2017, RBNZ data shows that the locally incorporated banks common equity tier 1 (CET 1) capital ratio was 11.0%, and the Tier 1 capital ratio was 13.26%, both figures being well above the minimum requirements of 4.5% for CET 1 and 6% for Tier 1[29].

Over the past year, we have seen some media attention around banks' capital adequacy ratios, specifically in relation to Kiwibank and Westpac. After scrutinising Kiwibank during the year, the RBNZ decided $250 million worth of bonds issued by the bank did not qualify as capital, with the subsequent adjustment impacting the bank's capital adequacy ratios. After the bank made changes to address the RBNZ's concerns, the regulator issued a non-objection letter about the bonds. On the other hand, Westpac encountered some problems in relation to its capital modelling which resulted in the bank breaching its conditions of registration and the RBNZ embarking on an independent review of Westpac's capital modelling. How to deal with these types of scenarios is discussed later in an article from Ceri Horwill, a KPMG Advisory Partner, on page 54.

Despite this recent activity by the local regulator, when comparing the capital requirements imposed by the RBNZ to those imposed on Australian banks by the Australian Prudential Regulation Authority (APRA), the New Zealand capital ratios would be even higher if the calculations imposed by APRA were used showing the capital position of the New Zealand banks is even stronger when compared globally at face value.

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Analysis of annual results

Analysis of financial statements					Size & strength measures									Growth measures		
Entity	Location of head office	Balance date	Survey year	Rank by total assets	Total assets* $Million	Net assets $Million	Total capital adequacy ratio %	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 %
Australia and New Zealand Banking Group Limited – New Zealand Banking Group	Wellington	30-Sep	2017	1	154,977	8,105	14.80	12.60	122,400	94,751	7,565	191	655	15.43	12.69	-5.13
		30-Sep	2016	1	163,358	7,819	14.30	11.80	121,129	89,768	7,655	215	666	-12.93	-10.19	7.35
Bank of Baroda (New Zealand) Limited	Auckland	31-Mar	2017	20	103	46	77.21	77.21	70	56	19	3	3	-34.48	-4.35	12.37
		31-Mar	2016	20	92	45	94.20	94.20	64	44	19	3	3	68.89	94.96	18.56
Bank of China (New Zealand) Limited	Auckland	31-Dec	2017	17	515	55	12.74	12.74	346	214	36	0	0	73.63	73.53	146.95
		31-Dec	2016	18	208	56	34.87	34.87	145	35	27	0	0	-655.08	-755.08	205.76
Bank of India (New Zealand) Limited	Auckland	31-Mar	2017	19	121	53	58.00	58.00	88	24	12	3	0	23.72	24.37	18.96
		31-Mar	2016	19	101	52	70.00	70.00	74	19	12	3	0	20.06	20.00	18.23
Bank of New Zealand	Auckland	30-Sep	2017	3	95,038	6,664	13.36	12.41	79,920	56,131	4,787	160	548	2.63	3.84	2.94
		30-Sep	2016	3	92,325	6,789	12.04	10.54	74,823	51,481	5,019	171	479	-12.04	-12.20	6.58
China Construction Bank (New Zealand) Limited	Auckland	31-Dec	2017	15	888	196	24.30	23.00	745	139	38	0	0	137.94	109.15	120.86
		31-Dec	2016	17	402	53	14.00	14.00	307	97	32	0	0	-571.00	-572.97	335.24
Citibank, N.A. New Zealand Branch	Auckland	31-Dec	2017	13	2,065	195	14.25	12.99	811	840	29	1	0	-2.46	-2.92	4.62
		31-Dec	2016	13	1,974	195	15.44	14.17	755	1,064	29	1	0	-5.44	-3.91	-0.30
Commonwealth Bank of Australia New Zealand Banking Group	Auckland	30-Jun	2017	4	92,505	4,679	14.20	12.10	81,494	54,713	4,717	124	440	10.24	9.97	7.81
		30-Jun	2016	4	85,804	5,174	14.30	12.30	75,757	50,892	4,770	134	431	4.25	4.57	6.90
Heartland Bank Limited	Auckland	30-Jun	2017	9	3,990	524	13.56	13.15	3,563	2,574	401	7	0	12.27	15.36	13.92
		30-Jun	2016	9	3,502	453	13.78	13.79	3,130	2,283	363	7	0	32.25	32.35	26.05
Industrial and Commercial Bank of China (New Zealand) Limited	Auckland	31-Dec	2017	14	904	140	19.18	19.18	704	150	54	1	0	138.97	162.17	21.81
		31-Dec	2016	15	742	54	12.69	12.69	381	127	37	1	0	0.64	-0.82	10.63
JPMorgan Chase Bank, N.A. New Zealand Branch	Wellington	31-Dec	2017	16	845	0	14.62	14.20	101	236	15	0	0	36.92	34.28	-4.33
		31-Dec	2016	14	883	0	14.12	13.54	93	193	11	0	0	-37.50	-34.65	-13.04
Kiwibank Limited	Wellington	30-Jun	2017	5	20,616	1,380	13.40	12.30	17,849	15,904	1,493	253	237	-57.26	-49.47	6.50
		30-Jun	2016	5	19,357	1,129	12.90	10.70	16,733	14,743	1,410	258	241	-2.36	-4.08	5.52
Kookmin Bank Auckland Branch	Auckland	31-Dec	2017	18	394	3	16.32	14.83	169	190	14	1	0	11.11	10.92	-12.49
		31-Dec	2016	16	450	3	16.01	13.74	122	207	13	1	0	-24.36	-24.78	20.19
Rabobank Nederland New Zealand Banking Group	Wellington	31-Dec	2017	6	14,306	1,598	25.00	17.60	10,559	4,981	320	33	0	6.05	7.55	-1.23
		31-Dec	2016	6	14,485	1,480	23.20	16.40	10,642	4,767	319	33	0	-24.77	-23.87	6.86
Southland Building Society	Invercargill	31-Mar	2017	10	3,987	268	12.56	11.74	3,429	2,945	480	16	0	37.43	32.18	17.02
		31-Mar	2016	10	3,408	235	13.76	12.50	2,889	2,703	447	16	0	2.76	0.32	19.13
The Bank of Tokyo-Mitsubishi UFJ Limited – Auckland Branch	Auckland	31-Mar	2017	11	3,560	143	15.28	12.70	3,113	219	17	1	0	-31.88	-34.39	12.36
		31-Mar	2016	11	3,169	125	15.66	12.71	2,818	484	17	1	0	5,398.68	777.25	4.96
The Co-operative Bank	Wellington	31-Mar	2017	12	2,363	171	16.90	14.00	2,107	2,035	313	34	0	0.74	10.52	15.80
		31-Mar	2016	12	2,041	157	15.80	15.70	1,807	1,788	311	34	0	15.52	20.83	13.01
The Hongkong and Shanghai Banking Corporation Limited – New Zealand Branch	Auckland	31-Dec	2017	8	5,071	10	19.00	17.20	3,448	3,118	214	1	0	-45.29	-44.96	-9.05
		31-Dec	2016	8	5,575	39	18.60	16.60	3,589	3,252	217	1	0	27.36	26.80	5.35
TSB Bank Limited	New Plymouth	31-Mar	2017	7	6,803	588	14.60	14.60	4,680	6,157	440	26	40	-24.73	-23.80	5.84
		31-Mar	2016	7	6,427	554	14.52	14.52	3,848	5,813	388	26	45	141.26	152.81	8.71
Westpac Banking Corporation New Zealand Banking Group	Auckland	30-Sep	2017	2	95,141	7,306	14.80	12.70	77,983	58,405	4,332	169	611	9.97	10.71	2.49
		30-Sep	2016	2	92,833	6,512	13.10	11.20	75,912	57,541	4,267	189	620	-4.27	-5.15	5.09
Bank Sector Total			**2017**		**504,192**	**32,124**	**n/a**	**n/a**	**413,579**	**303,782**	**25,296**	**1,024**	**2,534**	**7.35**	**6.99**	**1.42**
			2016		**497,136**	**30,925**	**n/a**	**n/a**	**395,020**	**287,303**	**25,363**	**1,094**	**2,485**	**-6.58**	**-5.74**	**6.35**

* Total Assets = Total Assets - Goodwill - Other Intangibles

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Analysis of annual results

Analysis of financial statements		Credit quality measures							Profitability measures										Efficiency 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 %	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 %
Australia and New Zealand Banking Group Limited – New Zealand Banking Group	2017	60	205	361	42.66	0.35	0.48	0.05	3,994	1.93	2.17	1.84	0.58	1,780	15.84	1.12	2,513	1.58	0.89	35.58
	2016	*147*	*152*	*433*	*35.57*	*0.39*	*0.52*	*0.12*	*3,861*	*1.92*	*2.22*	*1.85*	*0.53*	*1,542*	*14.00*	*0.98*	*2,230*	*1.41*	*0.94*	*38.44*
Bank of Baroda (New Zealand) Limited	2017	0	0	0	0.00	0.41	0.41	0.04	4	2.81	2.90	1.63	1.81	1	2.00	0.94	1	1.33	3.26	70.60
	2016	*0*	*0*	*0*	*100.00*	*0.41*	*0.58*	*0.11*	*4*	*3.35*	*3.48*	*1.32*	*1.89*	*1*	*3.14*	*1.65*	*1*	*1.60*	*3.56*	*67.91*
Bank of China (New Zealand) Limited	2017	1	0	0	0.00	0.27	0.27	0.20	9	1.46	1.47	1.09	0.95	-2	-2.93	-0.45	-2	-0.51	2.79	115.45
	2016	*0*	*0*	*0*	*0.00*	*0.30*	*0.30*	*0.60*	*3*	*2.18*	*2.21*	*1.87*	*-0.36*	*-6*	*-10.38*	*-4.46*	*-7*	*-5.05*	*6.55*	*361.27*
Bank of India (New Zealand) Limited	2017	0	0	0	0.00	0.39	0.39	0.05	4	3.00	3.06	1.06	0.52	1	1.74	0.83	1	1.16	2.32	65.97
	2016	*0*	*0*	*0*	*0.00*	*0.41*	*0.41*	*0.07*	*4*	*3.60*	*3.67*	*1.18*	*0.52*	*1*	*1.43*	*0.79*	*1*	*1.11*	*2.96*	*71.78*
Bank of New Zealand	2017	83	150	250	40.80	0.60	0.73	0.11	2,315	1.91	2.10	1.78	0.56	937	13.44	1.00	1,353	1.44	0.94	37.97
	2016	*120*	*173*	*253*	*39.53*	*0.59*	*0.73*	*0.17*	*2,269*	*1.96*	*2.19*	*1.79*	*0.57*	*913*	*13.00*	*1.02*	*1,303*	*1.46*	*0.95*	*37.29*
China Construction Bank (New Zealand) Limited	2017	0	0	0	0.00	0.10	0.10	0.08	11	1.37	1.38	0.85	0.26	2	1.45	0.28	0	0.07	1.50	91.71
	2016	*0*	*0*	*0*	*0.00*	*0.10*	*0.10*	*0.20*	*3*	*1.46*	*1.48*	*1.03*	*-0.19*	*-5*	*-8.54*	*-1.92*	*-5*	*-1.91*	*3.06*	*241.57*
Citibank, N.A. New Zealand Branch	2017	0	0	0	0.00	0.00	0.00	0.00	47	1.67	1.69	1.54	0.67	19	10.00	0.96	27	1.34	1.00	42.67
	2016	*0*	*0*	*0*	*0.00*	*0.00*	*0.00*	*0.00*	*47*	*1.67*	*1.69*	*1.44*	*0.71*	*20*	*10.22*	*1.01*	*28*	*1.41*	*0.98*	*40.91*
Commonwealth Bank of Australia New Zealand Banking Group	2017	66	96	384	14.32	0.32	0.39	0.08	2,297	1.94	1.98	1.64	0.64	1,001	19.07	1.12	1,434	1.61	0.89	34.70
	2016	*129*	*77*	*430*	*13.02*	*0.35*	*0.42*	*0.18*	*2,228*	*2.07*	*2.14*	*1.76*	*0.61*	*908*	*16.79*	*1.09*	*1,304*	*1.57*	*0.96*	*35.68*
Heartland Bank Limited	2017	15	36	25	34.06	0.49	0.72	0.45	169	4.35	4.45	4.00	0.17	61	11.39	1.62	84	2.24	1.89	41.70
	2016	*14*	*22*	*37*	*13.23*	*0.52*	*0.67*	*0.49*	*155*	*4.67*	*4.79*	*4.26*	*0.26*	*54*	*12.44*	*1.72*	*73*	*2.31*	*2.19*	*44.41*
Industrial and Commercial Bank of China (New Zealand) Limited	2017	3	0	0	0.00	0.58	0.58	0.52	16	1.99	2.19	1.95	-0.10	1	1.18	0.14	2	0.22	1.33	70.16
	2016	*1*	*0*	*0*	*0.00*	*0.33*	*0.33*	*0.33*	*7*	*0.86*	*0.89*	*0.76*	*0.09*	*-3*	*-5.30*	*-0.42*	*-3*	*-0.42*	*1.26*	*132.47*
JPMorgan Chase Bank, N.A. New Zealand Branch	2017	0	0	0	0.00	0.00	0.00	0.00	21	0.69	1.25	1.12	1.74	5	n/a	0.63	8	0.91	1.52	62.39
	2016	*0*	*0*	*0*	*0.00*	*0.00*	*0.00*	*0.00*	*17*	*0.57*	*0.85*	*0.72*	*1.23*	*4*	*n/a*	*0.42*	*6*	*0.62*	*1.18*	*65.62*
Kiwibank Limited	2017	-6	7	12	50.00	0.19	0.22	-0.03	494	1.84	1.91	1.50	0.63	53	4.22	0.27	95	0.48	2.03	81.98
	2016	*11*	*7*	*15*	*60.00*	*0.26*	*0.32*	*0.07*	*477*	*1.98*	*2.07*	*1.62*	*0.55*	*124*	*11.47*	*0.66*	*188*	*1.00*	*1.47*	*58.28*
Kookmin Bank Auckland Branch	2017	0	0	0	0.00	0.19	0.19	-0.13	7	1.24	1.25	1.24	0.53	3	103.99	0.76	5	1.07	0.75	42.27
	2016	*0*	*0*	*0*	*0.00*	*0.43*	*0.43*	*-0.03*	*7*	*1.24*	*1.24*	*1.23*	*0.52*	*3*	*80.08*	*0.70*	*4*	*0.98*	*0.78*	*44.35*
Rabobank Nederland New Zealand Banking Group	2017	16	8	131	3.25	0.33	0.37	0.16	306	2.06	2.08	1.76	0.07	118	7.65	0.82	173	1.20	0.81	38.17
	2016	*-6*	*25*	*49*	*14.01*	*0.14*	*0.21*	*-0.06*	*266*	*2.27*	*2.30*	*1.96*	*-0.38*	*111*	*7.88*	*0.79*	*161*	*1.14*	*0.79*	*41.92*
Southland Building Society	2017	11	2	8	37.76	0.53	0.62	0.34	123	2.45	2.49	2.26	0.89	27	10.66	0.74	37	1.01	2.03	60.93
	2016	*13*	*3*	*9*	*30.35*	*0.57*	*0.66*	*0.50*	*114*	*2.68*	*2.72*	*2.40*	*0.97*	*20*	*8.26*	*0.64*	*28*	*0.90*	*2.33*	*63.70*
The Bank of Tokyo-Mitsubishi UFJ Limited – Auckland Branch	2017	0	0	0	0.00	0.00	0.00	0.00	24	0.32	0.33	0.28	0.38	18	13.48	0.54	19	0.58	0.13	18.01
	2016	*0*	*0*	*0*	*0.00*	*0.00*	*0.00*	*0.00*	*34*	*0.36*	*0.37*	*0.31*	*0.74*	*26*	*23.70*	*0.86*	*30*	*0.96*	*0.14*	*12.59*
The Co-operative Bank	2017	2	6	2	30.35	0.18	0.20	0.11	73	2.36	2.39	1.97	0.95	10	6.31	0.47	18	0.81	2.40	72.46
	2016	*1*	*6*	*2*	*30.27*	*0.18*	*0.21*	*0.08*	*71*	*2.68*	*2.71*	*2.22*	*1.01*	*10*	*6.68*	*0.53*	*16*	*0.84*	*2.77*	*75.22*
The Hongkong and Shanghai Banking Corporation Limited – New Zealand Branch	2017	-1	0	3	40.52	0.04	0.07	-0.04	124	1.52	1.60	1.50	0.81	46	116.60	0.87	66	1.23	1.12	48.22
	2016	*-35*	*0*	*4*	*24.69*	*0.08*	*0.11*	*-0.95*	*146*	*1.75*	*1.85*	*1.70*	*0.94*	*85*	*172.20*	*1.56*	*119*	*2.20*	*1.14*	*42.42*
TSB Bank Limited	2017	4	8	9	12.76	0.47	0.50	0.09	149	1.99	2.01	1.64	0.26	46	8.11	0.70	66	0.99	1.20	53.23
	2016	*-9*	*3*	*10*	*14.36*	*0.47*	*0.50*	*-0.24*	*144*	*2.07*	*2.09*	*1.63*	*0.26*	*62*	*11.70*	*1.00*	*86*	*1.39*	*1.08*	*46.25*
Westpac Banking Corporation New Zealand Banking Group	2017	-76	80	173	27.75	0.39	0.45	-0.10	2,413	1.90	2.02	1.61	0.66	1,059	14.25	1.13	1,550	1.65	1.00	38.91
	2016	*73*	*56*	*222*	*47.30*	*0.43*	*0.57*	*0.10*	*2,362*	*1.96*	*2.12*	*1.64*	*0.65*	*963*	*14.56*	*1.06*	*1,400*	*1.55*	*0.98*	*37.64*
Bank Sector Total	**2017**	**178**	**597**	**1,357**	**28.25**	**0.39**	**0.48**	**0.04**	**12,600**	**1.93**	**2.08**	**1.73**	**0.59**	**5,188**	**14.43**	**1.04**	**7,450**	**1.49**	**0.99**	**39.46**
	2016	***460***	***523***	***1,464***	***30.16***	***0.41***	***0.53***	***0.12***	***12,219***	***1.98***	***2.17***	***1.78***	***0.55***	***4,833***	***13.96***	***1.00***	***6,963***	***1.44***	***0.99***	***39.25***

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

n/a = not available

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Analysis of annual results

Balance sheet breakdown		Assets ($Million)									Liabilities ($Million)								Equity ($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	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
2017																								
Australia and New Zealand Banking Group Limited – New Zealand Banking Group	30-Sep	4,114	14,146	7,251	121,968	2,722	367	3,275	4,342	**158,185**	94,751	2,192	27,999	7,341	9,587	2,375	2,627	**146,872**	8,044	11	146,872	48	3,210	**11,313**
Bank of Baroda (New Zealand) Limited	31-Mar	26	0	0	70	5	0	0	1	**103**	56	0	0	0	1	0	0	**57**	40	0	57	40	6	**46**
Bank of China (New Zealand) Limited	31-Dec	166	0	0	345	0	1	0	3	**515**	214	25	0	0	215	0	5	**460**	63	5	460	63	-9	**55**
Bank of India (New Zealand) Limited	31-Mar	30	0	0	87	2	1	0	0	**121**	24	0	0	0	43	0	1	**67**	50	0	67	50	3	**53**
Bank of New Zealand	30-Sep	4,453	5,778	3,805	79,441	677	173	277	711	**95,315**	56,131	1,594	23,938	3,219	1,799	544	1,149	**88,374**	2,351	1,075	88,374	52	4,538	**6,941**
China Construction Bank (New Zealand) Limited	31-Dec	132	0	5	744	2	2	0	2	**888**	139	28	293	5	226	0	1	**692**	199	1	692	0	-4	**196**
Citibank, N.A. New Zealand Branch	31-Dec	531	0	0	811	208	1	0	515	**2,065**	840	4	0	0	1,021	0	5	**1,871**	29	33	1,871	0	132	**195**
Commonwealth Bank of Australia New Zealand Banking Group	30-Jun	3,085	6,003	856	81,232	613	186	453	400	**92,828**	54,713	416	21,273	1,251	2,294	7,181	698	**87,826**	667	462	87,826	461	3,412	**5,002**
Heartland Bank Limited	30-Jun	57	319	0	3,546	0	8	71	34	**4,035**	2,574	0	856	3	0	0	32	**3,465**	473	22	3,465	-1	98	**570**
Industrial and Commercial Bank of China (New Zealand) Limited	31-Dec	159	41	0	700	0	1	0	3	**904**	150	0	137	0	467	0	8	**763**	145	8	763	-5	0	**140**
JPMorgan Chase Bank, N.A. New Zealand Branch	31-Dec	214	161	0	101	102	0	1	267	**846**	236	0	71	0	184	0	354	**846**	3	352	846	0	0	**0**
Kiwibank Limited	30-Jun	692	1,474	370	17,815	80	28	97	60	**20,616**	15,904	59	2,258	416	91	405	103	**19,236**	737	94	19,236	-8	651	**1,380**
Kookmin Bank Auckland Branch	31-Dec	7	0	0	168	218	0	0	0	**394**	190	58	0	0	141	0	1	**390**	0	3	390	0	3	**3**
Rabobank Nederland New Zealand Banking Group	31-Dec	518	724	13	10,524	2,495	5	0	27	**14,306**	4,981	0	2,652	34	5,027	0	14	**12,708**	551	232	12,708	1	815	**1,598**
Southland Building Society	31-Mar	101	418	5	3,411	4	21	7	29	**3,994**	2,945	401	259	27	0	39	49	**3,719**	2	47	3,719	-2	277	**275**
The Bank of Tokyo-Mitsubishi UFJ Limited – Auckland Branch	31-Mar	298	26	12	3,113	77	0	0	34	**3,560**	219	0	0	11	3,167	0	20	**3,418**	0	83	3,418	0	59	**143**
The Co-operative Bank	31-Mar	225	6	3	2,103	0	6	15	5	**2,364**	2,035	0	134	8	0	0	17	**2,193**	1	16	2,193	-1	172	**171**
The Hongkong and Shanghai Banking Corporation Limited – New Zealand Branch	31-Dec	606	487	117	3,447	391	2	15	22	**5,086**	3,118	232	331	44	1,293	0	42	**5,061**	3	23	5,061	2	23	**25**
TSB Bank Limited	31-Mar	144	1,970	0	4,658	0	18	8	4	**6,803**	6,157	0	0	8	0	0	49	**6,215**	10	40	6,215	12	566	**588**
Westpac Banking Corporation New Zealand Banking Group	30-Sep	2,232	8,036	3,420	77,681	2,623	146	665	863	**95,666**	58,405	1,043	17,322	3,475	3,646	2,822	1,122	**87,835**	143	2,040	87,835	-64	5,712	**7,831**
Bank Sector Total		**17,791**	**39,588**	**15,857**	**411,966**	**10,219**	**965**	**4,885**	**7,321**	**508,592**	**303,782**	**6,052**	**97,522**	**15,843**	**29,204**	**13,366**	**6,299**	**472,068**	**13,512**	**4,548**	**472,068**	**648**	**19,665**	**36,524**

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Analysis of annual results

Balance sheet breakdown		Assets ($Million)									Liabilities ($Million)								Equity ($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	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
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**	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**
Bank of Baroda (New Zealand) Limited	31-Mar	22	0	0	64	3	0	0	1	**92**	44	0	0	0	2	0	0	**47**	40	0	0	0	5	**45**
Bank of China (New Zealand) Limited	31-Dec	61	0	0	145	0	1	0	1	**208**	35	25	0	1	88	0	3	**152**	63	0	0	0	-7	**56**
Bank of India (New Zealand) Limited	31-Mar	22	0	0	74	4	1	0	0	**101**	19	0	0	0	29	0	1	**49**	50	0	0	0	2	**52**
Bank of New Zealand	30-Sep	4,098	4,703	7,319	74,378	934	165	216	728	**92,541**	51,481	1,244	22,753	7,786	814	542	916	**85,536**	2,351	0	200	115	4,339	**7,005**
China Construction Bank (New Zealand) Limited	31-Dec	85	0	1	307	7	2	0	0	**402**	97	15	125	2	110	0	1	**349**	59	0	0	0	-5	**53**
Citibank, N.A. New Zealand Branch	31-Dec	524	0	0	755	117	1	0	578	**1,974**	1,064	23	0	0	684	0	7	**1,779**	29	34	0	0	133	**195**
Commonwealth Bank of Australia New Zealand Banking Group	30-Jun	2,110	5,529	1,275	75,492	677	187	449	408	**86,127**	50,892	452	18,527	1,741	3,265	5,134	619	**80,630**	704	462	1,034	448	2,849	**5,497**
Heartland Bank Limited	30-Jun	84	236	0	3,114	4,903	9	58	46	**3,547**	2,283	2,053	717	6	13,614	2,336	43	**3,049**	421	1,296	155,539	-2	79	**498**
Industrial and Commercial Bank of China (New Zealand) Limited	31-Dec	353	5	1	380	3	1	0	2	**742**	127	0	85	9	461	0	5	**687**	60	0	47	-6	0	**54**
JPMorgan Chase Bank, N.A. New Zealand Branch	31-Dec	118	258	0	93	177	0	1	237	**884**	193	25	224	1	54	0	412	**884**	0	3	152	63	0	**0**
Kiwibank Limited	30-Jun	756	955	658	16,689	77	23	158	41	**19,357**	14,743	135	2,207	725	43	258	117	**18,228**	400	1	49	113	616	**1,129**
Kookmin Bank Auckland Branch	31-Dec	22	4,703	7,319	121	306	0	216	0	**450**	207	117	22,753	7,786	122	542	1	**447**	35	3	85,536	2,351	0	**3**
Rabobank Nederland New Zealand Banking Group	31-Dec	293	645	22	10,627	2,839	5	0	53	**14,485**	4,767	15	3,120	27	5,023	0	68	**13,005**	551	204	349	0	725	**1,480**
Southland Building Society	31-Mar	77	401	4	2,873	2	24	5	28	**3,412**	2,703	150	199	42	684	39	39	**3,172**	0	7	1,779	-13	253	**240**
The Bank of Tokyo-Mitsubishi UFJ Limited – Auckland Branch	31-Mar	227	27	11	2,818	66	0	449	19	**3,169**	484	452	18,527	9	2,549	5,134	1	**3,044**	51	83	80,630	1	41	**125**
The Co-operative Bank	31-Mar	198	9	4	1,804	0	8	13	6	**2,041**	1,788	0	65	15	0	0	16	**1,884**	7	36	3,049	-5	162	**157**
The Hongkong and Shanghai Banking Corporation Limited – New Zealand Branch	31-Dec	353	447	208	3,586	961	1	16	18	**5,591**	3,252	186	844	105	1,106	0	44	**5,537**	0	54	687	1	0	**54**
TSB Bank Limited	31-Mar	118	2,449	0	3,830	177	19	4	7	**6,427**	5,813	0	224	11	54	0	49	**5,873**	10	411	884	15	530	**554**
Westpac Banking Corporation New Zealand Banking Group	30-Sep	2,316	7,834	4,838	75,582	1,218	161	650	759	**93,358**	57,541	616	15,977	6,236	3,525	1,091	1,335	**86,321**	143	1,913	18,228	-105	5,086	**7,037**
Bank Sector Total		**16,364**	**43,159**	**38,294**	**393,383**	**17,374**	**997**	**5,658**	**4,156**	**501,614**	**287,303**	**7,560**	**135,553**	**41,598**	**45,843**	**17,412**	**5,142**	**466,211**	**13,018**	**4,518**	**348,163**	**3,037**	**17,857**	**35,403**

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Major banks - Quarterly analysis

Entity	Size & strength measures							
	31 Dec 15	31 Mar 16	30 Jun 16	30 Sep 16	31 Dec 16	31 Mar 17	30 Jun 17	30 Sep 17
Total assets[34] ($Million)								
ANZ	152,289	160,801	163,538	163,282	159,861	157,717	160,788	154,910
BNZ[30]	86,819	89,913	91,906	92,325	93,906	93,775	95,063	95,038
CBA[31]	81,785	86,012	85,678	88,764	90,827	91,625	92,375	92,344
Heartland Bank	3,290	3,334	3,489	3,595	3,755	3,829	3,963	4,151
Kiwibank	18,858	19,227	19,199	19,372	19,834	20,247	20,519	20,364
SBS Bank	3,286	3,408	3,506	3,543	3,740	3,987	4,053	4,229
The Co-operative Bank	1,971	2,029	2,109	2,179	2,257	2,349	2,434	2,512
TSB Bank[32]	6,299	6,424	6,475	6,522	6,629	6,794	6,949	7,062
Westpac	88,416	90,309	91,518	92,708	95,903	91,883	93,564	95,001
Total	**443,014**	**461,455**	**467,418**	**472,291**	**476,711**	**472,206**	**479,709**	**475,612**
Increase in gross loans and advances (%)								
ANZ	1.51	1.47	1.94	0.43	0.99	0.90	0.93	0.64
BNZ[30]	2.35	2.24	1.80	2.46	2.08	1.19	1.86	1.09
CBA[31]	2.53	1.87	2.38	3.43	1.58	1.06	1.37	0.82
Heartland Bank	22.19	3.02	3.29	4.01	2.93	3.62	2.64	3.78
Kiwibank	2.51	0.53	1.55	1.74	2.59	2.25	-0.08	0.21
SBS Bank	2.04	2.67	3.19	3.15	6.06	5.10	3.45	4.53
The Co-operative Bank	4.23	2.87	4.01	4.97	3.69	3.00	3.25	2.00
TSB Bank[32]	4.57	2.80	3.26	5.32	6.70	4.79	2.97	4.16
Westpac	1.38	2.22	2.88	1.86	0.71	1.03	0.69	0.20
Average	**2.09**	**1.85**	**2.22**	**1.91**	**1.48**	**1.19**	**1.18**	**0.77**
Capital adequacy (%)								
ANZ[33]	13.30	13.70	14.40	14.30	14.00	14.50	14.20	14.80
BNZ[30]	13.26	12.58	12.48	12.04	13.09	13.29	12.79	13.32
CBA[31,33]	14.10	13.70	14.30	12.70	13.70	13.80	14.20	14.10
Heartland Bank	14.46	14.01	13.78	12.71	12.96	13.19	13.56	13.04
Kiwibank	12.80	12.90	12.90	12.80	13.40	13.50	13.40	16.00
SBS Bank	14.27	13.76	13.50	13.63	13.27	12.56	11.91	11.35
The Co-operative Bank	15.80	15.80	15.50	16.10	17.50	16.90	16.60	16.60
TSB Bank[32]	14.86	14.52	14.62	14.59	14.65	14.60	14.85	14.55
Westpac[33]	13.90	14.00	14.00	13.10	13.40	14.00	14.00	14.80
Net profit ($Million)								
ANZ	347	416	430	349	403	466	406	505
BNZ[30]	192	259	229	233	223	193	276	245
CBA[31]	243	220	211	245	253	255	248	292
Heartland Bank	15	14	15	14	15	16	16	16
Kiwibank	38	29	24	28	35	22	-32	14
SBS Bank	5	6	7	7	6	6	7	6
The Co-operative Bank	3	2	2	3	3	2	3	3
TSB Bank[32]	13	10	14	14	14	5	11	17
Westpac	251	239	249	224	285	237	255	282
Total	**1,107**	**1,195**	**1,181**	**1,117**	**1,237**	**1,202**	**1,190**	**1,380**

Entity	Profitability measures							
	31 Dec 15	31 Mar 16	30 Jun 16	30 Sep 16	31 Dec 16	31 Mar 17	30 Jun 17	30 Sep 17
Interest margin (%)								
ANZ	2.22	2.18	2.24	2.17	2.18	2.14	2.14	2.18
BNZ[30]	2.21	2.21	2.15	2.12	2.07	1.98	2.06	2.21
CBA[31]	2.12	2.09	2.22	2.04	1.97	1.91	1.92	1.99
Heartland Bank	5.18	4.58	4.53	4.46	4.44	4.35	4.54	4.49
Kiwibank	2.07	1.98	2.02	1.96	1.92	1.82	1.95	1.95
SBS Bank	2.63	2.61	2.57	2.63	2.60	2.38	2.43	2.52
The Co-operative Bank	2.71	2.61	2.51	2.46	2.39	2.25	2.22	2.24
TSB Bank[32]	2.08	2.03	2.02	2.12	2.18	1.80	1.82	1.84
Westpac	2.17	2.11	2.12	2.08	2.03	1.86	2.03	2.16
Average	**2.21**	**2.17**	**2.20**	**2.13**	**2.10**	**2.01**	**2.07**	**2.15**
Non-interest income/Total tangible assets (%)								
ANZ	0.33	0.77	0.62	0.37	0.48	0.63	0.46	0.73
BNZ[30]	0.42	0.71	0.59	0.56	0.58	0.35	0.74	0.54
CBA[31]	0.77	0.57	0.47	0.62	0.66	0.63	0.62	0.64
Heartland Bank	0.89	0.45	0.45	0.26	0.49	0.37	0.31	0.18
Kiwibank	0.62	0.55	0.46	0.56	0.80	0.52	0.67	0.59
SBS Bank	1.03	0.97	1.00	1.00	0.93	0.79	0.77	0.78
The Co-operative Bank	1.02	0.64	0.94	0.98	0.97	0.58	0.96	0.85
TSB Bank[32]	0.20	0.21	0.21	0.35	0.27	0.21	0.25	0.80
Westpac	0.63	0.62	0.65	0.71	0.67	0.69	0.73	0.58
Average	**0.51**	**0.67**	**0.58**	**0.53**	**0.59**	**0.58**	**0.61**	**0.64**
Impaired asset expense/Average gross loans and advances (%)								
ANZ	0.09	0.08	0.18	0.14	0.12	0.01	0.04	0.03
BNZ[30]	0.22	0.23	0.15	0.08	0.11	0.12	-0.01	0.21
CBA[31]	0.14	0.17	0.31	0.12	0.10	0.05	0.06	-0.08
Heartland Bank	0.34	0.41	0.63	0.49	0.36	0.46	0.47	0.56
Kiwibank	0.07	0.10	0.02	0.00	-0.05	0.05	-0.13	0.25
SBS Bank	0.33	0.67	0.21	0.44	0.40	0.33	0.30	0.32
The Co-operative Bank	0.08	0.05	0.08	0.16	0.10	0.11	0.11	0.10
TSB Bank[32]	0.08	0.31	0.07	0.12	0.13	0.06	0.08	0.06
Westpac	-0.01	0.06	0.02	0.32	-0.19	0.01	-0.07	-0.14
Average	**0.11**	**0.13**	**0.16**	**0.16**	**0.05**	**0.05**	**0.01**	**0.03**
Operating expenses/Operating income (%)								
ANZ	43.30	42.41	36.61	43.98	38.24	35.67	39.28	34.30
BNZ[30]	42.26	34.94	39.69	40.28	42.11	42.91	38.65	37.99
CBA[31]	36.76	37.98	37.66	36.03	36.32	36.25	38.02	35.00
Heartland Bank	49.59	43.96	42.55	46.95	43.43	41.23	42.93	43.70
Kiwibank	59.35	62.39	71.30	67.80	64.62	73.04	138.17	78.74
SBS Bank	70.22	57.43	60.30	59.65	62.30	62.36	60.78	67.09
The Co-operative Bank	73.38	81.41	80.27	75.07	72.22	79.33	76.96	74.55
TSB Bank[32]	47.83	51.65	45.26	47.36	48.60	77.37	55.00	47.54
Westpac	40.48	40.80	41.25	38.92	40.69	42.26	43.81	40.03
Average	**42.52**	**41.07**	**40.33**	**42.07**	**40.93**	**40.92**	**44.82**	**38.96**

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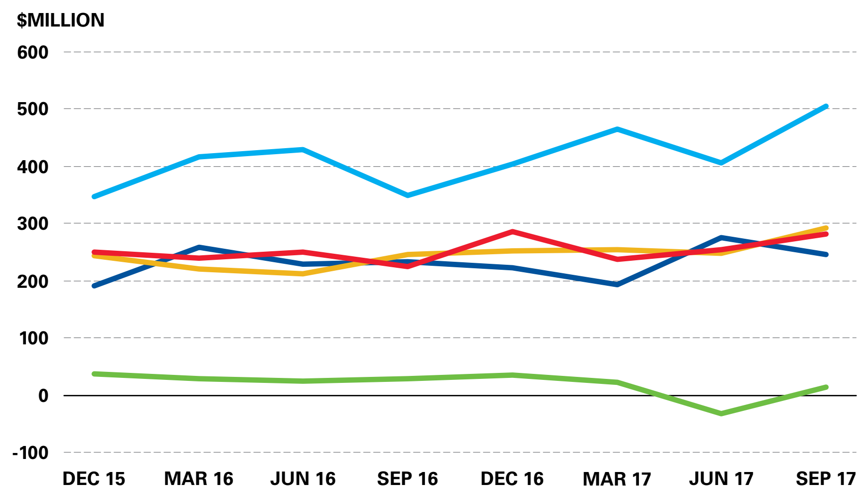
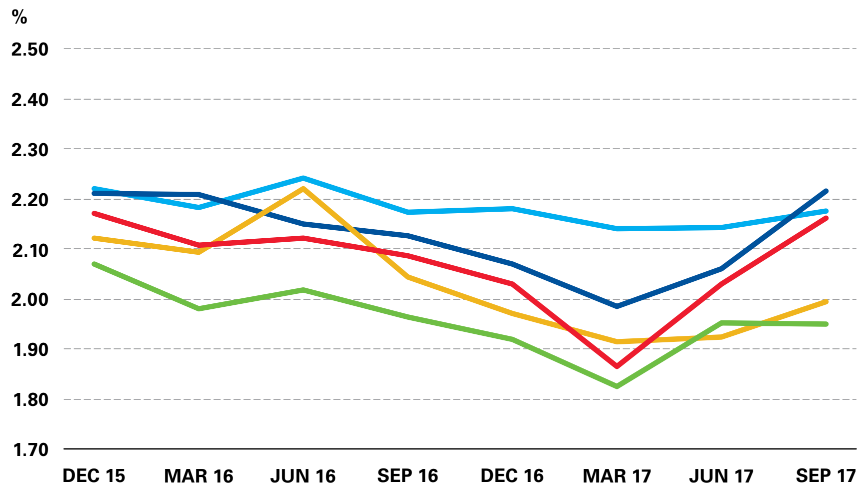
23 MAJOR BANKS: NET PROFIT

- ANZ
- BNZ
- CBA
- KIWIBANK
- WESTPAC



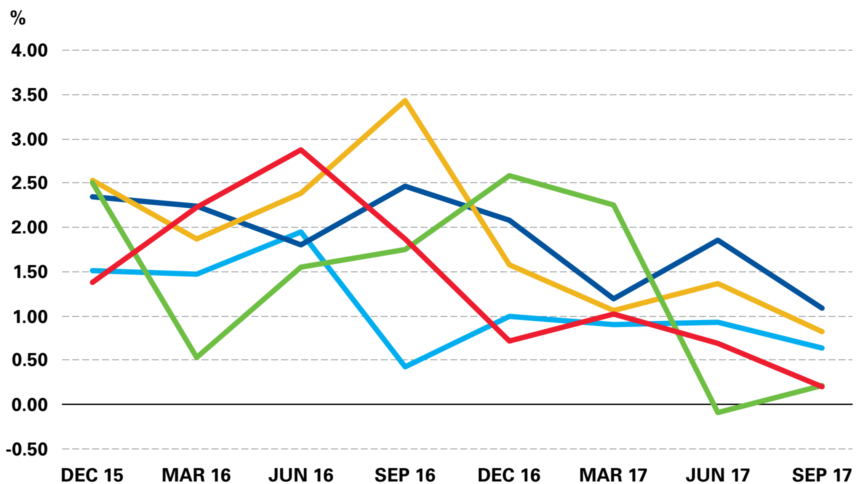
24 MAJOR BANKS: INTEREST MARGIN

- ANZ
- BNZ
- CBA
- KIWIBANK
- WESTPAC



25 MAJOR BANKS: INCREASE IN GROSS LOANS AND ADVANCES

- ANZ
- BNZ
- CBA
- KIWIBANK
- WESTPAC



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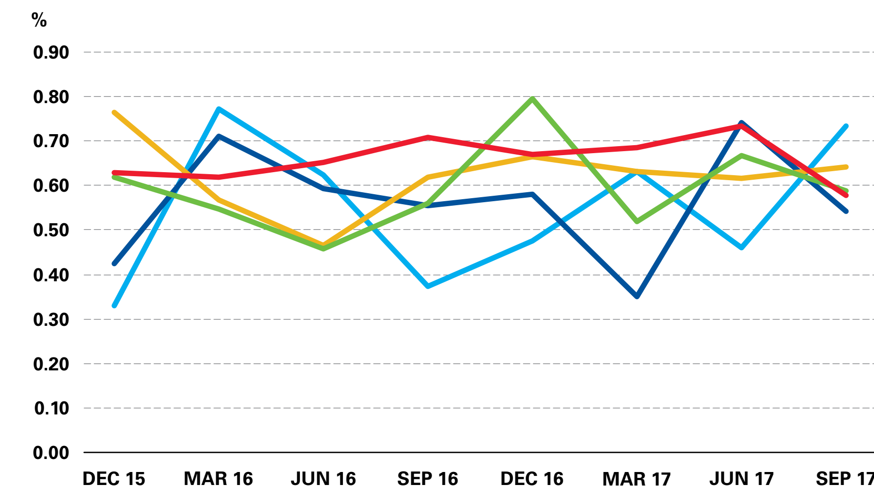
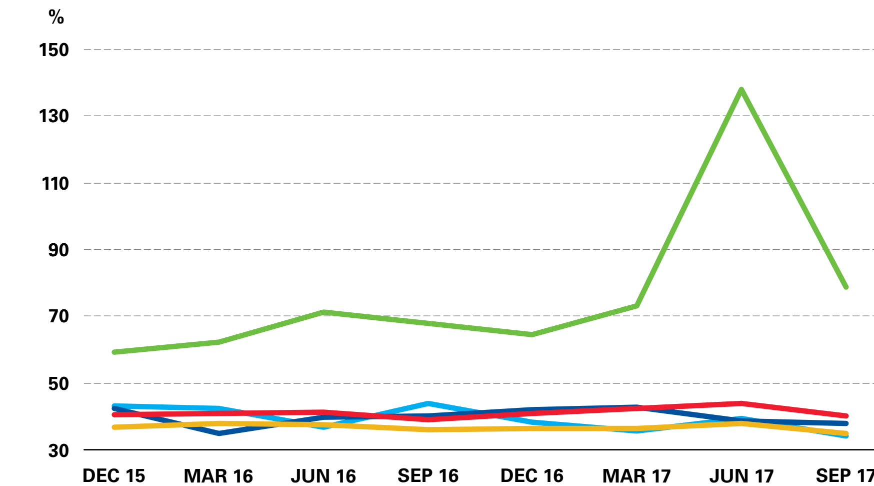
26 MAJOR BANKS: NON-INTEREST INCOME/ TOTAL ASSETS

- ANZ
- BNZ
- CBA
- KIWIBANK
- WESTPAC



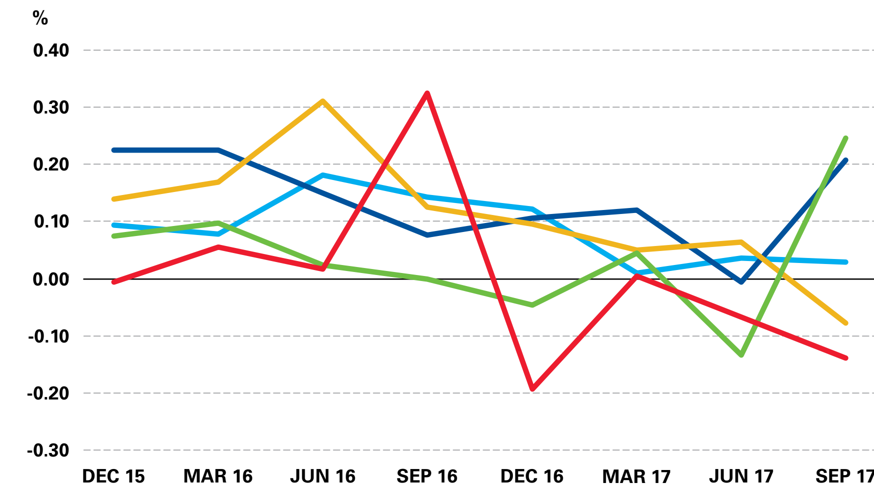
27 MAJOR BANKS: OPERATING EXPENSES/ OPERATING INCOME

- ANZ
- BNZ
- CBA
- KIWIBANK
- WESTPAC



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

- ANZ
- BNZ
- CBA
- KIWIBANK
- WESTPAC



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Getting practical with blockchain

Mike Clarke
Partner – Head of IT Advisory
KPMG

There are two blockchain stories. The first, is the cryptocurrency story. The media focus has been on the highly volatile values for Bitcoin, Ethereum, Ripple and others. Cryptocurrencies can be seen as the first blockchain application and their evolution will be fascinating.

The second story is the use of blockchain (or other Distributed Ledger Technology, or DLT) as the core tech of industry applications. The difference between these new applications and traditional legacy applications is that DLTs provide a trustworthy service to a group of computers (nodes) that do not fully trust each other. With DLT, several users can write entries into a block or a record of information, and a community can control how the record of information is modified and updated.

Bill Gates is attributed with the quote, "*We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten. Don't let yourself be lulled into inaction.*"

Respected IT Analyst, Gartner Inc., has a model which supports the Bill Gates quote. It is the Gartner Hype Cycle for Emerging Technologies which tracks new technology through five stages including Inflated Expectations and a period of Disillusionment. The hype around emerging technology is often about creating media interest and developing funding for start-up organisations who work in these technologies.

There has been significant hype around blockchain, with the majority of media and BBQ conversations being around cryptocurrencies, particularly Bitcoin. Less publicly, there has been industry hype around commercial applications built on blockchain.

There are examples of pilots in multiple industries including:

- Freight and Logistics (covering Bills of Lading and Trade Finance);
- AgriBusiness (Product Provenance and Traceability);
- Insurance (Automated Claims through Smart Contracts);
- Utilities (peer-to-peer power trading); and
- Government (Identity, Asset Tracking and the potential for eVoting).

In the Financial Services sector, there are also a number of advanced pilots including automating bank guarantees as used in commercial property leasing, and cross-border payments using Ripple Labs network as an alternative to SWIFT.

There has been significant hype around blockchain.

There are DLT implementations that are extending beyond the pilot phase, with perhaps the highest profile is the Australian Stock Exchange (ASX) plan to replace CHESS with a DLT post-trade settlement and clearing system from Digital Asset.

In the Media Release announcing the decision, the ASX Managing Director and CEO Dominic Stevens is quoted as saying "we believe that using DLT to replace CHESS will enable our customers to develop new services and reduce their costs".

The cost reduction theme is supported by a research paper issued by Accenture in conjunction with McLagan, a business unit of Aon PLC[35]. The research shows significant cost reductions from use of DLT in Investment Banks across middle and back office functions.

Critics of DLT will point to the following issues as reasons to stand back:

- The same benefits can be delivered from traditional systems and do not need DLT.
- With the required consensus mechanism, the solutions are too slow for real-time transactions.
- The consensus mechanisms consume significant computing and electricity resources which are difficult to justify.
- To be effective, DLT is a network solution and organisations will be reluctant to work together.
- The tech talent is scarce.

These issues are valid but should be considered in context. For example, where the use case delivers benefits in process improvement within the organisation, it is likely that DLT is not required or the best fit. That said, there are multiple use cases where the benefits can only be delivered through DLT.

The performance and resource issues relate more to public blockchains where anyone can join or run a node and anyone can participate in the consensus process. The majority of commercial applications will run on a permissioned blockchain, operated by known entities, with the capability to identify the nodes that can control and update the ledger, and even have ways to control who can issue transactions. Permissioned blockchains will reduce the performance and resource issues, and ongoing development is underway from technology, commercial and academic organisations.

While organisations seek competitive advantage, there is significant collaboration in the blockchain space with more than 30 banks participating in the R3 Consortium, other banks in the Digital Trade Chain, and up to 20 insurance companies participating in the B3i Blockchain Insurance consortium.

Five reasons to consider expanding your blockchain and DLT initiatives in 2018.

1. **It is rapidly becoming the underlying approach of the global system infrastructure:** More than a single solution or technology, blockchain and DLT technologies essentially connect together to form a new type of market infrastructure that sits in top of – and integrates into – existing systems and processes. And in doing so, it is quickly penetrating and changing the way firms, regulators, investors and managers communicate and share data.
2. **Commercial phase:** There have been extensive pilots and continued development during 2017, and over the next 12 to 24 months this work will move into the commercial and production phase.
3. **It can enable future competitive advantage:** Blockchain investments may not be paying massive returns yet, but they are allowing some firms to create the right platform for future growth. The adoption of blockchain and DLT should unlock unprecedented business flexibility, improved efficiency and new capabilities that could be leveraged to rapidly respond to changing market dynamics and competition in the future.
4. **It is likely to disrupt the value chain:** Blockchain has the potential to add significant value – by improving confidence between parties, reducing friction in the value chain and speeding up complicated inter-party processes. But it will also mean the disintermediation (or, more likely a refocusing) of certain players in the value chain. Players should be sizing up their future position and managers should be reassessing their value chains. Certain players, such as the transfer agents and the clearing and settlement houses, will need to address their future in the value chain and migrate to a new model.
5. **Involvement:** Some emerging technologies are developed by a small number of organisations whereas blockchain has widespread involvement from technology, commercial and academic organisations. The Banking and Insurance consortia include the largest global players from those sectors. The Open Source nature of blockchain developments means that there is more collaboration, resulting in rapid enhancement.

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Some definitions

Distributed Ledger Technologies (DLT)

Distributed Ledgers are basically decentralised, shared, distributed and synchronised databases spread across multiple locations. DLTs leverage the cloud to allow parties in a value chain or ecosystem to share data securely in near real-time, thereby opening up new opportunities for peer-to-peer collaboration and transactions.

Blockchain

Blockchain shot to fame as the distributed database behind the digital currently, Bitcoin. But it is just one of many different types of DLT platforms now in operation. While people tend to use the term blockchain as a synonym for DLT, it is important to remember that the DLT ecosystem is much broader than one technology or platform.

Smart contracts

Smart contracts are standardised, fully-automated, and autonomous financial instruments that facilitate, verify and enforce attributes of a contract according to predetermined scenarios. Underpinned by DLT technology, smart contracts ensure that agreements are fulfilled by all parties, automatically and in near real-time.

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Conduct, robo-advice and good client outcomes

Beckie Vanderbom
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Financial Risk Management
KPMG

No matter how financial advice is delivered, good conduct principles apply. Although robo-advice will improve the access to financial advice for New Zealanders, providers will need to design their service to consistently support good client outcomes.

Why now?

In late 2014, as part of the statutory review cycle, the Ministry of Business, Innovation and Employment (MBIE) began a review of the Financial Advisers Act 2008 (FAA). As part of the process they consulted with industry, consumers and other stakeholders, a process which culminated in the Financial Services Legislation Amendment Bill (currently at select committee stage).

Here is a list of the following key changes in the proposed regime:

- the definition of financial advice has been broadened;
- the categorisation of products has been removed;
- the distinction between personalised and class advice has been removed; and
- the requirement for personalised financial advice to be provided by a human adviser has been removed; this removal allows the introduction of robo-advice into New Zealand.

A new code of conduct for all financial advice activities

A new universal code of conduct will be developed that will apply to all financial advice provided to retail clients (the current code of conduct applies only to Authorised Financial Advisers).

To expedite development of the new code of conduct, a Ministerial working group was appointed to develop the code before the new regime comes into effect allowing the code of conduct to be developed in tandem with the legislative process. While this approach is innovative, given the tight legislative timetable, it means that firms are developing new technologies to provide financial advice without knowing what the future code of conduct will require.

See Table 8 on page 49.

The robo-adviser will be subject to the same standards as a human.

The working group is expected to have produced a draft code of conduct by August 2018 which will be delivery agnostic – i.e. it will apply equally no matter what the delivery method of the financial advice is. Put another way, the robo-adviser will be subject to the same standards as a human. This development is interesting as traditionally, conduct is associated with human behaviour. Good conduct is the essence and spirit in which a provider or adviser interacts with their client. It is driven by sound intentions and a desire for a good client outcome. However, since conduct is difficult to measure because, by its nature, it is not simple to quantify, robo-advice providers will need to design and maintain their services to consistently deliver a positive human behavioural trait.

FMA exemption available for early adopters

Prior to the start of the new regime and the publication of the new code of conduct, FMA has also recently consulted on an exemption to enable firms to offer personalised financial advice or an investment planning service to retail clients using a digital advice service. The exemption and application process are expected to be finalised in the first quarter of 2018.

Robo-advice brings benefits and opportunities for providers and consumers

This new distribution channel provides an excellent opportunity for providers to connect with prospective clients for whom their branding or services may not have previously appealed. Client preferences are changing, a phenomenon which presents new opportunities to rebrand, or create new or sub brands to appeal to different demographics. This is particularly true for firms who wish to grow their client base across client segments. Robo-advice is likely to be most popular with Millennials who have grown up with, and generally express a preference for, digital engagement. Baby Boomers, on the other hand, are more familiar with, and arguably feel more comfortable with, face-to-face business interactions with a trusted human adviser.

Baby Boomers … arguably feel more comfortable with, face-to-face business interactions with a trusted human adviser.

Robo-advice also offers the benefit of a cost-effective, lean operating model. So long as the service is meeting all regulatory requirements, robo-advice can be provided with fewer resources, thus reducing set-up and ongoing operational costs.

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This benefit potentially allows for firms to offer lower-cost services than possible under a traditional advice model. A further gain for consumers of a lower-cost model is that advice can be offered in areas where it was previously not cost effective for providers, notably for KiwiSaver.

The introduction of robo-advice into New Zealand will also increase choice for consumers, not only because it encourages domestic fintech innovation, but also because we are likely to see overseas entities accessing the market. In a more competitive market, good client experience acts as a differentiator to retain existing clients and attract new ones.

Care, attention, and planning in the design stage of the robo-advice solution are crucial

Key conduct considerations for robo-advice solutions

- Is robo-advice suitable for our company's client base, product range and service proposition?
- Layout and design are appropriate for the target market. Attention has been given to textual statements and language used is well worded, clear and suitable for the typical investor profile.
- Has adequate consideration been given to how and when disclosure is made?
- How do we ensure that clients are sufficiently engaged with the solution to support consistently good outcomes for them?
- How can risk profiling be tailored for an automated experience?
- How do we deal with ongoing client relationships?
- Is the solution likely to expose the firm to future risk? How can this be mitigated?

Despite the potential opportunities offered, there is uncertainty in rolling out a new distribution channel without a clear understanding of all the regulatory requirements in the new regime since the new code of conduct is still under development. Being first to market can provide a competitive edge, which means that entities taking advantage of the proposed FMA exemption will need to consider whether their robo-advice offerings are likely to meet the new code of conduct, and how they might be able to introduce some future proofing to minimise the number of changes required.

Given FMA's focus on improving the conduct of the financial services providers it regulates, robo-advice services will need to be designed to be able to demonstrate not only that they consistently support and deliver good consumer outcomes, but also that the client's interests are actively taken into account. Firms will need to be able to articulate how they know that their service is fulfilling good conduct principles. The approach taken by a vertically integrated firm to conduct principles will be different from one employed by a provider who only offers robo-advice.

Vertically integrated firms will have the additional challenges of potentially conflicted conduct and conflicted remuneration to turn their minds to. Conflict management procedures will need to be designed to show consideration for client interests. Providers will need to think about how to design advice processes and any incentives for partially automated services appropriately.

Since digital advice will be a new concept for most consumers, when developing their robo-advice services, firms will need to consider where, and how, appropriate disclosures should be made to ensure clients understand all aspects of an automated service, and the nature and scope of the advice they are receiving.

Those designing their services with conduct principles front of mind will be considering how they can challenge a client when necessary to ensure the client has an appropriate understanding of, and is engaged with, the advice process. A human adviser has the benefit of being able to detect changes in tone of voice, hesitation, or body language that may indicate a client does not understand or needs further explanation. How will a provider deal with clients for whom robo-advice is either not suitable, those with a lower level of financial literacy or those that vulnerable?

Capability is an important consideration. Providers will need to have people with the right skills and experience to ensure clients are receiving consistently high quality advice that provides them with a suitable recommendation. Well prepared firms will be giving thought to the robustness of testing, monitoring and quality assurance. They will also be considering how the application of competence, knowledge, and skills might be applied to an automated service, and whether it will need to change under the new regime.

Given the pace of technological change, and the generational movement in client engagement preferences, we expect to see digital strategy becoming an important consideration for financial advice providers. Conduct that supports good consumer outcomes and client-centricity will need to be integral parts of that strategy.

TABLE 8: MBIE – CONSULTATION PAPER – NEW FINANCIAL ADVICE REGIME[36]

Year	Event	Timing
2017	Code Working Group appointed	Early-mid
	Bill introduced	Mid
2018	Code of Conduct approved Transitional licence applications open	Aug
2019	Existing industry participants must be transitionally licensed New regime takes effect (including new Code of Conduct and new adviser designations) with a competency safe harbour Full licence applications open	Feb
2020		
2021	Transitional licences expire Everyone must be fully licensed Competency safe harbour ceases	Feb

Code of Conduct

- Code Working Group appointed in early-mid 2017 to develop a Code of Conduct before the Act comes into force.
- Will provide industry with more certainty about the requirements sooner, alleviating anxiety about any changes.
- Means most elements of the new regime will be able to take effect sooner.

Transitional licensing

- All existing industry participants must be licensed within six months of the approval of the Code of Conduct.
- Relatively easy process vis-á-vis the full licensing requirements.
- Brings existing industry participants into the new regime quickly – subject to new Code of Conduct and enforcement measures.
- Option of competency safe harbour but must limit their services to those they are currently able to provide.
- Gives FMA and education providers time to better anticipate licensing, training and compliance requirements.
- Will make transition to full licence smoother and more manageable for industry.

Full licensing

- Existing industry participants will have two years from the time transitional licensing takes effect to be operating under a full licence.
- Full licensing will be a more comprehensive process than the transitional licensing process, but will also be flexible and depend on factors such as the nature and size of the firm and the services it provides.
- Competency safe harbour will cease and all industry participants will be required to meet the competency standards in the Code of Conduct.

Key

- Code of Conduct
- Legislation and regulations
- Transitional licensing
- Full licensing

SOURCE: MBIE – CONSULTATION PAPER – NEW FINANCIAL ADVICE REGIME (PAGE 54)

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Revolutionising the banking eco-system

Nicola Raynes
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A world in which organisations share customer information with one another securely and with ease is on the horizon. You will have seen the myriad of news items in 2017 talking to this very development and how this will change the landscape for customers in choice and control. And where is this change first going to land? Given the quantum of information and data the banking sector holds as custodian of consumer finances, it is the first logical place to start. We are talking about 'Open Banking' – a phrase you will hear more and more frequently as jurisdictions get to grips with what the regime can do and how to approach its development and implementation.

What is Open Banking and why now?

Open Banking is a collaborative model in which consumers are able to have greater access and control over their own banking data. Consumers will be able to direct banks, through giving explicit consent, to provide information directly to them or to share the information with third parties in a standardised and secure way.

Open Banking is a collaborative model in which consumers are able to have greater access and control over their own banking data.

An Open Banking regime paves the way for a new eco-system in financial services, one that transcends the traditional banking and payments infrastructure. Disrupters in the market and global technology companies will exist alongside and in competition with traditional banks through integrated application programming interfaces (API), ultimately providing consumers with more choice, control and efficiency.

But why is Open Banking getting so much air time now? It centres on increasing competition in banking, allowing consumers greater control over their finances and improving consumer inertia.

What have we seen so far?

The United Kingdom (UK) has led the way. The Competition and Markets Authority (CMA) undertook a review (beginning in 2013) into the supply of retail banking services to personal customers and to small and medium-sized businesses, which concluded that there was a need to improve competition in retail banking and financial services. Open Banking was one of the changes proposed to increase competition.

The Open Banking Implementation Entity, created by the CMA (and funded by industry participants), has been working with industry stakeholders to create software standards and industry guidelines to enable Open Banking to be rolled out from early 2018 (on a managed roll out basis).

Closely coupled with the UK's Open Banking Standard is the European Union's Second Payment Services Directive (PSD2). This new legislation came into force in January 2018, mandating for more open data – that is banks must provide access to customer information to other financial and payment institutions.

Closer to home, the Australian government announced in its 2017-2018 budget the introduction of Open Banking, following a number of reviews undertaken in previous years into data access and competition. An independent review is being undertaken to assess the best approach for implementing the regime. Here in New Zealand, the government is yet to decide what path it will take, with the government asking Payments NZ to report on how the industry will progress Open Banking. Payments NZ is currently working on the API that connects organisations' systems and will be running a pilot programme for the API during 2018, of which the banks are likely to participate. An update is required from Payments NZ in April 2018 and it is anticipated that Commerce and Consumer Affairs Minister Kris Faafoi will seek to move quickly to establish a way forward.

The potential impact

Just what Open Banking will mean for you will depend on whether you are a bank, a consumer or an alternative financial service provider. We have outlined below just a few of the expected benefits this regime may provide to each of these stakeholders.

Banks	Consumers	Other Providers
— Speed and efficiency in serving its customers; for example, on-the-spot lending approvals — Provide support for embedding responsible lending practices with access to all financial relationships, spending patterns and financial behaviour — Ability to innovate more products and services that consumers want and need; for example, budgeting and financial management tools — Opportunity to partner with creative and disruptive technology partners to really be more customer centric and tailor offerings to consumers with predictive analytics and artificial intelligence — Lower cost of distribution through digital presence	— More effective use of financial management apps with real-live data and the ability to obtain financial advice to help better manage your money — Ability to assess options when looking at new financial products and understand which one works best for you — Having a single-view platform of all financial relationships — Access to debt management tools that will help you get through paying off your debt and avoid unnecessary charges — Cash flow management for businesses and potentially better unsecured loan terms	— Better and more cost effective data access has the potential to decrease barriers to entry for new providers — Opportunity to partner with incumbent banks to provide innovative solutions, obtain investment for future development and access to a wider population of consumers

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And we cannot forget the real benefits this could create for improving New Zealanders' financial literacy. There are concerns in New Zealand at the levels of financial literacy amongst the population, and programmes throughout the country, run by organisations community-wide, are driving financial literacy initiatives. Any tools that enable New Zealanders to manage their money better are welcomed, to help ensure people are making appropriate financial choices and planning for their and their family's future.

Any tools that enable New Zealanders to manage their money better are welcomed.

Real concerns with Open Banking

An Open Banking regime brings with it a number of risks and challenges that need to be fully mitigated and addressed. We look at some of these below.

- Data privacy and security – this risk is not to be underestimated and must be front and centre in any development plan put in place. Cyber risk is a ubiquitous risk that is here to stay, thus data privacy and security protocols need to be well developed and maintained for all parties in the Open Banking eco-system to adhere to.
- 'Turning off' data – further to the above, there is real concern around how consumers can 'turn off' their approval for data sharing (i.e. at the end of a contract or relationship) and what happens to that data at the end of that relationship.
- Silo approach to implementation – an industry-wide collaborative approach is required when New Zealand seeks to implement Open Banking. It cannot just be the large multi-national and challenger banks driving the regime approach, with fintech companies, consumer groups, regulators, government, etc. also needing to be involved. This will ensure that a standardised approach is developed for the entire eco-system.
- Transparency for consumers – the terms and conditions of data sharing need to be well developed to ensure consumers understand exactly what they are allowing to take place and are in a language that all consumers can understand.
- Scale of regulation – in developing an Open Banking regime, consideration is required on the scope and scale of regulation for all parties within the Open Banking eco-system, particularly in respect of providing financial advice, responsible lending, etc.
- Taking a pure compliance approach – ensuring compliance with the new Open Banking and data privacy/cyber-standards is paramount, but there is a risk that banks do not adequately strategise for how they will defend their market positions from new competitors or innovate new products and services alongside the compliance and technology development activity. There is a risk that banks may lose their place in the customer experience journey and the opportunity to be in front of consumers, and therefore this strategising is essential.
- Targeted consumer campaigns – there are concerns that with the enhanced data sharing, some parties may target certain customers, e.g. those who take a long time to pay debt providing the potential for higher interest income. This risk would be mitigated by the Responsible Lending Code, financial markets legislation and Conduct Risk principles banks are required (or encouraged) to abide by.

Open Banking will revolutionise the provision of banking products and services.

It's only the beginning

Open Banking will revolutionise the provision of banking products and services by breaking down consumer inertia on changing banking service suppliers and intensify competition for customers. We already have comparison websites for insurance companies. Banks are already providing alert services for bill payments or potential limit breaches and are developing apps for financial management (think Westpac's CashNav). But imagine a society where these services and more are the norm!

This is only the beginning – the opportunity for this type of data sharing across the entire economy is exponential. Not only within the financial services sector with insurance and wealth management sectors – but utility companies, logistics, etc. … the opportunity is endless. But it will be the banking sector that will lead the way.

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Getting past compliance crisis management

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In the middle of a serious compliance breach, it's hard to look beyond the immediate response to 'fix the problem'. But, given the volume and complexity of compliance is only heading in one direction – it's time to accept that there will be a 'next time', and work out how to get beyond crisis management.

Our banking industry is facing ongoing challenges around compliance. Whether that's compliance with prudential requirements, Commerce Commission, AML, internal limits, policy or methodology, or compliance with general laws and regulation.

Our banking industry is facing ongoing challenges around compliance.

In the middle of a response to an incident it feels like there is very little positive that can come from it, and very few decision points you have control over. Typically, the whole team up to Executive level is caught up in reporting deadlines, regulator response and developing robust solutions, with nobody truly free to focus on what is actually a good opportunity to learn. For example, risk appetite – is your compliance risk appetite really as you've stated it or has the incident challenged that? Are there opportunities to learn from mistakes or to identify areas that are not working as well as they should? Lastly, if the breach impacted customers in some way, can you use the opportunity to communicate proactively and turn the incident into a positive in your customer relationship?

We frequently see banks using an 'increasing concentric circles' type approach at the first stage of responding to an incident. Initial efforts are focussed on remediating the immediate issue – i.e. the circle at the centre, but banks who do this well will then expand the circle and look at possible wider impacts of the immediate issue and identify and fix any issues in those. Finally, they will extend the circle wider again and consider areas not impacted by the immediate issue, but facing the same challenges or using similar approaches, or systems or shared resources. Lateral thinking to bridge the gap between circle two and three is where the smarts are. The idea is to figure out what areas could have a similar issue and extend the review into that area without taking it too far and looking for problems which don't exist. Areas to be considered might be similar areas run by the same team, areas of similar complexity, similar data or models being used, similar history or a build-up of minor incidents.

During the second stage, the root cause analysis, the bank needs to get behind the current view of the incident and identify the layers upon layers of decisions that have led to the incident. Most people follow an 'ask why five times' type approach and try not to jump to conclusions or become wedded to one theory or solution that might not necessarily address the whole problem. The other temptation is to skip doing root cause analysis at all because it seems obvious what went wrong, and there is a reticence to start going over the area again with more people. This is an easy trap to fall into, but causes of incidents are rarely what they most obviously look like. Root causes can be a combination of cumulative decision making over many years, policy choices, investment decisions (or lack thereof), cultural or behavioural norms or area of weakness in the risk management approach, among others.

When done well, by someone independent of the problem, with no vested interest and the remit, ability and appetite to ask the hard questions, root cause analysis can offer real insight into your business.

The third stage, future proofing, can vary extensively in scale and has two main aspects; prevention of future incidents and moving up the maturity curve of remediation.

Future proofing, can vary extensively in scale.

Thinking about prevention of future incidents can feel intangible and futile when the energy is needed in the immediate incident response, so is generally thought about shortly afterwards. A good start is to identify the learnings from the root cause analysis and look for factors that could have stopped the current incident or identified it earlier had they been in place. Consider the following questions:

- Did the incident occur when the business operated outside a framework or policy? If yes, how was it circumvented; if no, why wasn't the risk captured by the framework?
- Had this area been looked at by second or third line? If not, why not; if yes, why wasn't the issue identified?
- How familiar were your team with the legislation or regulation once you got into it? Do they need to be more familiar – is more training needed?
- What is the rest of the world doing in the area where the incident occurred? Are you applying best practice?
- Are there others in the market experiencing similar challenges – what can be learned from them?
- Was there a single point or multiple points of responsibility?

Building maturity around future remediation response is equally important, as not all incidents can be prevented and incident frequency is increasing. At the lower end of the maturity curve is the heroics/firefighting approach, where remediation is reactive. Costs are high, methodology is manual and frequent rework required. Customer experience is poor and detracts from trust. At the other end of the spectrum is a proactive approach, using standardised policy tools and approaches, automation and leveraging previous knowledge and experience.

The theory is that if you invest time and money into fixing a problem once, then can't you learn from what you did and apply it next time.

The epitome of this approach, being developed by large banks in the UK and Australia, are remediation centres of excellence. These teams have a clear mandate to proactively identify and focus on resolving issues, particularly resolving customer issues and allowing customer trust to be regained. The theory is that if you invest time and money into fixing a problem once, then can't you learn from what you did and apply it next time.

These centres of excellence are essentially a group of people and resources that form a central hub for remediation. They build, collate, share and importantly re-use knowledge. They are efficiently, expediently and flexibly mobilised. They have the right mandates already set up to process and resolve issues quickly. They have strong visibility and recognition internally and ready-to-go governance structures.

They have experience of previous remediation, and build a pool of knowledge to keep improving responses and ensure that responses are consistent and proportionate. Most importantly, where relevant, they function as a customer advocate, to give the customer the best remediation experience so that they become an endorser of the bank's response, not a detractor.

Even if you don't take it as far as a remediation hub, its worthwhile taking the time out to regroup after an incident and consider what you could do differently or better next time. For example, you could consider whether the following are appropriate:

- Develop a policy on incident response and put your learnings into it.
- Identify and make accessible the people who gained the knowledge this time and look at making them available as a 'support group' for future incidents.
- Identify the early warnings indicators that first alerted you to this issue, or that should have been spotted, and share these to help people develop a sense for when issues might need to be escalated.
- Identify the key dates, deadlines, reporting and stakeholder expectations that drove the majority of the effort.
- Develop some decisioning criteria for issue criticality and identify the right communication channels for raising and resolving future issues.

For all the hard work and effort during an incident, there is a silver lining, which is that a successful response to an incident should bring your team insight into how to respond to future incidents and the foresight to prevent as many incidents as possible in future.

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New Zealand declares war on multinational financing arrangements

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The winds of war

Those of us who thought the crackdown on multinationals was something viewed only on our laptops and iPhones involving belligerents in faraway jurisdictions like the US and Europe will be interested to learn that New Zealand has now joining the fray. During last year's election campaign, both Labour and National were clear on that they would be tightening up on the perceived avoidance of taxes by multinational companies operating in New Zealand. The Labour-led Government has made good on this promise by introducing a Tax Bill in December that will enact a range of measures aimed at shoring up New Zealand's international tax laws.

Squarely in the firing line is the amount of interest that multinationals can charge on intercompany loans to their New Zealand operations. The proposed law contained in the Tax Bill are largely consistent with discussion papers released in February and September 2017, despite a number of stakeholders raising a litany of concerns. Multinationals now find themselves sitting on the cusp of significantly reduced levels of tax deductible interest payments on intercompany borrowings by their New Zealand operations.

Battle lines drawn

The Tax Bill will bring into force a 'restricted transfer pricing rule' that will significantly impact the amount of interest that can be charged on related party debt for many multinationals.

Broadly, the new rules will:

- have a rebuttable presumption that a New Zealand borrower has a credit rating one notch lower than the highest rated member of the multinational group;
- deem financial institutions (i.e. both bank and non-bank lenders) and insurers to have a credit rating equal to the highest rated member of the multinational group;
- require 'exotic' terms and conditions (including subordination and loan terms greater than five years) to be ignored when pricing an intercompany loan, unless these are features evident in the borrower's third party debt, or are required for regulatory purposes.

The effect of these measures will be to materially reduce the interest rate acceptable on such borrowing for many taxpayers. The new measures are intended to commence on income years beginning on or after 1 July 2018. Further, there will be no grand-parenting of existing loans – all cross border loans in place on or after the effective date will be impacted. The interest rate charged on every related party cross-border loan into New Zealand therefore needs to be re-evaluated to see whether the New Zealand borrower will risk having a portion of their interest deductions denied.

Rebuttable presumption – a bridge too far?

The presumed credit rating of New Zealand borrower (other than a financial institution) can rebutted, but only if three criteria are met, which the Government views as being indicative of whether or not 'tax structuring elements' exist with the lending into New Zealand. If the presumption can be rebutted then a taxpayer is allow to determine the interest rate under a more traditional transfer pricing analysis (which allows taxpayers to make interest deductions based on their standalone credit rating, and not the usually stronger parent rating). The three criteria are:

- the interest income on the loan must be subject to tax in the lender's jurisdiction at a rate greater than 15% (unless the lender is the global parent entity);
- there must be a reasonable expectation that the New Zealand borrower's interest coverage ratio (i.e. EBIT-to-interest expense) will be above 3.3x; and

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— there must be a reasonable expectation that the New Zealand borrower's thin capitalisation ratio will be less than 40% or less than 110% of its parent's worldwide group's ratio.

You would be right to view this presumption as hardly 'rebuttable' While the 15% tax requirement is reasonable, for many organisations the second and third criteria will be difficult to meet. In our view these strict criteria simply go too far.

'Talk to the hand'

The situation for financial institutions and insurers is even tougher. Where a New Zealand entity is a New Zealand registered bank, a licensed insurer, a non-bank deposit-taker or a member of a corporate group whose main business is the lending of funds, they are simply deemed to have the credit rating of the highest rated member of their corporate group. There is no ability to rebut this presumption.

Given that many New Zealand subsidiaries of foreign banks have their own formal credit ratings than can differ from those of their parent company, it seems unfair to simply assume a credit rating equal to their foreign parent.

See no evil

The other significant area of concern is that once a credit rating for the New Zealand borrower has been established (i.e. using the presumed rating or via orthodox transfer pricing analysis if the presumption can be rebutted), certain 'exotic' terms of an intercompany loan must be ignored in pricing it. These will include:

— ignoring the effect of any subordination of the intercompany loan to third party senior debt;

— ignoring any loan terms in excess of five years (i.e. a loan must be pricing assuming that it only has a five year term even though legally in may be in place for longer); and

— ignoring any other unusual terms, such as deferral of interest payments, options which give rise to premiums on interest rates and convertibility into equity.

The only exceptions are where such features are present in the borrower's third party debt or are required for regulatory purposes.

"The supreme art of war is to subdue the enemy without fighting"

All of this begs the question as to why these rules are being introduced. Fundamentally it all boils down to the fact that the Government believes that in the majority of cases multinationals should not be able to charge more than their global cost of funds to the New Zealand operations. The restricted transfer pricing rule will achieve this for many taxpayers. New Zealand believes this is the way most of the world is headed and that the restricted transfer pricing rule is therefore consistent with global trends.

We disagree. Our primary concern is that this has the potential to be a blunt instrument, for what will no doubt be widely varying circumstances across taxpayers. It assumes that New Zealand operations have the same assets, risk and functions as their parent. Transfer pricing analysis is complicated and time consuming, as the Government has acknowledged itself. But it does eventually produce outcomes which Governments should be happy with, as demonstrated by the Full Federal Court of Australian in the recent *Chevron* decision. By introducing this rule, the New Zealand Government is seeking to legislate the view they maintain in many transfer pricing disputes, without giving taxpayers a chance to argue back.

Also of concern is that the rules will leave New Zealand out of step with international consensus. While the New Zealand side of the transaction will mandate a much lower interest rate, the lender jurisdiction will still (reasonably might we add) expect their taxpayer to return an arm's length level of interest income based on a traditional transfer pricing principles. This of course raises the spectre of double taxation and trying to resolve the issue via the multi-jurisdictional vortex that is Mutual Agreement Procedure.

Finally, the Tax Bill also contains a number of drafting weaknesses, which will make applying the rules in practice very difficult (if not impossible) for some taxpayers. For example, the rules are unclear on what to do where an offshore parent company does not have a formal credit rating and it is not clear when to calculate the interest rate cap figure for loans already in existence when the new law comes into force.

Getting ready for action

Times are changing, and New Zealand's reputation as an easy place to do business will be impacted by the complexity these rules create.

Submissions on the Tax Bill were received on 8 February and it will be interesting to see whether any of the types of concerns raised in this article lead to any watering down of these proposals. We are not hopeful.

The most important thing taxpayers can do at the moment is to ready themselves by conducting an initial gap analysis, and comparing their interest rates under the current and proposed rules to determine any potential exposure. Not only will this quantify the size of the problem, but it can kick-start the process of putting in place a revised financing arrangement to ensure taxpayers are in compliance with the rules when they commence.

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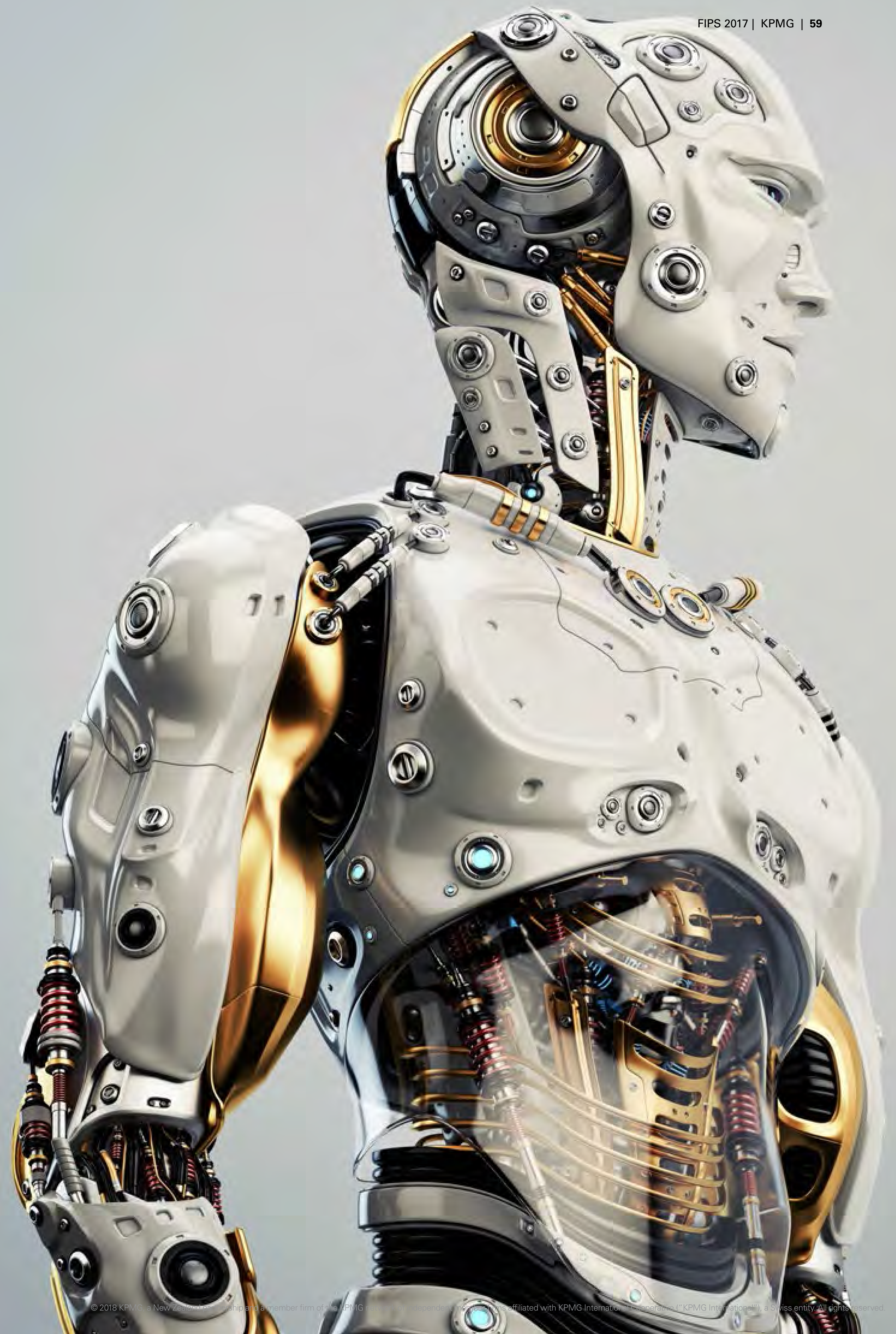

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Customer friction – reducing through emerging trends in Fintech innovation

Lauder Erasmus
Partner – Private Enterprise
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Reducing customer friction is fuelling innovation across the Fintech industry, as we seek to become a more consumer centric society. Many companies have succeeded by focusing on improving a single area of a customer experience (e.g. payments, lending). These areas have either been slow or cumbersome to deal with – traditionally subjecting its customers to a certain amount of friction and frustration.

We are starting to see a number of Fintechs moving into vertical markets to meet the needs of their customers across a wide range products. This ultimately creates digital ecosystems which are designed to reduce customer friction. This trend of creating a lower friction environment through developing one-stop-shops for digital financial transactions is driving innovation via the use of new technologies.

Changes in the way fintech companies interact with customers is a key source of innovation.

Changes in the way fintech companies interact with customers is a key source of innovation (for example, the coming wave of AI-driven banking chatbots). There is also an increasing trend in corporates who are creating platforms to connect back-office legacy systems to customer-facing systems and apps.

Startups are also acting as a catalyst for corporate innovation as both banks and insurers look to improve their digital performance and capabilities.

Changing the customer experience offered by traditional financial service providers who are challenged by legacy processes is providing the opportunity for fintech disruption. The use of emerging technology in AI, chatbots, robo-advice and blockchain is supporting this innovation.

The emerging trends discussed below are likely to shape New Zealand's Fintech sector. The following emerging trends in technologies are building consumer ecosystem in an effort to reduce customer friction:

1. Regtech evolution

Regulatory technology (regtech) has become a hot subsector in nearly every major region worldwide. Consumer experience has been directly impacted by the explosion of regulatory compliance traditional financial institutions are having to deal with. The myriad of local and international financial regulations and reporting requirements has left many financial institutions overwhelmed by the amount of effort required to maintain compliance. This has flowed directly back onto the customer experience because the design of internal processes lack consideration for being customer centric.

The considerable increase in regulatory requirements for financial institutions is a direct consequence of the global financial crisis (GFC). This is forcing the industry to respond through new Fintech solutions. The increased regulatory complexity and ever-changing regulatory environment, requires more sophisticated and digitised products that are simple for a consumer to use but are compliant.

Regtech startups and solutions have the potential to impact the customer experience through predictive analytics and artificially intelligent solutions. This technology monitors and identify issues for the customers in real time. Customers will begin to be serviced faster as Regtech solutions transform labour-intensive manual compliance processes through automation.

Organisations are also waking to the opportunities for business transformation provided by agile regtech solutions. Regtech is particularly well-positioned to contribute to productivity by helping structure and draw meaningful, actionable information from large volumes of data. Once integrated into business processes, advanced regtech solutions may begin to provide the capability to deliver a better customer experience, more robust consumer protections, improved transaction monitoring and real-time fraud detection.

The New Zealand ecosystem is relatively immature in comparison to some of the global eco-systems counterparts.

2016 saw over $994 million in global venture capital (VC) investment across 91 deals. Regtech startups in the US and the UK are taking an early lead in the industry due to the regulatory pressures in local markets, as well as alignment with broader industry drivers. While much regtech startup and VC activity is centred in these areas, activity continues to increase in other locations around the globe. Regulators in areas like Singapore and Australia have been working to encourage regtechs through use of regulatory sandboxes and targeted funding opportunities for regtech startups.

The New Zealand ecosystem is relatively immature in comparison to some of the global eco-systems counterparts, but no doubt we will see a notable increase in activity in this space in the near term, the FMA permitting robo-advice being an example.

2. The rising tide of Initial Coin Offerings (ICOs)

An ICO is a sale of tokens by a blockchain company looking to raise funds to create a currency of exchange in a decentralised network of applications. These tokens allow the owners of the applications to code the token on its blockchain. This code is called a 'smart contract'. Coupled with its ability to incorporate complex code, tokens provide access to a decentralised network of computers to run applications on. Tokens allow the holder to purchase a service or product from this network. However, many of these applications are still building their functional networks.

Instead of going the traditional VC route an application will announce it's issuing a token. Virtual funds in the form of tokens (e.g. Bitcoin or Ether) promise consumers a frictionless alternative to the traditional banking system. Consumers are lured by lower transaction fees, greater control and greater flexibility. These tokens make digital transactions between two parties possible without the bank as an intermediary.

Recently, there has been an explosion in interest in ICOs as an alternative means of raising funding – particularly for blockchain-based companies. Initial investors in ICOs speculate in making gains by buying early access to potentially foundational decentralised applications, just as early investors into Bitcoin and Ethereum did. Locally, an Auckland blockchain company Centrality issued US$80 million tokens in January 2018 when its ICO tokens sold out in six minutes.

With the rapid rise of ICOs there is an increasing focus from regulators. In China, ICOs have been banned entirely, while a number of smaller jurisdictions like Malta, Mauritius, Switzerland, and Gibraltar have set their sights on becoming leaders in ICO-related innovation.

3. Partnering in Fintech

In the future, the customer front-end user interface of traditional financial service players may yield to technology players (e.g. Amazon entered the lending market with Amazon Lending in 2011. Since then, more than $3 billion has been lent to small businesses in the US, the UK and Japan, who sell on the Amazon platform.). Large e-commerce companies have shown increasing interest in providing traditional financial services. By creating their own algorithms and verification processes, these companies can achieve greater efficiency while reducing costs compared to obtaining these services from a third-party provider.

E-commerce giants already hold and process significant volumes of customer data. The focus of technology giants is on developing and enabling consumer data-centric business models. Technology giants also offer advantages of increased speed to market, inexpensive and scalable infrastructure, and modern data analytics capabilities, including access to proven machine learning and cognitive technologies. These are all areas in which technology and e-commerce giants excel, unencumbered by legacy technology.

E-commerce players are investigating how to use customer data to better manage credit risk, working capital and liquidity. Though the focus is currently on creating an exemplary experience for customers within their ecosystem, there is the potential for such services to be offered as a white label product in the future, further disintermediating traditional players.

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The focus of technology giants like Google, Apple and Microsoft's on developing and enabling data-centric business models provide threats from another front. While banks hold and process significant financial data, the speed and efficiency with which a data-centric business can achieve these same tasks is accelerating. In the future, the front-end user interface and data processing elements of traditional banking players may eventually yield to technology players that can deliver reliable results on a more expedient timescale. Facebook is an example of a non-fintech player expanding into what is currently fintech-dominated space: digital payments. Coming from a social media background, Facebook's driver is the ability to monetise social communities as an integrated part of their ecosystem. While Facebook's strategy is not new, the size of its existing, engaged customer base offers opportunities unmatched by fintech or traditional payments firms.

Partnerships with technology giants may provide significant advantages to banks and other financial services firms currently hobbled by legacy systems, processes and people. Increased social engagement, and technologies to better manage customer relationships in the digital sphere, offer other opportunities.

With this wave of advancements in innovation in response to existing legacy infrastructure, continued increases in the development of complex regulation and the building of integrated consumer digital eco-systems – Fintech is certain to provide a very different consumer experience in the future. If customer centricity continues to drive this innovation then the prospect of vertically integrated digital eco-systems will become very real.

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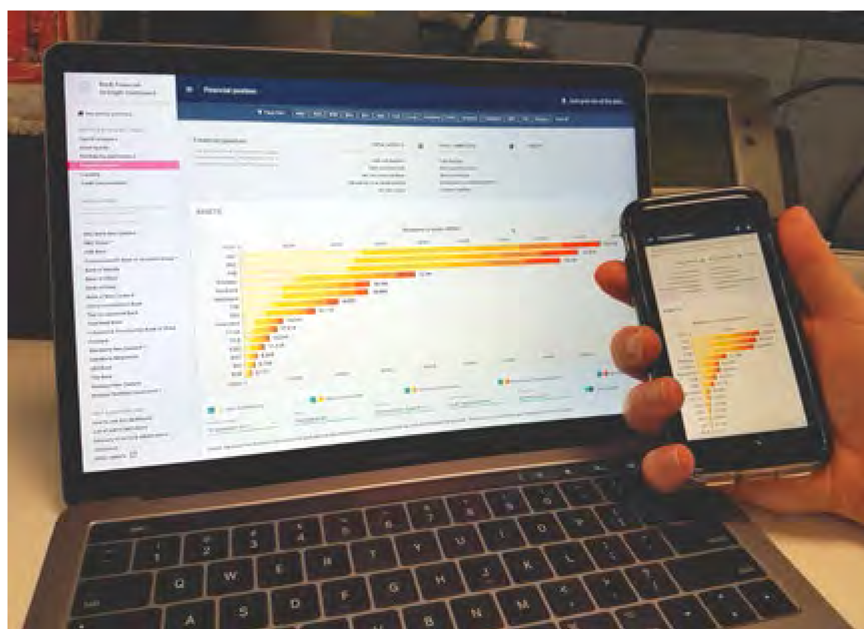
RBNZ: Modernising disclosures with Bank Financial Strength Dashboard

Geoff Bascand
Deputy Governor and
Head of Financial Stability
Reserve Bank of New Zealand

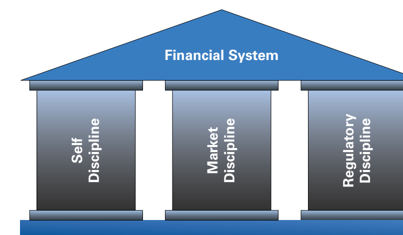
The Reserve Bank plans to unveil an innovative online information disclosure tool this year. Its *Bank Financial Strength Dashboard* aims to make it easier for investors, including the public, to assess the financial stability of banks by enhancing the disclosure and accessibility of key financial information. This will give greater transparency about banks' financial health and performance, and more informed investors should help promote a sound and efficient financial system.

The *Dashboard* will be an interactive online tool that will provide a central repository of key information about the prudential and financial condition of New Zealand incorporated banks. The underlying data will be updated quarterly and hosted on the Reserve Bank's website. The information will be drawn from data that banks provide to the Reserve Bank and presented in an accessible and user-friendly format. Importantly, the new Dashboard will allow users to make side-by-side comparisons of banks in an `apples-with-apples' scenario on seven key subject areas. These are: credit ratings, capital adequacy, asset quality, profitability, the balance sheet, liquidity, and credit concentrations. Dashboard users will be able to interact with the information and drill down for more details on each of the subject areas. More use of bank disclosures will help to improve investor decision-making and incentivise banks to prudently manage their risks.



The *Dashboard* will be an interactive online tool that will provide a central repository of key information about the prudential and financial condition of New Zealand incorporated banks.

As far as the Reserve Bank is aware, a digital interface of bank disclosures – combining timely data with an approach accessible to both the general public and more sophisticated investors – will be something of a world first. As such, the Reserve Bank recognises that this is an ambitious project and anticipates that the New Zealand public and the market will benefit from having easier access to a range of bank financial and prudential information.



The *Dashboard* builds on the three-pillars approach that the Reserve Bank's prudential regime is built on: market, self- and regulatory discipline, with the *Dashboard* helping to bolster market-discipline in particular by providing a tool to help investors assess the financial strength of their banks.

The *Dashboard* builds on the three-pillars approach.

Market discipline refers to the way market participants influence a financial institution's behaviour through monitoring its risk profile and financial position.

Anybody providing funds to a financial institution is considered an investor, from depositors banking $100 to professional investors in sophisticated debt instruments or equities, so the effects of market discipline can be considerable. Public scrutiny of bank disclosures could be expected to incentivise banks to improve the quality of their disclosures and thus bolster the self-discipline pillar.

The quarterly *Dashboard* replaces the need for banks to prepare off-quarter disclosure statements, but banks will continue to publish annual and half-yearly statements. Compared to the status quo, the *Dashboard* will improve the timeliness, comparability and accessibility of bank disclosures.

The Reserve Bank sees the *Dashboard* as an exciting development in the evolution of its prudential regime.

The *Dashboard*'s success will depend on the integrity of the data behind it and this will be a shared responsibility between the retail banks, which are expected to provide high quality reporting to feed into the *Dashboard*, and the Reserve Bank, which will manage the publication process. Another ingredient for success is the important role that users have to play in terms of scrutinising the data, which will contribute to data integrity and ultimately help make *Dashboard* disclosures effective. Given the range of stakeholder perspectives, the policy development process included a public consultation, and has involved working closely and collaboratively with banks to help configure the *Dashboard* with their current reporting processes in order to create a workable proposition.

The Reserve Bank has been working to bring this digital innovation from finalised policy to reality as quickly as possible. While originally floated in 2015 as part of a regulatory stocktake undertaken by the Bank, the decision to produce a *Dashboard* followed an iterative and robust consultation process. A public consultation was undertaken in 2016, feedback from which was built into the final proposal. Relevant industry stakeholders have also helped shape the *Dashboard*, and engagement with Government agencies has also been significant. We expect that the first *Bank Financial Strength Dashboard* will 'go-live' toward the end of May 2018.

The *Dashboard* itself will be a dynamic tool.

The release of the *Dashboard* will be accompanied by a public awareness and education campaign to ensure it encourages wide access for both technical and lay audiences. This will include a series of educational videos, explaining the seven key metrics and their related subject areas, as well as carrying out on-going financial education with industry and public users in the interests of further enhancing market-discipline.

The Reserve Bank sees the *Dashboard* as an exciting development in the evolution of its prudential regime. The *Dashboard* itself will be a dynamic tool, with the Bank intending to work behind the scenes beyond the `go-live' date to ensure the Dashboard keeps pace with industry developments and user needs.

Depending on the success of the *Dashboard* there may be scope to broaden the approach to other regulated institutions in the future as the Bank seeks to promote a sound financial system in the modern digital world.

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FMA: Show us better outcomes for your customers

Liam Mason
Director of Regulation
Financial Markets Authority

Implementing conduct regulation is an incremental process. Over the last two years, we've licensed around 200 firms across various parts of financial services, and have begun to build critical intelligence about the sectors we regulate. From a standing start, businesses have grasped the requirements to ensure they have systems, controls and governance processes to meet their obligations and the terms of their licence.

In 2014, when we began this process, we said it would take at least five years for industry and consumers to experience the difference and benefits of conduct regulation. We're now halfway through. Over the next two years will be focused on whether businesses are moving from a 'checking-off' process on their compliance systems to a broader focus on how their conduct impacts customer outcomes.

Our frontline teams will be talking to those we regulate and asking them to show us how their conduct is benefiting their customers. How has the provider dealt with any issues that have arisen leading to poor customer outcomes? We do not want providers to tell us they are delivering quality customer outcomes. We want them to show us how they know they are. This was set out in our Statement of Intent 2017-2020 and is the next natural step in conduct regulation.

Our frontline teams will be talking to those we regulate and asking them to show us how their conduct is benefiting their customers.

Transitions are rarely smooth

Transition to a new regime is rarely smooth. Conduct regulation means we not only seek to respond to instances of potential misconduct but to guide and encourage providers to improve their focus on customer outcomes before something has gone wrong.

Throughout last year we saw examples of businesses doing the right thing, ensuring they understand our expectations and talking to us about issues or concerns. Our recently published Conduct Outcomes Report covers the enforcement action we have taken when we are required to hold firms and individuals to account. These cases also demonstrate our expectations to the market.

Our teams also saw examples where a provider made a mistake, the business accepted it, made good, and focused on ensuring it wouldn't be repeated. For the most part we engage with and monitor willing compliers, market participants who understand our role and their obligations. The industry as a whole can see and understand the benefits of an active regulator engaging closely with the sector.

There are a small number of providers where this willingness to engage is lacking. These businesses will be subject to an increased level of scepticism about whether their conduct meets the objectives of our financial markets regulation. They are likely to receive a firmer response when issues arise.

Benefiting consumers

There is always a tension in regulation between ensuring licensing conditions and standards are met, alongside working with the industry to benefit consumers. While the requirement to support and promote investor capability initiatives is part of the conditions of an instrument of appointment for KiwiSaver default providers, we are still seeing a range of responses from the default providers.

While we accept some providers have made efforts to reach their customers, the results remain patchy. However, we also continue to work with the default providers in behavioural insights trials to understand how simple changes to the way information is communicated can have a big impact.

While we accept some providers have made efforts to reach their customers, the results remain patchy.

Conduct regulation is not just designed to impose rules and compliance standards to prevent misconduct. It has a broader goal of expanding the capacity of financial markets, allowing better and cheaper allocation of capital. We believe raising the overall standards of conduct within the financial services industry, and enforcing the law where we see potential breaches, supports our mandate to increase investor confidence and encourage participation in financial markets.

Encouraging innovation while mitigating risks

We also have a mandate to encourage innovation. New Zealanders will soon be able to access digital advice, or robo-advice, for the first time. We believe this innovation has the potential to broaden access to financial advice, particularly for KiwiSaver members and those with small sums to invest.

We have enabled digital advice by using our exemption powers to bring it into the existing framework of products and services we regulate. This decision has been supported by many providers, from major institutions to small start-ups.

Innovations bring opportunities and can also pose risks. Both when innovation is misused to circumvent or ignore rules designed to protect New Zealanders and also when exuberance about the latest product obscures risks inherent in it. Cryptocurrencies offer both these opportunities and risks.

Innovations bring opportunities and can also pose risks.

To address this, we have published guidance for both consumers and industry. We want to strike a balance – encouraging and accommodating innovations that support financial markets, while helping consumers understand the risks. The rise of cryptocurrencies is a global challenge, so we are working with colleagues at Australian Securities and Investment Commission (ASIC) and other market regulators around the world.

We are continuing to engage with the sector as entrants develop ideas for the local market. As a minimum, we have stated that cryptocurrency exchange businesses must be on the Financial Service Providers Register and provide consumers access to an independent dispute resolution scheme.

Where necessary we have intervened to prevent initial coin offerings that did not comply with market regulations in relation to the offer of financial products to the public.

Our guidance to consumers is clear: this is a risky, unregulated sector. Be prepared to lose money if you decide to buy or sell cryptocurrencies. Investors should also understand that using cryptocurrencies may make you a target for fraud, cyber-theft or businesses selling high-risk investments.

Our guidance to consumers is clear: this is a risky, unregulated sector.

Focus in 2018

A regulator cannot be everywhere all the time. We take a risk-based, intelligence-led approach to meeting our objectives. With over 200 firms having made the effort to gain a financial services licence, a particular focus for us in 2018 will be to take action where we see unlicensed firms engaging in an activity requiring a licence, or otherwise operating on the perimeter of our regulation to the detriment of New Zealand's market integrity.

For our regulated firms, we will continue to use thematic reviews to evaluate standards of conduct. We will take action where we see shortcomings, and use what we find to improve our understanding of current risks and identify areas for future monitoring.

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NZBA: Code of Banking Practice breaks new ground

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

Trust and confidence are watchwords for the banking industry the world over. The banking environment in New Zealand is different from other countries. We did not experience bank failures or bailouts in the GFC, nor the conduct scandals seen in other countries. We have a strong, stable and well-regulated industry, which benefits our economy, households and business. That said, we're very conscious of the world around us and we're not sitting on our laurels.

Building on our reputation and constantly looking to improve customer experience is an important driver for all banks in New Zealand. As part of that, the New Zealand Bankers' Association will this year publish a new Code of Banking Practice. We're taking a fresh approach to the Code that aims to boost its relevance and make it easier for customers to understand what they can expect from their bank.

We're taking a fresh approach to the Code that aims to boost its relevance and make it easier for customers to understand what they can expect from their bank.

The Code of Banking Practice has been around for over 25 years. It sets out what banks will do for their customers as a minimum standard, and helps ensure customers get a fair go from their banks.

The Code has played an important part in maintaining customer trust and confidence since it was first introduced in 1992. As the relationship between banks and their customers has matured over the years, the time seems right to break new ground and bring the Code into the 21st century.

The new Code states what customers can expect from their bank in a simple way. It is high-level and sits above the detail of bank terms and conditions.

The Code clearly sets out five commitments that banks will make to their customers.

It says banks will treat their customers fairly and reasonably. They'll communicate clearly. They will protect customer privacy and security. They'll be responsible lenders. And they'll deal effectively with customer complaints.

These few words say a great deal about what customers can expect from their bank. While the new Code is shorter and easier to read, in no way does it reduce what banks will do for their customers. In fact, it raises the bar.

While the new Code is shorter and easier to read …it raises the bar.

These principles avoid the old rules-based approach. This means banks have to think carefully about how their conduct meets the commitments in the Code. Following prescribed rules doesn't always result in the best customer outcomes. The principles-based approach we're proposing means banks will work even harder to get the right customer result. We think it'll be great for customers, and much better aligned with how we now do things in New Zealand.

The new Code will more easily keep up to date with banking innovation. For example, the current Code has a whole chapter on cheques and only a couple of clauses on mobile banking. That doesn't make sense in a world where cheque use is declining year-on-year, and mobile banking is hugely increasing. A higher level principles-based approach avoids the Code quickly getting out of date in light of changes to the way we prefer to do our banking.

The new Code also fits better with the changing regulatory environment. Consumer law and regulations have been enhanced over recent years, and there are more changes on the way. For example, we now have the Responsible Lending Code under the Credit Contracts and Consumer Finance Act. We're also looking at changes coming in through the Financial Advisers Act, which propose new customer-first obligations for financial advisers.

The new Code also fits better with the changing regulatory environment.

Our new approach is quite different from other countries, including Australia. There they have a different framework for their Code of Banking Practice that involves regulator-approval and requires a more prescriptive approach. It's a legal document that focuses on what banks need to do. By contrast, our new Code will focus on customers and what they can expect from their banks.

We've consulted closely with the Banking Ombudsman on the new Code because it goes hand-in-hand with the Ombudsman's role. If you're not happy with the way your bank has responded to your complaint, the Code says you can take it to the Ombudsman to sort out. The service is independent of the banks, and free to customers.

While the Ombudsman is more likely these days to deal with complaints about mistaken online payments than problems with cheques, the point of the disputes resolution service remains the same as when it was established 25 years ago.

All the evidence suggests that the Ombudsman scheme has worked as its architects intended. New Zealanders rate their banks highly in customer satisfaction surveys. That's not just because banks are providing the kind of experience customers want. It's also because banks operate in a very competitive environment and work hard to keep their customers happy. That includes putting right any problems quickly and fairly.

The new Code will provide the Banking Ombudsman with more flexibility in determining what good banking practice is. As well as looking at the principles set out in the Code, the Ombudsman will continue to take into account the relevant law, and bank terms and conditions. She may also consult other banks to determine what good banking practice looks like in particular cases. That's important because customer expectations may change over time. This flexibility will help keep minimum standards in line with those expectations.

Customer trust and confidence in banks are essential to the industry's ongoing success.

Customer trust and confidence in banks are essential to the industry's ongoing success. For the last 25 years the Code of Banking Practice has played a crucial role in improving customer outcomes by setting minimum standards in what people can expect from their bank. The new Code aims to build on that solid foundation. It will create a simpler, more easily understood and relevant framework for even better banking in New Zealand.

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Massey: Banking industry forecasts

Christoph Schumacher
Professor of Innovation and Economics
Massey University

"There are two kinds of forecasters: those who don't know, and those who don't know they don't know."

John Kenneth Galbraith

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

As in previous years, this FIPS article reviews and forecasts the key performance drivers for the New Zealand banking industry, namely lending, net interest margin and credit loss rate. Based on these drivers, I provide an outlook for the industry's profit before tax. To produce quarterly forecasts for the next two years ending in December 2019, I use a combination of macroeconomic variables and time-series analysis. Specifically, I employ a vector autoregressive model (VAR) as it enables me to investigate how interaction between the variables changes the forecast. The results of my analysis are displayed in Table 10 on page 72. I also revisit the forecast supplied in last year's FIPS to see how accurate it was, review the performance of the New Zealand economy in 2017 and provide an economic outlook for 2018.

The banking sector finished 2017 very strongly with higher than anticipated profits of over $2 billion. This was driven not only by an increase in lending volume, but also the result of banks reducing their operating expenses and several loss reversals.

As the savings on expenses and loss reversals have now been absorbed, before tax banking profits in the fourth quarter of 2017 (actual data not available yet) are expected to dip slightly. The outlook for 2018-19, however, is very positive, with profits anticipated to rise gradually to $2.09 billion. This is due to an expected increase in lending volume, steady net interest margins and a very low and stable credit loss rate.

Let's now take a closer look at the industry performance drivers. In our 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.

Lending in 2017 was around 5% higher than anticipated, with a total lending volume of $481 billion in 2017 (Q3). Total lending is expected to increase at a similar rate as in the past two years from $498 billion in 2018 (Q1) to $560 billion in 2019 (Q4). Investments and exports are projected to increase and residential construction should soon rebound from a recent drop. The RBNZ's Official Cash Rate (OCR) has been progressively cut to record lows in recent years, stimulating not only economic activity but also housing demand. Add to this strong net immigration numbers, and demand for loans continues to be strong.

Net Interest Margins (NIM) were marginally lower than expected, despite a reduction of OCR in 2016 (Q4) from 2% to 1.75%. This shows that banks pass on OCR changes to customers and that there is healthy competition in the banking sector. NIM are expected to remain fairly constant over the next two years at around 2.2% with a possible small reduction to 2.1% in the second half of 2019.

The unwinding of the Canterbury earthquake reconstruction in 2019 and the intention of the government to slow down house price increases could intensify competition, leading to slightly lower profit margins.

For 2016 (Q4) and 2017 (Q1), the Credit Loss Rate (CLR) hovered around 0.1% as predicted. In 2017 (Q2 and Q3), however, the CLR fell to a record low of 0.02% as a result of several credit loss reversals. We anticipate the CLR to remain this low as banks continue to implement stringent lending policies.

Changes in our macroeconomic indicators can impact the industry drivers used in our model. The regression results suggest that changes in lending volume are inversely related to changes in unemployment. New Zealand's unemployment rate fell to 4.6% in 2017 (Q3) from 4.8% in the previous period. This was the third straight decline and the lowest unemployment rate since 2008 (Q4).

Although the unemployment rate is expected to rise slightly to about 5% in the next two years, overall unemployment is low, 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. In 2017, net migration surged to a record high (in the year to 31 March 2017 net gains from migration were 71,932 up from 71,333 in the year ended 28 February). Including natural increase, our population grew by 100,400 people, the largest ever increase.

Inflation can have an impact on NIMs as environments of higher inflation often entail greater credit risk, which banks need to offset with higher margins. After very low inflation rates of around 0.4% in 2016, inflation rose to over 2% in 2017 and is currently sitting at 1.9%. This rate is in line with inflation in the majority of Organisation for Economic Co-operation and Development (OECD) countries.

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

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There is an expectation that inflation will sit around the 2% mark for most of 2018 and possibly rise to 2.4% in 2019. The impact on NIMs should be minimal, as possible increases in profit margins to compensate banks for increased risks could be offset by the competition within the industry.

Interest rates are low at the moment, reducing pressure on borrowers and resulting in a lower number of defaults and a low CLR. However, house prices and household debt have soared in recent years in relation to income. This high exposure to interest rate risks might impact on the CLR if interest rates were to rise. In 2017, household debt as a percentage of disposable income was 167.8%, a further rise from a high of 165% in 2016. Although the present levels of household debt aren't particularly alarming compared with other countries, the rate at which households become increasingly leveraged is a factor to watch. Another related factor that deserves consideration is rural debt-to-income ratios. Last year, commodity prices improved after weaker values in 2016. However, the cyclical upturn matured in the second half of 2017 and markets are looking tentative heading into 2018.

See Table 10 with Forecasting Results VAR.

There are three things to note about our model. First, 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. Secondly, 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 an impact on our key industry drivers. Fiscal policy is expected to become more expansionary in the next two years based on the new government's plans to raise spending, investment and transfer payments. Although there is an expectation of monetary tightening from late 2018 onwards, there are no indications that the economic landscape of the banking sector will change dramatically in the near future. Finally, forecasts for periods after a change of government can be tricky as the impact of new policies creates uncertainty. Specifically, policies on new government spending, increases in the minimum wage, tighter visa restrictions and the KiwiBuild programme might affect the economy more strongly than anticipated.

We now take a closer look at the performance of the New Zealand economy in 2017 and identify challenges that lie ahead. The economy grew by around 2.7%, which is solid in terms of global growth rates. However, growth was lower than in 2016 (3.6%) caused by a contraction in utilities and a slower than anticipated growth of services. The expectation is that the economy will grow by around 3% over the 2018-19 period, reflecting a positive outlook for the construction sector (we have seen a rebound in building permits) and stronger investments and exports.

In 2017, the New Zealand dollar weakened marginally from the elevated 2016 levels but remained strong. The demand for our dollar is backed by high interest margins compared with the G10, demand for primary products and a continued rise of tourism numbers. The strong dollar is still putting pressure on exports. However, after declining terms of trade in 2016 (-1.8%), we have seen a constant increase throughout 2017, reaching an all time high in September (+0.7%). This is due to a drop in import prices that was greater than the decline of exported goods.

TABLE 10: FORECASTING RESULTS VAR

VAR industry driver		2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4
		Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Lending ($Billion)	Upper CI				502	517	531	544	558	572	587	601	616
	Forecast	469	476	481	489	498	507	516	524	533	542	551	560
	Lower CI				477	480	484	488	492	497	501	505	509
Net Interest Margin (%)	Upper CI				2.33%	2.37%	2.38%	2.39%	2.39%	2.39%	2.38%	2.38%	2.38%
	Forecast	2.02%	2.07%	2.10%	2.13%	2.13%	2.14%	2.14%	2.14%	2.13%	2.13%	2.13%	2.12%
	Lower CI				1.94%	1.92%	1.92%	1.91%	1.91%	1.90%	1.90%	1.90%	1.89%
Credit Loss Rate (%)	Upper CI				0.10%	0.14%	0.17%	0.19%	0.21%	0.22%	0.23%	0.23%	0.24%
	Forecast	0.09%	0.05%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%
	Lower CI				-0.07%	-0.11%	-0.14%	-0.16%	-0.17%	-0.19%	-0.20%	-0.21%	-0.22%
Profit Before Tax ($Billion)*					2.50	2.54	2.58	2.61	2.64	2.67	2.69	2.72	2.74
	Forecast	1.75	1.74	2.01	1.93	1.95	1.97	1.99	2.01	2.03	2.05	2.07	2.09
					1.36	1.36	1.37	1.38	1.39	1.40	1.41	1.43	1.44

* 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.

For the year that ended in March 2017, New Zealand's exports were $70.4 billion, while imports were $67.4 billion (figures from the Ministry of Foreign Affairs and Trade). The New Zealand dollar is expected to stay strong; indications are that it will trade a little lower in the near future.

In 2017 we saw fairly steady and reasonable global growth. Major shocks to the global economy as a result of the political changes in the US and Britain, 'Brexit' and looming elections in Germany didn't happen. The economies of the European powerhouses France and Germany have stabilised and so has China.

Overall the New Zealand economy is still in good shape, although 2017 lagged a bit behind expectations. The forecast for 2018 is similar to that of 2017. Solid economic growth of around 3% driven by high tourist numbers, strong construction and building activity, solid inward migration and government monetary policies that support growth. Fiscally, New Zealand is in a sound position with a balanced budget and low public debt. As in previous years, the major vulnerability is the high level of household debt fuelled by the house price increases, especially in Auckland.

An interesting finding by the OECD Economic Survey 2017 is that New Zealand's productivity levels remain well below that of leading OECD countries. It attributes this to a lack of international connections, missing economies of scale, weak competitive pressure, low rates of capital investments, and weak research and development activity. This suggests that New Zealand could do even better by addressing its labour productivity issues.

To conclude, the banking industry seems to be in even better shape than the New Zealand economy. The industry finished the year with record profits and this trend is expected to continue.

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Ownership and credit ratings

as at 8 February 2018

Registered banks	Ultimate shareholding	%	Long-term credit rating: Standard & Poor's		Moody's		Fitch Ratings	
ANZ Bank New Zealand Limited	Australia and New Zealand Banking Group Limited	100	AA-	Negative	A1	Stable	AA-	Stable
ASB Bank Limited	Commonwealth Bank of Australia	100	AA-	Negative	A1	Stable	AA-	Stable
Australia and New Zealand Banking Group Limited – New Zealand Branch[37]	Australia and New Zealand Banking Group Limited	100	AA-	Negative	Aa3	Stable	AA-	Stable
Bank of Baroda (New Zealand) Limited[38]	Bank of Baroda (India)	100	n/a	n/a	Baa3	Stable	BBB-	Stable
Bank of China (New Zealand) Limited[39]	Bank of China Limited (China)	100	A	Stable	A1	Stable	A	Stable
Bank of India (New Zealand) Limited[40]	Bank of India (India)	100	BB+	Stable	Baa3	Stable	BBB-	Stable
Bank of New Zealand	National Australia Bank Limited	100	AA-	Negative	A1	Stable	AA-	Stable
China Construction Bank (New Zealand) Limited[41]	China Construction Bank Corporation	100	A	Stable	A1	Stable	A	Stable
Citibank, N.A. New Zealand Branch and Associated Banking Group[42]	Citigroup Inc.	100	A+	Stable	A1	Positive	A+	Stable
Commonwealth Bank of Australia – New Zealand Branch[43]	Commonwealth Bank of Australia	100	AA-	Negative	Aa3	Stable	AA-	Stable
Heartland Bank Limited	Various investment/nominee companies; various private shareholders	100	n/a	n/a	n/a	n/a	BBB	Stable
Industrial and Commercial Bank of China (New Zealand) Limited[44]	Industrial and Commercial Bank of China Limited (ICBC)	100	A	Stable	A1	Stable	A	Stable
JPMorgan Chase Bank, N.A. New Zealand Branch[45]	JPMorgan Chase & Co.	100	A+	Stable	Aa3	Stable	AA-	Stable
Kiwibank Limited	New Zealand Post NZ Super Fund Accident Compensation Corporation (ACC)	53 25 22	A	Stable	A1	Stable	AA-	Stable
Kookmin Bank Auckland Branch[46]	KB Financial Group Inc.	100	A+	Stable	A1	Stable	A	Stable
Rabobank Nederland New Zealand Banking Group[47]	Coöperatieve Rabobank U.A.	100	A+	Positive	Aa2	Negative	AA-	Stable
Rabobank New Zealand Limited	Coöperatieve Rabobank U.A.	100	A	Positive	n/a	n/a	n/a	n/a
Southland Building Society	Mutual	100	n/a	n/a	n/a	n/a	BBB	Stable
The Bank of Tokyo-Mitsubishi UFJ Limited – Auckland Branch[48]	The Bank of Tokyo-Mitsubishi UFJ, Limited	100	A	Stable	A1	Stable	A	Stable
The Co-operative Bank	Mutual	100	n/a	n/a	n/a	n/a	BBB	Stable
The Hongkong and Shanghai Banking Corporation Limited – New Zealand Branch[49]	HSBC Holdings plc	100	AA-	Stable	Aa3	Stable	AA-	Stable
TSB Bank Limited	TSB Community Trust	100	n/a	n/a	n/a	n/a	A-	Stable
Westpac Banking Corporation New Zealand Banking Group[50]	Westpac Banking Corporation	100	AA-	Negative	Aa3	Stable	AA-	Stable
Westpac New Zealand Limited	Westpac Banking Corporation	100	AA-	Negative	A1	Stable	AA-	Stable

n/a = there is no credit rating available for this entity from the rating agency indicated.

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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.

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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 in relation to gross loans and advances. This 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.

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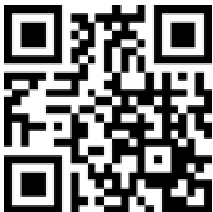

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