Debt to income data: a quick introduction

The Reserve Bank is publishing data from the monthly 'DTI new commitments survey'. This user guide aims to assist the understanding and usage of DTI data. For more detailed information about the data, see the Technical Note.

When taking out a mortgage, customers are asked a range of questions by their bank, including about their other debt and income. In the 'DTI survey' the banks provide the Reserve Bank with summary data of their new mortgage customers' debt and income profile.

Monthly data from March 2017 onwards is now available, and will be updated quarterly. Dates for the next publication of the data are available in the Statistics Release Calendar.

DTI data informs financial stability risks

The Reserve Bank developed the DTI survey to better understand risks to financial stability. We collect data on the value and number of new mortgages, total borrower debt and gross income. The DTI ratio is calculated by dividing the total debt of a borrower by their gross income.

The DTI ratio is a useful measure of mortgage serviceability for owner-occupiers. All else equal, a borrower with a higher DTI ratio would have a smaller buffer to withstand an adverse shock to their serviceability, for example a partial loss of income or higher interest rates.

Higher serviceability risk increases the likelihood of credit losses for banks in an economic downturn. Higher-DTI households also tend to reduce their consumption in response to shocks, even if they can still service their mortgage. Reducing spending could create stress for individual households and impact the wider economy

DTI is part of a larger dataset that provides insights into the risk of new mortgage lending. It joins the loan-to-value ratio (LVR) survey, which measures new mortgage commitments by the value of mortgage loans relative to the valuation of the property. The LVR indicates the credit loss to banks in the event the borrower cannot service their debt.

What is a 'high DTI'?

Serviceability risks should be viewed as a continuum, with no hard threshold for when DTI is "high". We are currently publishing DTI data from a ratio of under three through to a ratio of over six. The Reserve Bank's risk monitoring keeps a particularly close watch on new mortgage lending with a DTI of over five.

Overseas regulators who have used a loan-to-income (LTI) restriction have applied limits of up to five for owner occupiers. For example, Ireland and the UK have LTI limits of 3.5 and 4.5, respectively. The difference in the regulatory thresholds in the two countries reflects differences in the risk environments, risk appetite and historical experience.

LTIs are conceptually similar to DTIs, but since they do not include total borrower debt we can expect the DTI distribution of the mortgage portfolio to be higher than the LTI distribution for any given country.

Insight into housing affordability

DTI can play a helpful role in assessing housing affordability. Housing affordability can be viewed from several perspectives, including the affordability for renters; affordability for prospective home buyers; and affordability for recent home buyers. The DTI survey is more suitable as tool for assessing recent home buyer affordability, because it measures actual mortgage lending flows.

DTI survey data informs the 'residual income' measure of affordability. This method draws on a range of data to estimate the income left for a household's other expenses after meeting their mortgage obligations.

Interpreting DTI data

The DTI new commitments survey is a monthly survey completed by registered banks. In addition to total borrower debt and gross income, it also indicates whether the borrower lives in Auckland, and whether they are a first home buyer or other owner-occupier.

Committed lending in the DTI survey is a finalised offer to customers to provide a mortgage loan, or to increase the loan value of an existing mortgage loan.

The DTI ratio uses a broad measure of borrower debt. In addition to the loan value of the new mortgage commitment, it also includes any pre-existing mortgages, and incorporates any other loans that are considered in the bank's serviceability assessment, such as credit card debt and loans to other lenders.

Borrower gross income is the amount of income the reporting bank is prepared to count as part of assessing whether to extend a loan to a prospective borrower. It may include salaries and wages, self-employment income, or a range of other sources.

Data quality challenges

The main data quality challenge ahead of this DTI publication was accurately measuring borrower gross income. Initially, many banks were only collecting income up to the point where mortgage serviceability requirements were met, rather than capturing all material income.

The Reserve Bank worked collaboratively with banks to improve data quality, which now better captures and report borrower gross income and is suitable for analytical purposes.