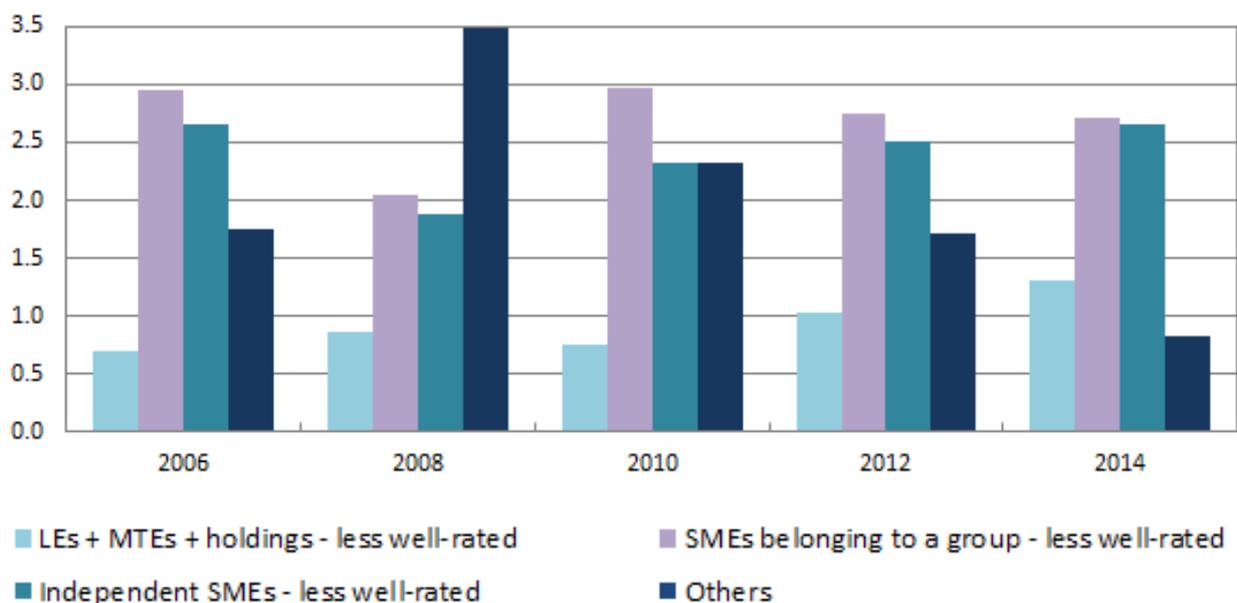


Are there zombie firms in France?

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Firms in difficulty benefiting from loans at very low rates, known as "zombie firms", remain rather scarce in France. The share of these firms according to size has been broadly stable over the past decade. In 2014 they accounted for about 2.5% of SMEs and slightly more than 1% of the others (Large Enterprises, Mid-Tier Enterprises and Holdings). One deduction is that zombie loans should not be viewed as one of the key factors impairing labor productivity in France.

Figure 1: Percentage of firms less well-rated and benefiting from very low rates



Source: Authors' calculations.

Adverse consequences of zombie lending

Zombie firms are companies that banks hold on to their business, even though they are unprofitable and highly indebted or insolvent, and by financing them at excessively low rates (see Caballero et al., 2008).

Zombie lending could be seen as a positive voluntarist policy as it helps keep otherwise insolvent companies stay afloat. Credit allocation may then be sub-optimal from the viewpoint of the broader economy insofar as the human resources and capital held by zombie firms should have been reallocated to more profitable firms. The costs of labor and capital are thereby increased; this reduces the profitability of healthier firms or new entrants and may discourage investment and business creation. Hence, industries with a high proportion of zombie firms have lower job flows and lower productivity rates than others

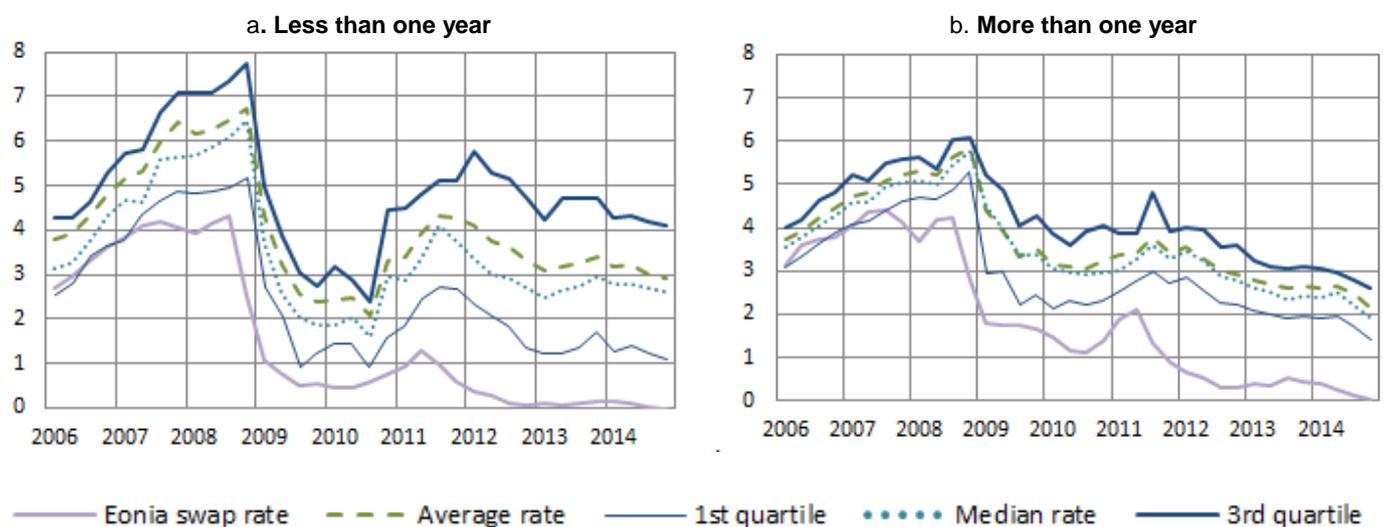
According to [Acharya et al. \(2016\)](#), "in 2013, 50 %, 40 % and 30 % of debt, respectively, in Portugal, Spain and Italy, was owed by firms which were not able to cover their interest expenses out of their pre-tax earnings". In France as in other advanced countries, recent studies have highlighted the slowdown in

productivity (see [Bergeaud et al., 2016](#), [France Stratégie, 2016](#)). Could this slowdown result from a surge in the relative share of zombie firms in France? This article replies negatively for France on the basis of a more detailed article of the Bulletin de la Banque de France (see [Avouyi-Dovi et al., 2016](#)).

French lending rates: Strong scattering and sharp decline

The analysis covers short-term as well as investment loans. It takes into account the “Narrowly Defined Effective Rates (NDERs), annualized over the life of the loan. The NDERs are determined by the total remuneration from the transaction for the lending credit institution and the total cost of the transaction for the borrower. They are drawn from Banque de France databases.

Figure 2: Cheap short-term and investment loans to non-financial corporations



Sources: Banque de France and authors' calculations.

The financial crisis in 2009 marked a break in the upward trend in bank lending rates since 2005. Median rates fell by around 5 percentage points (pp) in less than a year on short-term loans and by around 3 pp over two years for long-term loans (see Figure 2). In 2010-11, they rose again slightly as a result of the sovereign debt crisis in some euro area countries. Once tensions subsided, the downward trend in rates resumed, especially for loans with duration of more than one year. Overall, from end-2008 to end-2014, median rates fell by around 4 pp for both short- and long-term loans.

Around 10% of firms benefiting from very low rates

The Banque de France rating system for firms is based on an expert assessment made by financial analysts. It takes into account both financial and qualitative criteria; it covers about 280,000 firms with a turnover of more than 750K euros. It includes 11 ratings ranging from an excellent situation to a compromised situation, in addition to a rating given in the absence of adverse information and recent documentation, and another rating associated with legal insolvency (see <http://www.fiben.fr/cotation/cotation-bdf.htm>)

A firm is assumed to have been granted particularly advantageous borrowing conditions (very low rates) if the rate on its loan is lower than the first decile of the rates for the healthiest firms, i.e. the highest rate offered to 10% of the firms benefiting from the lowest rates and the best rating of the Banque de France.

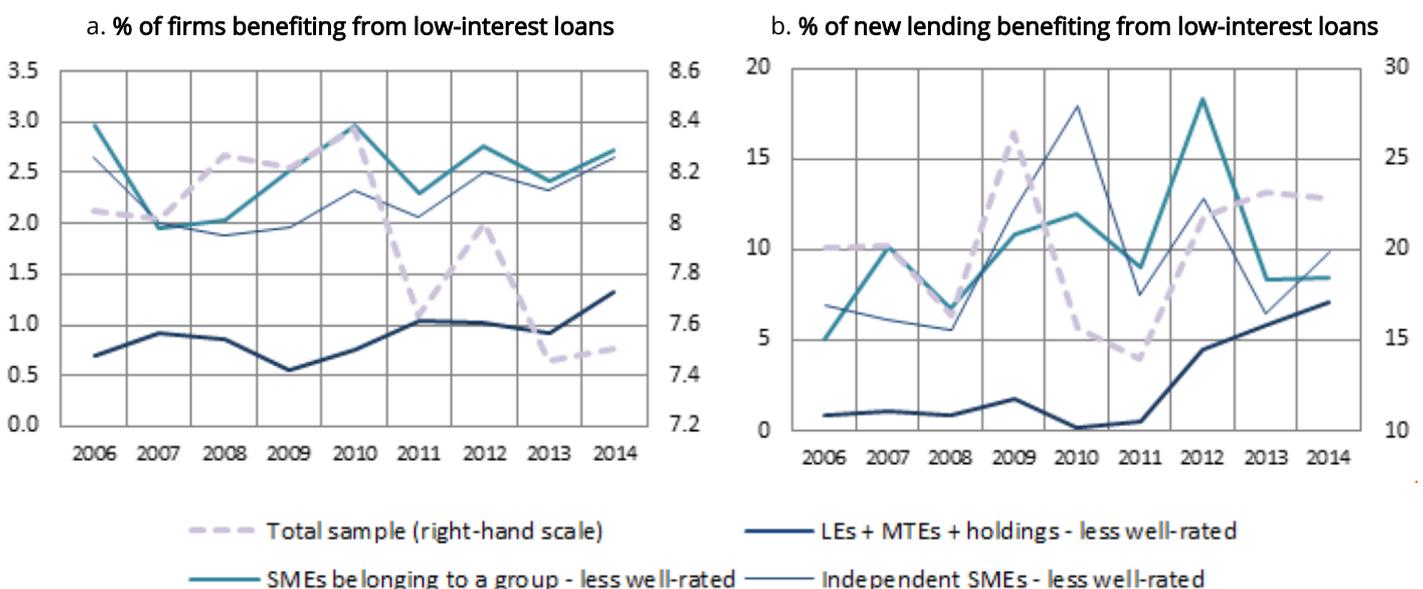
Over the whole sample, around 10 % of firms on average benefit from low-interest loans. This share slightly increased in 2010, before a net decline in 2014. Besides, as a percentage of the volume of new lending, this proportion is around 20%. This reflects the fact that the rates correspond to fairly high loan volumes. This latter proportion significantly increased following the crisis before converging back to its back to its long-run level in the recent period.

Firms benefiting from loans with very low interest may be financially sound. Thereby, it is interesting to look at the share of these loans extended to firms less well-rated by Banque de France (5+ and worst, the 5+ threshold being determined by taking into account the minimum quality requirement for signatures of receivables defined by the Eurosystem) also considering their size. A rise in the share of low-rated companies receiving very-low-interest loans would be strong evidence of zombie lending.

Relatively stable and weak shares of firms “less well-rated” benefiting from very low rates

Figure 3a shows that, for each size category, the share of firms with the lowest rating and with very low interest rates is more or less stable over the period: between 2% and 3% of small and medium-sized enterprises (SMEs) and around 1% of all large enterprises (LEs), mid-tier enterprises (MTEs) and holdings. The share of loans with very low interest rates in new loans is more volatile and significant (see Figure 3b), which reflects the sensitivity of the indicator to large-value loans.

Figure 3: Relatively stable shares of firms “less well-rated” benefiting from very low rates



Calculations based on new short-term and investment loans to non-financial firms; shares of firms and of new lending with rates below the first decile of rates granted to firms rated 3++, 3+, 3, 4+ and 4. The lowest ratings are 5+, 5, 6, 7, 8, 9 and P (see https://publications.banque-france.fr/sites/default/files/medias/documents/bulletin-de-la-banque-de-france_196_2014-t2.pdf).

Source: Authors' calculations.

For SMEs, the share of low-interest loans increased during the financial crisis, but has declined since then. For larger firms, the share is small (less than 1%), but has increased significantly since 2011. In fact, this increase is mainly attributable to companies rated 5 and 5+. The default rates of these latter firms are much lower than for firms rated 6 and above. So, in 2014, around 10 % of the total amount of credit extended to large corporates, MTEs or holding companies, was granted at particularly low rates to firms with a rating between 3++ and 4.

However, it is mainly on large loans outstanding, basically benefiting large enterprises, Mid-Tier Enterprises or holdings that banks could try to avoid recording losses. Consequently, zombie lending appears to be relatively rare in France and should not be a significant factor impairing labour productivity.