

HOUSEHOLD DEBT: A FINANCIAL OBLIGATIONS RATIO, FRENCH STYLE

The Fed calculates ratios to measure financial obligations of US households. These ratios provide a better understanding of changing patterns in indebtedness and consumer spending. Similar ratios calculated for France permit to record the evolution of constraints of financial obligations on both French homeowners and renters. Comparing the French and US figures shows that financial obligations on US households have risen, which is not the case in France.

Debt service ratio and financial obligations ratio: two important indicators created by the Fed

The Fed publishes two quarterly ratios which estimate the level of the burden of household debt: the debt service ratio (DSR), since 1980, and, more recently, the financial obligations ratio (FOR). The first ratio only takes into consideration household debt due for payment (interest and principal) over disposable income. The second, more general measure, includes other elements in its numerator, known as recurring expenses: the FOR incorporates rents, auto leases, homeowners' insurance and property taxes. Another difference between the FOR and the DSR is that the FOR splits the aggregate ratio into separate sets of figures for homeowners and renters.

The Fed has highlighted the difficulty in calculating these ratios that are based on a certain amount of assumption. The ideal data set, for example, would have the specific amount repaid by each individual household loan. Because this data is not available, the calculation is a rough approximation of the debt service ratio faced by households. Even so, if absolute ratio levels are approximate, changes in these levels, over time, will show the degree of the burden of debt on households and serve as a precious tool for understanding the US economy.

Calculating similar measures for France

Various data sources were used for devising a similar tool for French households¹: household surveys (Insee's Housing survey, the Household Debt Observatory's Household debt survey - Observatoire de l'Endettement des Ménages), credit outstanding and interest rates from the Banque de France, national accounts statistics (Insee) on household income. The frequency of the data made it possible to construct an indicator which is released annually. The ratio's numerator for French households breaks down into two aggregates:

- Payments related to housing. For homeowners, these include: (i) annual payments to repay mortgages net of housing subsidies (interest and principal, including insurance) on the purchase of a main residence; (ii) co-ownership expenses and, (iii) private expenses (water, fuel). For renters, these payments include rents and other rental and private expenses.
- Other household short-term debt. These are expenses resulting from repayments of other household debts (interest and principal), relative to status of occupancy (homeowners and renters).

The aggregate of these two categories is set against the gross disposable income before taxes of both homeowners and renters. The ratio provides almost the same information as the FOR.

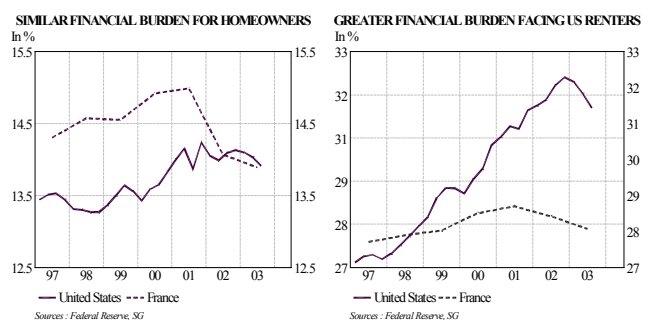
¹ The assumptions and data used to calculate the French ratios are explained on the next page.

Similar obligation levels for homeowners, different for renters

The French ratio incorporates payments related to housing not included in the US FOR. This accounts for the unseemly difference between the French and US ratios: French homeowners appear to face a similar burden as US homeowners, whereas US renters only appear to have been facing more financial obligations than French renters since 1999.

Looking firstly at homeowners, the US household FOR should actually be higher because of a considerable rise in mortgage debt, and even more so when considering the specific advantages in the US, where financial costs are deductible: mortgage loan maturities (generally 30 years) are much longer than in France, which spreads the financial obligations over a longer period; Government Sponsored Enterprises (Fannie Mae, Freddie Mac) provide liquidity to the mortgage finance market by playing an intermediary role between banks and household borrowers, also housing loans are easily renegotiable and new loans secured against housing assets are readily granted (equity lines). In general, US homeowners have been able to take advantage of the very low level of long-term rates in recent years, particularly in 2003, but the rise in their mortgage debt corresponds to a FOR close to 14%, which is relatively high.

The ratio for French homeowners is at a similar level, but this is because of the methodological difference in sundry expenses included in the French figures. The decline in the burden facing French homeowners in 2002 can be explained by both a decline in mortgage repayments and by households' reduced appetite for household short-term loans, according to the Household Debt Observatory survey.

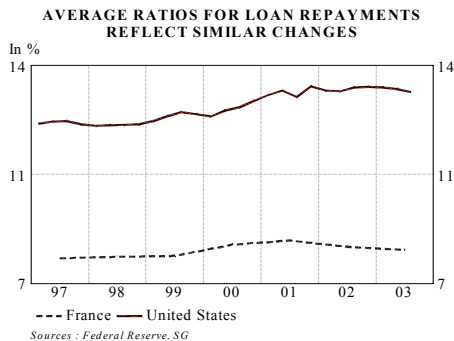


Regarding renters, the FOR went from 27% to over 31% in the United States between 1997 and 2003, whereas it has hardly risen in France and is at a much lower level, despite the methodological difference in payments mentioned above. This reflects fundamental differences in household debt patterns on both sides of the Atlantic.

The burden of repayments is increasing for French households but more so for US households

With a steadily rising rate of indebtedness in recent years, which was at 58.8% of gross disposable income at the end of 2003 (for total households), the level of French household debt is much lower

than US households, whose rate of indebtedness reached 117.3% at the end of 2003, and has been rising particularly steeply since 2001. The comparison of obligations facing households based on household short-term loans and mortgage repayments (i.e. the Fed's DSR and the French ratio calculated on the sole basis of loan repayments) talks for itself. The burden of due payments on household debt increases at a faster rate in the United States, where there is a much higher level of financial obligations.



A further increase in the repayment burden facing US households resulting from a rise in interest rates would gradually reduce their propensity to add new loans, lower demand (housing and durable goods) and put pressure on growth.

Methodology for calculating the French ratios

Data available for France allow for a ratio to be calculated which reflects the financial burden on households in broader terms. Like the US FOR, it incorporates not only mortgage debt and other household short-term loans but also different categories of incompressible expenses such as rent or other private or collective housing expenses. The indicator is, however, based on a number of assumptions and approximations.

We distinguish between two main types of financial obligations in the numerator. The first, relating to housing, is exclusively based on results from Insee's Housing survey. The table below gives a breakdown of how this component, called 'total net housing affordability rate' is calculated (using homeowners as an example): it is the ratio of total household expenditure to disposable income, both for homeowners and renters.

Housing	Homeowners
Total net financial obligations	Total average net spending *number of new homeowners +Total average net spending excluding mortgage repayments *number of established homeowners
Average annual gross income, net social contributions, before tax deductions	Average annual income of new homeowners *number of new homeowners +Average annual income of established homeowners *number of established homeowners
Total net housing affordability rate (%)	Total net financial obligations / Average annual income

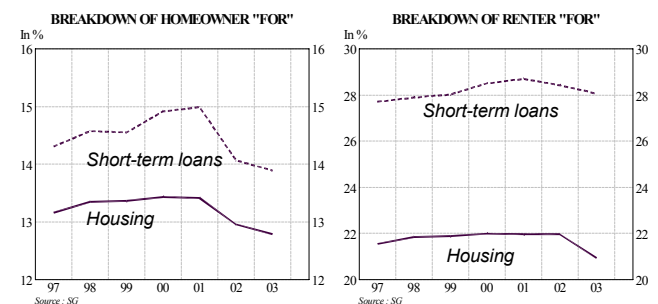
The second, relating to household short-term loan facilities, calculated from data on outstanding loans granted to households by credit institutions, as published by the Banque de France. These outstanding loans are broken down between homeowners and renters in proportion to the number of households holding this type of loan in each category, as obtained from the household debt survey published by the Household Debt Observatory.

Two assumptions were made in calculating repayment obligations: 1/ Household credit interest rates correspond to the average effective rates used by credit institutions for consumer credit in the first quarter of the year in question (rates published by Banque de France), and 2/ repayment of the principal is spread evenly over 4 years.

Financial obligations resulting from household short-term loans repayments are set against gross disposable income before taxes to obtain a second ratio, called 'household credit affordability rate', in order to obtain a numerator similar to the one used in calculating the 'total net housing affordability rate'. The difference between gross disposable income before taxes and income obtained by adding average gross disposable incomes also before tax of homeowners and renters from the Housing survey is broken down according to the proportion of homeowners and renters provided in the same survey. The procedure for calculating this second component is shown in the table below:

Credit	Homeowners	Renters
Household short-term loans (1)	Household short-term debt outstanding granted by credit institutions on 1 January of the year in question	
Homeowners / renters (2)	Outstanding* number of homeowners with household short-term loans	Outstanding* proportion of renters with household short-term loans
Credit rate (1)	Average effective rates used by credit institutions in the first quarter of the year in question	
Amount of annual repayment	Homeowners outstanding * credit rate + Homeowners outstanding / 4	Renters outstanding * credit rate + Renters outstanding / 4
Gross disposable income current income and asset taxes (3) (A)	Gross disposable income + Current income and asset taxes (A)	
Average annual gross income, net social contributions, before tax deductions (4) (B)	Denominator of homeowners total net housing affordability rate = (B1)	Denominator of renters total net housing affordability rate = (B2)
Total average annual income	(B1) + proportion of homeowners* [(A)-((B1)+(B2))]	(B2) + proportion of renters* [(A)-((B1)+(B2))]
Household credit affordability rate (%)	Annual repayment / Average annual income	

Source: (1) Banque de France; (2) Observatoire de l'Endettement des Ménages (Household Debt Observatory); (3) National accounts, Insee; (4) Housing Survey, Insee



The sum of the two affordability rates ('net housing affordability rate' and 'housing credit affordability rate') allows us to obtain a Financial Obligations Ratio for French households, both for homeowners and renters. The average ratio is simply measured as a weighted average of the indicators obtained for homeowners and renters, using the proportion of both household categories out of total French households, published in the Housing Survey.

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