RESERVE BANK
OF NEW ZEALAND
TE PŪTEA MATUA

Debt to income - New Commitment Survey

V1.2 September 2018

Please contact the Reserve Bank Statistics Unit (statsunit@rbnz.govt.nz) to discuss these procedures and definitions if in any doubt about their meaning or if following them will produce an internal inconsistency with your available financial data.

Data collection purpose

The purpose of the RBNZ Debt to Income – New Commitment Survey is to monitor risk in banks mortgage portfolios and in the overall New Zealand financial system. The data also helps to measure the impact of the recent Loan to Value restrictions, to better measure risks across different buyer types and allows insights to debt serviceability.

Definitions

New Commitment

A bank enters into a new commitment for a residential mortgage loan on the day that the bank sends the loan documentation to the applicant's solicitor. This is typically the day on which the bank has made an irrevocable offer to an applicant for a residential mortgage loan and the borrower has accepted the offer. By this point in the process the credit risk should be regarded as being the same as if the asset was already on the balance sheet.

New commitments do not include pre-approvals that may or may not lead to a firm offer of finance. Necessary (but not sufficient) conditions for a new commitment are that a specific property has been identified and that an amount has been agreed for the loan that the customer will draw down, or in the case of a mortgage lending facility, for the facility limit.

Residential mortgage loan

Report all Property Investment and Non-property investment residential mortgage loans. These terms are formally defined in BS19. Note that reverse residential mortgage loans do not need to be reported.

Loan to valuation ratio (LVR)

Loan-to-valuation ratio = [loan value / property value] x 100

Loan value and property value are formally defined in BS19.

Unknown LVR

In extraordinary cases, it may not be possible to determine the loan-to-valuation ratio, and therefore to allocate a commitment to an LVR band. Such commitments should be reported in the "LVR unknown" bands. For policy purposes, including the application of LVR restrictions, these commitments will be treated as "LVR > 100%".

Origination

The origination date is the time that a loan is committed to by the bank and includes any point in time at which there is a credit event in respect of a borrower.

Total gross income

Total gross income is the amount the bank is prepared to count in its servicing analysis (ie that qualifies (after any applicable haircuts) based on internal policy. It includes wages and salaries, self-employment income, boarder income, rental income, superannuation & other government benefits and investment income. **Banks should calculate this in the same way they currently calculate income for their own loan serviceability decisions, with the following guideline as an exception:**

- gross rental income should be haircut by 25% to reflect uncertainty and unavoidable expenses related to earning that income.

(The Reserve Bank will consider whether further harmonisation of approaches for statistical purposes is appropriate in the future).

Some additional points on the calculation of borrower income:

- We understand that industry practice is to treat student loan repayments as a deduction from income (given that the repayment depends on income rather than debt). This is preferable (given it is industry practice). If student loans are reported this way, do not also report the student loan balance in "total debt". Take the net income after student loans reported and 're-gross' it for taxes. Alternatively, it is acceptable to treat student loans as debt and not as a deduction from income. Similarly, if Working for Families payments are included in a 'net wage and salary figure' – re-gross this assuming normal tax rates apply.

- Self-employment or business income: conceptually this should be a figure net of business related expenses (but gross of tax paid by the business or the owner). The treatment of business related debt and interest expense can follow one of two methods.

    - First method: If the net figure is after payments of interest on business related debt, do not report the business debt as a component of "total debt".
    - Second method: Use an income figure that does not deduct business related interest expense, and include business debt as part of total debt. This method may be more suitable if the business debt is intermingled with the residential mortgage of the customer and is difficult to separate. Also, if the business is predominately residential rental property investment, this method should be used (as stated below).

- Rental income should be reported gross (ie before tax) and haircut – as above. This includes rent on non-residential property (e.g. commercial property or farms). Even if residential landlords report these assets in 'business' accounts, please do not treat these incomes as business incomes. Report haircut gross rent and report all the relevant mortgage debt as part of total debt.

- Foreign income should be included if it is acceptable to your bank's serviceability policy, using haircuts and limits set by that policy.

- In rare cases banks impute a total income figure for a customer. The extent of this should be reported as a note in one of the fields in the "Sign-Off" tab of the return. The income should be reported as "other" income in part 6 of the survey (see also the note on 'unknown' TDTIs below).

- As stated in our June 2017 letter, our expectations is for banks to continue to improve the capture of all material and eligible sources of income for a borrower. For example, if a household is able to pass a servicing test based on the salary of one earner, but there is a second co-borrowing household member with salary income that appears eligible, we are asking banks to take the steps necessary to record both incomes. As a guide, a source of income should be considered material if it would boost borrower income by 10% or more (relative to the income already collected), unless the borrower's TDTI (based on income already collected) is already below 3.

Borrowing parties

The scope of borrowing parties can be complex where one or more borrower or guarantor already has existing properties and debts. The first answer is to look at the grouping for LVR purposes. If a set of properties and borrowers are being grouped for LVR, it is generally acceptable to group their income to compute loan to income (LTI).

However, we understand there are circumstances where banks consider it is not appropriate to count the income of some borrowers or guarantors. These could include the income of some borrowers or guarantors (e.g. parents assisting first home buyers) not being counted because the mortgage is expected to only be serviced by other borrowers (e.g. the buyers).

If some people (e.g. the parents as guarantors) are providing a 'guarantee' that reduces the LVR of the borrowers, but it is expected that the main borrowers ('the children') will service the whole loan, the guarantor's income should not be included, but the full loan should be included when computing LTI and TDTI. The new commitment measured will be as for LVR.

For total debt, banks should seek to include all the debts of the same borrowers/guarantors whose income is included in the calculation. If a borrower or guarantor is being excluded when computing income, don't attempt to include their debts in 'total debt'.

In complex cases where borrowers are responsible for multiple obligations that cannot be grouped, banks may use their own policies to split borrower income across those multiple obligations but the apportionment to each borrower should be reasonable and linked to their expected servicing of the debt.

Loan to income ratio (LTI)

Loan-to-income ratio = [loan value / total gross income]

Where:

a) loan value is as defined for the LVR calculation. This will normally include all mortgage debt at your bank.
b) total gross income is as defined above

Explanatory note: this 'loan to income' concept is currently called 'debt to income' in the LVR New Commitment survey.

Unknown LTI or TDTI

We are aware that in some rare instances banks may not have precise details on income for some borrowers. In these cases banks should use the best available proxy, or if no reasonable proxy is available, the loan should be described as unknown LTI/TDTI. Examples of proxies that **would not** be reasonable include:

- Income data based on regional or suburb-level averages
- Debt or income data based on portfolio medians or averages
- Information not tied specifically to the individual customer

Proxies should only be based on information about the individual borrower, where the information held is in not quite the right form. Proxies that **would** be reasonable include:

- computing gross wages and salary income by reinflating a regular fortnightly net payment to a matching expected gross annual salary.

We expect the need for proxies, and for reporting of unknown LTI/TDTIs, to decline over time as bank systems improve.

Total Debt to income ratio (TDTI)

Total Debt-to-income ratio = [total balance of borrowers´ debts / total gross income]

Where:

a. Total balance of loan values is the sum of all loan values (typically the limit of each loan) that the borrower or borrowing parties discloses they are responsible for servicing out of their income. This includes the loan value of the new commitment, and any pre-existing mortgages, either at your bank or another lender. Where possible it should also incorporate any other loans and leases (e.g. consumer, credit card and overdraft lines, student loans, other loans and leases (but see the points above around student loan and business debt)) and any other existing financial obligations as recorded in the bank's serviceability assessment. Foreign debt should be included as disclosed.

b. Total gross income is the same as for the loan to income ratio (LTI) defined above.

First home buyer

A first home buyer is a borrower entering the home ownership market in New Zealand for the first time and purchasing or building a property they (or a related party) intends to owner-occupy. In the case of more than one borrowing parties to a loan, borrowers are classified as first home buyers only if none of the borrowing parties have previously drawn down on housing finance for owner occupation.

If the borrower, or at least one borrowing party, has previously drawn down on housing finance for owner occupation they should not be classified as a first home buyer

The borrower declares whether they are a first home buyer as part of the loan application.

Owner occupier (no investment collateral)

Owner occupiers are borrowers who own or are in the process of buying or building a house or flat they (or a related party) will live in, or are borrowing against properties that meet that definition, are not first home buyers, and are not borrowing against any investment properties. An owner can occupy more than one property, e.g. a family home and a holiday home.

The definitions of related party and the criteria for a secondary home to count as owner occupied (essentially that rental income should be minimal) are described in BS2A and BS2B.

Owner occupier (investment collateral)

Owner occupiers with investment collateral are borrowing for the purpose of purchasing or building a house or flat they (or a related party) will live in, and are securing that loan at least partly against investment property collateral. An owner occupier with investment property collateral can occupy more than one property e.g. a family home and a holiday home.

Investor

Investors are entities or persons borrowing for the purpose of building or purchasing residential property to rent. The borrower is securing the loan at least partly on a non-owner occupied property and the borrower does not intend to live in the property (if any) they are seeking to build or purchase.

Relationship to BS2 “Property Investment” and “Non-Property Investment” loan

For the avoidance of doubt, “First home buyer” and “Owner occupier (no investment collateral)” should sum to match the BS2 and BS19 “Non-property investment” concept.
Similarly, the “Owner occupier (investment collateral)” and “Investor” categories should sum to match the BS2 and BS19 definition of a “Property Investment” residential mortgage loan (see picture below). In this way, we are collecting a breakdown of borrowers according to the purpose of their current borrowing <u>and</u> the nature of their collateral.

BS19	Reporting in template	Purpose
Non-property investor	First home buyer	First Home buyer
	Owner occupier (no inv collateral)	Owner Occupier
Property investor	Owner occupier (investment collateral)	
	Investor	Investor

Auckland loan and Non-Auckland loan

A loan is an Auckland loan if it qualifies as an Auckland loan (APIL or ANPIL) for BS19 purposes. This includes any loan that has any Auckland investment property as collateral. It also includes any loan that has an Auckland owner occupied property as collateral, unless that loan has also has investment property as collateral and those investment properties are all outside Auckland.

A loan is a Non-Auckland loan if it does not qualify as an Auckland loan (so it is NAPIL or NANPIL for BS19 purposes). This includes any loan that does not have Auckland collateral. It also includes loans which have investment property collateral if those investment properties are all outside Auckland, even if the loan also has Auckland owner occupied property as collateral.

Commitments for business purposes and top ups and refinancing more generally

These commitments should be reported as described above, based on the nature of the underlying collateral (they will either be “Owner occupier (no investment collateral)”, owner occupier (investor collateral) or “Investor” loans). If a borrower is topping up or refinancing based on a mixture of investor and owner occupied collateral, report them as owner occupier (investor collateral) if the majority of collateral value is owner occupied, otherwise as an “Investor”.

Memo item: Bridging finance

In this column report the total debt of each borrower whose “total debt” includes a mortgage on a property that they expect to repay (e.g. on sale of property) fairly soon after the new commitment your bank is making. For example, if borrower is buying a home to live in and has not yet sold their existing home (but intends to), report the loan commitment including the full amount of their mortgage debt once they have bought their new home in the appropriate TDTI bucket, and also include their total debt as bridging finance in this column.

Components of Income and Debt (Part 6)

Most items have been described above. Note the points about how debt should not be counted if the resulting debt payments have already been deducted from your income figures. For example if ‘wage and salary’ income has had student loan deducted, do not report the student loan as a part of total debt or the section 6 breakdown of total debt.

The “Personal” loans column is intended to represent all disclosed consumer debt (including credit cards, overdrafts, car loans and the like).

Instructions:

- Only newly committed residential mortgage loans are to be reported in this survey.
- Report the number of commitments as one per loan application regardless of the number of mortgage loan products the borrower chooses to use e.g. a fixed portion and floating portion should be counted as one commitment.
- Report the value of commitments as the gross increase in credit associated with new commitments this month. Include increases to residential mortgage loans, including revolving credit limits (or similar facilities).
- Report dollar figures in millions to three decimal points, i.e. to the nearest hundred thousand New Zealand dollars. For example $1,234,567.89 is reported as 1.234
- Report values in white cells only. The grey cells will derive from data entered in white cells.
- Please review the high-level results and sign-off before submitting to the Reserve Bank.
- Submit all returns via the Secure Upload Facility. Please also submit any revisions via the Secure Upload Facility, with the reason for and full explanation of the revision clearly highlighted under “Revisions” in the “Sign-Off” tab of the return.
- Please clearly explain any “Significant Variances” or “Changes in Practice” in the fields provided in the Sign-Off tab. Please provide as much detail as possible regarding the changes, particularly in the early stages of the survey implementation, when systems and the extent of data capture may be changing.

Examples

Below are a series of sample transactions that illustrate how we would expect banks to calculate and report the relevant metrics. The first two examples include detailed information on how to complete the key fields in the template. The remaining examples simply illustrate the expected TDTI calculations.

1) The pre-existing debt obligation including any other financial obligations declared by a borrower or borrowing parties across all lenders is $400,000 and the value of the new commitment is $275,000. The annual gross income (as defined earlier in this document) is $150,000. The new loan is to buy a $320,000 dollar investment property in Auckland and is solely secured on that.

   The Total Debt to Income Multiple is calculated as:

   TDTI = ($400,000 + $275,000) / $150,000 = 4.5

   Because the new loan is only secured on the new property, it has a loan value of $275,000. So the loan would also be reported as having a LTI of 1.8 ($275,000/$150,000) and an LVR of 86% ($275,000/$320,000).

   The value of commitment ($275,000) should be reported as follows:

   - Table 2.1 row (d) in the TDTI >4<=5 bucket
   - Table 3.1 row (d) in the LTI <=3 bucket
   - Table 4.4 row (f) in the TDTI >4<=5 bucket
   - Table 4.8 row (f) in the LTI <=3 bucket
   - Table 5.4 row (d) in the TDTI >4<=5 bucket
   - Table 5.8 row (d) in the LTI <=3 bucket

   One new commitment should be reported in Table 2.4 row (d) in the TDTI >4<=5 bucket

   The composition of the $150,000 annual borrower gross income should be reported in Table 6.4 in the TDTI >4<=5 bucket (row (c)).

   The composition of the $675,000 total debt obligations should be reported in table 6.9 in the TDTI >4<=5 bucket (row (c)).

2) A single borrower has an existing house worth $400,000, a mortgage of $200,000 (at your bank) and annual income (wages and salaries) of $85,000. The borrower also has $50,000 in student loan debt and a credit card at another bank. The only information available on the credit card is that payments are $700 per month.

   The borrower wishes to purchase another house, worth $500,000 without an additional deposit. The borrower plans to sell the first house, but if he/she can't, the bank assesses the house would rent for $400 per week. $400 per week * 52 weeks is $20,800, which we would haircut by 25%, so about $15,600 ($15,000 for simplicity sake) per annum, after the haircut.

   The loan is a **Bridging loan.** The customer is an owner occupier (no investment collateral) as their **intention** is not to rent any property out. The new commitment ($500,000) should be reported in tables 2 to 5, but this example deals with the details of reporting of total debt and income in section 6.

As the customer is not a First Home Buyer, and does not intend to be a landlord the TDTI would be reported under section 6.7.

Total gross income would still include the rent, as this is part of the serviceability assessment. Total gross income is $85,000 (wages and salaries) plus haircut rental income, so $85,000 plus $15,000 = $100,000. In line with your bank's policy, student loan payments of approximately $10,000 are deducted from gross income, leaving $90,000. These income items are reported in table 6.2.

The Loan Amount is the existing mortgage, plus the new purchase, so $200,000 plus $500,000 = $700,000.

The initial LTI would be $700,000/$90,000= 7.78. LVR = $700,000/$900,000 = approx. 78%.

You impute that a $700 per month credit card bill is represented by a balance of $14,000 (and have reported this approximation method to us). Other debts would then be $14,000, as the student loan balance is accounted for in the income calculation. Total debt is therefore $714,000. Again, this would be split according to the table in section 6.7.

TDTI is therefore $714,000/$90,000 so 7.93. So $714,000 is placed in table 6.7 in the TDTI>7 <=8 bucket, distributed across the different sorts of debt. The entire $714,000 is also placed in the 'bridging finance" memo item next to that table.

3) Business debt coming entirely from residential mortgage

   A customer runs a business. They own their own home (value $1m). The total debt secured against the home is $600,000. $300,000 finances the business. That is, it is secured on the house and/or guaranteed by the customer, but the funds have been loaned by the bank to the business which has no other debts.

   The business EBIT is $100,000. The business pays $15,000 in interest on the debt provided against the mortgage security. The customer's share of the businesses after tax profit is $50,000 (after $20,000 tax and $15,000 in reinvestment). Your serviceability policy is to exclude expected reinvestment needs from the owner's share of earnings. The customer has no other income or debts.

   The customer is responsible for servicing $600,000 in debt and this should all be included. Their income should be computed as $85,000 (since the debt is being counted in the borrower's total debt, the business income should be calculated without deducting the interest costs of servicing that debt, and tax should also not be deducted, but expected reinvestment needs are deducted in line with policy). This gives TDTI = 7.06.

4) Business debt coming partly from residential mortgage.

   A customer runs a business (a wholly owned limited liability company). They own their own home (value $1m). The total debt secured against the home is $600,000. $300,000 finances the business. That is, it is secured on the house and/or guaranteed by the customer, but the funds have been loaned by the bank to the business. The business has $500,000 in other debt, partly secured against business chattels but not guaranteed by the owner.

   The business EBIT is $130,000. The business pays $15,000 in interest on the debt provided against the mortgage security and $30,000 in interest on the other debt. The customer's share of the businesses after tax profit is $50,000 (after $20,000 tax and $15,000 in reinvestment). Your serviceability policy is to exclude expected reinvestment needs from the owners share of earnings. The customer has no other income or debts.

The business debt not secured by mortgage or guaranteed by the owner does not need to be counted, but the interest costs of servicing it should then be deducted from business income. Thus the customer is responsible for servicing $600,000 in debt, and their income should be computed as $85,000 (before tax, but after the costs of servicing the debt that isn't included, and deducting expected reinvestment needs are deducted in line with policy). This again gives TDTI = 7.06.

It would also be acceptable to include the full business debt in debt and not deduct the servicing costs of this debt from income.

5) Student loans

A customer has $100,000 in gross wage and salary income. They have a $80,000 student loan and a $450,000 dollar mortgage. They have no other income or debt. Their annual student loan deductions are $10,000.

As described above, it is preferable to deduct the student loan deductions from gross income, to give a final figure of $90,000 and a TDTI of $450,000/$90,000 = 5.

It is also OK to count the student loan as debt and not deduct from income. This would give a TDTI of $530,000/$100,000 or 5.3.

6) Consolidating borrowers

A customer (2 borrowers, not necessarily related parties) has 4 rental properties held in a LTC, and one borrower also owns their own home (held in a trust). The combined wage and salary income of the customers is $300,000. The rental properties generate $100,000 in annual rent ($75,000 after haircuts). Both customers have completely guaranteed the debt of the LTC and the bank also has a mortgage over the customer's own home (in the trust).

The total mortgage debt is $1.5 million, and there are no other debts.

We would expect all of these accounts to be consolidated for LVR purposes, and for DTI purposes as well. Thus debt is $1.5 million and TDTI is $1,500,000/$375,000 = 4.0.

7) Case where consolidation is not appropriate (e.g. limited guarantees)

A customer is buying a first home for $500,000. Their parents provide a $100,000 limited guarantee secured against their own home (also mortgaged to the bank). The bank lends $480,000 to the customer, who has no other debts.

The LVR may be reduced by the guarantee provided by the parents, but as the customer is responsible for servicing the entire loan, parental income should not be incorporated into computations of LTI or TDTI. If the customer's income is $100,000, their LTI and TDTI should be computed as $480,000/$100,000 = 4.8.

8) Cases where consolidation is not appropriate (e.g. limited guarantees) part 2

A customer (2 borrowers, not necessarily related parties) have 4 rental properties held in a LTC, one also owns their own home (held in a trust and mortgaged to the bank) and the other also owns their own home (no mortgage balance, but mortgage provided to bank in support of the guarantee). The combined wage and salary income of the customers is $300,000 ($150,000 each). The rental properties generate $100,000 in annual rent ($75,000 after haircuts). Both customers have guaranteed the debt of the LTC up to a limit of $100,000 per person and the bank also has a mortgage over the customers own home (in the trust).

The total mortgage debt is 1.5 million ($1.2 million on the rentals, $300,000 on the owner occupied home), and there are no other debts or income.

Because the LTC is not fully guaranteed by the owners, it is a separate entity. Unlike the previous example, the owners expect to have to service the portion of the debt they have guaranteed. Therefore, its debt should be computed as $1.2million minus the $200,000 in guarantees= $1m. The rental income means it has a DTI of $1,000,000/$75,000 = 13.33.

The customer that owns their home has a total debt of $300,000 + $100,000 = $400,000 for a DTI of 400/150 = 2.67.

The customer that has provided a guarantee but no other mortgage has a total debt of $100,000 for a DTI of 100/150 = 0.67.

9) Limits to residential mortgage asset class

A company has been approved for total loans and credit limits with your bank of $21 million dollars. The exposure is individually managed and the credit limits are based on projected cash flow rather than business collateral. As added surety, the bank has taken security over 2 residential properties owned by the controlling shareholder (total value $3 million). The exposure is not classed as a residential mortgage in your capital modelling.

We would not expect this to be treated as a residential mortgage loan or reported in LVR or DTI reporting.

<u>Appendix 1:</u> Document change log

Version	Date	Comment
V1.1	June 2017	Last issued reporting guide document
V1.2	Sept 2018	Update to ‘Investor’ definition (pg. 5)