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The Dashboard – year one: shining a brighter light on the financial strength of banks

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Non-technical summary

Just over a year ago, we launched the Bank Financial Strength Dashboard, a website all about the financial health of registered banks in New Zealand. This article discusses our experience with running the Dashboard as well as the Dashboard's role in promoting a sound and efficient financial system.

We use website user statistics to get an early indication of how well the Dashboard is achieving its objective of better informing market participants about the financial strength of banks.

Uptake for the Dashboard has been strong. It receives nearly 10,000 visits each quarter. To put this in perspective, the Dashboard's predecessor (the little known G1 table) received about 500 visits per quarter. The Dashboard has also received international acclaim by winning the Initiative of the year award from the Central Banking Publication. These are both good indications that the Dashboard is meeting our admittedly lofty expectations. However, there is always room to do more and do better.

Further improvements to the Dashboard are being considered. This includes, in principle, a Te Reo Māori version of the Dashboard; API functionality; better information on trends; and the possible addition of new metrics. The Reserve Bank is also considering a dashboard approach to improve prudential disclosures in the insurance sector.

The Reserve Bank is committed to supporting the broader effort to help build the financial capability of New Zealanders. The Dashboard contributes to this broader effort by providing relevant and accessible information on the financial strength of banks to the public.

The Dashboard is an interactive website designed to help depositors, investors and a range of other stakeholders judge the relative safety of banks and thereby make informed decisions when placing funds with banks. This scrutiny by market participants – called market discipline – incentivises banks to operate in a prudent manner, which ultimately contributes to a stable financial system.

Market discipline is one of three pillars that the Reserve Bank relies upon to promote a sound and efficient financial system. The other two pillars are regulatory discipline (i.e. the rules and regulations that banks must

The Dashboard – Year One

Award winning

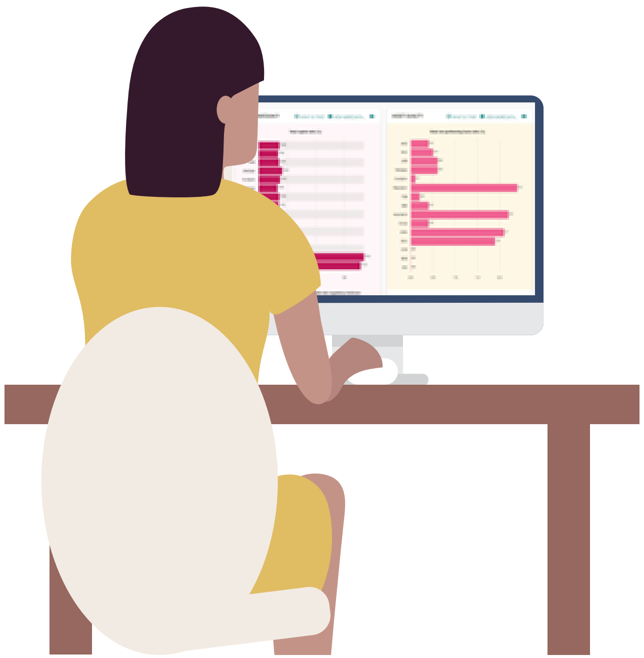
Named Initiative of the Year by Central Banking Publication

38,000

visits

2,800

hours spent by users



40 percent

returning users

4 mins 30

average length of visit

adhere to) and self-discipline, which aims to support a bank's internal risk management and governance systems.

Disclosures have long played a key role in the Reserve Bank's approach to prudential regulation and the Dashboard is a major overhaul of how financial disclosures are communicated to a diverse audience of users.

The need for an overhaul of disclosure was identified through the 2015 Regulatory Stocktake and informed by international best practice on financial disclosure requirements. These international standards were updated in the aftermath of the 2007-2008 global financial crisis (GFC) and reflect a renewed focus on market discipline.

In the analogy of the Reserve Bank (Te Pūtea Matua) as the big tree (Tāne Mahuta) that sits at the centre of New Zealand's financial ecosystem, the Dashboard can be thought of as a spotlight or perhaps a spyglass. Tāne's arborists (the regulator) provide this spyglass to New Zealanders so they can help keep an eye on the health of Tāne's branches, which are the regulated entities such as banks.

This analogy is a useful reminder that the Dashboard is a collaborative effort where everyone has a part to play. The Reserve Bank needs to provide a disclosure tool that works for a diverse set of users; banks need to provide quality data and users need to engage with the data.

Like any tool, the Dashboard needs to be maintained to ensure that it remains fit for purpose over the long haul. As mentioned, we are planning several enhancements to the Dashboard that respond to the needs of our users and improve stakeholder engagement.

Further down the track, we plan to do a more detailed review of the Dashboard. This review will help to better judge the Dashboard's impact

The Dashboard versus its predecessor

Compared to the old G1 table, which it replaces, the Dashboard has:

20

times the number of views

3

times the number of downloads

3

times the amount of information

and identify opportunities for improvement. As data availability improves, there will be scope to increase the amount of information the Dashboard provides. In the meantime, we encourage users to keep providing feedback on the Dashboard as minor enhancements may still be possible in the interim and user engagement will help with the upcoming review.

Introduction

Public disclosures are designed to promote financial stability by creating well informed market participants.

Well informed market participants are an essential element of well functioning markets. The consequences of poorly informed market participants can be severe. This is especially true of the market for banking services where (due to the large size of some banks and their high degree of interconnectedness), poorly informed market participants could lead to imprudent behaviour by banks, which in turn could threaten the stability of the financial system. To guard against these risks, public disclosure requirements are in place on banks to help investors, depositors and other stakeholders make well informed decisions when placing their money with a bank.

In other words, the economic rationale for making public disclosures a regulatory requirement is that the private provision of banking services is subject to information asymmetries and negative externalities, which can lead to excessive risk taking and result in damage to the wider economy.

Public disclosures have long been a regulatory requirement.

In New Zealand, public disclosures have long played a prominent role in the prudential regulation of banks. From the mid-1990s, New Zealand incorporated banks have been required to publish quarterly disclosure statements that describe their financial and prudential condition. The aim of these disclosure statements was to create a large and diverse group of well-informed market participants that would scrutinise the riskiness of banks and thereby help promote the stability of the financial system (Mortlock, 1996). Public disclosures have since become a well established component of the international best practice toolkit on the prudential regulation of banks.

Market discipline is the moderating influence that well informed market participants can exert on the risk taking behaviour of banks.

Prudential disclosures are intended to help market participants exert a moderating influence on a bank's risk taking behaviour by, for example, demanding a higher rate of return or switching banks in response to a bank taking on more risk. The influence that market participants exert on banks is called 'market discipline' and is one of the three pillars which form the Reserve Bank's prudential regulation framework; the other pillars being self discipline, which involves supporting firms' internal risk management structures, and regulatory discipline which involves setting rules and requirements. The three pillars work together as the support structure to promote a sound and efficient financial system.

Market discipline has gained importance in the wake of the GFC…

The global financial crisis of 2008 (GFC) was a stark reminder of the inherent vulnerability of the financial system and prompted a strong regulatory response around the world. Along with the need for more stringent minimum capital and liquidity requirements, the GFC also highlighted the need for more transparency and better access to timely information to support market participants in making well informed decisions. Indeed, the relative importance of prudential disclosures as a regulatory tool has increased in the post-GFC era.

… and the Reserve Bank places a strong emphasis on market discipline.

The Reserve Bank emphasises market discipline more than other jurisdictions and therefore also relies more heavily on public disclosures (Fiennes (2016)). The need to modernise our approach to public disclosures by banks was identified in an in-depth review of regulatory settings in a 2015 stocktake exercise. The stocktake identified the need for more timely, comparable and accessible prudential disclosures and resulted in the development of the 'dashboard' approach to disclosures – an online interactive repository of key prudential metrics. The requirement for banks to publish general disclosure statements was retained but the frequency of publication was reduced from four to two times per year as a result of the dashboard.

The Dashboard is a major overhaul of how public disclosures by banks are made available to users.

The Bank Financial Strength Dashboard (the 'Dashboard') was launched on 29 May 2018 and has seen a strong uptake in usage compared to its predecessor, the little known, and now discontinued, G1 data table that was compiled by the Reserve Bank from individual bank disclosure statements. The Dashboard has also received international acclaim by winning the Initiative of the year award by the Central Banking Publication. One prominent user described the Dashboard as one the best examples of moving towards better transparency and financial literacy that they had ever seen. The awards committee noted the Dashboard as an example that could be replicated in other jurisdictions (Central Banking Publication (2019)).

The Dashboard is widely used and internationally recognised.

The strong uptake in use and international recognition are both positive indications that the Dashboard is tracking well at meeting its objectives of broadening the use and effectiveness of prudential disclosures. However, after one year in operation it is timely to ask ourselves some important questions, such as "who is using the Dashboard?" and "has the Dashboard improved market discipline in the New Zealand banking sector?" This article presents Dashboard website user statistics during the first year of its operation to gain some early insight into answers for these important questions.

Further analytical work is being planned to better understand how market discipline operates in New Zealand and to better gauge the Dashboard's impact. Box A provides a short discussion on some practical challenges with using public disclosures as a tool to enhance the effectiveness of market discipline.

Box A

Market discipline in practice

Market discipline is a key part in the toolkit for prudential regulation and supervision…

Market discipline is the influence that market participants exert on the risk-taking behaviour of firms and is a key pillar of the Reserve Bank's approach to prudential supervision. By its nature, market discipline is a collaborative effort and is more likely to be effective if market participants:

- have incentives to monitor financial institutions;
- have useful information and the ability to process it; and
- have the right mechanisms to exercise discipline.

…but also requires nurturing and is not without its limits.

These conditions can be challenging to meet and regulators and banks play an important role in laying the groundwork for effective market discipline to emerge. Provided the framework is sufficiently supported, market discipline can be a non-intrusive and cost-effective tool for limiting excessive risk taking. Indeed, the merits of market discipline are well recognised and it features prominently in the toolkit of international best practice on prudential regulation and supervision of banks. But market discipline is not without its critics, some of whom argue that there is misplaced confidence in market discipline (David Min (2015)). These arguments include:

- large and complex banks are too difficult to monitor;
- an assertion that short-term creditors like depositors are risk-insensitive and therefore do not have the incentive to actively monitor banks;
- that shareholders have a higher risk appetite than creditors and this can incentivise more rather than less risk taking by banks; and
- that market discipline works mostly as an ex-post mechanism (because market participants react to risk information that reflects past behaviour) and therefore does not prevent the build-up of risk.

These are valid concerns but the degree to which they inhibit market discipline will crucially depend on market characteristics and the regulatory settings that are in place in a particular jurisdiction.

New Zealand's regulatory settings market conditions support effective market discipline…

IIn New Zealand, there are good reasons to believe that an effective framework is currently in place to support market discipline. This includes a relatively less complex banking sector compared to other jurisdictions and regulatory settings that create strong incentives to monitor the banks (O'Connor-Close & Austin (2016)). For example, the Open Bank Resolution (OBR) policy and the historical absence of an explicit deposit insurance scheme place the cost of a bank failure mostly on shareholders and creditors rather than the taxpayer, which strongly incentivises the risk-monitoring of banks. It can also be argued that market participants are comparatively well informed because New Zealand is a leader in public disclosures. Finally, New Zealanders are well served by choice when it comes to banking services and so have mechanisms available to exercise discipline.

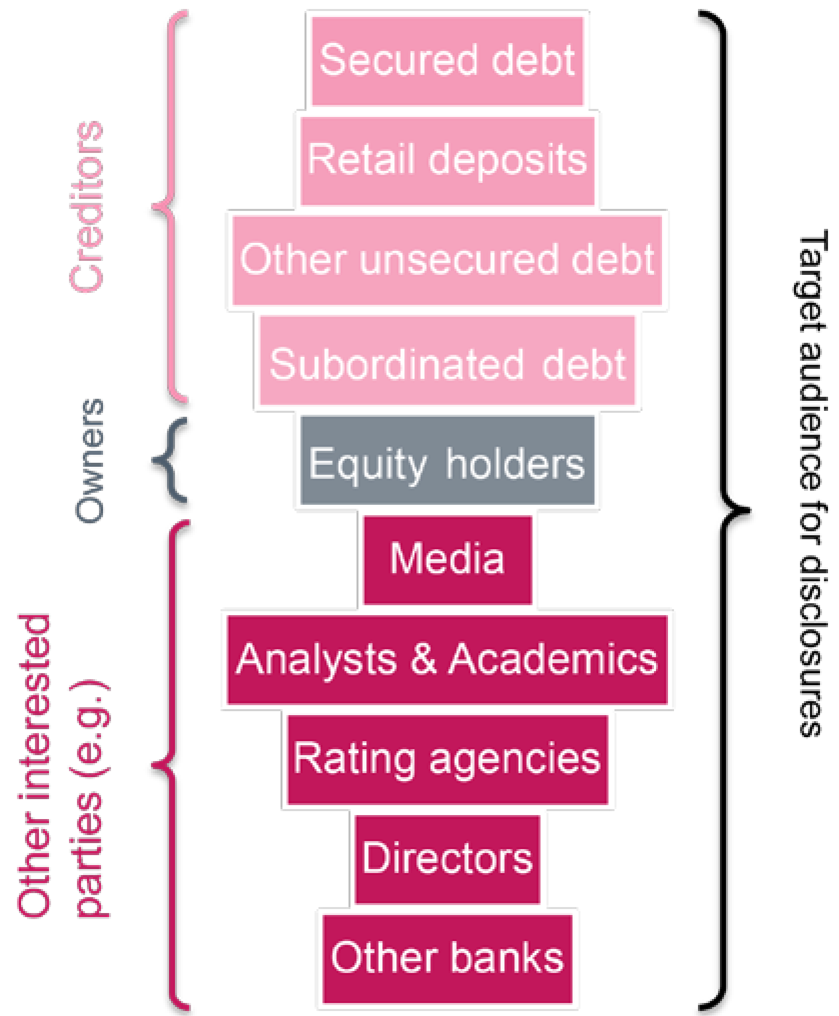
The Minister of Finance's in-principle decision (announced on 24 June 2019) to establish a depositor protection scheme may reduce depositors' incentives to monitor banks; although the size of this effect will depend on the features of the depositor protection such as the level of protection. The monitoring incentives of other stakeholders will likely remain unchanged because they are not covered by the depositor protection scheme.

Prudential disclosures are intended to mitigate the build-up of risk by making relative risk comparisons across banks easier for stakeholders. Banks are keenly aware that they will be judged relative to their peers and this creates a strong incentive to avoid deviating from the pack. Our experience with launching the Dashboard has confirmed this. In this way, disclosure works particularly well at mitigating idiosyncratic bank risks but not necessarily system wide risks because the pack behaviour of banks can make bad equilibriums difficult to identify (Borio (2019)). To some degree this risk is mitigated by system wide risk monitoring that the Reserve Bank does as part of its six-monthly Financial Stability Report and the application of Macroprudential tools when system risks become elevated.

Market discipline is difficult to measure…

Nonetheless, the question of just how effective market discipline is in New Zealand remains open. In an effort to plug this knowledge gap, the Reserve Bank has recently published what we believe to be the first quantitative study of market discipline in New Zealand (Haworth, Irrcher and Gillies (2018)). This study uses a well-established approach to measure the sensitivity of debt and equity prices to risk information

Figure 1
Disclosure target audience and sources of market discipline



about banks. The study finds that investors generally respond in the expected way to changes in bank risks. That is, they demand higher returns as risk increases. This finding is broadly consistent with those in other jurisdictions. This result is encouraging as it provides empirical support to the notion that market participants are paying attention and processing risk information. However, the measurement approach itself is somewhat limited because it does not cover the contributions of all relevant stakeholders and therefore does not provide a holistic view of the effectiveness of market discipline.

… and the Reserve Bank intends to do further analytical work on how market discipline operates in New Zealand.

There are a range of stakeholders (see Figure 1) that are not explicitly accounted for in the quantitative methodology because they do not directly affect the prices of financial securities in an observable and measurable way. Nonetheless these stakeholders can be expected to contribute to market discipline. This includes stakeholders like media, analysts and rating agencies among others. The Reserve Bank intends to carry out further analytical work to better understand how the full range of market participants contribute to market discipline in New Zealand.

What is the Dashboard and how does it work?

Deciding where to invest or store money is an important financial decision that involves making risk and reward trade-offs. Making these types of judgements is a difficult task and the information needed to do so is not always available or easy to understand. This is where the Dashboard comes in.

The Dashboard is a website all about the financial strength of banks.

The Dashboard is an interactive website that contains over 100 metrics about the financial and prudential condition of registered banks in New Zealand. The Dashboard was developed with the needs of our diverse target audience front of mind (see Figure 1 in Box A). This user-focused approach meant that we prioritised the presentation of insights from the data over simply making information available, which resulted in a design that is layered and graphics focused. The 'quick tour' video on the Dashboard landing page explains the various components of the website.

The Dashboard features a layered design so that users can get quick and easy access to key risk information…

The First layer of the Dashboard contains a selection of seven key metrics, such as credit ratings, capital ratios and non-performing loans. These key metrics provide a good starting place to gain insights on the financial strength of registered banks. Each of the seven key metrics is presented in a chart which also contains a written description of what the metric means and a short explanatory video (which can be accessed through the ‘What is this?’ button). Clicking on the ‘view more data...’ button on the chart will bring users to the next level of detail.

Credit ratings deserve a special mention because they are a summary measure directly relevant to depositors and investors. That is, credit ratings are an evaluation of a bank’s ability to repay its debts (such as money owed to depositors) that is provided by an independent financial services company (i.e. a rating agency). The other Dashboard metrics provide further insight and transparency into how banks run their business and risks that they take.

The Dashboard also contains several interactive features that allow users to make side-by-side comparisons of banks, which is useful to help choose among investment alternatives or where to store money.

Users who simply want access to the underlying data can download the full data set by clicking on the ‘just give me all the data’ button.

…but users are advised to consult with their financial adviser when making important financial decisions.

The Reserve Bank’s role in public disclosures does not extend to the giving of advice on the financial condition of any particular bank. Dashboard users are encouraged to consult with a financial advisor, when making important financial decisions.

Is the Dashboard a success?

Success is difficult to measure but users have embraced the Dashboard.

The success of the Dashboard ultimately depends on the extent to which it improves market discipline. This is a difficult test to meet because, as mentioned, measuring market discipline is itself challenging and the lack of important data for New Zealand makes direct measurement even more challenging. However, there are measurement techniques that we intend to explore once more post-launch data is available.

In the meantime, feedback from our user community and website user statistics can shed light on the Dashboard's impact.

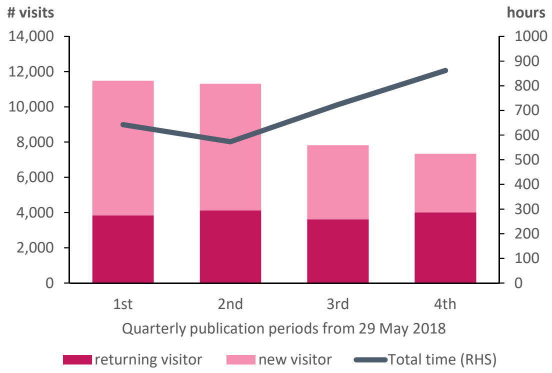
Indicators such as the number of visitors and the amount of time they spend on the website provide valuable insight on the size of our audience and whether visitors find the information worth their time.

The connection between the volume of traffic on the Dashboard and its impact on market discipline is straightforward: more Dashboard visitors means more people who are looking to get informed and therefore more capable of exerting market discipline.

Uptake has been strong and Dashboard users are spending a growing amount of time getting informed about the financial strength of banks.

In its first year of operation, the Dashboard has received an average of nearly 10,000 visits per quarter (see Figure 2). This is a big increase compared to its predecessor, the little known and now discontinued G1 table, which typically received about 500 visits per quarter. The

Figure 2
Dashboard user statistics



Source: RBNZ

number of Dashboard visits has dropped off somewhat after the first two publications, but this was expected because the novelty factor has waned and there was promotional support for the early publication rounds.

The number of visits would mean little if people were not spending a meaningful amount of time on the Dashboard. In this regard, the Dashboard has continued to gain interest with users. The average duration of visits has more than doubled from 3:23 minutes in the first publication period to 7:30 minutes in the fourth publication period. Collectively, users have spent 2,800 hours perusing the Dashboard.

The time that visitors spend on the Dashboard is heavily influenced by how the information is presented. The key metric summary page (i.e. the landing page) gets by far the most attention as it is displayed front and centre. However, a good number of users also spend time digging into the deeper layers of the Dashboard, especially areas that are given high prominence on the summary page such as capital adequacy and asset quality. This user behaviour confirms the merits of a layered user interface that presents key information up front while giving visitors the option of digging deeper where it is of interest.

Dashboard visitors are making use of educational videos and using interactive features to make relative risk comparisons across banks.

Users appear to appreciate the various interactive features on the Dashboard. The organisation filter, which allows users to pick and choose the banks they wish to compare, is the single most popular item that users interact with. This is encouraging because it suggests that users are actively making side-by-side comparisons and evaluating the relative risk across banks, which is the main objective of prudential disclosures and what the Dashboard was designed to do.

Users who download the underlying data are presumably using them as an input for further analysis or reporting. This is another way to look at the impact of public disclosures. On average, the underlying Dashboard data is downloaded around 500 times per quarter, which is more than three times higher than the typical number of downloads of the G1 table (the Dashboard's predecessor).

One last user statistic that we think is worth highlighting is the amount of returning visitors. During the last publication period, over half of visits were from returning users. This implies that the Dashboard has become a reference tool and has acquired a strong base of regular users who actively monitor the health of New Zealand banks.

Dashboard user statistics point to success.

Taken together, the activity of visitors to the Dashboard during the first year in operation suggests that the Dashboard has succeeded in broadening the use of public bank disclosures in New Zealand.

Beyond the user statistics, stakeholder feedback also provides an indication that the Dashboard is having a positive impact. Domestically, we have received very positive feedback on the Dashboard's user friendly design and the clarity of the explanatory materials.

Broader stakeholder feedback also points to success.

The Dashboard has been recognised internationally by winning the 2019 Initiative of the year award from the Central Banking Publication. The judging panel remarked that "the Dashboard offers clarity of insight into the nation's financial system – effectively honing in on and highlighting key disclosure data while also achieving the vested participation of banks, analysts and the public." The judges also noted that "there is also the potential for the initiative to be replicated elsewhere."

One academic remarked that the Dashboard is "one of the best examples I have ever seen" of moving towards transparency in the banking sector and boosting financial literacy.

Banks themselves have come to recognise the Dashboard as a valuable source of information to help benchmarking and risk monitoring against their peers. The Dashboard may have increased bank compliance costs somewhat but this is largely due to additional scrutiny of the data they supply for the Dashboard. This additional scrutiny has led to some improvements in the quality and comparability of disclosure information.

On the whole, stakeholder feedback and user statistics indicate that the Dashboard is a big step forward in terms of improving the effectiveness of public disclosures and consequently enhancing market discipline.

The role of stakeholders

In the analogy of the Reserve Bank as Tane Mahuta (the big tree), we describe the Dashboard as a tool like a spotlight or looking glass. Tane's caretakers (Reserve Bank staff) provide this looking glass to market participants who help keep an eye on the health of Tane's branches (Regulated entities like banks).

The Dashboard need to be maintained and nurtured and this requires all stakeholders to play their part.

Like any tool, the Dashboard needs to be maintained to ensure that it remains fit for purpose over the long haul. All stakeholders have a role to play. The spotlight must focus on the right areas (provide the right information) for it to be effective. Users must also know how to spot warning signs and respond accordingly (financial capability). The Reserve Bank needs to set up a disclosure tool that works for a diverse set of users; banks need to provide quality data and users need to engage with the data and engage with the Reserve Bank about their disclosure needs.

Looking ahead

Further improvements to the Dashboard can be expected…

Stakeholders have provided some very useful feedback over the past year and the Reserve Bank is working through how best to take this feedback on board. Some examples of potentially useful enhancements include improving the ability to see how the data move over time (i.e. better trend information) and a public application programming interface (API) which will give people more flexibility in how they use disclosure data provided on the Dashboard. As part of a broader Te Ao Maori strategy the Reserve Bank is working with Maori language experts to develop a Te Reo Maori version of the Dashboard.

…and the Reserve Bank is committed to supporting the broader effort to boost the financial capability of New Zealanders.

The Reserve Bank recognises the important role that financial literacy plays in supporting a well functioning financial ecosystem. The Reserve Bank also recognises and is committed to supporting the broader effort of boosting the financial capability of New Zealanders. The Dashboard's strong emphasis on making prudential disclosure information accessible to a diverse audience is an example of this commitment. The Reserve Bank is actively looking for more opportunities such as the Dashboard to contribute to lifting the financial capability of New Zealanders.

Prudential disclosures for the insurance sector need to be improved…

Compared to the banking sector, prudential disclosures for the insurance sector are spartan. There are several reasons for this, including that prudential supervision of the insurance sector by the Reserve Bank is fairly new (compared to the banking sector) and because developing consistent and comparable reporting by insurers has proven challenging. Nonetheless, the Reserve Bank is considering how a dashboard approach might be used to improve prudential disclosures for the insurance sector.

The rationale and benefits of an insurance sector dashboard are essentially the same as those for the banking sector. That is, prudential disclosures support market discipline, which ultimately helps promote a sound and efficient financial system.

The journey towards world class insurance sector disclosures in New Zealand will likely take several years and will require a high level of engagement by all stakeholders, especially industry.

…and building an insurance sector dashboard will take several years and require a high level of engagement from all stakeholders.

Developing an insurance sector prudential Dashboard will incur some costs on industry but insurers will also benefit from a trusted and reliable source of industry benchmark information. At this stage we expect to begin discussing our early thoughts on what a first step insurance dashboard might look like with industry towards the end of the year.

Conclusion

The first year of the Dashboard has been a successful one. Uptake is strong and the Dashboard's ability to retain users is promising. While market discipline is difficult to measure directly, the Dashboard's success implies that it has been strengthened. Further, analytical work is also being planned to better gauge the Dashboard's impact.

This article has also made the case for a collaborative approach to market discipline. Disclosure helps stakeholders assess risk by providing the necessary information; stakeholders can help regulators to improve disclosure through feedback. The Dashboard was developed with collaboration in mind and is made to be perpetually evolving. The Reserve Bank sees feedback as integral to the Dashboard's long-term success and asks users to participate in the journey.

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