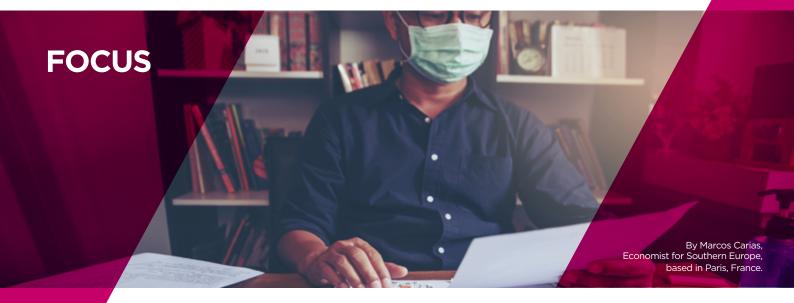
COFACE ECONOMIC PUBLICATIONS



Are corporate balance sheets in Spain and Italy ready for the COVID-19 shock?

EXECUTIVE SUMMARY

Spain and Italy will be amongst the economies hardest hit by COVID-19, contracting by 12.8% and 13.6% respectively in 2020, according to Coface's forecasts. To approximate the potential impact of this contraction on corporate balance sheets, we ran simulations on the evolution of firm solvency, using central bank data that accounts for differences across sectors and firm sizes. Results suggest that some large firms in the automotive and metals sector in Spain could suffer from small liquidity buffers. In both countries, construction and retail will be dragged down by higher debt, as well as textile-clothing SMEs in Italy. Overall, we observed a higher prevalence of vulnerable firms in Italy, a factor that will weigh on the recovery. In 2021, the Spanish and Italian GDPs should rebound by 10.2% and 8.9%, leaving the economies 3.9% and 5.9% below 2019 levels, respectively. While Q2 2020 should be the most challenging quarter of the year, there are now good reasons to think that the road to recovery will be long and arduous. Despite the immediate tax deferrals, liquidity guarantees, payroll subsidies and debt moratoria, it is likely that many vulnerable firms will not survive: for the 2020-2021 period, Coface forecasts corporate insolvencies to increase by 22% in Spain and 37% in Italy, relative to 2019 levels. Furthermore, many companies would survive only at the cost of substantially higher leverage. Even with ultra-low interest rates, higher debt will lead to durably depressed investment¹. Therefore, the temporary COVID-19 crisis could exert durable downward pressure on a country's growth potential, accelerating the "japanization" of the Eurozone. With this in mind, it is worth taking a closer look at the health of Spanish and Italian corporate balance sheets. This should help identify pockets of vulnerability where widespread defaults are more likely to materialize.

TABLE 1
GDP quarter on quarter
(QoQ) % change

QoQ growth rate	Latest reading (Q1 2020)	Lowest previous reading
Italy GDP	-4.7%	-2.7% (Q1 2009)
Spain GDP	-5.4%	-2.2% (Q1 2009)
Spain GDP-Construction	-11%	-8.9% (Q1 2010)
Spain GDP-Manufacturing	-8.8%	-3.7% (Q1 2009)
Spain GDP-Services	-6.2%	-2.3% (Q4 2012)

Sources: INE, ISTAT, Refinitiv Datastream, Coface

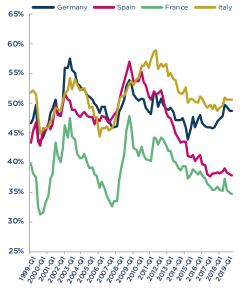


^{1- &}quot;Corporate debt overhang and investment: firm-level evidence" by Borensztein et al. (World Bank Policy Working Paper, 2018); "Corporate debt and investment: a firm level analysis for stressed euro area countries" by Gebauer et al. (ECB working paper, 2017)

The bird's eye view: deleveraging aligns Spain's debt with its low productivity, Italy's zombie SMEs are cause for concern

In their spring 2020 financial stability reports, both Banca d'Italia and Banco de España underline that the current financial position of firms is healthier than on the eve of the global financial crisis²⁸³. An initial look at the aggregate data supports this argument for Spain, but is less clear for Italy. Indeed, while comparing the main Eurozone economies (Chart 1), we noticed that in Q2 2008, Spanish, Italian and German corporates all had leverage ratios of around 50%. Since then, Spanish firms have managed to substantially deleverage, reducing the aggregate leverage ratio to 37% in Q3 2019, comparable to the low levels of French companies. Italian firms, admittedly, have also improved their financial position since the Q4 2011 peak of 59%, but to a much lesser degree. At around 50%, the Italian corporate sector is now the most indebted of the big 4, only slightly above Germany but with a weaker value generating capacity. It is important to always think of debt as a promise of future value creation: debt is not unsustainable in the absolute, but relative to the expected path of future income. Average yearly value added per worker (AVA) in Italy stands at EUR 48,000, 17% lower than Germany's (EUR 58,000)4. The disparity becomes more concerning when accounting for differences across firm sizes. In fact, the higher end of the Italian productive apparatus is quite performing: AVA for large companies (250+ employees) is on par with that of Germany (both around EUR 75,000) and well above Spain's (EUR 58,000). However, at the SME level, the AVA gap with Germany is of 18% in Italy and 29% $\,$ in Spain. Italy's higher stock of corporate debt therefore looks more worrying at the SME level. From this aggregate perspective, the mismatch between leverage and value generation among Italian SMEs is particularly significant. Another way to assess balance sheet health is to examine the consistency between the maturity structure of debt and the behavior of private investment: we want to check if firms are borrowing funds in a way that is consistent with their use of them. In a healthy economy, firms borrow long-term funds to invest in long-term assets and short-term funds to cover working capital needs. Therefore, a lengthening of the maturity structure of corporate liabilities (i.e. more long-term, less short-term) should be a sign of companies getting ready to expand productive capacity. This is the behavior observed in France and Germany (Chart 2), where firms used ultra-low interest rates to restore pre-crisis levels of investment. In the South, we noticed the same skewing of liabilities towards long-maturity debt, but without the

CHART 1 Gross debt as a % of total assets, non-financial corporations



75%

70%

corresponding increase in investment, which remained stagnant and well below the pre-financial crisis peak. For Spain, a charitable reading suggests that this could just be a side-effect of broader deleveraging: all types of debt fell, short-term debt just decreased faster. For Italy, however, deleveraging was not strong enough for this interpretation to hold. This growing mismatch between investment and financing suggests a high prevalence of zombie firms: a large population of firms are using long-term funds to cover up for lackluster growth in the present, rather than sowing the seeds of future growth. Much of this debt can easily become non-performing loans with a strong enough shock to revenue.

The granular view: a closer look reveals pockets of risk in automotive, metals, construction and retail

Macroeconomic aggregates are useful for a bird's eye view of the economy, but the whole need not reflect the state of its components. To account for this, we use granular data to simulate the potential effect of the

Italy

23%

22%

CHART 2 Investment-financing mismatch: maturity profile of debt and Gross Fixed Capital Formation



21% 20% 65% 19% 60% 18% 17% 55% 16% 50% 15% 2005 2007 2009 2011 2013 2015 2017 2019

Source: ECB. Eurostat. Coface

- 2 Banco de España, Financial Stability Report Spring 2020, Chart 1.10, page 41.
- 3 Bank of Italy, Financial Stability Report Spring 2020, Figure 1.10 page 17
- Based on data from Eurostat's structural business statistics database

expected 2020 revenue contraction on firm solvency. Our sample distinguishes small, medium-sized and large firms across 8 sectors⁵, resulting in 48 firm populations (1 population = 1 sector/size category pair in a country, e.g. small Italian textile firms)6. Given the unusually abrupt nature of the shock, cash reserves will be determinant for debt service. We measured solvency by looking at the sum of cash reserves and projected gross

operating income as a multiple of interest expenses: a cash-adjusted interest coverage ratio (ICR). Charts 3 and 4, show the projected distribution of this indicator across the sample. We see a widespread degradation of solvency with 8 and 13 firm populations falling to the lowest category (an ICR between 0 and 10) in Spain and Italy, respectively⁷.



Source: Banque de France, Coface Calculated as (cash and equivalents projected gross operating income)/interest expenses

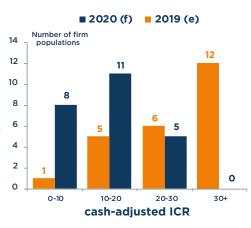
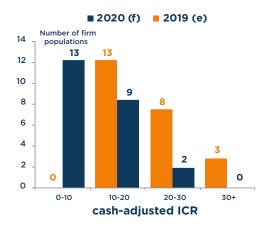


CHART 4 Distribution of firm populations according to ICR, Italy

Source: Banque de France, Coface

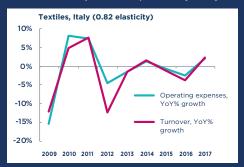


SIMULATING THE SECTORAL IMPACT OF COVID-19 ON FIRM SOLVENCY

To formulate projections of firm solvency (measured as the capacity to service debt), we need to consider the depth of revenue contraction and the extent to which firms could adjust their costs. First, we use an ARIMA model with double exponential smoothing - developed by Coface - to determine assumptions on revenue contraction for each sector8. Second, we need to account for the fact that firms cannot fully absorb the shock to revenue by adjusting expenses, and that the capacity to adjust costs also differs among industries. Studying a cross-country sample of firms, the BIS found that, on average, firms only manage to reduce expenses by 6% for every 10% contraction in turnover in a given quarter (i.e. a cost elasticity of 0.6)9. To examine sectoral differences in cost elasticities, the growth rates of turnover and operational expenses are compared. For instance, the construction sector in Spain tends to exhibit a much more sluggish cost adjustment behavior than the textile sector in Italy (see charts below). We also noticed that, despite tight cost management in most years, Italian textile firms had a lot of trouble adjusting to the strong shock of 2012, when revenue declined by 12.47% but operating costs only by 4.46%.

Therefore, we assign relatively weak cost elasticities wherever costs contract at a slower rate than turnover for prolonged periods (construction in Spain between 2011 and 2014) or wherever we notice weak cost adjustment in particularly bad years (textile in Italy in 2012). To guide our





calibration, we measure the degree of correlation as well as the absolute value difference between these two time-series. Using the BIS estimate as a benchmark, adjusting it for annual frequency¹⁰ and accounting for sectoral differences, we calculate estimates for 2020 gross operating income, which are then used as a basis to project the cash-adjusted interest coverage ratio.

This simulation is subject to a number of caveats. First and foremost, measures such as subsidized furlough schemes should help businesses adjust overhead expenses to a greater degree than usual. As such, the results of our simulation are best understood as an approximation of the fundamental damage to firm solvency, independently of public intervention. More broadly, the forecasts are subject to the significant uncertainty inherent to extraordinary circumstances. That being said, it seems like the popular conception according to which large firms are less vulnerable is not systematically verified, at least not by all measures. For instance, large automobile manufacturers could be heading for trouble due to their habit of keeping little cash: at end-2018, cash reserves as a percentage of turnover stood at only 2.73% in Italy and 0.55% in Spain¹¹. As a result, the shock to revenue has had a strong impact on solvency across this segment (Chart 5 see next page). This is an illustration of how practices that optimize efficiency in normal times (not letting cash sit idle in the company's coffers) can backfire when low-probability, high-stakes risks materialize.

5 - Textiles, Automotive, Chemicals, Metals, Construction, Retail, Transport and Hospitality. Due to possible irregularities in the data, we will not comment on the latter two.

6 - Firm size categories: Large : turnover > 50 M€, Medium-sized: 10 M€ <turnover< 50 M€, Small: turnover< 10 M€.

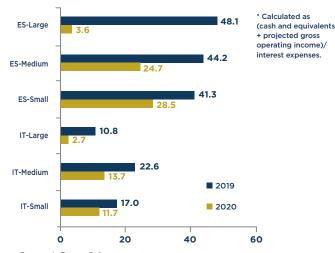
7 - Italy: all populations in retail and construction, large and small automotive firms, large metals frims. Spain: small and medium-sized metals firms, large and medium-sized construction firms and large auto producers.

8 - See "From a massive shock to a differentiated recovery" Coface Barometer Q2 2020 (June 2020).

9 - See "Covid-19 and Corporate Sector Liquidity" by Banerjee et al. (BIS bulletin, 2020). 10 - We should expect smoother cost adjustment at the annual frequency.

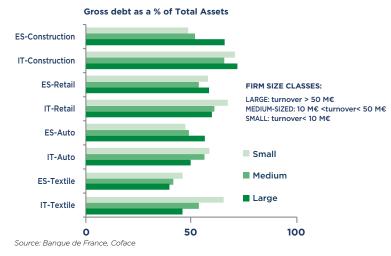
11 - The corresponding figures for medium-sized (small) companies are 7.35% (14.5%) in Spain and 8.08% (11.99%) in Italy.

CHART 5
Cash-adjusted Interest Coverage Ratio*, Automotive sector (NACE code C29)



Source: Banque de France, Coface

CHART 6
Distribution of debt burden, selected sectors (2018)



DISCLAIMER

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Chart 6 plots leverage ratios for a handful of the most indebted firm populations in our sample. The retail and construction sectors, both with high leverage and weak projected interest coverage ratios, emerge as particularly vulnerable from this perspective, as well as small textile manufacturers in Italy.

Broadly speaking, Italian firms are in a weaker position, but metals and automotive in Spain are also vulnerable cash wise

As a general rule, we observe higher prevalence of potentially vulnerable firms in Italy, which is consistent with the aggregate data examined earlier: populations with a cash adjusted-ICR under 1212 in 2020 were projected, against 7 in Spain. Most of the time, this can be explained by lower initial cash holdings, weaker profitability and slightly more sluggish cost adjustments. However, some specific populations in Spain have some of the lowest scores in the sample: large firms in the automotive and metals sectors¹³, both under 5. This is what happens when sectors with low cash buffers also suffer large declines in turnover. Spanish auto sales have so far declined at an average of 80% YoY in March-May, and we expect a contraction of turnover of roughly 60% in Q2 for the metals sector. Does this mean that these large producers are at a larger risk of insolvency? Not necessarily, as there are at least two reasons that explain how these firms can mobilize resources smaller players cannot.

First, these units are often members of larger international groups, which can arbitrate liquidity between divisions across the globe, and have better access to capital markets. Second, due to their systemic importance in terms of employment, governments have strong incentives to provide life-saving assistance despite fundamental weaknesses, as illustrated in Italy by the recent EUR 6 billion state-backed loan to FCA.

Furthermore, the construction and retail sectors also appear as vulnerable, with high levels of debt and rather sluggish cost adjustment in both countries, though retail firms in Spain benefit from stronger cash buffers. Chemicals and textile, both expected to suffer strong turnover contractions, appear resilient compared to the rest of the sample, as only small Italian textile producers ended up with an ICR below 12¹⁴.

- 12 The standard ICR (operating income/interest expense) is typically benchmarked against a value of 1, but is not a very meaningful indicator in the presence of a very large and sudden shock to revenue. Since there is no benchmark for the cash-adjusted ICR, we use the value of the 1st decile of the 2019 distribution, roughly equal to 12.
- 13 The same pattern is present in Italy, but with a much lower intensity: large metal producers end up with a projected ICR of only 0.8 in Spain, vs 6.4 in Italy.
- 14 Besides other resilient sectors not included in this sample, such as agri-food and pharmaceuticals



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