

Looking Beyond Headline

Overview

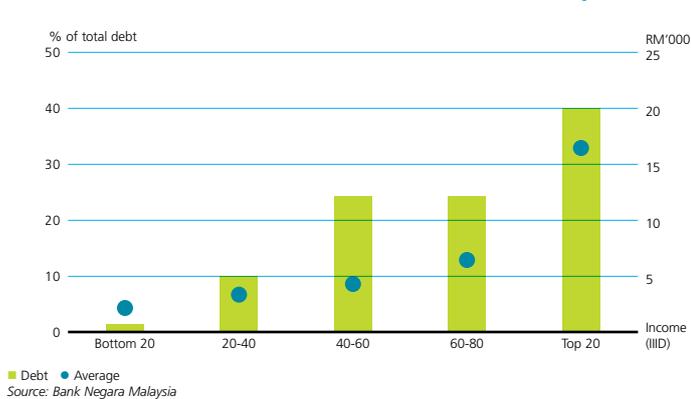
The ratio of household debt to gross domestic product is a common measure of household indebtedness, often used to indicate risks of over-indebtedness above certain thresholds. Yet, this headline statistic provides very little insight on the quality of debt due to several key information gaps. One cannot directly infer the debt repayment capacity of households from the ratio as it does not take into account the available savings and wealth of the borrowers. Neither does the ratio provide any information on the distribution of debt or pockets of weaknesses across borrowers with different income levels. The ratio is therefore insufficient for policy analysis and design. Furthermore, analysis using this ratio could lead to wrong and erroneous conclusions. For these reasons, other metrics such as the debt service ratio (DSR) and financial margin should also be used for more granular assessments of potential household vulnerabilities and the implications for financial stability.

The following is a summarised article on a detailed analysis by Bank Negara Malaysia which provides some assessments on the distribution of household debt and repayment capacity using DSR and financial margin as indicators which are derived based on data from a recently established Integrated Income Indebtedness Database (IIID) to match borrowings of individuals captured in the Central Credit Reference Information System (CCRIS) with their income information reported to the Inland Revenue Board of Malaysia. The analysis covers close to 2 million individual records, representing about 5% and 10% of the Malaysian population¹ and labour force respectively, on total debt of approximately RM200 billion or 20% of total household debt.

Distribution of Household Debt

As at end-2015, the largest share of debt (about 40%) is owed by individuals in the top 20 income group² (Chart 1). The average debt level for borrowers in this group is more than twice of that observed for other borrower groups (Chart 2). The debt servicing capacity of this group is reasonably healthy as indicated by more prudent debt service ratios (Chart 3). Relative to other income segments, a large share of this debt is secured, with about 77% of debt taken out for the purchase of properties and principal-guaranteed investments which contribute towards individuals' wealth accumulation (Chart 4).

Chart 1: Household Income and Distribution of Debt by Income



Borrowers in the more vulnerable income segments, represented in the analysis by individuals in the bottom 40 income group, accounted for only 11.4% of total debt. However, borrowers in this group are more likely to face difficulty servicing their debt in the event of a payment shock, given thinner buffers. This is somewhat mitigated by the lower proportion of debt financed under floating or variable rate schemes compared to other income groups (Chart 5). More than half (53%) of borrowings by this group remain sensitive to changes in interest rates which can have a disproportionate impact on debt repayment capacity given the low absolute income levels.

Chart 2: Debt per Borrower by Income Group

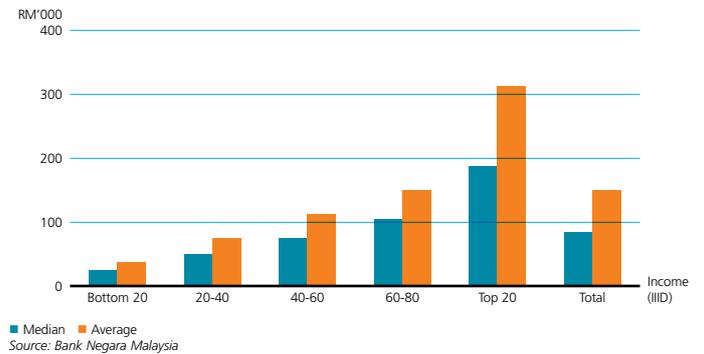


Chart 3: Debt Service Ratio by Income Group

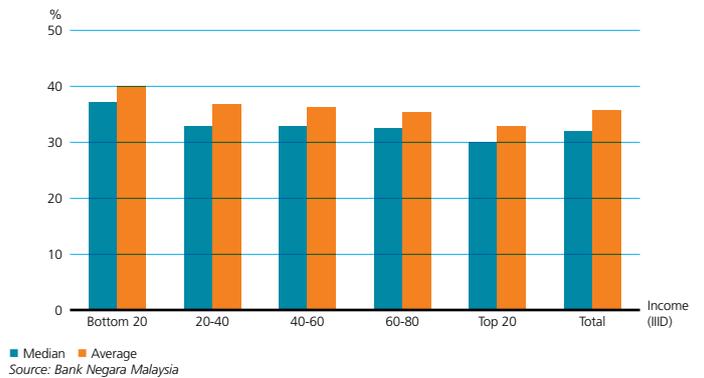


Chart 4: Debt by Loan Purpose by Income Group

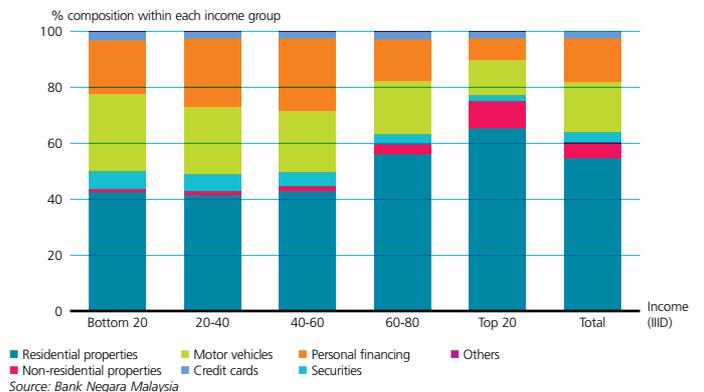
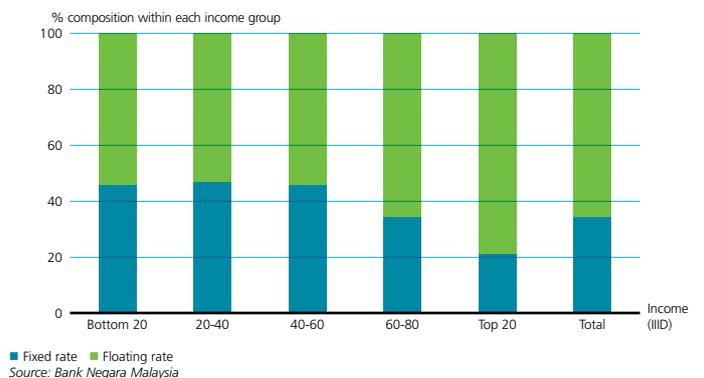


Chart 5: Debt by Type of Interest Rate by Income Group



Household Debt Statistics

About two-thirds of total debt is acquired by those living in major employment centres³. Most of these borrowers are of the age between 30 and 40 years old in the 40-60 income group. As expected, a significant portion of debt is for the purchase of residential property, followed by debt for vehicle purchases and personal use, corresponding to the need for greater mobility and higher expenditures associated with raising young families and urban lifestyle choices.

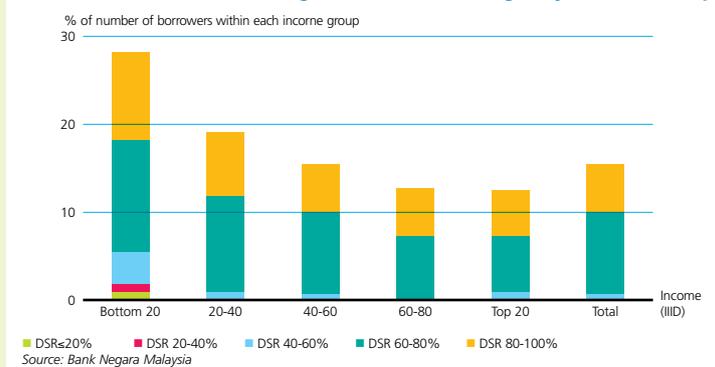
Following the implementation of responsible financing measures by the Central Bank in 2012, the share of financing represented by individual borrowers in the 40-60 income group has shown some pick-up as credit providers tightened lending standards for the lowest income groups. This has also been an area of greater supervisory focus by the Bank in recent years. Given the profile of debt taken out by borrowers in this group as noted above, close attention by lending institutions to ensure robust affordability assessments continues to be warranted.

Assessment of Debt Repayment Capacity Using Financial Margin and the Correlations with DSR

A borrower's financial margin is defined as his income net of statutory obligations, debt repayments and expenditures on basic necessities⁴. Borrowers are more likely to face financial difficulties, particularly in the event of unexpected income and expenditure shocks, if they have a negative financial margin. These borrowers will receive the most scrutiny and a debt-at-risk (DAR) metric is used to capture this potential source of risk.

At the aggregate level, 15.4% of total borrowers covered in the analysis had negative financial margins (Chart 6). The highest share of borrowers with negative financial margins was found in the bottom 40 income group (21% of borrowers within the income group), with an estimated amount of DAR of about 3% of total debt. Including borrowers in the 40-60 income group, the DAR increases to about 8% of total debt. The share of borrowers with negative financial margins decreases substantially to about 13% for borrowers within the 60-80 and top 20 income groups (Chart 6).

Chart 6: Borrowers with Negative Financial Margin by Income Group



As noted earlier, a larger portion of debt taken by such borrowers is secured debt, thus substantially mitigating the impact of negative financial margins on bank asset quality. Other findings from the Central Bank also suggest that borrowers in the higher income groups are much more likely to have higher levels of savings and other forms of household wealth that can be drawn on to service debt. This is corroborated by the delinquency and impairment ratios observed for borrowers in this group which were substantially lower than the industry average (Chart 7 and Chart 8).

Policy Implications

In general, lending policies of both banks and non-banks typically require a borrower's total debt servicing obligations to be below 60% of income at the point of debt origination. The analysis presented affirms that this has had a key

Chart 7: Gross Delinquent Loans

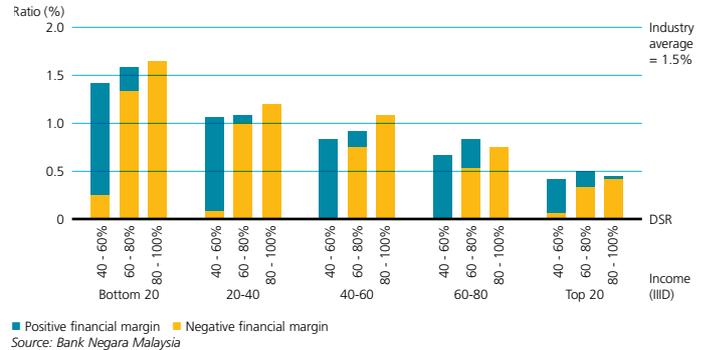
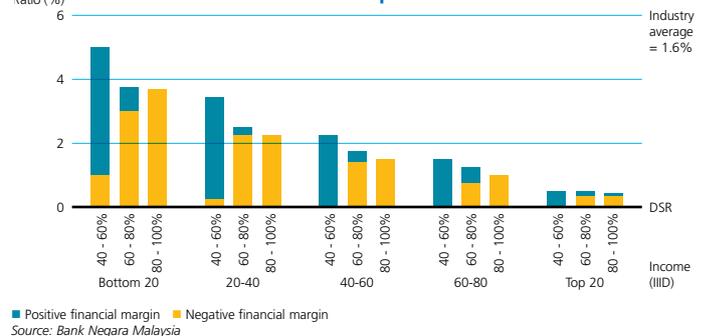


Chart 8: Gross Impaired Loans



role in mitigating risks in the household sector. A material change in the profile of household debt – particularly in terms of the distribution of household debt across income groups and DSR levels – could, however, alter this and weaken household resilience, with broader implications for financial and macroeconomic stability. This underscores the need to maintain continued vigilance in lending practices, as well as support for households to effectively manage debt through sustained education and debt assistance programmes. This analysis also shows that households at greater risk include those in the 40-60 income group of a younger demographic and living in major employment centres, based on the profile of their debt. Measures such as improvements to public transportation that will reduce the need for borrowings to purchase vehicles and increase income earning opportunities will be important to complement continued vigilance in ensuring responsible financing practices by lending institutions.

The relationship between DSR and default probabilities may provide guidance on indicative levels of prudent threshold of DSR level for different income groups. This could contribute towards financial institutions' credit underwriting, risk management and loan loss provisioning practices. It could also contribute towards greater differentiation of borrowers' credit risk profile based on the DSR level across age and income groups, geographical location and type of financing facility. The application of proportionality of regulations, can reduce potential unintended consequences (such as reduced access to financing for eligible borrowers) of broad macro prudential policies. In addition, further studies can better inform the design and calibration of stress test scenarios and parameters to assess the shock absorption capacity across borrowers and lenders.

1. In comparison, the Household Income and Labour Dynamics Survey used for a similar study in Australia represents about 0.1% of the population.
 2. Individuals are clustered based on monthly income (Source: IIID).
 • Bottom 20 income group: Individuals earning ≤RM2,500 per month
 • 20-40 income group: Individuals earning RM2,501-3,500 per month
 • 40-60 income group: Individuals earning RM3,501-5,000 per month
 • 60-80 income group: Individuals earning RM5,001-8,000 per month
 • Top 20 income group: Individuals earning ≥RM8,000 per month
 3. Selangor, Johor, Kuala Lumpur and Penang.
 4. For this study, basic necessities are defined as:
 (i) food and non-alcoholic beverages;
 (ii) housing rental and maintenance;
 (iii) water, electricity, gas and other fuels;
 (iv) transportation;
 (v) education; and
 (vi) healthcare.