Activity shocks: the amplifier effect of trade credit

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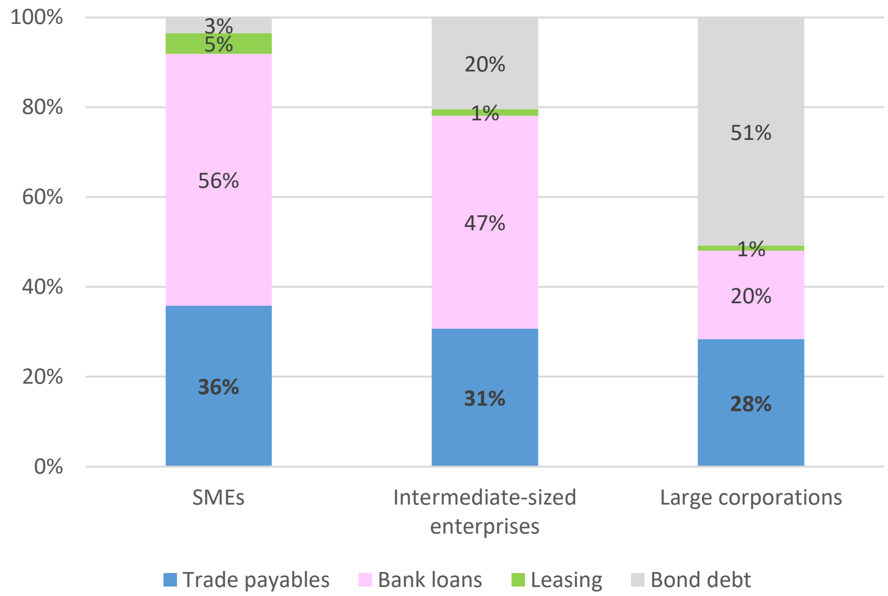
Trade credit is widely used by non-financial corporations to cover their short-term liquidity needs. However, the Covid crisis, which was an unexpected and widespread shock to activity, highlighted the inherent weakness of this financing method: it can amplify the impact of an activity shock on firms' liquidity.

Chart 1: Breakdown of corporate debt in 2022 (%)



Data source: FIBEN database, October 2023.
Notes: Sample of 346,000 firms in France that are subject to corporation tax, excluding the financial sector. The SME category does not include microenterprises. Debt is gross of trade receivables and cash.

When considering corporate debt, we automatically think of bank debt, which is the preferred financing method for small and medium-sized enterprises (SMEs), or market debt – bond financing or similar – which is the preferred method for large corporations. However, one financing channel that is often overlooked – even though it accounted for around 30% of total gross corporate debt in 2022 (see Chart 1) – is trade credit: i.e. operating liabilities as opposed to financial debt, also referred to as trade payables.

Trade credit arises from the payment delays agreed between firms as part of their normal trading activities. These delays are recorded in firms' financial statements as either trade receivables (the firm has granted a payment delay to its client) or trade payables (the firm has been granted a payment delay by its supplier). In other words, suppliers provide their clients with *credit* up to the time of settlement. Under this framework, a firm can simultaneously be a lender (the supplier) and a borrower (the client). The balance of a firm's payables and receivables constitutes its net lending or borrowing position vis-à-vis its trading partners: if its trade payables exceed its trade receivables, it is a net trade credit borrower from its partners; in the opposite case, it finances its partners.

Trade credit is the main source of short-term financing for non-financial corporations in France, as well as in most European countries, and in the United States and China (see Bureau, Duquerroy and Vinas, forthcoming in the Review of Corporate Finance Studies). In 2019, regardless of firm size, French firms' gross trade payables were nearly seven times higher than their short-term bank debt.

Trade credit: a source of resilience or fragility?

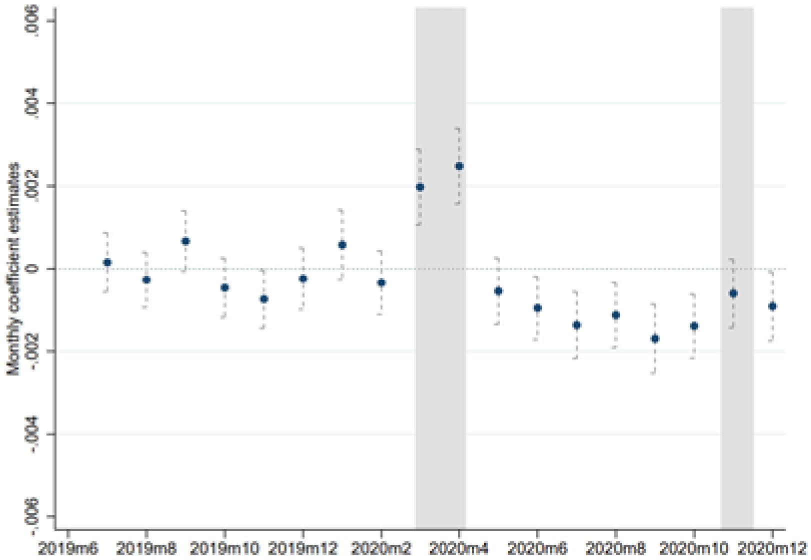
Given the economic significance of trade credit, there is a large body of academic literature analysing its role in the economy. It is often presented as a source of resilience during banking or financial shocks, as it offers a margin of adjustment for firms facing a liquidity shock caused by a credit crunch (e.g. Costello, 2020). It can also serve as a substitute for bank lending (e.g. Biais and Gollier, 1997).

However, in a recent article, Bureau, Duquerroy and Vinas (forthcoming) show that, in the event of a liquidity shock caused by a sharp drop in activity, trade credit can cause liquidity stress for borrowing firms. The mechanism is simple: when sales, and hence receipts, fall suddenly, firms still need to honour the repayment obligations inherited from their past activity; this creates a liquidity squeeze and, if not properly anticipated, can cause the most constrained firms to default on paying their suppliers, temporarily amplifying the impact of the initial activity shock.

Using data on more than 170,000 French firms, Bureau, Duquerroy and Vinas (forthcoming) identify this effect by exploiting the experimental framework provided by the lockdown imposed in mid-March 2020 in response to the Covid pandemic. The event was a widespread and unexpected shock to activity, that was irrespective of firms' initial financial position and relatively long in duration. The lockdown lasted for nearly two months, meaning that French firms had to repay all debts incurred prior to this period while also experiencing a sharp drop in sales.

In "normal" periods, the fact that a firm is a net borrower from its trading partners has no impact on its probability of payment default. However, a net debt position at the start of the lockdown significantly increased this probability in March and April 2020 (see Chart 2). In April 2020, with the activity shock caused by the lockdown, firms whose net trade credit position (defined here as the difference between trade payables and trade receivables) was one standard deviation higher had a 10% greater probability of defaulting on their suppliers than the other firms in the sample.
The effects of the shock on firms' financial positions and their ability to meet their trade credit repayments were only observed over a very short period – two months at most – due to the government's rapid implementation of liquidity support measures. State-guaranteed loans, a job-retention scheme, the deferral of tax payments and social security contributions, and the payment of subsidies (notably from the solidarity fund), rapidly allowed firms to absorb the liquidity shock, thereby averting massive payment defaults and spillover effects. As a result, the second lockdown did not trigger a rise in the default rate (see Chart 2). Ultimately, thanks to government support, the liquidity shock proved short-lived and did not affect French firms' solvency: the number of business failures in fact fell significantly in 2020.

Chart 2: Effect of firms' net trade credit position on their probability of payment default



Source: Bureau, Duquerroy and Vinas (forthcoming).
Note: Estimate of the average impact (and 95% confidence intervals shown by the dashed lines) of a firm's net trade credit position on its monthly probability of defaulting on a supplier payment, after controlling for other firm characteristics (leverage, size, cash holdings, etc.) and for sector of activity. The default events taken into account are those on trade bill payments, which are recorded daily by the Banque de France for individual firms. The period studied is June 2019-December 2020; the grey-shaded area indicates the two lockdown periods.

What are the takeaways for firms from these findings?

Trade credit exposes firms to a dual risk: the risk that they won't be paid by their clients, and the risk that they won't be able to pay their suppliers. As we have seen, this risk materialises in particular when there is a slowdown in activity. It is specific as firms facing a liquidity shortage often struggle to find a way to avoid defaulting or being late on a payment: supplier payment deadlines are often short (maximum of two months in France and Europe) and it is harder to renegotiate them with multiple trading partners than with a small number of bank lenders. However, not all firms are equal when it comes to negotiating payment times. Deadlines depend on various factors such as firm size (large corporations typically have more bargaining power than SMEs), sector of activity (a firm's position along the supply chain is a major determinant of its reliance on trade credit as the final consumer generally pays immediately), the quality of the client-supplier relationship (recent or more long-standing, degree of competition in the market, etc.), and financing constraints (does the client have an alternative funding source?). That said, regardless of their characteristics, firms can hedge their trade credit risk by proactively managing their trade receivables.

As highlighted in a recent report by the *Observatoire du financement des entreprises* (September 2023) on very small enterprises' access to cash loans, firms can obtain short-term funding by pledging outstanding receivables to a bank or specialised institution (discounting, "Dailly" assignment of receivables, factoring) and receiving the value of these sales upfront. During the lockdown, there were fewer payment defaults among firms with cash buffers or that used factoring and/or accounts receivable financing: these firms were better able to absorb the liquidity shock (Bureau, Duquerroy and Vinas, forthcoming).

By highlighting the fragility caused by trade credit, this blog post reinforces the financial orthodoxy that, when it comes to financial management, cash is king, and that any chief financial officer worth their salt needs to focus on managing their trade receivables. In addition, the effect highlighted in this post is not specific to Covid. Other widespread adverse shocks are liable to materialise eventually. For example, the IPCC (2022) has indicated that the disruption of ecosystems could lead to new pandemics, and force governments to introduce measures restricting social interaction.