

Agenda

Advancing economics in business

When the going gets tough: a closer look at financial distress and restructuring

The European Commission recently published a report by Oxera examining the process and outcomes of financial distress and restructuring. The objective of the study is to gain a clearer understanding of what might happen in the absence of state support, in order to provide insight into how to target aid more effectively in the future. Past cases of financial distress also shed light on what investors, creditors and other stakeholders might expect during and after distress

Each year a large number of firms experience financial distress. Even before the start of the financial crisis, in 2006 in the UK alone, over 5,000 firms underwent compulsory liquidation, and a further 4,000 were in receivership or administration.¹ In practice, far from being an exceptional event, financial distress can be considered an integral part of a well-functioning market. After all, it can and does result in different outcomes, including successful turnaround, acquisition by another firm, or piecemeal sale of assets and winding up of the company—each with differing implications for stakeholders. Understanding the drivers, process and outcomes of distress is therefore a critical element of any business and financial analysis.

Considering the economics of distress is also informative in the context of state aid policy, for example, when considering criteria for granting aid or assessing restructuring plans in state aid cases. Aid is frequently justified in terms of the preservation of jobs and business activity, and the limitation of spillover effects. This relies on an implicit assumption that it significantly improves outcomes relative to the situation in which there is no intervention (often referred to as the counterfactual). The behaviour of distressed firms that do not receive state aid represents a natural benchmark for testing this assumption.

The study carried out by Oxera on behalf of the European Commission investigates cases of distress between 1998 and 2005 in large- and medium-sized firms across Europe. It aims to facilitate a clearer understanding of the drivers and implications of financial distress, and to inform what happens in the absence of state support. With default rates currently at 20-year highs, and unprecedented state intervention in

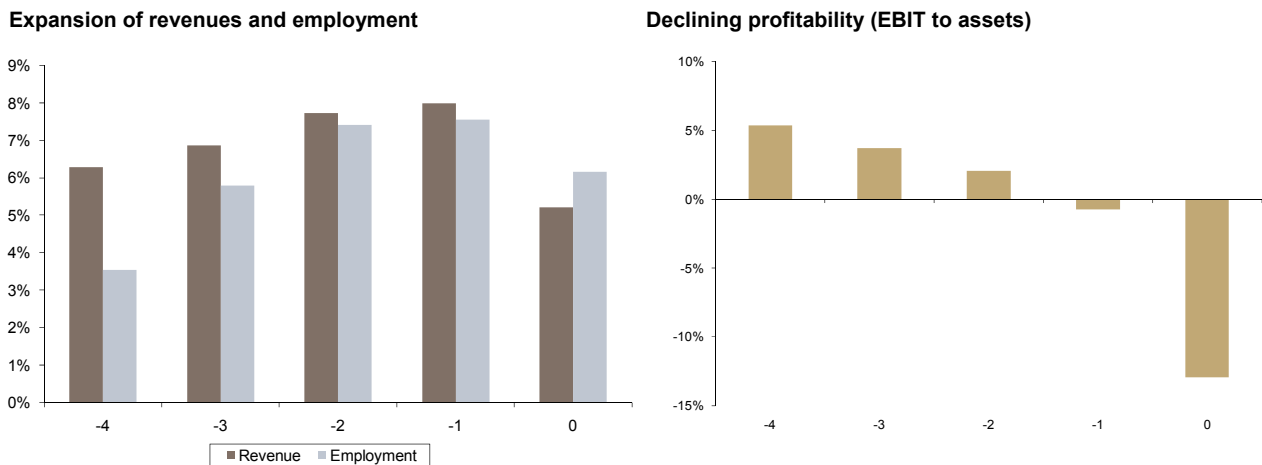
the market, this can be seen as more relevant than ever.

In cases of restructuring more generally, whether involving aid or not, corporate stakeholders are concerned about the risk of a firm falling into financial distress and its prospects when in difficulty. Insights into distressed outcomes enable management and stakeholders not only to isolate their 'value at risk' more effectively, but also to consider preventive and remedial actions. For that, a comprehensive picture of distress cases is required.

- **How do businesses evolve prior to and following distress?** How does distress first manifest itself? What are the early warning signs? How deep are cuts to firms' workforces? Observations from past cases can help stakeholders and policy-makers assess and benchmark particular distressed businesses.
- **What determines how firms deal with distress?** What are the key drivers of whether firms survive or disappear? What determines whether and when firms return to financial health? Understanding the relationship underlying the outcomes of distress can help inform expectations, and aid preparation for, and management of, distress.
- **Are there any spillover effects?** Is there evidence of contagion from distressed firms to the local region and industry? Which regions are most vulnerable? Understanding the broader consequences of distress can inform policy decisions.

In the state aid context and beyond, the use of robust economic analysis is required to answer these

This article is based on the Oxera report 'Should Aid be Granted to Firms in Difficulty? A Study on Counterfactual Scenarios to Restructuring State Aid', prepared for the European Commission, December 2009. Available at www.oxera.com.

Figure 1 Business performance prior to distress

Note: These charts relate to European firms that have encountered financial difficulties. Revenues and employment are measured as the change relative to the fifth year before the onset of distress. The horizontal axes represent the number of years before the onset of distress. EBIT, earnings before interest and tax.

Source: Oxera analysis, based on Bureau Van Dijk data.

questions. With the 'Rescue and Restructuring Aid Guidelines' due for review in 2012, economic analysis of distress has a significant role to play in informing the assessment of state aid cases.

What are the main characteristics of distress?

The Oxera report has looked into specific case studies, existing empirical studies and new research on the drivers and outcomes of distress, which provides unique insights into firms' behaviour.³ This has allowed for some diagnosis of the symptoms (ie, how a firm will tend to behave as it encounters difficulties), as well as a prognosis of how distress plays out.

What happens to firms as they enter into distress?

The first striking observation from this research is that firms tend to expand prior to distress. Ailing establishments in a state of secular decline are more the exception than the rule; rather, the evidence points towards ambitious businesses where management loses sight of profitability in pursuit of new business.

While firms grow in terms of output and employment, beneath the surface their financial performance typically deteriorates in the period leading up to distress. Profitability falls, reflecting a diminished capacity to generate cash from the business (see Figure 1). Expansion is often funded by debt, and cash shortages are supplemented by new borrowings. The result is that leverage increases while the ability to service debt declines, significantly increasing financial risk.

Another insight from the research is that the break point comes rather suddenly, with prior warning rarely available more than a year in advance. The first 12 months of distress can bring a dramatic change, with a spike in losses often wiping out all profits earned in the previous five (or more) years. These losses do not typically result in an immediate collapse, as firms use their capital buffer and are able to raise funds to cover initial losses. As a result, fixed liabilities increase significantly relative to assets in the year of distress.

What happens afterwards?

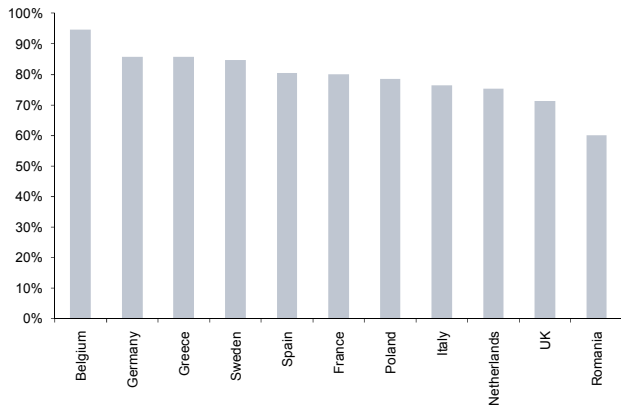
The prognosis for ailing firms is mixed. By and large, firms successfully restructure, although returning to

What happens before distress?

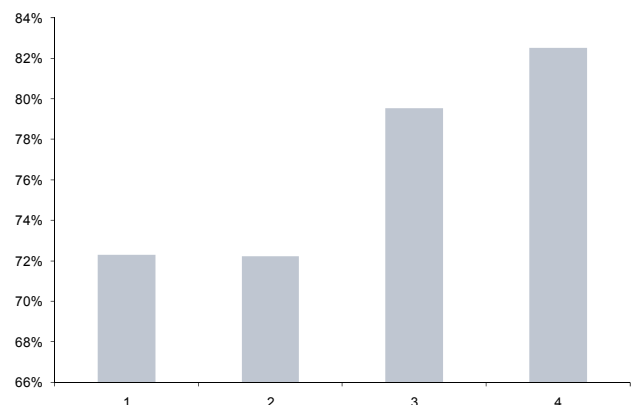
- The combination of expanding activities and declining performance prior to distress reflects expansion into less profitable business activities or investment in projects with low or negative net present value. This suggests that an important driver of financial distress can be miscalculation or inefficiency on the part of management.
- Distressed firms tend to experience declining profitability before declining output and employment, suggesting that poor profitability should be treated as a 'leading' indicator of distress. This also indicates that expanding activity is not a sufficient condition for a successful business profile, and is frequently unsustainable in the medium term.
- The abrupt drop in business and financial performance is indicative of a sudden shock or an event that, in combination with the firm's weakened financial state, precipitates financial distress.

Figure 2 Survival rates

Variation across Europe



Survival rates increase with size (4 = large, 1 = small)



Note: Survival rates are measured as the number of surviving firms as a proportion of the total number of firms within each category. Firm size is measured based on the book value of assets prior to distress. Source: Oxera analysis, based on Bureau Van Dijk data.

financial 'business as usual' with hurdle rates being met can be a long and painful process. At the same time, some firms are unable to recover and exit the market. In both cases, the process is not easy—as the business refocuses or ceases certain operations, at least a proportion of the labour force is generally shed.

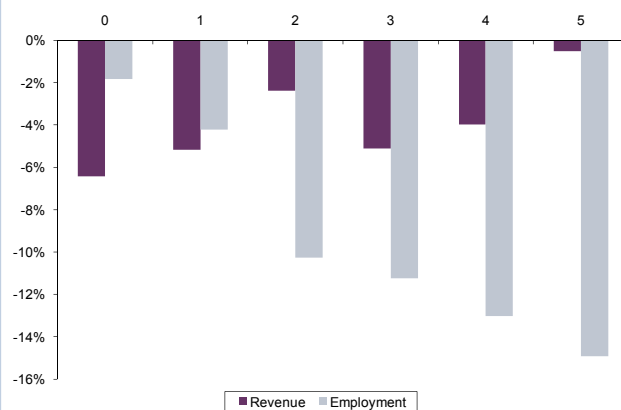
Most firms survive for at least three years after the onset of distress—77% of firms either successfully restructure or are acquired by another firm. There is, however, considerable variation in survival rates depending on the type of firm. Manufacturing firms have a lower survival rate than firms operating in other sectors, while the survival rate of firms in the health sector is greater than 90%. Other firm characteristics

are also important—for example, larger firms have a relatively high survival rate (see Figure 2). There are also significant variations across countries.

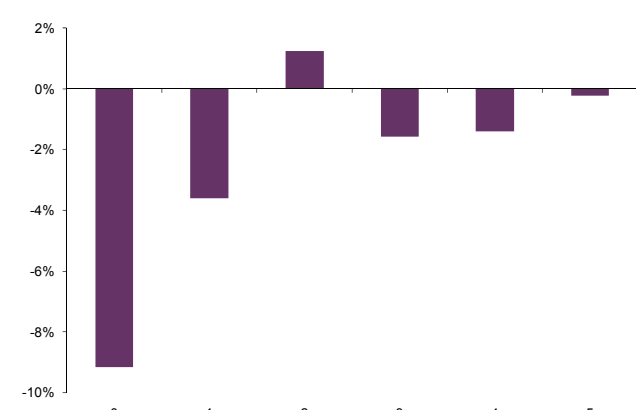
There are a number of paths that firms could follow after the onset of distress. One observed trajectory is that the distressed firm reaches a minimum point in terms of financial health in the first year of distress, with no further, gradual deterioration (see Figure 3). However, the firm's financial state remains poor overall, and does not return to pre-distress levels within the first few years of encountering difficulty. Revenues recover quickly, while employment falls, suggesting that management may take action to restructure and streamline the business.

Figure 3 Developments following distress (for surviving firms)

Revenues recover while employment falls



Improving profitability (ratio of EBIT to assets)



Note: The horizontal axes represent the number of years that the firm has been in distress. Revenues and employment are measured as the change relative to the year before the onset of distress. Source: Oxera analysis, based on Bureau Van Dijk data.

Drivers of outcomes of distress

Firms appear less likely to survive and tend to exhibit slower recovery in revenue and employment post-distress if:

- they are more severely distressed—firms that have experienced a more severe shock, or whose underlying profitability is low, typically find it harder to recover in the short term, and are forced to make deeper cuts in capital investment. At the same time, longer-term viability depends to a greater extent on contemporaneous business factors and market conditions than on the magnitude of the shock;
- they own assets that cannot be easily sold in other markets—asset specificity reduces the scope for a successful business restructuring through selling non-core assets and focusing on core operations. Recovery rates are also lower among those distressed firms that have a greater proportion of specific assets;
- they have more complex financial structures—firms with financial structures that include higher numbers of securities appear less able to negotiate a successful financial restructuring than those with less complex structures. Similarly, firms that have a lower proportion of bank debt in their capital structure are less able to negotiate terms and covenants on their debt. Such firms are more likely to enter formal bankruptcy;
- they operate in the manufacturing sector—manufacturers consistently perform worse and exhibit lower survival rates following distress. This may be due to structural overcapacity and increasing import penetration;
- they operate in concentrated markets—research shows that in concentrated industries, financially secure competitors may stand to gain from taking advantage of a rival's distress by re-pricing and expanding market share. Distressed firms may not be able to respond due to financial constraints;
- the insolvency regime in the country of operations is not efficient—an efficient insolvency process with effective administration minimises the proportion of the asset base that is lost due to legal and administrative costs.

Firms that do not ultimately survive often experience a temporary recovery in financial performance before collapse, but these firms' revenues do not typically recover before the business is wound up. This suggests that the implementation of an immediate remedial programme following the onset of distress is a critical factor for the prospects of a successful restructuring.

What drives the outcomes of distress?

Explaining events with the benefit of hindsight might be easy, but identifying ex ante which factors are most likely to influence performance and outcomes post-distress is a more challenging economic exercise.

Firm-specific characteristics, including past performance, size, financial structure, capital intensity and particular characteristics of its human capital pool, all appear to drive restructuring outcomes.⁴ These factors embody the nature of the business and determine its underlying prospects. Structural inefficiencies, for example, reflected in consistent underperformance in the run-up to distress, seem to reduce the likelihood that the firm will continue as a going concern.

Drivers that are largely external to the firm are also important, since they interact with the firm's underlying business characteristics. These include the legal and business environment in which the firm operates,⁵ and the overall performance of the sector and the economy.

The operating losses of firms experiencing financial difficulties can originate from market developments that have not been properly addressed by the firm. While some factors, such as stock market crashes or sector-specific shocks are beyond management control, the response of management is an important determinant of the scope of their negative impact.

The above points raise a number of questions. Which of the above factors are most important? What is the magnitude of their potential outcome in each case? These questions cannot be answered in isolation from the particular circumstances of each case, and therefore significant attention needs to be given to case-specific information.

What are the wider business and social consequences of distress?

It is quite common to consider distress as a firm-specific event, but it often has implications beyond the firm itself. The negative effects of distress can spread to other parts of the economy via commercial linkages with other firms. Where the firm is an important component of a sector characterised by strong relationships between upstream and downstream firms, its distress could harm other firms operating in different parts of the value chain.

In a perfect world, the financial distress of a single firm would not be cause for concern; under perfect competition, the effects would be offset as output and jobs are instantaneously transferred to competitors. In

Drivers of spillover effects

Spillover effects are likely to be more severe where:

- the firm is large and employs a large proportion of the local workforce—the activities and employment of such establishments are more costly to transfer to other firms. Large businesses also have a greater volume of commercial linkages with other firms, increasing the scope for contagion;
- the firm owns assets that cannot be easily transferred to other firms—where firms own assets that are specific to its own business, individual business units cannot easily be divested. This reduces the scope of a successful business restructuring that would preserve core activities and transfer activity and employment in the divested business units to other firms;
- suppliers are heavily reliant on the distressed firm—supplier–purchaser relationships are a key transmission mechanism for the negative effects of

distress. Where suppliers are more dependent on the distressed firm, the impact of distress on suppliers and the wider economy is greater;

- the value added per employee is low—skill mismatches are an important market friction, since the skills of low-value-added employees are less readily transferable to alternative employment opportunities;
- there is no training available for displaced workers—training for workers can remedy labour market failures and skill mismatches, and allow for a smoother transfer of employment to other firms;
- there are high levels of unemployment in the local region—displaced workers will experience greater difficulties in finding alternative employment, and there is a higher possibility that long-term structural unemployment may emerge.

reality, frictions such as industry entry and exit costs impede this process, leaving open the possibility of socially sub-optimal outcomes.

Under these circumstances, there may be scope for state intervention in order to mitigate the consequences of distress, such as the harmful effects of long-term unemployment. It is therefore critical to identify the circumstances under which the impact on the region or industry is likely to be more severe.

There are a number of areas that could be investigated further. How does distress interact with local business cycles? Which way does the causality run? How long do these effects last? What can be done to mitigate such effects? It is clear that financial distress cannot be tackled from one perspective alone.

How can these insights be applied?

Corporate default rates are forecast to remain at an elevated level for some time.⁶ Many episodes of financial distress may occur before higher levels of growth return and continue under normal market conditions.

In this context, observations from past cases are a powerful tool. They provide a platform from which to

assess the likelihood of distress as well as benchmark restructuring plans. This could be critical not only in cases where state intervention might be considered, but also where a rescue or restructuring is being staged by a private sector entity.

In state aid, there has been a policy presumption that the provision of restructuring aid saves ‘a considerable amount of jobs and activities that would otherwise disappear’.⁷ However, evidence about the impact of state aid intervention on jobs and activity, compared with a counterfactual of no intervention, has been limited. By informing the development of counterfactual scenarios, economic analysis of financial distress and restructuring could form an important component of any overall assessment of the proposed state aid.

Beyond restructuring aid case practice, observations from past cases also have implications for legislation relating to the functioning of capital markets, labour markets and bankruptcy codes.⁸ The negative impacts of distress are reduced when capital and labour markets work more effectively, and when bankruptcy codes provide an efficient means of resolving the position of a firm in distress. Improving the efficiency of ‘private aid’ would reduce the need for state aid.

¹ UK Insolvency Service, <http://www.insolvency.gov.uk>.

² European Commission (2009), 'Commission Communication Concerning the Prolongation of the Community Guidelines on State Aid for Rescuing and Restructuring Firms in Difficulty', OJ 156/02, July 9th.

³ See Oxera (2009), 'Should Aid be Granted to Firms in Difficulty? A Study on Counterfactual Scenarios to Restructuring State Aid', prepared for the European Commission, December. The observed trends are based on a sample of more than 1,300 firms in 25 Member States which have experienced financial distress. A definition of financial distress applied to select these cases corresponds closely with the definition of financial difficulties set out in the European Commission's Rescue and Restructuring Aid Guidelines, para 19. European Commission (2004), 'Communication from the Commission: Community Guidelines on State Aid for Rescuing and Restructuring Firms In Difficulty', OJ 244/02, October.

⁴ See, for example, Musso, P. and Sciavo, S. (2007), 'The Impact of Financial Constraints on Firms Survival and Growth', Observatoire Francais des Conjonctures Économiques, and Hernando, I. and Martínez-Carrasca, C. (2008), 'The Impact of Financial Variables on Firms' Real Decisions: Evidence from Spanish Firm-level Data', Banco De España: Servicio De Estudios.

⁵ See, for example, Davydenko, S.A. and Franks, J. (2008), 'Do Bankruptcy Codes Matter? A Study of Defaults in France, Germany and the UK', *Journal of Finance*, **63**:2, pp. 565–608.

⁶ *Financial Times* (2009), 'US Commercial Mortgages Default Rate Climbs to 3.4%', December 1st.

⁷ European Commission (2008), 'Specifications to Invitation to Tender COMP/2008/A3/015', July.

⁸ A case in point is the recent consultation by the UK government on potential modifications to the Insolvency Act (1986). The consultation considered whether changes could be introduced that would deliver improved outcomes for stakeholders of distressed firms. UK Insolvency Service (2009), 'Encouraging Company Rescue', November.

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Gunnar Niels: tel +44 (0) 1865 253 000 or email g_niels@oxera.com

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