# Heterogeneity of firms' financial situations: the Covid "hump"

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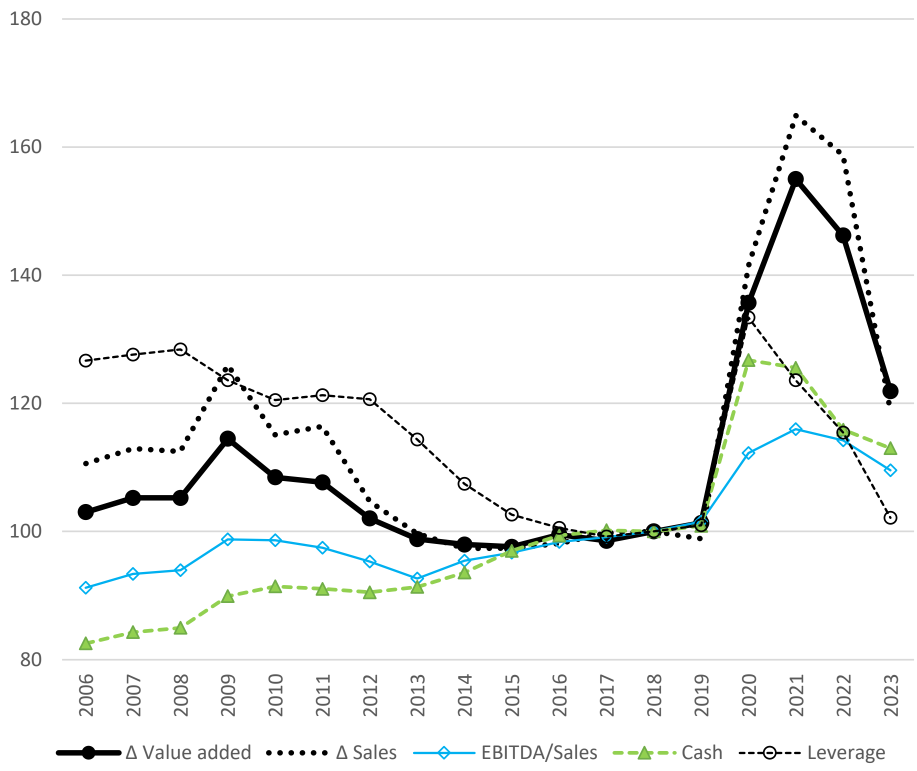
*The dispersion of French firms' financial situations increased sharply during the Covid crisis, including within sectors and/or firm size categories. In contrast to the 2009 recession, the increased dispersion can be seen at both the bottom and top of the distribution. Nonetheless, 2023 confirmed the process of post-crisis normalisation.*

***Chart 1 Change in the gap between the 3rd and 1st quartiles of different financial indicators (2018 = 100)****




Source: FIBEN data (June 2024).
* ΔVA, ΔSales: % change in value added (VA) and sales. Leverage: gross debt/equity. Cash: cash + marketable securities. Variables filtered for whether the firm is part of a group, size, sector and year fixed effects.

Analyses of corporate tax returns, both for end-2022 (Bureau and Py, 2023) and end-2023 (Bureau and Py, 2024), have so far highlighted the overall resilience of French firms in the face of recent crises. The studies attempt to paint a more nuanced picture, breaking down results by firm size and/or business sector. Even so, their findings may still mask major disparities between individual situations, both within sectors and within firm size categories.

## Starting in 2020, the dispersion of financial situations increased

Regardless of the year under consideration, there is a wide disparity in financial situations across France's roughly 4 million firms. In 2023, for example, French SME turnover *rose* by 5% year-on-year in average terms, but a third of SMEs in fact reported a *decline* in turnover (Bureau and Py, *op. cit.*). Conversely, even at the height of the Covid crisis, when turnover declined significantly in average terms, over two in five SMEs in fact reported a rise.

This inter-firm disparity is more than simply a result of sectoral effects, and reflects the normal functioning of a market economy. However, one striking feature is the sharp rise in intra-sectoral heterogeneity in 2020-21. To analyse this, we calculate the interquartile range (Q3–Q1) for different financial indicators, after filtering for effects of size, sector, year and whether firms are part of a group. We use a sample of 200,000 firms on average each year: firms located in France, subject to corporation tax, with annual turnover exceeding EUR 750,000, and not belonging to the financial sector. The sample covers nearly 80% of French non-financial corporation value added.

We analyse five financial indicators: change in value added (VA), change in sales, EBITDA/sales ratio, cash position (in days of sales) and a leverage ratio (gross debt/equity). In the base year (2018), we find, for example, that the median operating margin, filtered for fixed effects, is -0.1% (compared with 5.7% without filtering), and ranges from -4.3% for the first quartile to 5.4% for the third quartile. The gap (Q3–Q1) is therefore equal to 9.7%. We normalise this to 100 to allow us to compare the change with that in the other heterogeneity indicators.

Chart 1 shows no marked trend in the heterogeneity implied by VA growth rates up to 2019. However, the dispersion increases by nearly 40% between 2019 and 2020, peaks in 2021 and then decreases, coming back to around 20% above its 2018 level in 2023. The same pattern can be observed for turnover growth.

The heterogeneity implied by the leverage indicator declines steadily in the decade before the pandemic, then rises abruptly in 2020, before declining again to its 2018 level by 2023. For cash positions and, to a lesser extent, EBITDA margins, we observe an upward trend in heterogeneity prior to the pandemic. The heterogeneity implied by both indicators then increases in 2020, and again in 2021 in the case of EBITDA margins. It then declines for both indicators, but remains 10% higher than in 2018.

## The rise in heterogeneity in 2020-21 coincides with the temporary decline in business failures

The fall in the number of business failures during the Covid crisis most likely played a role in amplifying the dispersion of individual situations: firms that would normally have gone bust remained in business thanks to the generosity of public support for businesses during the crisis (the so-called "whatever it takes" policy). The increased dispersion is also consistent with the work of Bureau et al. (2022) who highlight the significant intra-sectoral heterogeneity of activity shocks during the Covid crisis.

The rise in energy prices in 2021-22 affected firms to varying extents, notably depending on the renewal date of their energy supply contracts. The Conseil d'analyse économique (2024) highlights strong heterogeneity in growth rates in SME energy expenditure, and finds that the differences are more intra-sectoral than inter-sectoral. This could explain why the heterogeneity in operating profit and cash positions remained above 2018 levels in 2023.

## Unlike in 2009, the rise in dispersion in 2020-21 is driven by both ends of the distribution

The Covid crisis not only distorted the bottom of the distribution (with weak firms moving away from the median), it also caused a distortion at the top end (with the strongest firms pulling even further ahead of the rest). In terms of VA growth, for example, we observe a widening of the gap between the median and first quartile in 2020 (Chart 2, black curve). The gap between the third quartile and median also widens sharply in 2021 and remains substantial in 2022 (green curve). This contrasts markedly with the 2009 crisis, when the rise in dispersion was essentially driven by the weakest firms. A similar pattern can be observed in the other heterogeneity measures.

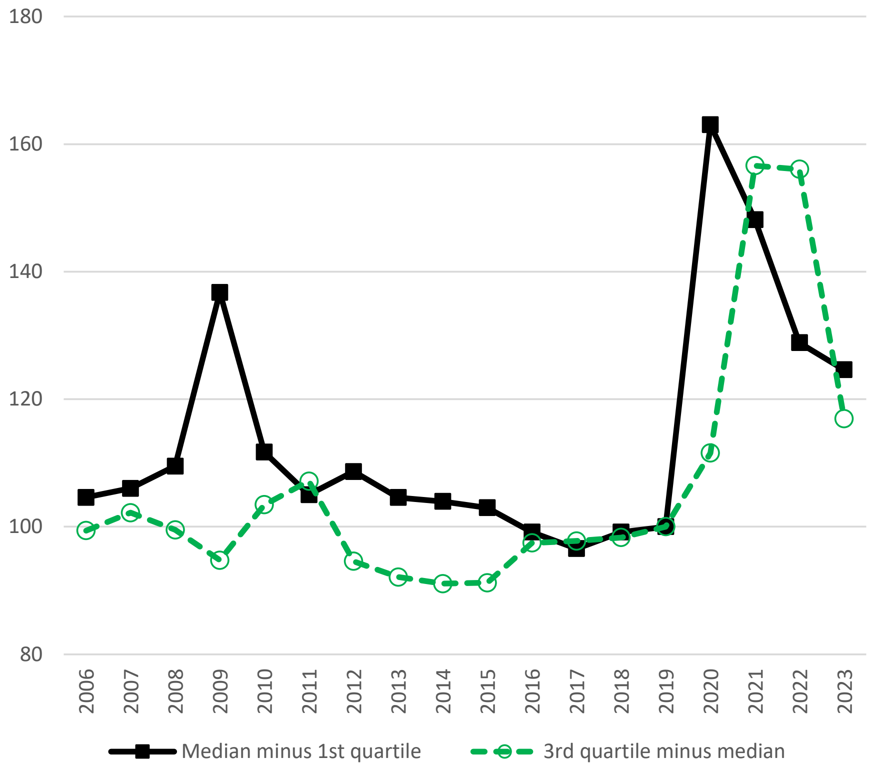
## What public policy lessons can we learn from this?

Whereas public debate traditionally focuses on firm size and sector, our analysis confirms the importance of intra-sectoral heterogeneities – an aspect that was indeed taken into account in support policies during the pandemic. The support was rolled out quickly and with very simple conditions, so that all types of firm benefited. This is well documented in the Cœuré Report (2021): firms whose turnover rose during the crisis benefited from aid and, in some cases, were overcompensated for the decline in operating profit.

Did the generosity of public support for businesses during the Covid crisis hinder the process of "creative destruction"? The concern is legitimate, given that the IMF recently pointed out that a significant share of the productivity slowdown – observed in most advanced economies since the early 2000s – can be explained by increased misallocation of production factors across firms within sectors.

Without taking sides in this debate, we should point out that the government did not prioritise weaker firms in its allocation of Covid aid (Bénassy-Quéré, 2021), that business failures began to rise again from the end of 2021, and that the dispersion of individual situations is gradually returning to its pre-Covid level. Up to now, empirical studies have found that market selection mechanisms continued to function normally during the Covid crisis (see Cros et al., 2021, Maadini and Hadjibeyli, 2022, Recco, 2024, Nicolas et al., 2024).

***Chart 2 VA growth rate: change in the deviation from the median of the 1st and 3rd quartiles (2018 = 100)***




Source: FIBEN data (June 2024).

Notes: See Chart 1.