New banking sector balance sheet statistics: Technical note

5 April 2017

In April 2017 the Reserve Bank began publishing new monthly statistics that will provide greater insight into the structure and activities of the banking sector. Since 2015 the Bank has worked closely with banks to develop a new statistical collection on the sector's balance sheets. The previous statistical balance sheet collection from registered banks, the Standard Statistical Return (SSR), has been discontinued.

Background

Over the period since the SSR was first introduced, back in the late 1980s, there have been significant changes in the financial system and in the financial instruments on bank balance sheets. As new policy questions have arisen, particularly since the global financial crisis, gaps in the data have increased. Some gaps have been partly filled by the introduction of new surveys like the Liquidity and Income Statement, but some gaps remained. In addition, some new collections (Asset quality and Capital adequacy surveys) were introduced quickly and did not align well with statistical collection best practice, or link well with data collected in the SSR. The SSR was also not updated to reflect changes in statistical collection best practice.

Definition inconsistencies across collections led to a high level of revisions due to a lack of clarity for respondents. Such inconsistencies are very inefficient and burdensome for both respondents and the Reserve Bank's Statistics Unit. A project to redevelop the bank balance sheet collection has its origins back in May 2012 when the Bank consulted on our registered bank collections. The outcome of the consultation, however, was to initially develop an Income Statement collection where the largest gap was identified. This survey was introduced in 2013 with the first publication in 2014. It was not until mid-2015, however, that the project to redevelop the Bank balance sheet (BBS) was able to be established.

Main project aims

1. Design, develop and implement a bank balance sheet data collection suite that is relevant, integrated and well defined, and aligns with international best practice.

2. Fill crucial gaps in statistical and prudential data to enable policy makers, supervisors, analysts, researchers, and registered banks to make better informed decisions and interventions.

3. Provide balance sheet data to enable the construction of financial accounts and flow of funds statistics for New Zealand

The intent of the new Bank Balance Sheet (BBS) collection was to create a single high level balance sheet which is the central "hub" for the related data collection suite, with the majority of other collections effectively satellites that link back into some or many of the balance sheet's components (see Appendix 1). A key outcome is to be able to collect data once but use it multiple times for supervision, macro-prudential and statistical purposes – the BBS is collected under section 36 and section 93 of the RBNZ Act.

Overall, the project aimed to produce a high quality balance sheet, in line with international best practice, that is more efficient and cost effective to manage and deliver - in particular our aim is to reduce time spent on reconciliation across collections. This has been achieved through consistent and industry agreed definitions, challenged through workshops and tested through trials over 2016.

New collection

The new data collection incorporates:

- Breakdowns of financial assets and liabilities by counterparty (institutional sectors);
- Clearer definitions for financial instruments that are consistent with *Disclosure Statement* reporting and international standards;
- More detail collected on financial instruments and products;
- Improved and consistent reporting by respondents, which has been developed with banks and other stakeholders through workshops and trial runs.

Institutional sector classification

A key focus of the new Bank Balance Sheet Survey (BBS) was collecting information on financial assets and liabilities by institutional sector (or counterparty). This breakdown of financial instruments by sector aligns with Statistics New Zealand's standard for Statistical Classifications for Institutional Sectors (SCIS). This more granular data requirement has highlighted resident and non-resident items previous collected contained misclassifications. Data quality has been significantly improved as a result of the new focus.

This statistical classification will provide information that supports economic analysis and macroeconomic management by grouping together economic units that have similar roles and which respond to economic events and interventions in a similar manner.

Institutional sector statistics are useful for:

- monitoring the effects of fiscal and monetary policy
- analysing investment and consumption behaviour
- studying the source and disposal of incomes and the origin of savings
- identifying the direction and method of transfer of savings from one sector to another
- recognising the funding sources of investment and, consequently, borrowing and lending between sectors.

http://www.stats.govt.nz/methods/classifications-and-standards/classification-related-stats-standards/institutional-sector.aspx

Collecting information on financial assets and liabilities by institutional sector will ultimately enable the Bank to develop financial accounts and also flow of funds statistics. Currently these are not available for New Zealand. These accounts would enhance our understanding of the financial sector as a whole, and inter-sector relationships within the economy – improving the information available for policy decisions.

The main institutional sectors are as follows:

Financial businesses

This sector consists of resident financial institutions that mainly pursue financial services. The major subsectors are:

- **Reserve Bank of New Zealand** – New Zealand's central bank.

- **Registered banks** include all resident financial corporations that are registered under the Reserve Bank of New Zealand Act 1989 to operate as banks. They have liabilities in the form of deposits or deposit substitutes.

  http://www.rbnz.govt.nz/regulation-and-supervision/banks/register

- **Other depository institutions** include significant deposit acceptors or significant issuers of other comparable forms of liquid assets. This subsector consists of all approved depository institutions other than those categorised as registered banks. It includes some deposit taking organisations, as defined by the Reserve Bank of New Zealand, building societies and credit unions.

  http://www.rbnz.govt.nz/regulation-and-supervision/non-bank-deposit-takers

- **Other financial institutions** include other financial institutions not included in 'Registered banks' or 'Other depository institutions'. Other financial institutions provide mainly financial services, including financial intermediation, financial risk management, liquidity transformation, and various supporting activities. These include:

  o Insurance corporations
  o Pension funds (KiwiSaver and other superannuation funds)
  o Other financial investment funds. These include investment funds that pool investor's funds for investment in financial or non-financial asset e.g. money market investment funds or non-money market investment funds
  o Other financial intermediaries and financial auxiliaries (entities that service financial markets but do not own the financial assets or incur the liabilities they handle)

General government

This sector includes both central and local government. In initial web table outputs these two sectors are combined.

Central government includes organisational units responsible for functions such as taxation, law and order, defence, and those responsible for advancing the economic and social well-being of the country in other ways. Major subsectors are:

- Government departments
- Offices of parliament

- Crown entities including Accident Compensation Corporation (ACC), the Earthquake Commission (EQC) and the New Zealand Superannuation Fund (NZSF).
- Debt Management Office, a division of The Treasury
- Non-profit institutions that serve groups of government organisations (eg New Zealand School Trustees Association).

Note: State-owned enterprises (SOEs) are captured separately in "SOE, mixed ownership & CCOs". In addition, crown entities are included in the Central government sector but some are likely to be classified into industry codes other than Public administration and safety (excl. LA) as defined in ANZSIC. For example, health boards and education institutions are crown entities and therefore Central government by Sector, but are classified as "Health care & social assistance" and "Education & training" respectively in the ANZSIC tab.

See link to state sector organisations below:

http://www.ssc.govt.nz/state_sector_organisations

Local government includes territorial authorities and regional councils, as well as other non-market units and non-profit institutions they control. They are responsible for functions such as town planning, providing local infrastructure, libraries, museums, and sports grounds.

Note: Market-orientated council controlled organisations are included in "SOE, mixed ownership & CCOs".

SOE, mixed ownership & CCOs

This sector consists of Government-owned enterprises that engage in market production and operate in a similar way to non-financial businesses. This sector includes SOE, mixed ownership model companies and market-orientated council controlled organisations. For international reporting purposes this sub-sector is separately identified although in initial web table publications this subsector is included in non-financial business.

Non-financial businesses

Non-financial businesses consist of resident business enterprises that produce goods and non-financial services to sell at competitive market prices that are sufficient to generate a profit or surplus in the long term. These units operate in markets where purchasers are free to buy, or not, depending on the price offered, so a sale only occurs when there is a mutually beneficial exchange.

Our policy interest is to better understand the financial business needs of the New Zealand business sector, and how these businesses may react to economic shocks. Businesses ranging from small to large tend to have different risks and can behave in different ways in response to shocks. How banks and other financial institutions provide finance to these entities can be different.

The new collection seeks more granular information on loans to businesses and deposits from businesses based on business size, based primarily on turnover, but also taking into

account total assets and number of employees (see Appendix 2). We anticipate releasing the more detailed breakdown in future publications.

Non-profit institutions serving households (NPISH)

This sector includes organisations that provide goods or services to their members, or to other households, without charge or at prices that are not economically significant. The two main kinds of organisations included are:

- Community and social groups, such as trade unions, professional or learned societies, consumers' associations, political parties, churches or religious societies (or related community activities), and social, cultural, recreational, and sports clubs;
- Philanthropic organisations, such as charities, and relief and aid organisations, financed by voluntary transfers in cash or in kind from other institutional units.

Household sector

This sector includes individuals, family trusts and estates.

The household sector also includes those trusts that are set up as passive holders of the family home and, possibly an assortment of financial assets. Such trusts are not active portfolio managers but passively hold the assets on behalf of individuals and families.

This sector excludes individuals, family trusts and estates where the purpose of the loan is for business or residential investor property use. Both are treated as Non-financial business lending:

Non-residents

Include persons, companies and other entities that are ordinarily domiciled or have a principal centre of economic interest in a country other than New Zealand.

Financial institutions abroad: This sector consists of non-resident financial institutions that mainly pursue financial services.

Sovereign abroad: Include in this sector non-NZ sovereigns, Supranational, quasi-sovereign entities that have a principal centre of economic interest in a country other than New Zealand. Sovereign abroad also includes certain institutional units that may be physically located in New Zealand but represent another country: for example embassies, consulates or high commissions.

Non-financial business abroad: Include non-resident business enterprises that produce goods and non-financial services to sell at competitive market prices that are sufficient to generate a profit or surplus in the long term.

Households abroad: This sector includes individuals, family trusts and estates ordinarily domiciled or have a principal centre of economic interest in a country other than New Zealand.

Breakdowns of financial instruments

The new banking statistics include improved breakdowns of financial instruments, including loans, securities, deposits and borrowings. This is a major step forward from the old SSR concepts of "claims" and "funding". The BBS captures the underlying financial instruments of claims, separately identifying loans, securities and deposits. On the liabilities side, funding has been separated into deposits, securities and other borrowing. This is internationally accepted best practise for reporting financial instruments, and removes what for some banks was a "black box" of data series - the terms claims and funding did not align with their internal reporting or external publications including their Disclosure statements (DS). A copy of the summary balance sheet collection can be found in Appendix 3 and descriptions of all financial assets and liabilities are available on our website S10 table.

For statistical purposes, financial instruments are captured "gross" to meet international reporting requirements, but provisions and net adjustments are also captured separately to enable an accounting presentation of "net" financial instruments to be constructed. The definitions align with international reporting standards (MFSM[1] and OSS). Coupled with more granular data requirements, the trials have highlighted items that have historically been misclassified by respondent banks.

The new collection will have a large number of new series where there is no comparable bank data available so most new series will start at December 2016. We will, however, be backdating selected high level series to provide analysts with consistent long run data (see Backdating). Data for both assets and liabilities by institutional sectors are captured in both New Zealand dollars and total foreign currency, although initially only the total value is reported. More granular financial instrument breakdowns do not seek a New Zealand dollar and foreign currency split due to the materiality (and associated complexity) of such breakdowns.

Loans

Definition: Loans and advances (or receivables) are financial assets with fixed or determinable payments that are not quoted in an active market. Loans are financial assets that are created when a creditor lends funds directly to a debtor, and are evidenced by non-negotiable documents.
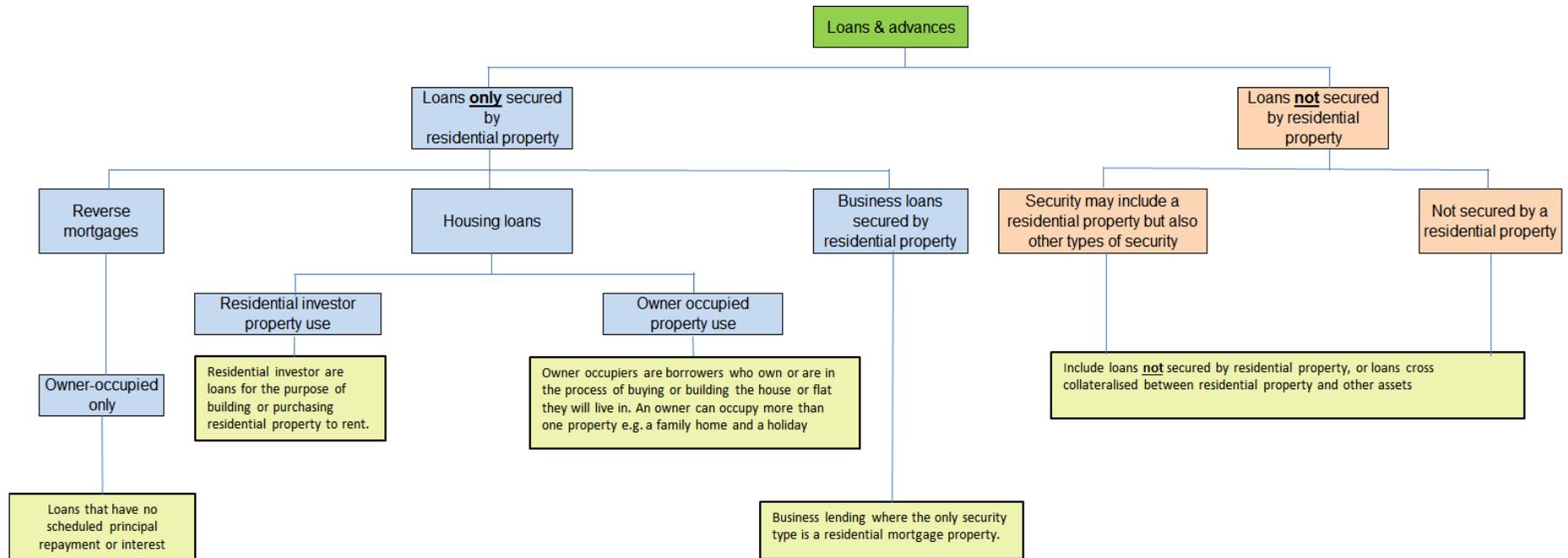
Figure 1 provides a high level visual presentation of the breakdown of loans. In the new collection loans are initially split between fully secured by residential mortgage and not fully secured by residential mortgage. Lending secured fully by residential mortgage is further split between owner-occupier, residential investor and business lending. This split is based on "purpose" of the loan and not by policy requirements and therefore less likely to be subject to change through time. The breakdown of residential mortgages enables reporting of the full mortgage lending portfolio.

The SSR captured housing loans (both owner-occupier and investor loans combined) and separately total mortgages, though through the trial processes it became clear some banks had been underreporting total mortgages and some only included mortgages for housing purposes. Business mortgage loans fully secured by residential property are now separately identified.

In addition to institutional sector breakdowns, loans are also classified by products including interest only, revolving credit, principal & interest, finance leases and credit cards.

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[1] Monetary and Financial Statistics Manual and Compilation Guide (IMF 2016) & Official Statistics System

Figure 1: Classification of loans


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                            ┌─────────────────┐
                            │ Loans & advances│
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Loans **only** secured by residential property

Loans **not** secured by residential property

Reverse mortgages

Housing loans

Business loans secured by residential property

Security may include a residential property but also other types of security

Not secured by a residential property

Owner-occupied only

Residential investor property use

Owner occupied property use

Residential investor are loans for the purpose of building or purchasing residential property to rent.

Owner occupiers are borrowers who own or are in the process of buying or building the house or flat they will live in. An owner can occupy more than one property e.g. a family home and a holiday

Include loans **not** secured by residential property, or loans cross collateralised between residential property and other assets

Loans that have no scheduled principal repayment or interest

Business lending where the only security type is a residential mortgage property.

Loans to households

Households are defined as individuals, family trusts and estates (including those trusts set up as passive holders of the family home). Lending to households includes loans for the purposes of:

- Owning a home (Owner occupier property use)
- Personal consumer borrowing

The BBS provides a comprehensive breakdown of Owner-occupied mortgage loans for the first time. Owner occupiers are borrowers who own or are in the process of buying or building the house or flat they will live in as their principal place of residence. An owner can occupy more than one property e.g. a family home and a holiday home. Only households can have owner-occupied property use loans and the property is New Zealand residential property.

Previously our headline housing figure, which is used for sector credit, included both Owner occupier property use and Residential investor property use mortgages and so included more than just the household sector borrowing – the latter is a non-financial business sector borrowing. In addition *Household-housing* as it was known in the SSR was derived from as a residual of an industry breakdown of loans. More discussion on "Household" and "Housing" is covered in the "Special topics" section later in this note.

Owner-occupied mortgage loans from banks are now available by:

- Payment type i.e. interest only, revolving credit, principle & interest;
- Resident and non-resident (all reported as resident lending in the SSR);
- Floating and fixed (the latter includes more breakdowns for the less than 12 months to the next interest rate review (repricing).
- Undrawn commitments for households (to be available at a later date)

Personal consumer lending for banks is better defined and more granular in the BBS. As a result there has been some data cleansing by banks and total consumer loans is lower than previously published. In the SSR, consumer lending was primarily identified from questions appended to the ANZSIC industrial activity questions. Personal consumer loans account for just over five percent of total household borrowing from banks, with the majority of household borrowing by owner-occupied residential mortgage. Breakdowns for Personal consumer lending are available for overdrafts, credit cards and term loans.

Coupled with new deposit information, discussed below, household financial activity is now more comprehensively captured.

Residential investor property use loans

Investors are entities or persons borrowing for the purpose of building or purchasing residential property to rent. The "Mum & dad investor" type loans are considered non-financial business loans for the purposes of this survey as well as including any person(s) that have a separate residential investor property use loan which is not for their normal business purpose. Previously this lending was captured under *Household – housing* in the SSR but the shift to institutional sector reporting means this lending is considered non-financial business loans as it is a business activity. Residential investor property use loans are reported separately from other business lending.

Loans to business

Business mortgage loans fully secured by residential property and not fully secured by residential mortgage are now separately identified and both include a full institutional sector breakdown. This enables a comprehensive and consistent breakdown of business lending, regardless of the security involved.

The BBS collection has further expanded the non-financial business sector breakdowns to capture more granular information around business lending. Not all these breakdowns will be available in the first release but this is an area where we intend to expand the statistical series later this year.

The initial release will include lending to the non-financial business sector:

- By business type e.g. agriculture, commercial property and other business loans
- By total Agriculture and separately by sub sectors e.g. Dairy, sheep & beef, horticulture and other on-farm lending. This granularity was previously only collected annually;
- By total Commercial property lending (now separately identified);
- All the above will initially be available by type of product e.g. interest only, revolving credit, principal and interest, finance leases, credit card and other loans;
- Business mortgage loans fully secured by residential property are also available by floating and fixed loans - the latter includes breakdowns by when the next interest rate review is for the loan (repricing).

In Figure 2 we can identify commercial property lending which makes up around 35% of business lending (excluding agriculture)

Figure 2
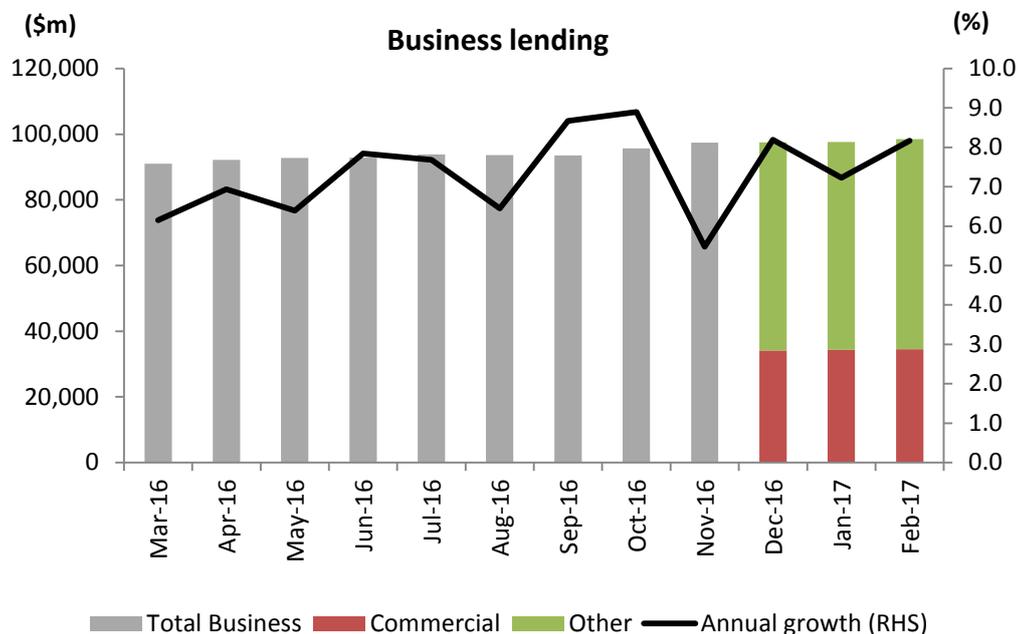
Future releases will include:

- Business lending by size: large or institutional clients, medium or small.(see Appendix 2)
- Commercial property loans by
  - Investment property (includes primarily commercial property for capital value appreciation and associated cash flows)

- o Property development – commercial (includes primarily construction of office, retail or other commercial developments); and
  - o Property development – residential (includes primarily residential sub-division and residential apartment developments)
- Include a breakdown of business loans not fully secured by residential mortgage by floating and fixed loans - the latter includes breakdowns by when the next interest rate review is for the loan (repricing).
- Undrawn commitments.

Like households the new collection will have a large number of new series where there is no comparable bank data available so most new series will start at December 2016. We will, however, be backdating a couple of high level series to provide analysts with consistent long run data (see Backdating section)

Agriculture and business credit

It should be noted that "Services to agriculture" are no longer included in the monthly agriculture lending value in the BBS and are included in other business lending. The Annual Agriculture Survey, collected from 2004 to 2016 (as at 30 June), did included a separate agriculture services figure. This information has been used to backdate the historical data.

More granular breakdowns of agricultural loans are now available monthly (See Figure 3).

Figure 3
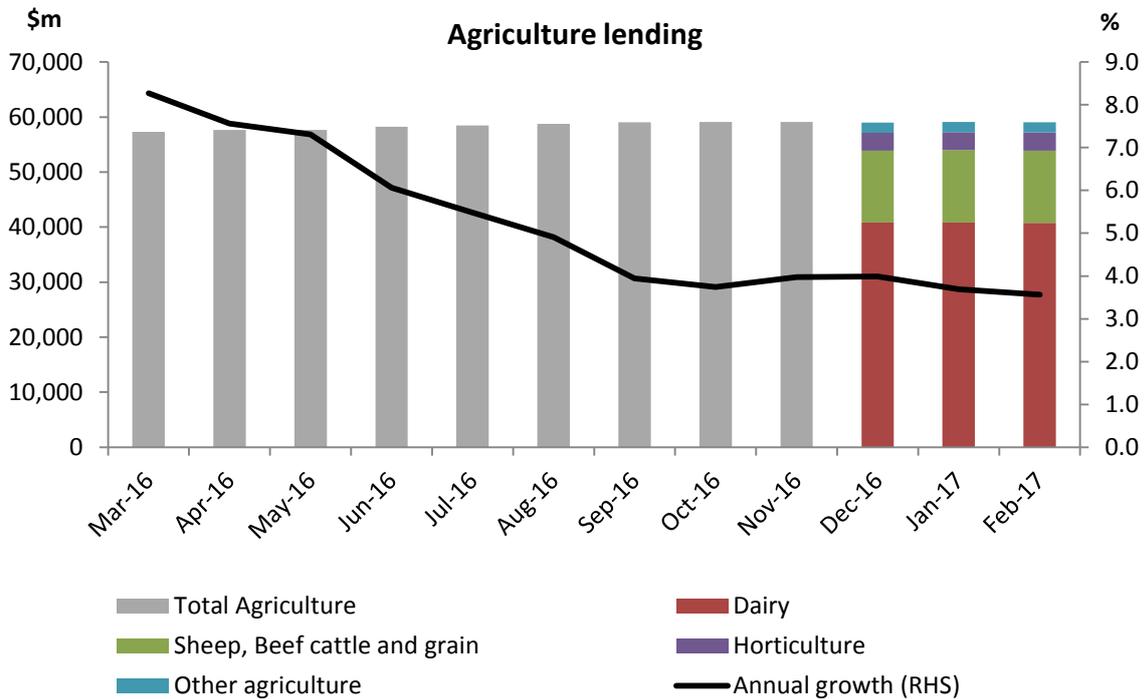
Deposits

Definition: Deposits are standard, non-negotiable contracts open to the public at large that allow the placements of variable amounts of funds and the later withdrawal. Deposits exclude any debt securities but include redeemable shares issued by building societies to customers.

Information around deposits was difficult to precisely identify in the SSR as deposits were subsumed by the broader concept of funding. While the majority of bank funding from households was likely to be in the form of a deposits, households can and do hold bank issued securities (RCDs). In the SSR, household deposits were primarily identified from questions appended to the ANZSIC industrial activity questions – these were only New Zealand dollar funding. Households have no ANZSIC code, nor do non-residents, and both have been impacted by data quality issues relating to incorrect coding of customer funding.

Clearer definitions coupled with more granular data requirements, have highlighted items that have historically been misclassified. Deposits are an area where the data quality has improved significantly. Data cleansing, has impacted on the level of reported household deposits.

The new collection provides a more comprehensive breakdown of liabilities, and deposits in particular. For the first time the following deposit splits are available:

- Resident and non-resident classification based on the Statistical Standard for Institutional Classifications;
- Call and fixed deposits - includes more breakdowns, particularly for the less than 12 months, to the next interest rate review or when deposits roll over;
- Interest bearing and non-interest bearing information;
- Transaction (everyday banking accounts), saving (call accounts primarily for saving purposes) and term deposits (fixed for greater than 1 day);
- All the above for New Zealand dollar or foreign currency deposits;
- Quarterly deposits by size providing estimates of average balances

The new breakdown of deposits by account type is now available (see Figure 4).

Figure 4

Household deposits - Resident
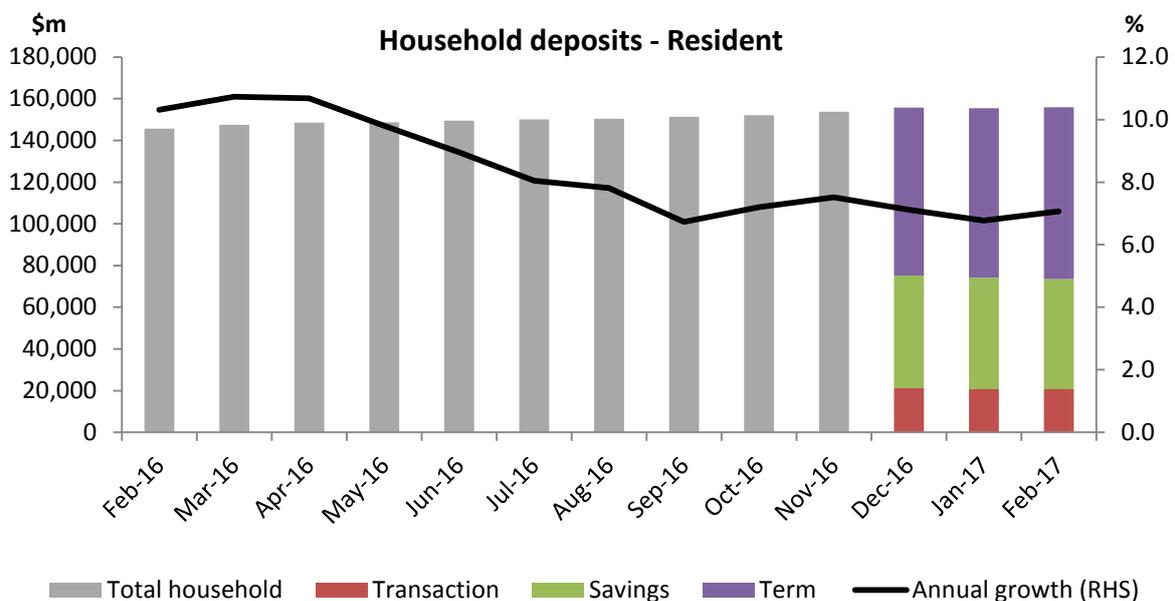
Money and credit

These series have been completely rebuilt and, will now align with international standards for the reporting of money and credit data based on the Monetary and Financial Statistics Manual and Compilation Guide, IMF (2016). The previously collected financial instruments data was insufficient to construct the aggregates in line with the international standards.

Only two measures of money will be published (broad money and narrow money). Previously three measures were published (M1, M2, M3) and these are discontinued. We continue to publish two measures of credit, domestic credit and private sector credit which are largely unchanged.

ANZSIC industrial activity

In addition to sector breakdowns, the new collection has continued to collect loans and deposits by Australia and New Zealand Standard of Industrial Classification (ANZSIC), but this classification is now based on the 2006 standards (previously 1996). While the prime difference in the standards relates to the separate treatment of service activities, loans and deposit values are now captured based on New Zealand dollar and foreign currency combined (previously just New Zealand dollars only).

Other assets and liabilities

Securities and derivatives are also separately collected. Both are classified by the standard counterparty sectors, as well as by New Zealand dollar or foreign currency

While banks know with certainty what securities they hold issued by other entities, holders of their own securities is usually largely unknown as this management function is usually outsourced to an external registry to manage and arrange interest payments. We will utilise our own Registry of Securities (ROS) to validate the original maturity and type of security, as well as provide consistent sector classifications.

Backdating

Statistics for most new series will be available from the December 2016 month onwards because there is no comparable data from the SSR. However, the following key statistics have been backdated to provide comparable historical data.

- Housing lending (banks and NBLIs)
- Personal consumer lending (banks and NBLIs)
- Business lending (banks and NBLIs)
- Agriculture lending (banks and NBLIs)

- Floating mortgages (banks)
- Fixed mortgages (banks)
- Household deposits (banks)

- Broad money (depository corporations)
- Domestic credit (depository corporations)
- Private sector credit (depository corporations)

This section provides an overview of our backdating method, the new backdated series published on 5 April 2017 and the main differences from the previously published data.

Method
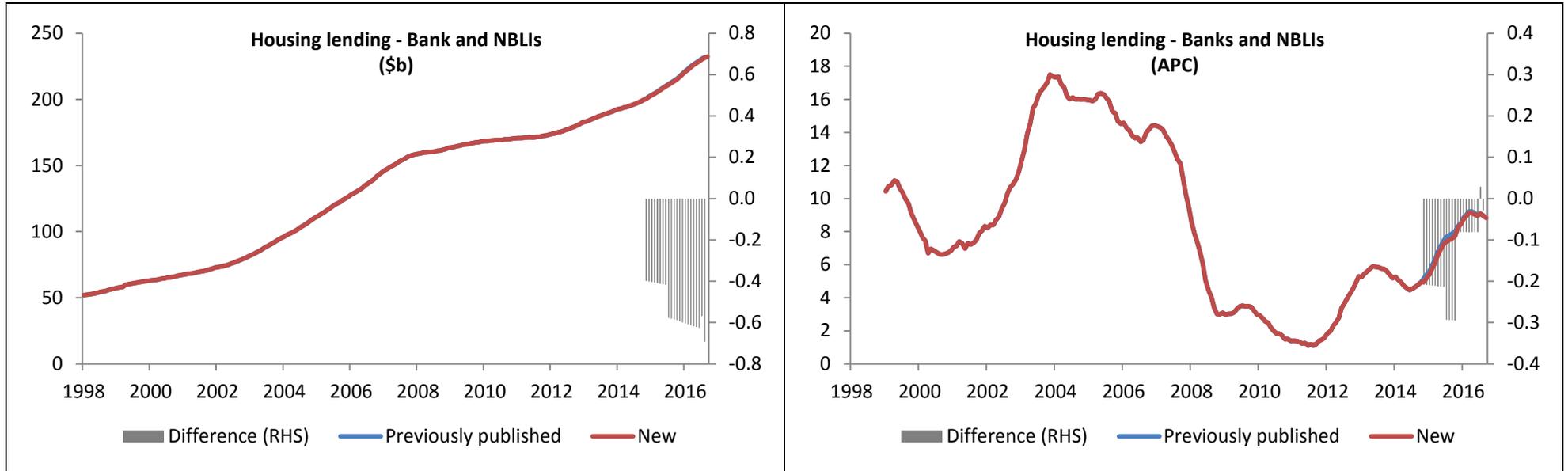
The general method for backdating the key statistics was:

i. Adjust for measurable differences between the new estimates from the BBS and old estimates from the BBS. For example, the new agriculture lending data from the BBS no longer includes services to agriculture. An estimate for services to agriculture was obtained from our Annual agriculture survey and removed from the old agriculture lending data from the SSR.

ii. If there was still a significant difference between the new estimates and old estimates after adjusting for the measurable differences we then applied an adjustment for the unmeasurable differences. For example, improved reporting of personal consumer lending as it was no longer derived as a residual.

iii. The adjustment was usually a ratio of the new estimate to the old estimate calculated from the parallel runs of the SSR and BBS in December 2016 and January 2017[2].

iv. The ratio was applied to the old estimate to generate a comparable historical data. For most statistics the ratio was applied back to the beginning of the series resulting in a level shift. However, in most cases there was little change in the annual growth rates.

The following charts and tables highlight the changes to key statistics:

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[2] For some series the ratio from the September 2016 trial BBS was also included where the quality of September 2016 trial was good.

Backdated series

The following graphs compare the previously published series with the new backdated series. All data prior to December 2016 is estimated using the method described above.

Personal consumer lending - Banks and NBLIs ($b)

Personal consumer lending - Banks and NBLIs (APC)

Business lending - Banks and NBLIs ($b)

Business lending - Banks and NBLIs (APC)

Agriculture lending - Banks and NBLIs ($b)

Difference (RHS) — Previously published — New

Agriculture lending - Banks and NBLIs (APC)

Difference (RHS) — Previously published — New

Household deposits - Banks ($b)

Difference (RHS) — Previously published — New

Household deposits - Banks (APC)

Difference (RHS) — Previously published — New

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Floating mortgages - Banks ($b)

Fixed mortgages - Banks ($b)

Broad money - Depository corporations ($b)

Broad money - Depository corporations (APC)

Legend (each panel): Difference (RHS), Previously published, New

Domestic credit - Depository corporations ($b)

Difference (RHS) — Previously published — New

Domestic credit - Depository corporations (APC)

Difference — Previously published — New

Private sector credit - Depository corporations ($b)

Difference (RHS) — Previously published — New

Private sector credit - Depository corporations (APC)

Difference (RHS) — Previously published — New

Main differences between old and new collections

The following table outlines the main differences between the new series and the previously published series.

Data	Previously published data (SSR)	New data (BBS)
Housing lending (banks and NBLIs)	• Housing lending for banks was derived as a residual from the (ANZSIC96) industry breakdown of NZD claims in the SSR.	• Housing lending for banks separately identified and comprises owner occupier and residential investor property use mortgages in the BBS. As a result there has been some minor data cleansing by banks and housing loans is slightly lower than previously published. The annual growth rate is largely unchanged. • There is no change to definition of housing lending for non-banks.[3]
Personal consumer lending (banks and NBLIs)	• Consumer lending for banks was derived as a residual from the (ANZSIC96) industry breakdown of NZD claims in the SSR.	• Personal consumer lending for banks is better defined and more granular in the BBS. As a result there has been some data cleansing by banks and consumer loans is lower than previously published. The annual growth rate is largely unchanged. • There is no change to definition of consumer lending for non-banks.
Business lending (banks and NBLIs)	• Business lending for banks *excluded* 'services to agriculture', business loans to non-residents in the SSR. • Only covered business loans denominated in NZ dollars in the SSR.	• Business lending for banks *includes* 'services to agriculture', business loans denominated in foreign currency and business loans to non-residents in the BBS. This results in a higher level than was previously published but the annual growth rate is largely unchanged.

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[3] The Non-bank balance sheet collection will be redeveloped later in 2017/18 and will use the same template as the Bank balance sheet collection.

		• There is no change to the definition of business lending for non-banks.
Agriculture lending (banks and NBLIs)	• Agriculture lending *included* 'services to agriculture' in the SSR.	• Agriculture lending *excludes* 'services to agriculture' in the BBS. The result is a lower level than was previously published but the annual growth rate is largely unchanged. • There is no change to the definition of agriculture lending for non-banks.
Floating and fixed mortgages (banks)	• Floating and fixed mortgages were reported in part E (loans fully secured by residential property) of the SSR. • Many banks were under reporting loans fully secured by residential property (Part E) in the SSR.	• Loans fully secured by residential mortgages are reported by all banks in the BBS resulting in an increase in residential mortgages. • Floating mortgages remain largely unchanged and fixed mortgages increase in the BBS. • The ratio of fixed to floating mortgages is unchanged.
Household deposits (banks)	• Household deposits were derived as a residual from the (ANZSIC96) industry breakdown of NZD funding in the SSR.	• Household deposits is better defined and more granular in the BBS. As a result there has been some data cleansing by banks and household deposits is lower than previously published. The annual growth rate is largely unchanged.
Broad money (depository corporations)	• M3 covers *selected* registered banks, non-banks and the Reserve Bank (known as M3 institutions). • M3 *includes* non-resident NZD funding and all resident NZD funding for M3 institutions from the SSR.	• Broad money covers *all* registered banks and the Reserve Bank. • Broad money *excludes* non-resident funding because their deposits are used primarily for international rather than domestic transactions and long-term and other illiquid financial

	• M3 *excludes* FX funding for M3 institutions from the SSR.	instruments because they are not a medium of exchange [4] • Broad money *includes* deposits denominated in foreign currency.
Domestic credit and private sector credit (depository corporations)	• Domestic credit (DC) and private sector credit (PSC) cover *selected* registered banks, non-banks and the Reserve Bank (known as M3 institutions). • DC and PSC *include* non-resident NZD claims for M3 institutions from the SSR. • DC and PSC *exclude* FX resident claims for M3 institutions from the SSR.	• DC and PSC cover *all* registered banks and the Reserve Bank. • DC and PSC *exclude* non-resident claims. • DC and PSC *include* debt securities and loans denominated in foreign currency.

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[4] This brings our monetary statistics into line with international standards *Monetary and Financial Statistics Manual and Compilation Guide* (IMF 2016).

Specific topics

The Bank Balance Sheet Survey collects detailed breakdowns of the financial instruments on bank balance sheets including by sector, by industry, by product, and by time to next reprice date to name a few. This allows us to 'slice and dice' the data and publish in different ways.

This section explains how to interpret and use some of the different breakdowns published in our web tables.

- Loans to the Household sector vs Housing loans
- Loans fully secured by residential mortgage
- Sector vs industry

Web tables have been identified in brackets e.g. (table S30) Banks: Assets – Loans by sector

Loans to the Household sector (table S30) vs Housing loans (table S31)

Loans by sector (table S30)	Loans by purpose (table S31)
This table provides a breakdown of Loans by *sector*. A sector groups together economic units that have similar roles and which respond to economic events and interventions in a similar manner. Lending to the Household sector comprises loans for the *purposes* of : • Owner occupier property use • Personal consumer Loans for the *purposes* of residential investor property use are included in the Non-financial business sector[5].	This table provides a breakdown of Loans by *purpose.* Lending for Housing purposes comprises: • Owner occupier property use • Residential investor property use The lending for Housing purposes includes residential investor property use loans (even though it is defined as activity in the business sector) as it is exposed to the same risks as owner occupier property use loans. Loans fully secured on residential mortgages for business use are included in the Business *purpose* as they have different risk characteristics than owner occupier and residential investor property use loans.

Example 1: Reconciling Household sector loans (table S30) and Housing loans (table S31)

Loans by sector (table S30)	Feb-17 ($b)	Loans by purpose (table S31)	Feb-17 ($b)
Households (residents)	172.1	Owner occupier property use	164.3
Households abroad	2.8	Personal consumer	10.6
Total	**174.9**	**Total**	**174.9**

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[5] The System of National Accounts 2008 (SNA08) rental properties and the mortgage debt held against them are treated as a business activity and recorded against the business sector. This is consistent with the treatment of rental properties in the National Accounts, Sectoral Balance Sheet and Household Balance Sheet statistics.

Loans fully secured by residential mortgages (table S33)

Loans fully secured by New Zealand residential property (table S33) comprises:

- Owner occupier property use
- Residential investor property use
- Business use

As noted in above business loans fully secured by residential property are included in the in the *Business* purpose in Loans by purpose (table S31) but separately identified in Loans fully secured by residential mortgage by repricing (table S33), which provides an overview of the banking sector residential mortgage portfolio.

Figure 5
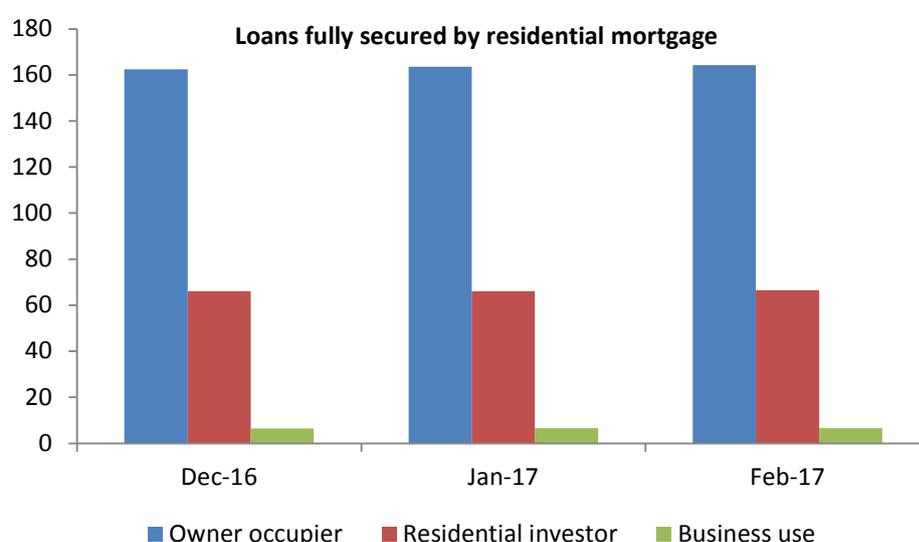
Loans and deposits by sector/purpose (tables S30/S31 and S40) vs Loans and deposits by industry (tables S34 and S41)

A key focus of the Bank Balance Sheet Survey was collecting information on financial assets and liabilities by institutional sector (or counterparty). An institutional sector groups together economic units that have similar roles and which respond to economic events and interventions in a similar manner. Institutional sector statistics are useful for monitoring the effects of fiscal and monetary policy, understanding the funding, borrowing and lending activity between sectors, and compiling sectoral balance sheets.

However, we have also collected and published information for selected financial assets and liabilities by (ANZSIC) industry. Businesses are assigned to an industry according to their predominant economic activity.

The 'Industry' and 'Sector' classifications do not align and results in differences in the loans and deposits by sector (tables S30 and S40) compared with loans and deposits by industry (tables S34 and S41).

Examples:

- The Agriculture *industry* may include residential investor property loans and loans to crown entities (the latter reported elsewhere in the Government sector) that operate in the agriculture industry.
- The Insurance, Other financial investment funds, Education and Health *industries* will include crown entities such as ACC, EQC, NZSF, DHBs, universities and public schools. Crown entities by sector, however, are only included in the Central government sector.

Figure 2: Sector/purpose vs Industry for selected data
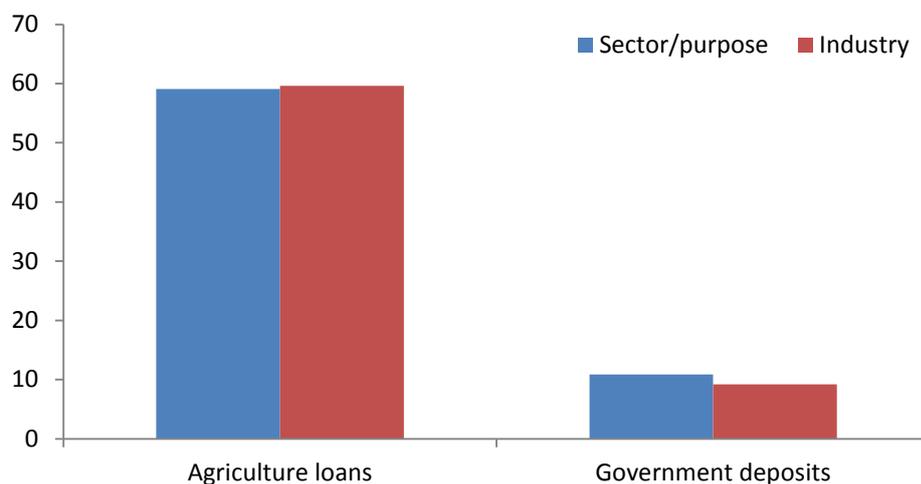
Comparison with other data published by the Reserve Bank

The following table compares selected data from the Bank Balance Sheet Survey with other data published by the Reserve Bank.

Data (Dec-16)	Comparison ($b)		Reason for differences
Total assets	BBS	510.3	
	DS	510.3	
Residential mortgages	BBS	235.0	In the LVR there are variations by some banks in the treatment of business loans secured by residential property and reverse residential mortgage loans
	LVR[6]	227.8	
Personal credit cards	BBS	5.5	The CCS includes non-bank credit card issuers such as American Express, Diners Club, Latitude Financial Services, the Warehouse Financial Services, Warehouse Money and Flexi Cards.
	CCS[7]	6.4	

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[6] LVR Positions Survey www.rbnz.govt.nz/statistics/c35
[7] Credit Card Survey www.rbnz.govt.nz/statistics/c12

Future publications and further improvements

Future publication

Our first release of data from the Bank Balance Sheet Survey on 5 April 2017 replaced key data previously published from the SSR:

- Sector credit
- Banking sector balance sheet
- Household deposits
- Funding and claims by ANZSIC
- Mortgages
- Money and credit

New data on loans broken down by sector, by purpose, and by product as well as a more comprehensive breakdown of mortgages was also published for the first time on 5 April.

We are planning a second phase of publication later in 2017 where we will publish other more detailed data collected from the new Bank Balance Sheet Survey once data from several reporting periods are available.

The second phase is likely to include:

- Lending to the business sector by size, by product, and by time to the next interest rate review (repricing).
-
- More detail on lending to the commercial property sector e.g. lending for investment property, property development - commercial and property development - residential.
- Undrawn lending facilities of households and business.
- More granular financial instrument breakdown including by NZD or FX.
- Deposits by size.

We will be seeking feedback on our second phase of publication later in the year.

Further improvements

The new banking sector balance sheet statistics are a significant improvement in the quality and coverage of data available for research and analysis, monitoring and benchmarking, and the compilation of official statistics.

However, we have identified some gaps and inconsistencies in other data collections that we will be seeking to improve to ensure that our financial sector statistics remain fit for purpose.

- We have concerns around the quality of previously published effective mortgage and business lending rates. We will be reviewing our interest rate data needs and extending the Retail Interest Rates Survey and Income Statement Survey to fill some of the data gaps left by the retirement of the SSR, enable better quality effective mortgage rates to be calculated, as well as meeting future needs.

- We will also be redeveloping the balance sheet collection for non-bank institutions. The Non-bank balance sheet redevelopment will enable more insights into the activity of non-bank deposit-takers and non-bank lenders in New Zealand.

Appendix 1

New Registered Bank Balance Sheet

KEY — Proposed Collections · Collected Now · Recently introduced · Discontinue or amend?

VISION: Collection "Hub" with the majority of other collections effectively satellites linking back

Other Financial Sector Collections

- Managed funds survey — Q
- Insurance survey — Q

New Developments

- Repository of securities (ROS) — M

Gaps – New Satellites

- Connected exposures — Q
- Large exposures — Q
- Capital: composition, metrics and risk exposures — Q

Prudential

Domestic books
Branch only
Dual registered branch
Local subsidiary

Liabilities	Assets
Deposits	Cash & Deposits
Securities	Securities
Borrowing	Loans & Advances
Repos	Reverse Repos
Derivatives	Derivatives
Other Liabilities	Other Assets
Capital (IFRS) · Issued and paid up · Retained earnings	

Statistical

Varied Frequency

- Aligned with international standard
- Clear and consistent definitions
- More efficient to manage and deliver

Existing Collections

- Income Statement — M
- LVR – Lending position — Q
- LVR – New commitments — M
- LVR – Investor compliance — M
- Liquidity survey — M
- Interest rate survey — M
- Asset quality survey — M
- Housing approvals — W
- Agricultural survey — A
- Credit card survey — M
- Capital adequacy survey — M

Appendix 2

Our policy interest is to better understand the financial business needs of the New Zealand business sector, and how these businesses may react to economic shocks. Businesses ranging from small to large tend to have different risks and can behave in different ways in response to shocks. How banks and other financial institutions provide finance to these entities can be different. The majority of non-financial businesses in New Zealand are small with around 90% having turnover of less than $1m per year. While relatively small in number, the remaining non-financial businesses however account for around 80% of total turnover. Very large or institutional businesses can issue their own bonds as an alternative to borrowing from banks and behave differently from other medium sized corporates in response to economic or financial shocks.

For the purposes of this survey, the following categories have been applied:

- Small = Turnover less than $1m
- Medium = Turnover greater than $1m and less than $50m
- Large = Turnover greater than $50m

These categories have been established after reviewing data collected in the 2014 Statistics New Zealand Annual Enterprise Survey (AES). In terms of total assets, businesses in the medium and large categories tend to account for around 25% each for all non-business assets, and have annual turnover of around 40% each.

For the purposes of this survey, respondents are asked to use a level of reasonableness and judgement when trying to manage these splits in practice. Some flexibility around the precision of the boundaries is acceptable e.g. where a bank has an established method of allocating customers to different business categories based on size and complexity that takes into account the nature of the business relationship relative to small, medium and large clients.

The major non-financial business subsectors are:

- **Corporate businesses (large/institutional)**: Examples of the types of entities classified as large corporate business or institutional clients are likely to include:

  o Businesses with annual turnover exceeding $50m; and may
  o Require more sophisticated lending facilities, and increased management, to help control risks to the lending institution given the potential high level of exposure;
  o Include registered private companies with greater than 20 employees and publically listed companies; or
  o Branches of non-resident corporate business enterprises; or
  o Head offices with mainly non-financial business enterprises as subsidiaries

- **Corporate businesses (medium)**: Examples of the types of entities classified as medium corporate business are likely to include:

  o Businesses with annual turnover exceeding $1m but less than $50m; and may include
  o Registered private companies with less than 20 employees
  o Total assets on average may be greater than $5m

- **Retail businesses (small):** Examples of the types of entities classified as small retail business are likely to include:

  - o Businesses with annual turnover less than $1m
  - o Sole proprietorships and small partnerships,
  - o No employees or a small number of employees
  - o Assets on average may be less than $5m

Appendix 3

High level balance sheet: Assets

Balance Sheet (DS summary)

Section A: Assets

	NZD	Foreign currency	Total	Memo item Related party
1 Cash (notes & coin)	0.000	0.000	**0.000**	
2 Deposits (with depository institutions)	**0.000**	**0.000**	**0.000**	0.000
2.1 Demand deposits	0.000	0.000	0.000	
2.9 Other deposits	0.000	0.000	0.000	
3 Debt securities	**0.000**	**0.000**	**0.000**	0.000
3.1 Available for sale securities	0.000	0.000	0.000	
3.2 Trading securities	0.000	0.000	0.000	
3.9 Other securities	0.000	0.000	0.000	
MA1 Less provisions for credit impairment	0.000		0.000	
4 Loans & advances (Net)	**0.000**	**0.000**	**0.000**	
Loans and advances (Gross)	0.000	0.000	0.000	0.000
MA2 Less provisions for credit impairment	0.000		0.000	
MA3 Plus other net adjustments for loans & advances	0.000	0.000	0.000	
5 Securities purchased under agreement to resell	0.000	0.000	**0.000**	0.000
6 Shares & other equity investments	**0.000**	**0.000**	**0.000**	0.000
6.1 Shares listed on a stock exchange	0.000	0.000	0.000	
6.2 Shares not listed on a stock exchange	0.000	0.000	0.000	
6.9 Other equity investments	0.000	0.000	0.000	
7 Derivatives in an asset position	0.000	0.000	**0.000**	0.000
8 Other assets	**0.000**	**0.000**	**0.000**	0.000
8.1 Insurance assets	0.000	0.000	0.000	
8.2 All other assets	0.000	0.000	0.000	
9 Total assets (total of questions 1 to 8)	**0.000**	**0.000**	**0.000**	**0.000**

High level balance sheet: Liabilities & equity

Section B: Liabilities and capital

		NZD	Foreign currency	Total	Memo item Related party
10 Deposits		0.000	0.000	0.000	0.000
10.1	Transaction balances	0.000	0.000	0.000	
10.2	Savings balances	0.000	0.000	0.000	
10.9	Term deposit balances	0.000	0.000	0.000	
ML1	Other net adjustments for deposits	0.000	0.000	0.000	
11 Debt securities (issued)		0.000	0.000	0.000	0.000
11.1	Short-term debt securities (≤ 1 year)	0.000	0.000	0.000	
11.2	Subordinated debt securities (> 1 year)	0.000	0.000	0.000	
11.9	All other long-term debt securities (> 1 year)	0.000	0.000	0.000	
ML2	Other net adjustments for debt securities	0.000	0.000	0.000	
12 Borrowings		0.000	0.000	0.000	0.000
12.1	Subordinated loans	0.000	0.000	0.000	
12.2	Securities sold under agreement to repurchase	0.000	0.000	0.000	
12.9	All other borrowed funds	0.000	0.000	0.000	
ML3	Other net adjustments for borrowings	0.000	0.000	0.000	
13 Derivatives in a liability position		0.000	0.000	0.000	0.000
14 Other liabilities		0.000	0.000	0.000	0.000
14.1	Accounts payable (Trade credit & advances)	0.000	0.000	0.000	
14.2	Tax liabilities	0.000	0.000	0.000	
14.3	Dividends payable	0.000	0.000	0.000	
14.4	Provisions for losses (Other than loans)	0.000	0.000	0.000	
14.9	Other miscellaneous liabilities	0.000	0.000	0.000	
15 Equity		0.000	0.000	0.000	0.000
15.1	Ordinary shares	0.000	0.000	0.000	0.000
15.2	Preference shares	0.000	0.000	0.000	0.000
15.3	Reserves	0.000	0.000	0.000	0.000
15.4	Retained earnings	0.000	0.000	0.000	0.000
15.9	Other	0.000	0.000	0.000	0.000
16 Total liabilities and equity (total of questions 10 to 15)		0.000	0.000	0.000	0.000

Appendix 4

New balance sheet tables on 5 April 2017

	New table	Previous table(s)	Main changes to data	Historical data
S10	Banks: Balance sheet	S1 Banks: Balance sheet	• Financial instruments (e.g. deposits, loans) align with *Disclosure Statements* and differ from the breakdown previously published in S1. • Reporting is consistent with *Disclosure Statements* and some items are reported net (e.g. loans). In the SSR all items were reported gross. • Total assets align with *Disclosure Statement* reporting but may not match total assets previously reported in S1.	The bank balance sheet is not backdated as the balance sheet data from the SSR is not comparable with the new collection.
Registered bank lending				
S30	Banks: Assets – Loans by sector	None	• New breakdown of loans by sector	Historical data is not available as it was not previously collected in the SSR.
S31	Banks: Assets – Loans by purpose	None	• New breakdown of loans by purpose.	Historical data is not available as it was not previously collected in the SSR.
S32	Banks: Assets – Loans by product	S5 Banks: Claims by instrument (NZD non-Treasury claims only)	• New breakdown of loans by product.	Historical data is not available as it was not previously collected in the SSR.
S33	Banks: Assets – Loans fully secured by residential mortgages by repricing	S8 Banks: Mortgage lending (value of residential mortgage lending only)	• Only the value of residential mortgages is available in the new table.	Data for the total value of floating and total fixed loans has been backdated.

			• The *number* of residential mortgages is not available. • Increase in the value of fixed mortgages due to improved reporting of respondents.	The detailed repricing buckets are not backdated as the data may not be comparable.
S34	Banks: Assets – Loans by industry	S7 Banks: Claims by sector	• Previously only collected claims which comprised loans, securities, and deposits at other depository corporations. • Increase in loans as it captures both NZD and FX loans. Previously only NZD claims were captured. • Reclassification between industries due to the change from ANZSIC96 to ANZSIC06. • The monthly weighted average interest rate will not be available as this is no longer collected.	Loans by ANZSIC are not backdated as the data from the SSR is not comparable with the new collection.
Registered bank deposits				
S40	Banks: Liabilities – Deposits by sector	C17 Household deposits	• Decrease in resident household deposits as it no longer includes non-resident households and household holdings of debt securities. • Deposits for other sectors e.g. non-financial businesses, financial businesses, and non-resident are also published.	Resident household deposits have been backdated to provide comparable historical data. Deposits for other sectors have not been backdated due to lack of historical data in the SSR.
S41	Banks: Liabilities – Deposits by industry	S6 Banks: Funding by sector	• Previously only collected funding which comprised, deposits, securities, and borrowings (including repos).	Deposits by ANZSIC are not be backdated as the data from the SSR is not comparable with the new collection.

			•	Increase in deposits as it captures both NZD and FX deposits. Previously only NZD funding was captured.	
			•	Reclassification between industries due to the change from ANZSIC96 to ANZSIC06.	
			•	The monthly weighted average interest rate is not available as this is no longer collected.	
Registered bank interest rates					
B20	New customer average mortgage interest rates	S8 Banks: Mortgage lending (new customer average mortgage interest rates)	•	Data on the monthly yield are not available in the new collection. We intend to extend other data collections (Income Statement and Retail Interest Rates surveys) to capture information to enable the provision of higher quality effective mortgage lending rates and the business lending rate in the future.	The new customer average floating rate has been backdated.
Other data					
C5	Sector lending (banks and non-bank lending institutions)	C5 Sector credit C6 Household credit	•	Decrease in the level of agriculture lending as it no longer includes services to agriculture. Services to agriculture is no longer separately identified and will be included in business lending. Services have been removed from historical data based on values captured in the discontinued annual agriculture survey.	We have backdated the following series to provide comparable historical data: • Agriculture credit • Business credit • Housing credit • Consumer credit We have estimated the back series using historical data from the SSR and other surveys (e.g. annual
			•	Increase in the level of business lending as it includes loans	

			denominated in foreign currency, loans to non-residents and services to agriculture. • Decrease in the level of housing lending due to improved reporting by respondents of housing loans. • Decrease in consumer lending due to improved reporting by respondents of consumer loans.	agriculture survey).
C50	Money and credit aggregates	C1 Monetary aggregates C2 Credit aggregates C3 Monetary and credit aggregate components	• Decrease in the level of broad money as non-resident deposits are no longer included. • Increase in narrow money due to the inclusion of all transaction deposits (previously only cheque accounts included). • The level of domestic credit and private sector credit is largely unchanged.	We have backdated the following series to comparable historical data: • Broad money • Domestic credit • Private sector credit

Data that is no longer available

	Data	Why it will not be available	Future plans to publish	Alternative data sources
1	**Interest rates** • Monthly yield (also known as the effective mortgage rates) • Weighted average interest rates on NZD funding and claims • Business lending rate (published in B3)	Interest rate data is not collected in the new balance sheet collection. We were concerned about the quality of the effective mortgage lending rates and business lending rate collected from the SSR.	We intend to extend two other Reserve Bank surveys to enable us to produce higher quality interest rate data: 1. Retail interest rate survey to collect a wider range of interest rates including fixed mortgage rates. 2. Income statement survey to collect interest income from different types of lending to derive effective interest rates	• The Retail interest rate survey (B3) publishes an average floating mortgage rate. • Interest.co.nz publishes mortgage rates for a range of terms.
2	**Mortgages** • <u>Number</u> of fixed and floating mortgages.	Data on the <u>number</u> of mortgages is not collected in the new balance sheet collection. Only data on the <u>value</u> of mortgages is collected. Note that in the previous data, where a mortgage is split between floating and fixed, it was counted in both the floating and fixed categories.	There are no plans to collect data on the number of mortgages in the future.	
3	**Detailed agriculture lending (annual)**	The annual agriculture has been discontinued as more frequent data on lending to the main agriculture industries (dairy, sheep & beef, horticulture) is available from the new balance sheet collection.	There are no plans to collect detailed data on agriculture lending in the future.	• Industry association reports e.g. Poultry Industry Association, Wine Growers Association.