



Corporate Liquidations in Ireland

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Abstract

This letter presents trends and stylised facts on Irish corporate liquidations. The data show that liquidations in Ireland follow the pattern of the business cycle, with the recent financial crisis coinciding with a dramatic increase in corporate liquidations. The breakdown of liquidations by both sector and geography show that there have been significant differences in the dispersion of liquidations.

1 Introduction

The corporate liquidations rate is one of the few direct indicators of small and medium size enterprise (SME) distress that is available for Ireland over an extended period of time. Corporate liquidations can directly affect financial stability through the realisation of bank losses and consequent impact on bank balance sheets. Since the onset of the financial crisis, corporate and SME impairments on Irish banks' balance sheets have increased substantially. Corporate failures can also indirectly impact bank balance sheets through debt repayment difficulties faced by households affected by unemployment. Furthermore, a high corporate failure rate makes it increasingly difficult for banks to distinguish between potential borrowers that are creditworthy and those that are not. Banks may become reluctant to lend which in turn can exacerbate financial difficulties faced by non-financial

corporates.

While previously the Central Bank has used the total number of liquidations to determine a liquidations rate, this letter presents an expanded dataset which now also includes both a sectoral and geographical breakdown of the data. This is of particular interest in examining the effect of the recent financial crisis, as both the regions and economic sectors most affected can now be identified.

2 Why corporate liquidations?

In addition to corporate liquidations, other possible measures of corporate credit distress include: actual bank loan defaults or write-offs collected either from banks' directly or via a credit register and expected default frequencies (EDFs) as calculated by statistical models such as Moody's KMV using information from corporate bonds. The benefits of corporate liquidations as a measure of dis-

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stress are twofold. First, since SMEs make up 99.8 per cent of the Irish corporate sector, they are of great interest.² However, SMEs are unlikely to issue bonds, and therefore will not be captured by Moody's KMV and similar models, whereas they will be captured by the corporate liquidations data and bank-related distress measures. Second, credit can take many forms; bank credit, although an important source of financing for SMEs, can also be supplemented by, for instance, trade credit, equity capital and leasing arrangements. In particular, SME access to bank credit is pro-cyclical with alternative sources of financing becoming increasingly important during stressed periods.³ Unlike bank-originated data, corporate liquidations data can capture all forms of SME credit distress.

3 What causes corporate liquidations?

Studies of corporate liquidations can include both macroeconomic and microeconomic explanatory variables. Micro, or firm-specific, determinants of liquidations largely relate to balance sheet items. For instance, firm profitability, indebtedness (more indebted companies are more likely to experience problems) and liquidity (an indicator of the ability of the firm to meet debt repayments) are often-used variables. McCann (2014) uses survey data on the ratio of debt to turnover for Irish SMEs in 2012 and 2013 to show that, as this ratio increases, the solvency ratio of the firm, measured as issued capital plus total reserves divided by total assets, deteriorates. In addition, it is more likely that a newer company will fail than a long-established one, as new companies are by their nature smaller and unproven. In an EU study, Hazak and Mānasoo (2007) find that the overall risk of default is a U-shaped function of the time the company has survived.

Macroeconomic determinants of corporate liquidations are linked to the business cycle and include the overall indebtedness of the corporate sector, interest rates, oil prices, exchange rates and equity prices, GDP and the output gap. For example, Vlieghe (2001) investigates the determinants of corporate failures in the UK using aggregate time series data. He finds that the debt-to-GDP

ratio, the real interest rate, deviations of GDP from trend and real wages are long-run determinants of the liquidation rate, while the birth rate of new companies, an index of property prices and nominal interest rates have significant short-term effects. In an examination of corporate liquidations in Austria, Boss (2002) finds that variables such as industrial production, inflation, the stock index, the nominal short-term interest rate, and the oil price are the most important determinants of corporate default rates.

Kelly, O'Brien and Stuart (2014) use the data presented here to determine what drives the probability of SME failure during a protracted period of stress. The authors estimate a survival model that incorporates the diminishing effect of the age of the firm on the probability of failure and include variables designed to capture the imbalances and stresses in the Irish economy prior to and during the recent financial crisis. They find that, after controlling for firm location and economic sector, both macroeconomic conditions and bank credit conditions are determinants of firm survival. In terms of macroeconomic factors, they find that macroeconomic variables which capture the build-up in distress, such as the unemployment rate, explain the behaviour of insolvent liquidations better than variables which only capture short-term fluctuations in economic activity. They also find that insolvencies are affected by the pro-cyclicality of bank credit standards and availability throughout the cycle. First, firms that are "born" during expansionary periods when credit standards tend to be looser, are more likely to become insolvent than those "born" when credit standards are tighter. Second, a reduction in bank credit availability at any point in time decreases the probability of firm survival.

4 The data

Data on Irish corporate liquidations is provided by the Department of Jobs, Enterprise and Innovation (DJEI) which collects figures directly from the Companies Registration Office (CRO). A company can be liquidated in one of a number of ways:

- Members' voluntary wind-up - where directors must make a statutory declaration that

²See the CSO's Business in Ireland Survey 2009.

³See Lawless, Martina, Fergal McCann and Connor O'Toole, 2013. 'The importance of banks in SME financing: Ireland in a European context', Central Bank of Ireland, Economic Letter, No. 5 for a discussion.

the company will be able to pay its debts in full.

- Creditors' voluntary wind-up - where creditors must receive notice of the intention to wind-up the company and are allowed to supervise the conduct of the liquidation.
- Court wind-up - where the company is wound up by a court order at the instigation of a member or creditor.

The focus here is on what we refer to as "insolvent liquidations", that is those liquidations which arise from a creditors' voluntary wind-up or a court wind-up.⁴ Insolvent liquidations are of most interest from a financial stability perspective as they best capture liquidations driven by credit distress. Applying this definition strips out liquidations that should not result in losses to creditors, that is "members voluntary" liquidations, for which the owner must furnish the CRO with a certificate of solvency. The information available for each liquidated company includes company name and number, company address, sector of business as well as the date of registration and liquidation.

In addition to the liquidations data, annual data on the overall number of firms on the companies' register, also sourced from DJEI, are used to calculate a "liquidations rate", defined as the number of liquidations as a percentage of total companies on the companies' register.

5 The corporate liquidations rate in Ireland

Before turning to the expanded dataset, we begin by looking at the aggregate liquidations rate. Figure 1 shows the annual corporate liquidations rate and annual rate of real GDP growth for Ireland since 1980. A general trend is evident, whereby a slowdown in economic activity tends to be associated with an increase in the liquidations rate. This is most obvious during the period around the recent financial crisis during which the liquidations rate increased to its highest level on record at 0.77

per cent. However, previous periods of weaker economic growth during the early years of each decade for instance also saw increases in the liquidations rate. Conversely, strong economic growth through much of the 1990s and 2000s coincided with an extended decline in the liquidations rate to a historical low of 0.20 per cent in 2007.

5.1 Liquidations by sector

We now turn to the new information in the expanded dataset. The sectoral breakdown of corporate liquidations is based on the NACE principle objects code which is assigned to firms on their establishment. For the purposes of our analysis companies have been grouped into eight broad sectors⁵. Since NACE codes were introduced only in the 1970s, prior to 1994 a significant portion (more than 30 per cent) of liquidated companies did not have an accompanying NACE code. As a result the sectoral analysis here focuses on the period from 1994 onwards.

Figure 2 shows the number of liquidations, per quarter, broken down by sector. While the increase in the total number of liquidations during the recent crisis is striking (a 4 fold increase from 2007 to 2011), the impact across sectors has been uneven. Given the significant property market contraction and the decline in domestic demand that has occurred during this time it is not surprising that the number of liquidations in the real estate and construction sector and the retail sector have increased significantly and resulted in the share of liquidations accounted for by these sectors increasing during this time. Traditionally, the other business activities sector has accounted for the largest number of liquidations although this declined somewhat in the face of the financial crisis.

This raises the question of how large these liquidations are relative to the size of each individual sector. Figure 3 shows the failure rate for each sector, i.e. the number of companies liquidated as a proportion of the number of active companies for a given sector. The most striking observation is the increase in the failure rate, across all sectors in 2008/09 after the onset of the economic downturn.

⁴A company can also be removed from the companies' register through "strike-off". Strike-off can occur where a company requests to be struck off, or where a company fails to comply with certain aspects of the Companies Act. Companies subject to strike-off are not included in the analysis here.

⁵The eight sectors used are primary industries (including agriculture, forestry, fishing and mining), retail & wholesale, manufacturing, transport & communications, construction & real estate, financials, hotels & restaurants and other business activities which incorporates utilities. A small number of companies for which no NACE code is available are removed from the analysis.

Prior to this failure rates had been comparatively low and steady in most sectors. It is clear that during the crisis the liquidation rate is highest in the hotels and restaurants, manufacturing and retail and wholesale sectors. Interestingly, although the construction and real estate sector accounts for a large number of liquidations as mentioned above, its liquidation rate (despite more than doubling during the crisis) is lower than for these other sectors. A further point to note is that at the end of the sample most sectors show declines in their failure rates from the peak levels seen in recent years.

5.2 Liquidations by region

In terms of the geographical breakdown of liquidations a similar picture is evident with the number of liquidations increasing across all regions in recent years (Figure 4).⁶ It should be noted that the regional breakdown is based on companies' registered address - which may not necessarily be where the business activity was carried out.⁷ Nonetheless, the analysis shows that the majority of liquidated firms have a registered address in Dublin. While this share has declined somewhat in recent years, Dublin continues to dominate in terms of the number of liquidated companies. By contrast, although starting from a much lower base, the South-West, Mid-West and Border regions have seen large relative increases in this time.

To better understand the relative impact of these increases across regions, Figure 5 shows the liquidations rate in each region. While the liquidations rate in Dublin increased almost three-fold during the crisis, the failure rate in Dublin has generally been higher than elsewhere. Other regions, for example the border and the south west, which prior to the crisis would have had lower failure rates also saw dramatic increases. The highest failure rate during the crisis was seen in the Mid-west. Once again a number of regions show a small reduction in the failure rate at the end of the sample.

6 Conclusion

This letter presents a newly expanded dataset on corporate liquidations. This dataset shows that the recent financial crisis has coincided with a particularly marked increase in corporate liquidations. However, the increase in liquidations has not been distributed evenly, either across economic sectors or geographically. In particular, while the construction sector has experienced the largest number of liquidations during the crisis, when the size of the sector is taken into account, the rate of liquidations has been much higher in hospitality, manufacturing and retail sectors. Similarly, although Dublin continues to account for the largest portion of liquidations, increases in liquidation rates have been greatest in western regions.

⁶A small number of companies with insufficient address information are omitted from the analysis.

⁷Some companies for example use a solicitor's office as their registered address.

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Figures

Figure 1: Time Series of Real GDP Changes and Company Failure Rates(Insolvencies) 1982-2012

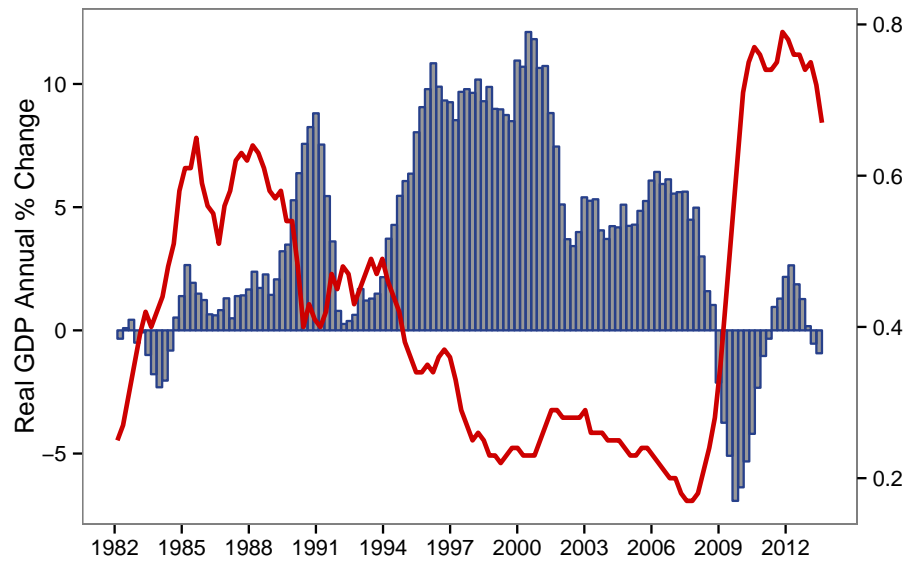


Figure 2: Number of Liquidations by Sector

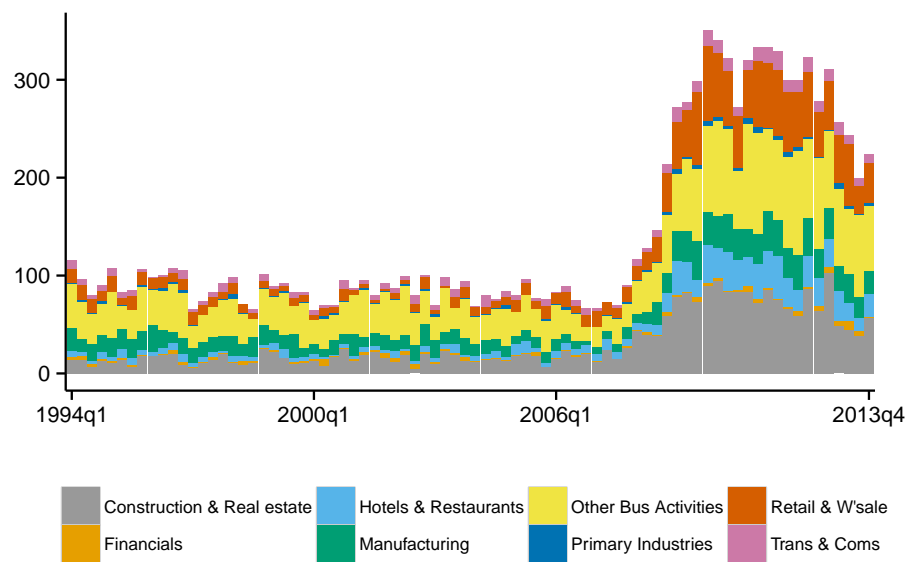


Figure 3: Liquidation Rate by Sector

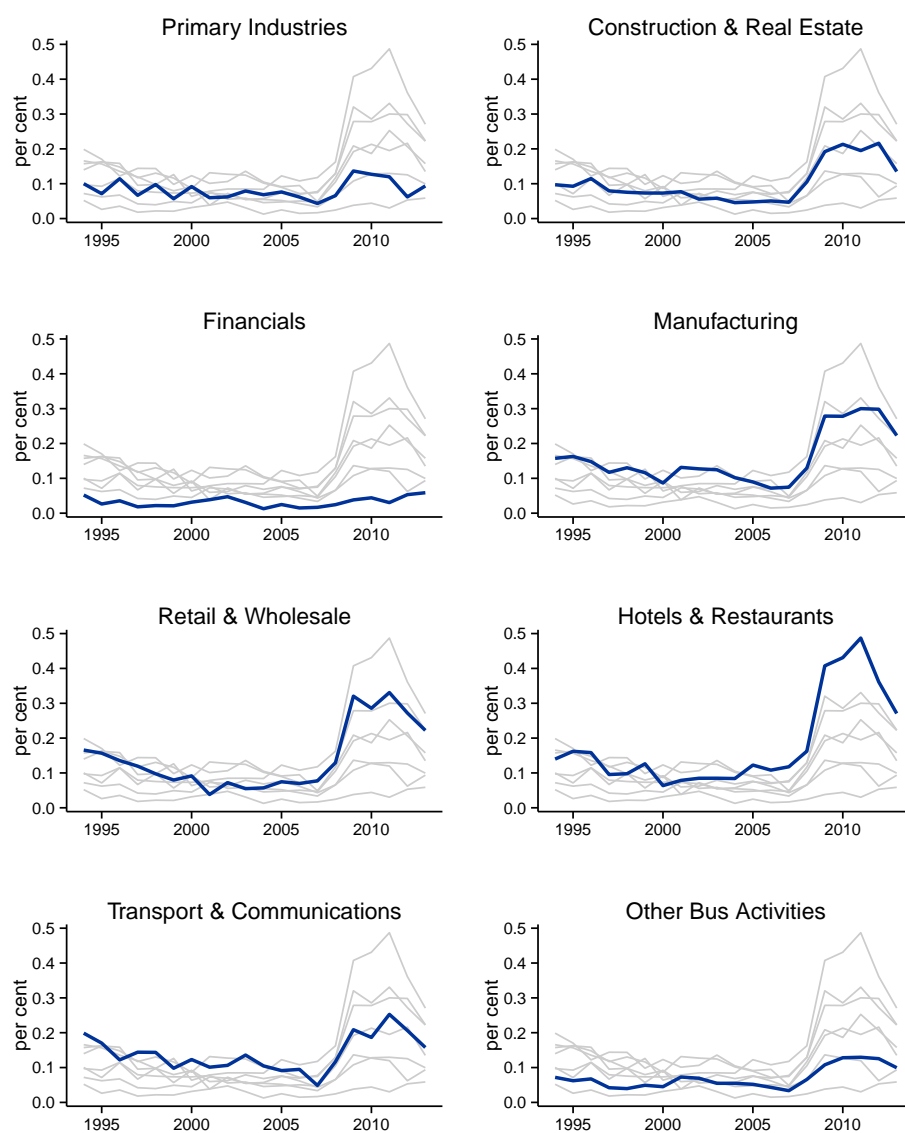


Figure 4: Number of Liquidations by Region

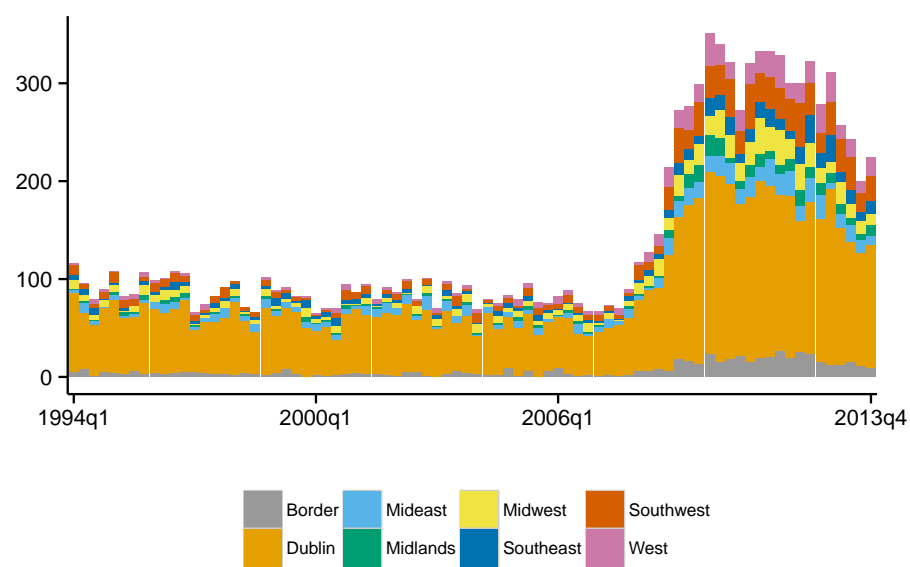


Figure 5: Liquidation Rate by Region

