An overview of the new banking sector balance sheet statistics

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Extract

In the years following the Global Financial Crisis (GFC), there has been an increased demand both inside and outside the Reserve Bank for more rigorous, detailed data on the banking sector covering a broader range of areas than in the past. This is a trend that has also been apparent internationally.

At the same time, it was also becoming increasingly apparent that our existing statistical engine for bank balance sheet data collection, the Standard Statistical Return (SSR), which had been in place since the late 1980s, had a number of gaps and limitations and was not well suited to providing the extra information users wanted. We have added new data collections since the GFC to address data gaps but did not overhaul the SSR, which has resulted in some inconsistencies between old and new collections.

Over the past two years, we have been working on a new collection of bank balance sheet data, which will serve as the main collection hub for both our prudential data as well as our published statistics.

The new data collection incorporates:

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

This paper will walk through the Bank Balance Sheet redevelopment.

Background

To enable the Reserve Bank of New Zealand (RBNZ) to carry out its primary functions, the RBNZ Act enables the Reserve Bank to require registered banks to supply information and data relating to their business activities.

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

Why redevelop the collection?

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. Demand for more detailed data on the banking sector has increased over the years, both inside and outside the RBNZ. As new policy questions have arisen, particularly since the Global Financial Crisis (GFC), gaps in the data have increased. Some gaps or limitations included:

- No monthly profit and loss (P&L) information;
- No breakdowns of financial instruments (SSR used concepts of "funding" and "claims");
- Limited product breakdowns; and
- No monthly breakdown of business lending (e.g. for agriculture or commercial property).

While many gaps have been partly filled by the introduction of new surveys, some gaps remained. Some new collections were introduced quickly and did not align well with statistical collection best practice, or did not link well with data collected in the SSR. The SSR itself was not an easy collection to update and no longer reflected statistical collection best practice.

We were also aware of other issues. In particular, definition inconsistencies across some RBNZ collections made comparisons or data confrontation difficult. This lack of clarity was confusing, leading to revisions. Such inconsistencies are very inefficient and burdensome for both data providers ("respondents") and the RBNZ's Statistics Unit.

A project to redevelop the bank balance sheet collection has its origins back in May 2012 when we consulted with the industry on improving our registered bank collections. The outcome of the consultation, however, was to initially develop an Income Statement collection[1] to help close a significant gap identified following the GFC. This survey was introduced in 2013 with the first publication in 2014. A project to redevelop the Bank Balance Sheet collection (BBS) followed in 2015.

The intent of the new BBS collection was to create a single high level balance sheet that would act as a central "hub" for other related, but more detailed, data collections. The majority of other RBNZ collections would effectively become satellite surveys that link back into some or many of the balance sheet's components (see Appendix 1). A key outcome is

[1] This collects financial performance data, including revenues, expenses and profit/loss items.

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 data collection, in line with international best practice, that is more efficient and cost effective to manage and deliver. In particular our aim was to reduce time spent on reconciliation across collections for both respondents and the RBNZ's Statistics Unit. This has been achieved through consistent and industry agreed definitions, challenged through workshops and tested through trials over 2016. The outcome contributes to a more comprehensive suite of banking sector data that will enable policy makers, supervisors, researchers and registered banks to make more informed decisions.

What are the key changes?

The new data collection incorporates:

- More detailed breakdowns of financial assets and liabilities, introducing institutional sector classifications (or counterparty);
- Clearer definitions for financial instruments that are more consistent with *Disclosure Statement* reporting and international standards;
- More breakdowns 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; and
- More granular data requirements has meant many banks needed to rebuild to their systems or data queries, identifying data quality improvements as a result of the lower level exposure of data.

Breakdowns of financial instruments

The new BBS collection requests 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" which did not distinguish the types of assets or liabilities. In the BBS we now capture the underlying financial instruments of claims, by separately identifying loans, securities and deposits. On the liabilities side, funding has been separated into deposits, securities and other borrowing. This approach 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 Bank balance sheet collection and supporting Definitions document can be found on our website.

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 for financial instruments align with international reporting standards (MFSM and OSS[2]).

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

The new collection has a large number of new series where there is no comparable bank data history available so most new series start at December 2016. Some high level series have been backdated to provide analysts with consistent long run data.

With more granular data requirements, the trials have enabled banks to classify some items more accurately than was the case under the SSR.

Institutional sector classification

A key focus for us was collecting information on financial assets and liabilities classified by the counterparty's institutional sector. This helps us to identify "to whom" and "from whom" funds were received or paid i.e. who the counterparties were behind the financial instrument transaction. The new BBS breakdown of sectors aligns with Stats NZ's standard for Statistical Classifications for Institutional Sectors (SCIS). This more granular data requirement has better highlighted resident and non-resident items and data quality has significantly improved as a result of the new focus. (Note: Assigning customers between resident and non-resident is in most part primarily based on tax status and a customer's address details, and any changes are reliant on customers notifying the bank accordingly.)

Ultimately 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.

The main institutional sectors are as follows:

Key institutional sectors	Description
Resident:	
Financial businesses	*Includes resident financial institutions i.e. RBNZ, registered banks, other depository institutions and other financial institutions.*
Non-financial business	*Resident businesses that produce goods and services.*
General government	*Includes both central and local government but excludes SOE, mixed ownership & CCOs.*
SOE, mixed ownership & CCOs	*Government owned enterprises that operate similarly to non-financial businesses.*
Households	*Includes individuals, family trusts and estates.*
Non-profit institutions serving households (NPISH)	*Organisations like community, sports and social groups or charities, etc.*
Non-residents or "Rest of the world"	*Persons or entities that live or have their main economic interest outside of New Zealand.*

A more detailed discussion of the institutional sector classifications is available in the technical note available on our website.

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 Edition (previously 1996). The key difference in the standards relates to the separate treatment of service activities. We ask respondents to classify the counterparty of their loans and deposits by ANZSIC. Businesses are assigned to an industry according to their predominant economic activity.

The ‘Industry’ and ‘Sector’ classifications do not always align and this can result in differences in the loans and deposits by sector compared with loans and deposits by industry.

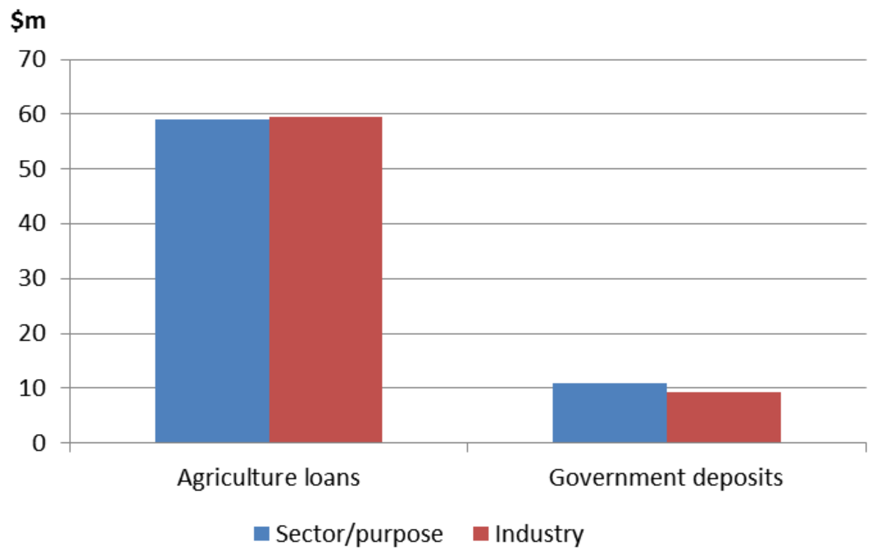
Examples:

- 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.

- 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.

- The Insurance and Other financial investment funds *industries* will include crown entities such as ACC, EQC and Guardians of New Zealand Superannuation (NZ Super fund).

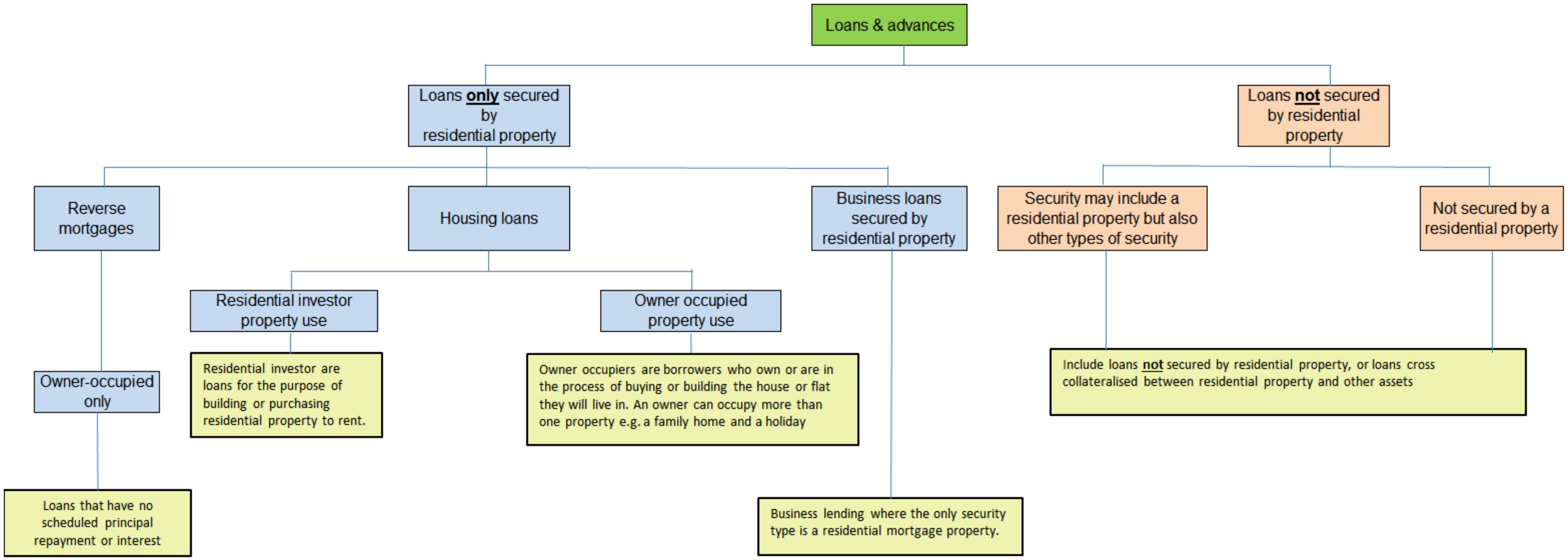
Figure 1 Sector/purpose vs. Industry for selected data



The key focus on the asset side of the balance sheet is loans…

A significant proportion of the new collection has focussed on loans, with a very granular breakdown now sought. For the purposes of the collection loans have been defined as follows:

Figure 2 Classification of loans & advances



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 2 (see page 7) 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. Banks provided feedback early in the workshop process that they focus on their mortgage book and their non-mortgage book, so adopting a similar approach enables easier validation against a bank's own internal reporting. 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[3] 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 with some only including mortgages for housing purposes. Business mortgage loans fully secured by residential property were not separately identified.

The introduction of the institutional sector classification for counterparties has resulted in a clear separation between households and business sector activity.

Loans to households now more clearly identified…

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); and
- Personal consumer borrowing.

For the first time the BBS provides a comprehensive breakdown of Owner-occupier mortgage loans. 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-occupier property use loans and the property is a New Zealand residential property.

As noted above 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 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 produced by Stats NZ.

[3] Under current LVR policy loans secured across both Owner-occupier and Residential investor property are combined and treated as Residential investor loans

This concept has been a challenge through the trial process as a large proportion of residential investor loans are held by “Mum and Dad” type investors and so housing and household concepts needed to be clearly defined.

In addition *Household-housing,* as it was known in the SSR, was actually derived as a residual of an industry breakdown of loans.

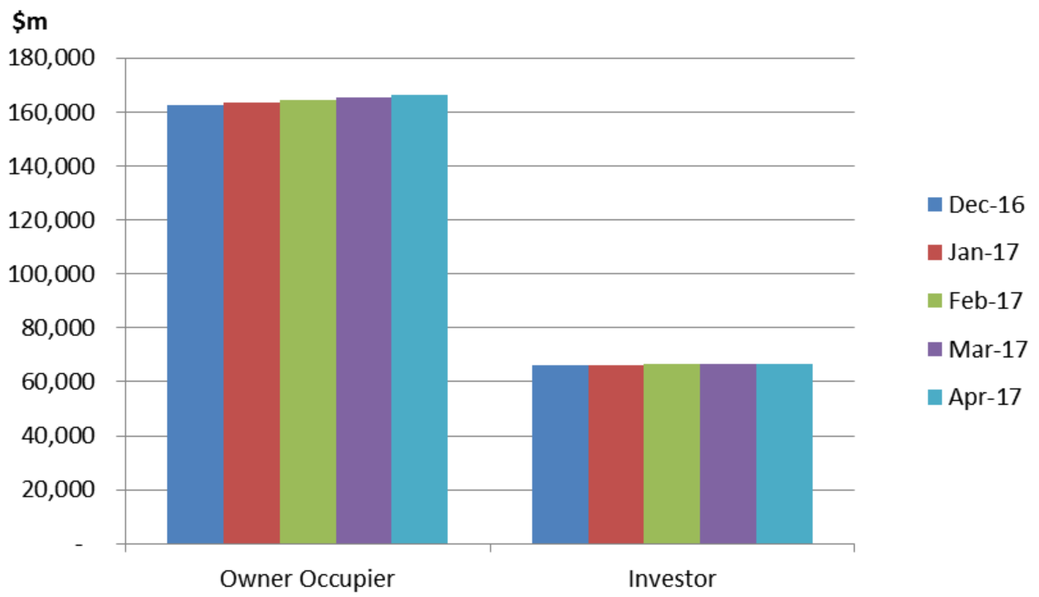
Owner-occupier mortgage loans from banks are now available by:

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

While only a selection of data has been initially published, more granular information is anticipated to become available later this year. More granular data requires a longer lead in time to ensure early quality issues are identified and resolved once it has been fully confronted across an extended period.

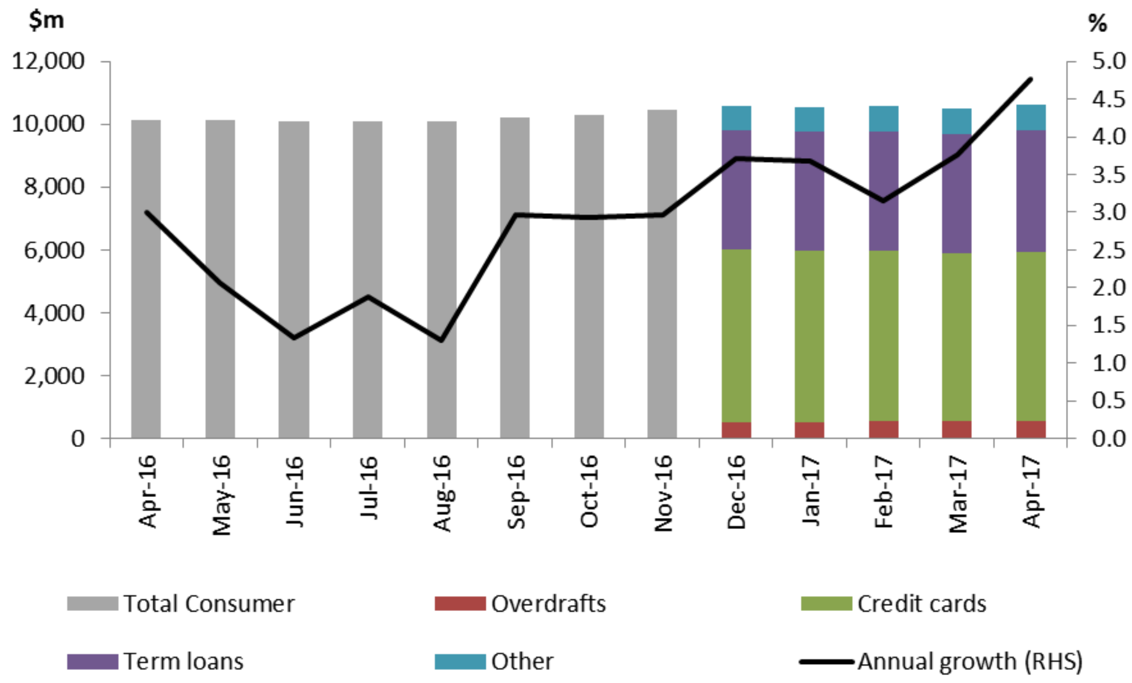
Owner-occupier property loans account for the majority of housing loans:

Figure 3 Housing loans



Personal consumer lending for banks is also now better defined and more granular in the BBS and directly captured. As a result there has been some data cleansing by banks - total consumer loans are now lower than previously published. In the SSR, consumer lending was primarily identified from questions appended to industrial activity (ANZSIC) questions. Personal consumer loans account for only around five per cent of total household borrowing from banks, with the majority of household borrowing by owner-occupier residential mortgage.

Figure 4 Consumer loans



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

Residential investor property use loans…

Investors in residential property are entities or persons borrowing for the purpose of building or purchasing residential property to rent. 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. As noted above, "Mum & Dad investor" type loans are considered non-financial business loans for the purposes of this survey and as such most lending would be considered "retail" business type loans. Professional landlords, however, are also included in this breakdown. Some of their borrowing would be considered more "medium" enterprises as the loans (exposure) may exceed $5m (business "size" is discussed below).

Residential investor property use loans are reported separately from other business lending.

Loans to business…

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 differently structured.

The new BBS collection seeks more granular information on loans to businesses (and deposits from businesses) based on business size. 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 or small sized businesses in response to economic or financial shocks.

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

- 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 Stats NZ 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.

During the trial period banks advised that they could reasonably easily identify institutional corporate clients. The challenge for banks primarily was in providing the breakdown between small and medium businesses. We agreed a level of reasonableness and judgement could be applied 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. Along with turnover, assets and the number of employees were also added to the definitions to help with categorising businesses.

The major non-financial business subsectors are:

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

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

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

    - Businesses with annual turnover exceeding $1m but less than $50m; and may
    - Include registered private companies with less than 20 employees; or
    - Total assets on average may be greater than $5m.

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

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

In terms of future publications, it is likely published series will combine both small and medium businesses (SME). Apart from size, 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. We have further expanded the non-financial business sector breakdowns to capture more granular information around business lending. Not all these breakdowns have been published to date but this is an area where we plan to expand the statistical series later this year.

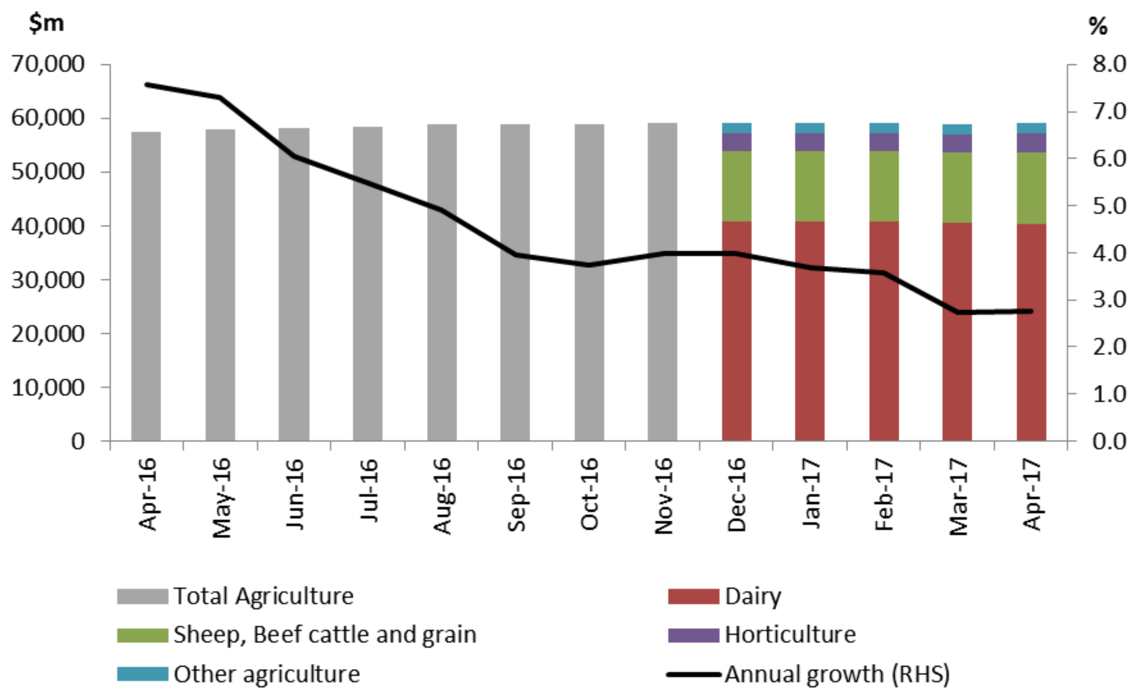
The initial published series included lending to the non-financial business sector:

- 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).

Loans to Agriculture account for a large proportion of business lending…

The old SSR survey captured total agricultural lending but did not capture the separate sub sectors of Dairy, Sheep & beef, Horticulture and Other on-farm lending separate. Values for “Services to agriculture” were also included in the total monthly lending values, but not identified. The RBNZ collected an Annual Agriculture Survey, as at 30 June, from 2004 to 2016, capturing these detailed sub-sector breakdowns. It also captured separately services to agriculture. The new BBS now captures these sub sectors monthly but excludes services to agriculture. These are included in other business lending. The annual breakdowns have been used to backdate the historical data. The more granular breakdowns of agricultural loans are now available monthly - see Figure 5.

Figure 5 Agricultural loans



Commercial property loans now more clearly identified…

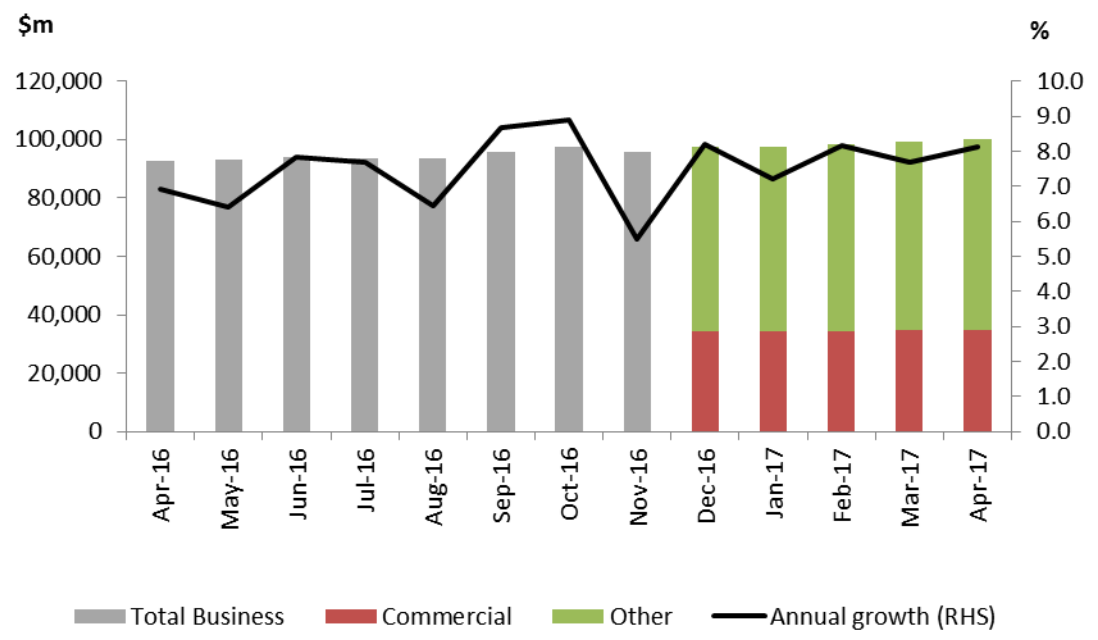
Another key area of interest is lending for commercial property. The old SSR did not separately identify commercial property loans. They were estimated from ANZSIC industrial activity questions on claims data that captured “Property and business services”. This information is now collected directly and includes the following sub sector loans for:

- Investment property (includes primarily commercial property for capital value appreciation and associated cash flows);
- Property development – commercial (includes primarily construction of office, retail or other commercial developments); and
- Property development – residential (includes primarily residential sub-division and residential apartment developments).

This new, more granular data will require a longer lead in time to ensure early quality issues are identified and resolved once it has been fully confronted across an extended period. Higher level data is currently available and published.

In Figure 6 we can now identify commercial property lending which makes up around 35% of business lending (excluding agriculture).

Figure 6 Business loans (excluding agriculture)



The new collection has a large number of new business series where there is no comparable bank data history available so most new series will start at December 2016. We have, however, backdated agriculture and business high level series to provide analysts with consistent long run data.

The key focus on the liability side of the balance sheet is deposits…

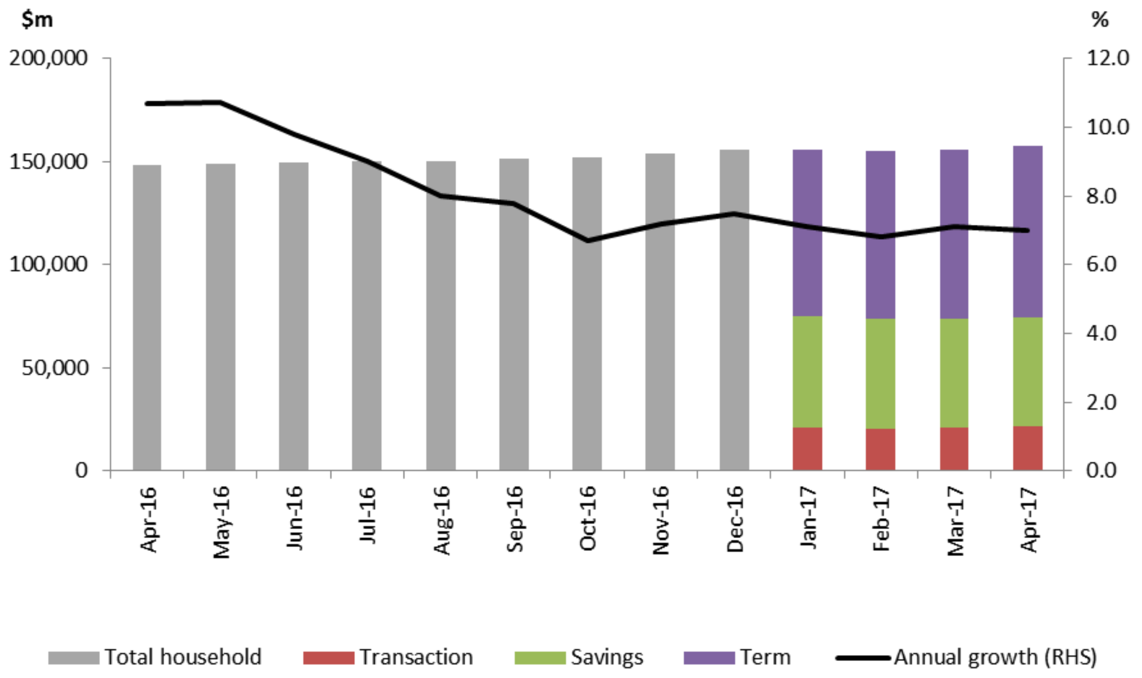
For the purposes of the BBS collection deposits have been defined as follows:

> 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 deposits, households can and do hold bank issued securities. 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.

With clearer definitions, coupled with more granular data requirements, the trials enabled banks to identify deposits more accurately. Deposits are an area where the data quality has improved significantly. Data cleansing, however, has impacted on the level of published household deposits (now lower than previously reported). In the BBS, three types of deposits are now identified: Transaction deposits (everyday banking accounts), Savings deposits (call accounts primarily for saving purposes) and Term deposits (fixed for greater than 1 day).

Figure 7 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 deposits based on sector and ANZSIC classifications;

- Call and term deposits, including more breakdowns, particularly for less than 12 months, to the next interest rate review or when deposits roll over;
- Interest bearing and non-interest bearing information is also identified;
- 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 account balances by size buckets (to be published later this year).

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 revised international standards.

Only two measures of money are now 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.

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 that have been issued by other entities, holders of securities they have issued themselves is usually largely unknown as this management function is usually outsourced to an external registry to manage and arrange interest payments on their behalf. In the future we will utilise our own Registry of Securities (ROS) to validate the original maturity and type of security issued by banks, as well as provide consistent sector classifications for future publications.

Publications and further improvements

Our first release of data from the BBS 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 publications later in 2017 when we will publish more detailed data collected from the new BBS once we have had an opportunity to confront the data over an extended period to ensure any early quality issues are identified and resolved.

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 are currently seeking feedback on our second phase of publication.

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.

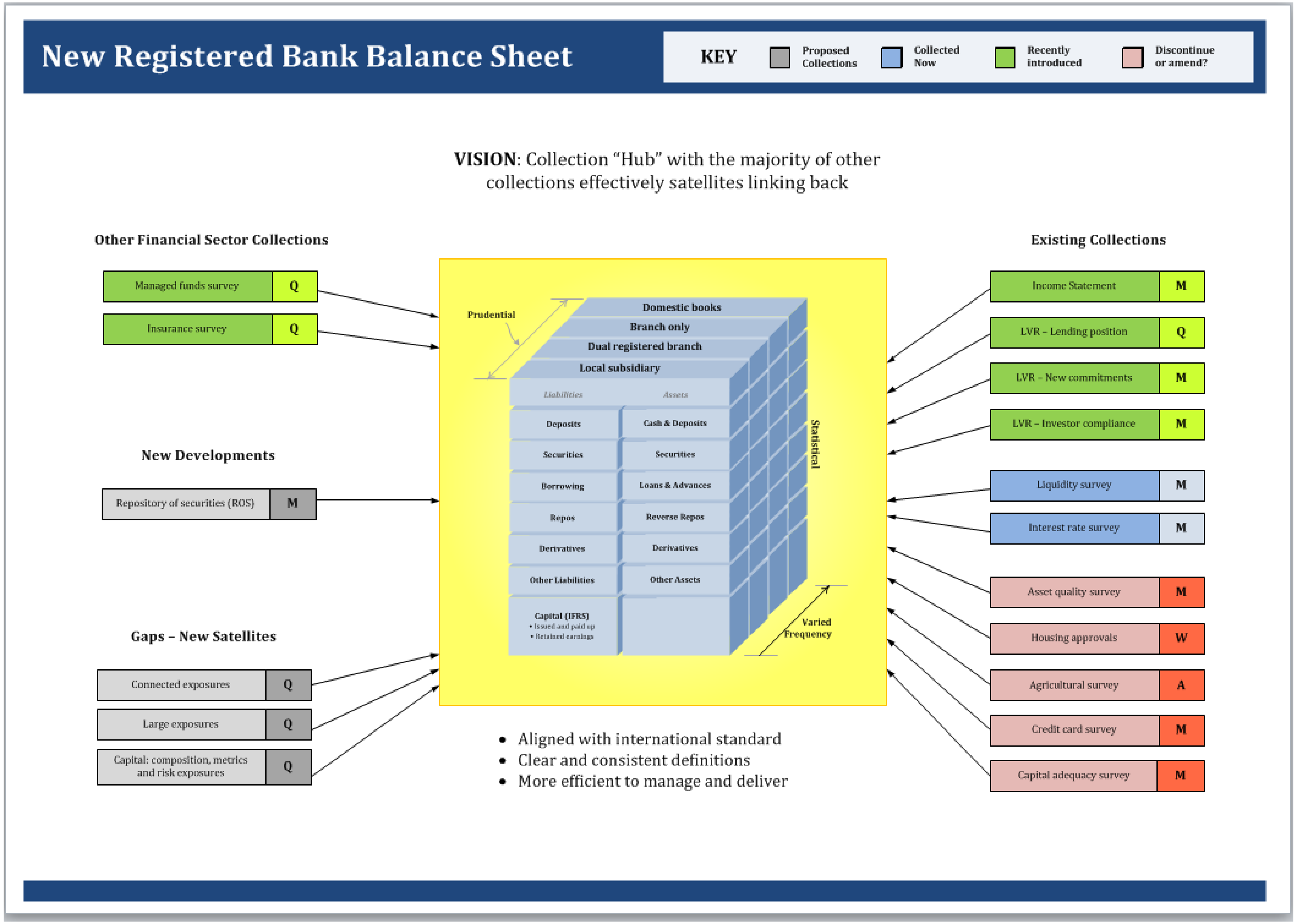
- We have concerns around the quality of previously published effective mortgage and business lending rates. We are currently reviewing our interest rate data needs and plan to extend the Retail Interest Rates Survey and Income Statement Survey to fill some of the data gaps left by the retirement of the SSR, to 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.

Conclusion

More granular data, coupled with industry agreed definitions, has helped achieve improvements in the quality of reporting by respondents and the resulting published series. With the introduction of the new BBS we are now able to provide a more comprehensive suite of banking sector data that will enable policy makers, supervisors, researchers and registered banks to make more informed decisions.

Appendix 1 "Vision"



Appendix 2 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.[4]
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. • There is no change to the definition of

[4] 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.

		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. • M3 *excludes* FX funding for M3 institutions	• 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 instruments because they are not a medium of

	from the SSR.	exchange [5] • 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.

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