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ECONOMIC CRISIS AND FIRM EXIT:
DO INTANGIBLES MATTER?

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Economic crisis and firm exit: do intangibles matter?

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Abstract

The crisis regarding the Euro area has caused several business closures, especially in the periphery of the EMU. In this paper, we use an original Italian firm-level dataset to determine why firms exit the market during times of economic crisis, paying particular attention to the role of intangibles. We argue that intangibles strengthen a firm's resilience, which improves the firm's ability to cope with adverse events and unexpected shocks. We obtain two main results: first, we show that the presence of intangibles significantly reduces the probability of firm exit, especially during the initial phase of the crisis; second, we find that financial constraints become more relevant than intangibles in explaining firm exit during the later stages of the crisis. Thus, the process of firm selection during the crisis has undergone a rapid transformation, with distortions that may lead even skilled firms to exit. Implications of these findings for EU recovery policies are discussed.

Keywords: *intangibles, firm exit, EU crisis, industry dynamics*

JEL codes: **D22** (Firm Behaviour: Empirical Analysis); **L21** (Business Objectives of the Firm); **L25** (Firm Performance: Size, Diversification, and Scope); **O32** (Management of Technological Innovation and R&D)

1. Introduction

The crisis in Europe has left its mark on the corporate landscape. Over the past few years, nearly all EMU countries have seen aggregate business closures. According to Eurostat,[1] between 2008 and 2012, the Eurozone has experienced a 7% drop in the number of active manufacturing firms, with an average death rate of nearly 6%. Such a drop has been particularly acute in the periphery of the Eurozone. For instance, in Italy and Spain, the average death rate of firms ranges between 6% and 9%, and the overall drop in active manufacturing firms has been between 9% and 17%, respectively. These data are worrisome, especially when firm exit entails the loss of accumulated capabilities that are not replaced by the capabilities and skills of new entrants, as seems to be the case in the EU periphery.

The economic literature has devoted a great deal of attention to studying the determinants of firm exit and survival. For example, work in industrial dynamics suggests that firm exit is negatively related to age and size (Dunne et al., 1988; Audretsch, 1991; Agarwal and Gort, 1996; Sutton, 1997) a consequence of successful path-dependent organizational learning, scale efficiencies, and market power. Instead, organization and innovation scholars emphasize the role of the technological capabilities of firms (Hall, 1987), which suggests the existence of an innovation premium in a firm's survival (Cefis and Marsili, 2012). Moreover, with regard to the recent economic crisis, a small but growing amount of literature[2] has stressed the importance of factors directly associated with macroeconomic shocks, such as financial constraints and a firm's sensitivity to changes in aggregate demand and trade.

In this paper, we contribute to this literature by studying the relationship between intangible assets and firm exit. Although the literature on intangible assets is extensive, to date, scholars have devoted relatively little attention to the role that these assets play in the face of the on-going global crisis. This is probably due to the general belief that intangible activities have little to do with the economic crisis. In this view, major decreases in demand are expected to bring about a reduction in intangible investments, so that the latter is perceived more as a consequence of the crisis rather than as the cause of variation in firm's responses (Filippetti and Archibugi, 2011; Laperche et al., 2011). However, an emerging body of research suggests that a firm's assets, including intangible assets,

[1] Our own elaboration of the data is available at http://ec.europa.eu/eurostat/data/database (Accessed on: 4th of September 2015).

[2] As suggested by Cleassens et al. (2012), the relatively small dimension of this literature is probably due to the fact that frim-level data for many countries has a long lag time prior to release.

can be important determinants of the firm's capability to adapt to unexpected environmental changes (Lengnick-Hall and Beck, 2005). This literature refers to the concept of a firm's *resilience capability* and argues that intangibles can indeed contribute to firm performance in times of crisis.

On this basis, the present paper investigates whether intangible assets play a role in the probability of a firm exiting the market during the recent crisis. In particular, we examine whether firms that invest in intangible assets have a lower probability of exit than firms that have relatively little to no investments in intangibles during times of economic crisis. Because investing in intangibles entails a certain degree of sunk costs and inevitably exposes firms to greater financial risk, the answer to this question is anything but trivial. In this sense, we may expect intangible assets to play a positive role only if the gain in terms of sustained resilience more than compensates for the cost of financing.

We test our hypothesis on a sample of Italian manufacturing firms. We choose Italy because it is one of the Eurozone countries that has been severely impacted by the economic downturn. Moreover, we can exploit preferential access to a large firm-level dataset with detailed information on both intangible investments and the death of firms from 2006-2013. Overall, we obtain two main results: first, we show that intangible assets significantly reduce the probability of firm exit, especially during the initial phase of the crisis; second, we show that firm exit tends to be explained by different variables during different stages of the crisis. While early exits (i.e., before 2010) tend to be associated with both the presence of intangible assets and the market in which the firms operate, late exits tend to be a product of financial constraints. Moreover, we find that neither size nor age seems to play a relevant role in explaining firm exit during the crisis. The implications of these findings on European recovery policy are also discussed.

The paper is organised as follows. Section 2 discusses the literature. Section 3 presents the dataset, the variables, and some descriptive statistics. Section 4 discusses the empirical strategy. Section 5 shows the results. Section 6 lists some robustness checks. Finally, Section 7 concludes.

2. Theoretical and empirical background

The determinants of firm exit and survival are the focus of extensive literature (see for instance Dunne et al., 1988; Klepper and Simons, 1997; Agarwal and Gort, 2002; Klepper and Thompson, 2006; Santarelli and Vivarelli, 2007). In industrial economics, it is usually argued that firm size and age positively affect the probability of survival. As new firms acquire experience through production and learning, they improve their internal efficiencies (Jovanovic, 1982). In the presence of market selection, this leads to an increase in size as well as the chance of survival over the

lifecycle of a firm. These predictions have been tested in a number of studies. While some contributions focus on the link between firm survival and the current size of all firms (Evans, 1987; Hall, 1987; Doms *et al.*, 1995), other works investigate the effect of the firm's initial size on post-entry survival (Dunne et al., 1988; Mata and Portugal, 1994; Audretsch, 1995; Baldwin, 1995). Although some of these studies find a positive association between firm size and age and survival, the relationship can be non-linear, with the survival likelihood increasing with firm size but at a decreasing rate (see Evans, 1987; Hall, 1987). The significance, and even the sign of the relationship, can also vary entrants (Wagner, 1994), industries (Audretsch et al., 1999) and stages of the product life cycle (Agarwal and Audretsch, 2001). Moreover, with specific reference to age, an inverted U-shaped function is observed in some cases, with the likelihood of surviving increasing shortly after entrance and then decreasing in later years (Audretsch and Mahmood, 1994; Wagner, 1994).

In addition to size and age, the existence of financial constraints is also considered an important driver of firm exit. Financial constraints can hamper the firm's ability to make strategic plans and at the same time, increase the firm's sensitivity to external shocks. For instance, Winker (1999) along with Becchetti and Trovato (2002), find that perceived credit constraints have negative effects on a firm's innovation expenditures and overall investment, which impacts the firm's performance. With specific reference to firm exit, Holtz-Eakin et al. (1994) exploit a unique dataset matching personal wealth data to survival rates among US entrepreneurs; they show that inheritance reduces the probability of firm exit and interpret this finding as evidence for the existence of a negative relationship between credit constraints and firm survival.

If financial constraints are relevant in general, they may be even more important during downturns in the business cycle. Cleassens et al. (2012) argue that the 2008-2009 crisis has impacted firm performance through a combination of two main channels: a financial one that has affected the firm's ability to access credit, and a real one that has resulted in a contraction of internal demand and trade. Estimates reveal that in economic terms, the real channel is more important than the financial one, particularly during 2009. Medina (2012) and Wu (2012) find similar results. With specific reference to the Eurozone, Demelis et al. (2013) indicate a strong dependence on credit expansion before the crisis with regard to firm performance. However, post-2008, the credit crunch has seemed to affect only slow-growth firms, especially those operating in domestic bank-dominated economies. Remarkably, all these contributions primarily measure firm performance in terms of sales and profits. To the best of our knowledge, very few contributions (see Godart et al. 2012; Wagner and Weche Gelübcke, 2013; Wagner, 2013; Clarke at al., 2012; Arrighetti et al., 2015) have dealt with the issue of firm survival in the context of the on-going

economic crisis.

A useful framework for studying the drivers of firm exit in periods of economic downturn is to make a distinction between external and internal factors. External factors include all the variables that are external to a firm and may affect its survival. These factors embrace most of the variables that have been considered in previous literature, such as changes of aggregate demand and financial shocks. They also include factors related to institutional and technological features of the context in which firms operate, such as the geographic region and the industry. Internal factors include all the firm-specific characteristics that help when faced with sudden environmental changes. Some of these are structural factors, such as size, age, and financial tightness, while others are related to the managerial and organizational capabilities of a firm. Recent literature on managerial practices (Bloom and Van Reenen, 2010), which has attracted growing attention even among economists, suggests that the 'soft' skills and abilities of firms can indeed be important drivers of firms' overall performance.

In this paper, our main focus is on the role played by internal factors, particularly intangible assets. The latter have been the focus of a growing amount of literature in recent years. Different from the standard "R&D centric" approach to innovation, and in line with more recent trends such as the "system approach" to innovation (Carlsson et al., 2002) and the "open-innovation mode" (Chesbrough, 2003), this literature stresses the importance of additional factors as key drivers of firm innovation, such as designs, software, blueprints, technology licences, and trademarks (Montresor and Vezzani, 2014). These assets are generally referred to as intangibles and their contribution has been analysed with regard to different dimensions of economic activity. At the macro-level, growth-accounting exercises have shown that intangible assets account for a larger share of labour-productivity growth than tangible assets in a number of countries (Corrado et al., 2005, 2009; Fukao et al., 2009; Marrano et al., 2009; Borgo et al., 2013). At the micro-level, a number of studies have pointed to the existence of a positive link between intangible assets and firm productivity (Marrocu et al., 2012; O'Mahony and Vecchi, 2009; Bartel, 2007; Bontempi and Mairesse, 2008; Jiménez-Rodríguez, 2012; Hall et al., 2013; Battisti et al., 2014), market value (Hall et al., 2005; Greenhalgh and Rogers, 2006; Sandner and Block, 2011; Hulten and Hao, 2008), and export (Delgado-Gómez and Ramírez-Alesón, 2004). However, none of these studies have considered the impact of intangible assets on the likelihood of firm exit.

We argue that during economic downturns, intangible assets can mitigate the risk of failure by strengthening the firm's resilience capacity. Within the frame of the resource-based (Penrose, 1959, Barney, 1991, 2001) and capability-based theories of the firm (Dosi et al., 2000), resilience capacity is defined as the unique blend of cognitive, behavioural, and contextual properties that increase a

firm's ability to respond to environmental changes (Lengnick-Hall and Beck, 2005). Faced with an economic crisis, resilient firms have a lower chance of exiting the market because they are more capable of interpreting unfamiliar situations, devising new ways of confronting these events (e.g., to develop new routines), and mobilizing people, resources, and processes to transform these choices into reality. Indeed, discussions on organizational resilience have recently become more salient as the substantial disruptions associated with an unpredictable environment create a climate of uncertainty and crisis (Coutu, 2002; Horne & Orr, 1998; Mallak, 1998, Lengnick-Hall et al., 2011).

According to Lengnick-Hall et al. (2011) the resilience capability depends on two main groups of factors: the amount and variety of resources available within the firm, and the firm's capability to combine these different resources and develop new routines. While the former can be interpreted as a level and variety effect, the second is a dynamic capabilities effect that includes the processes of recombining and creating new capabilities. In both cases, intangible assets play an important role. As suggested by Teece et al. (1997), intangibles are not only key in determining the firm's (specific) asset position but also in shaping the path through which new capabilities are generated (such as the role of knowledge management software in favouring assets recombination). When coping with economic downturns, firms endowed with intangible assets have a larger portfolio of assets (variety effects) as well as a greater ability to combine them (dynamic capabilities effect) to plan strategic responses. All else equal, we should expect firms with intangible assets to have a lower probability of exit during a crisis than firms with limited or no intangible assets.

The quality of the assets accumulated by firms has already been considered as driver of firm exit and survival. Hall (1987), for instance, shows that the probability of firm exit decreases with the share of accumulated R&D expenditures of the firm. Similar results have been found regarding the type of entrepreneurial education and quality of human capital available within the firm (Bates, 1990; Brüderl et al., 1992; Gimeno et al., 1997). Doms et al. (1995) and Colombo and Delmastro (2001) link firm exit to the quality of the physical assets and show that firms employing advanced manufacturing equipment have a lower chance of exiting. In so far as the output of the innovation process is concerned, Cefis and Marsili (2005) and Buddelmeyer et al. (2010) study the relationship between firm innovative performance and survival; they find that the former positively impacts the latter. However, none of these studies consider intangible assets as defined above. Moreover, no specific link is made between intangible assets and resilience capacity in times of crisis.

3. Data, variable and descriptive analysis

3.1 Data

We use data collected from two sources: the first wave of the MET survey and the AIDA-BVD database. Using these sources, we are able to integrate comprehensive data on intangible assets and exit, at firm level. The MET survey is a survey conducted by an Italian private research centre (*Monitoraggio Economia e Territorio*) every two years using a sample of nearly 25,000 Italian manufacturing firms (with partial sample overlap among the different waves).[3] The sample ensures high representation in terms of firm size (4 dimensional classes), region of origin (20 regions), and industry (10 sectors disaggregated following the 3-digits ATECO 2002 classification). It includes firm-level information on the company's internal structure, including information on the firm's size, the types of investments realized, and the reference markets. The first wave is conducted during the summer of 2008, few months before the bankruptcy of Lehman Brothers. Therefore, it contains detailed information on the pre-crisis characteristics of firms, specifically during 2006-2007.

The AIDA-BVD database contains disaggregated balance sheet and profit and loss statement information for the period 2007–2014 for all Italian firms. Moreover, it contains information on the present status of the firms (active vs. non-active and merged vs. acquired), which we use to distinguish between active and exited firms (see below). After having selected the firms that are active as of 2007, we match the information of the AIDA-BVD datasets with the responses to the MET survey, obtaining a final sample of 4,746 firms.[4] The original sample representativeness in terms of firm size, region of origin and industry of activity is preserved.[5]

Thus, we obtain an unbalanced panel with information in three time-horizons. First, we have firm-level information on both the internal structure and the financial position before the crisis, i.e., from 2006-2007. Second, we have access to the disaggregated balance sheet of all firms during the crisis, i.e., from 2007-2014. Finally, we can identify the firms that are still active and those that have exited the market by 2014. These data allow us to study the determinants of firm exit, and eventually distinguish among the different types of firm behaviour throughout the recession.

3.2 Variables

Our key variable distinguishes between active and exited firms. Information contained in the AIDA-BVD database allows us to detect firms that are active in 2007 but have changed their status before 2015. On this basis, we develop an algorithm (see Appendix A.1) that allows us to identify firms that have effectively exited the market (see also Arrighetti et al., 2015). In contrast to previous literature (see Agarwal and Audretsch, 2001; Cefis and Marsili, 2005), we can distinguish between

[3] The MET survey share many features of the Capitalia's Survey on Manufacturing Firms, another business survey carried out in Italy, which covers the periods ending respectively in 1997, 2000, 2003 and 2006.
[4] The reduction in the size of the original sample is due to the availability of disaggregated balance sheets in the AIDA-BVD database (see subsection 3.2).
[5] Tables reporting on the sample's representativeness are available from the authors upon request.

exit resulting from the death of the firm and exit occurring through merger and acquisition. In this paper, we focus only on the former; the firms subject to mergers and acquisitions are removed from of the sample. Unfortunately, we are unable to observe when an exit actually occurs, thus, the first dependent variable that we consider (*EXIT*) is a dummy variable that takes value 1 if a firm has exited the market before 2015, and zero otherwise.

In addition to the firm status in 2014, we have information on the evolution of firm's sales for the period 2007-2014. On this basis, we construct a second variable that distinguishes between firms that exited relatively early and firms that exited late. In making such distinction, we use the year 2010, as a temporal threshold so that we can map the conventional differentiation between the "first" and "second" crisis, where the former is usually associated with the subprime mortgage crisis of 2008-2010 that originating in the US, and the latter refers to the ongoing European debt crisis that started in 2010. In particular, we classify firms as "early exit" if for the years 2011, 2012, and 2013 they report more than a 90% reduction in sales compared to 2007. The value 90% is clearly arbitrary and it is introduced to control for possible noise in the sales data. We run some robustness checks using different values and find that results do not change (see below). "Late exit" firms are obviously defined as the difference between the firms that have exited the market before 2015 and the ones that exited the market earlier. Thus, we define a discrete variable *STATUS* taking value 1 if the firm is active in 2014, 2 if the firm is "early exit" (i.e., exited the market before 2010), and 3 if the firm is "late exit" (i.e., exited the market after 2010).

Among the regressors, our focus is on intangible assets. According to the literature, there are several different ways to measure intangible assets. Here, we follow a balance sheet-type of approach, which considers the stocks originally reported as assets on companies' asset and liability balance sheets. In particular, we consider a subset of the assets usually reported under the item "intangible fixed assets", i.e., "research and advertisement expenditures", "patents", and "licenses and trademarks".[6] In doing so, we differ from previous contributions that use similar data (e.g., Marrocu et al., 2012) and instead consider the aggregate value "intangible fixed assets". We make this choice because the item "intangible fixed assets" also includes goodwill, whose capitalisation is highly subject to managers' discretion and as such, difficult to interpret. On the contrary, the items that we consider in our measure are the objective expenses incurred by firms.[7] The sum of these

[6] For more details on the composition of the item "intangible fixed assets" within the frame of the Italian legislation see Italian Civil Code, art. 2424.

[7] One of the main limitations in using company data to measure intangible assets is that firms may fail to give a full account of their intangible assets in the balance sheet. This is especially true for firms that adopt international accounting standards such as the IAS 38, which requires that research expenses be treated as expenses rather than assets. Although this can be a problem in general, it is not relevant in our sample. According to Italian legislation (Law

three assets is then normalised by each firm's total asset size to compute the firm's intangible capital intensity (*ICI*). At any given point in time, ICI_i^t is a proxy of the intangible assets accumulated by firm *i* in period *t*.

As discussed in Arrighetti et al. (2014, 2015) and shown in Figure 1 the distribution of *ICI* is highly concentrated. In all industries and for all years, over 30% of firms report no investment in intangibles, while the top 10% of firms invest from 2% to 60% of their total assets in these assets. This distribution points to the existence of heterogeneity in the propensity to accumulate intangible capital, where the most striking distinction is between those who invest and those who do not. On this basis, our main goal is to understand if firms that invest in intangibles indeed enjoy an advantage in the probability of survival when faced with the shortcomings that follow a crisis.

In addition to intangible assets, we include another set of variables usually associated with firm survival in our analysis. First, we consider a set of demographic and structural variables such as firm size measured in terms of number of employees (*SIZE*), age (*AGE*), and the degree of tangible capital intensity (*TCI*). Second, we consider a set of export-related indicators, such as the percentage of export sales (*EXPORT*) and whether a firm is active in EU (*D_EU*) and extra-EU (*D_EXTRAEU*) markets. Third, we consider a set of financial and profitability indexes, which include a measure of financial exposition (*FINEXP*), a liquidity index (*LIQUID*) and a return on assets index (*ROA*)[8]. A full description of all variables can be found in Appendix A.2.

[Figure 1 here]

3.3. Descriptive analysis

Table 1 reports some descriptive statistics for the entire sample of firms (column 1), the firms that are active (column 2) and the firms that exited the market before 2015 (column 3). The last column reports the results of an F-test on the difference between the mean values for active and exited firms. We notice that exited firms are on average younger (*AGE*), less productive (*LAB_PRDTY*, *ROA*), more financially exposed (*FINEXP*), and less liquid (*LIQUID*) than active firms. Interestingly, we find no significant difference regarding the firm's orientation towards export

306/2003 and Legislative Decree n. 38/2005), IAS 38 applies only to firms that are listed in the Italian Stock Exchange, which none of our firms are. Moreover, from preliminary interviews we have had with some of the firms in our sample, we know that they report research expenses as intangible assets on their balance sheets. This makes us confident that our measure is indeed a good proxy of a firm's intangible assets.

[8] Given the relevance usually attributed to financial indicators in survival analysis, along with the fact that firm selection occurs mainly at the industry level, we normalize all financial indexes, namely *FINEXP*, *LIQUID* and *ROA*, by the industry average in our empirical analysis.

(*EXPORT*, *D_EU*, *D_EXTRAEU*) or firm size (*SIZE*).

With respect to *ICI*, the univariate analysis suggests that on average, exited firms tend to be more intangible capital intensive than active firms. Although this result can be interpreted as a signal of a positive relation between *ICI* and the probability of firm exit, this is not always the case. As suggested above, the accumulation of intangibles requires firms to devote a substantial portion of their financial resources to these assets, whose benefits that are frequently delayed and highly uncertain. In this sense, the relatively high degree of *ICI* in exited firms is partially associated with a relatively high degree of financial exposition and low liquidity. Therefore, it is not clear which is the predominant factor. To gain a better understanding of the role of intangible assets, we use a multivariate analysis. This is the aim of the next two sections.

[Table 1 here]

Before moving to the multivariate analysis, it is interesting to compare the performance of the three distinct groups of firms (i.e., *active*, *late exit* and *early exit*) throughout the recession. Apart from the interest *per-se*, this can also serve as a quality check on our classification. Along these lines, Figure 2 reports the evolution of the average of the firms' sales during period 2007-2013 for *active* firms (close to 90% of the total), *late exit* firms (nearly 8% of the total) and *early exit* firms (nearly 2% of the total). As we can see, the crisis had a different impact on each type of firm. All firms experience a significant reduction in sales in the aftermath of the crisis, i.e., the year 2009. However, while the "*active"* firms came back to their initial level of sales and remained at that level throughout the remaining years, the other firms' sales continued to decline. The *early exit* firms reduced their sales by more than 70% in less than 3 years. By 2011, they were already out of the market. The "*late exit"* firms experienced a somewhat less radical decline and after a partial stabilization between 2009 and 2011, they rapidly converged toward exiting the market in the last two years. The reason behind such a degree of heterogeneity in firm responses is the main focus of the remaining parts of the paper.

[Figure 2 here]

4. Empirical strategy

We model the probability of firm exit as a function of two main types of variables. On one hand, we consider systemic variables, such as the industry and the geographic region in which the firm

operates. These variables are treated as control variables in our analysis. On the other hand, we consider firm-specific characteristics, with particular attention being paid to intangible capital intensity, as well as financial and export-related indicators. On this basis, we estimate the effect of each variable on the probability that a firm exits the market during period of 2008-2014.

Formally, our baseline model takes the following form:

$$\Pr(EXIT_i = 1) = \Phi\left(XF_i'\beta_F + XC_i'\beta_C\right), \qquad (1)$$

where $\Phi(\cdot)$ is the cumulative distribution function for the standard normal, XF_i is a vector of firm-specific characteristics; XC_i is the vector of control variables; and β_F and β_C are the vectors of parameters to be estimated. Our baseline assumption is that the beginning of the crisis acts as an exogenous and unexpected shock for firms, which allows us to identify the parameters in (1). To estimate the latter, we use a maximum likelihood (ML) estimation.

Within vector XF_i, our main focus is on the effect of intangible assets. As discussed in Section 3, *ICI* exhibits a highly skewed distribution, with a few firms investing significantly and many others investing nothing. To control for such heterogeneity, we replace the continuous variable ICI_i with a dummy variable which takes value 1 if $ICI_i > 0$ and zero otherwise (D_ICI_i). Moreover, we include a set of interaction terms to capture the financial conditions at the time the intangible investments are undertaken. These interaction terms are computed first by defining a set of robustness indicators D_FINEXP_i, D_LIQUID_i, D_ROA_i, such that $D\_FINEXP_i = 1$ if $FINEXP_i < \underline{FINEXP}$ (0 otherwise), $D\_LIQUID_i = 1$ if $LIQUID_i > \underline{LIQUID}$ (0 otherwise) and $D\_ROA_i = 1$ if $ROA_i > \underline{ROA}$ (0 otherwise) where $\underline{VAR}$ for VAR = {*FINEXP*, *LIQUID*, *ROA*} is the median value of VAR. Then, we multiply these robustness indicators with variable D_ICI_i to capture the firms that invest in intangibles during relatively robust financial conditions. These interaction terms capture the same conceptual constructs and are therefore used interchangeably with one another.

In addition to the intangibles, we include in XF_i other variables that are usually associated with the probability of firm survival, such as $SIZE_i$, AGE_i and TCI_i. Moreover, given the international and financial nature of the crisis, especially during the initial period of 2008-2010, we also include a set of export ($EXPORT_i$, D_EU_i, $D\_EXTRAEU_i$) and finance-related indicators ($FINEXP_i$, $LIQUID_i$, ROA_i) in XF_i.

In the vector of control variables (XC_i), we include dummies for both the industry (using Pavitt's (1984) classification) and the region of origin (distinguishing between the North, Centre, and South of Italy). As a robustness check, we also test for different types of industry and regional

classifications and observe robust results.

All independent variables in equation (1) are evaluated at the beginning of the period, i.e., during 2006-2007. On this basis, we use these variables to predict the probability of a firm exiting the market within the next 7 years (i.e., before 2015). Given the structure of our data, we obviously cannot exclude the possibility of model misspecification and omitted variable bias. To address this issue, we saturate vector XC_i with as many variables as we can in order to control for any kind of firm-specific effects (offsetting the risk of running into multicollinearity). Because our concern is especially related to *ICI*, we focus our attention on variables that can be correlated with the accumulation of intangible assets, such as labour productivity (LAB_PRDTY_i), the degree of vertical integration ($VERT\_INT_i$) and a dummy variable indicating firm's affiliation with a group (D_GROUP_i). While this solution, together with the rather detailed specification of vector XF_i, and the acceptable degree of correlation among regressors (see Table 2), should reduce the risk of omitted variable bias, some care must be taken in interpreting the results.

[Table 2 here]

As discussed above, the key feature of our dataset is that it allows us to track the behaviour of firms throughout the crisis. In particular, we can distinguish between different processes of firm exit, with some firms rapidly converging towards exit and others facing a more gradual process of selection. For this reason, we estimate the following multinomial logit model in addition to using the baseline model discussed above:

$$\Pr(STATUS = k) = \frac{\exp(XF_i' b_F^k + XC_i' b_C^k)}{1 + \sum_{j=1}^{3} \exp(XF_i' b_F^j + XC_i' b_C^j)} \quad \text{for} \quad k = 1, 2, 3 \qquad (2)$$

where $STATUS_i$ is a discrete variable distinguishing between *active*, *late exit* and *early exit* firms. All the other variables remain the same as in model (1). By comparing the size and significant level of coefficients across these models, we will be able to investigate whether similar variables play different roles in explaining exit during distinct phases of the crisis.

5. Results

Table 3 reports the estimates on the probability of exit, translated into marginal and impact effects for the continuous and dummy variables, respectively. First we add regressors included in XF_i with the exclusion of intangible-related variables (Model 1). Then, we add D_ICI_i to test the isolated effect of intangible assets (Model 2). Finally, we run three additional models in which we include the interaction between D_ICI_i and the robustness indicators discussed above (Models 3, 4 and 5).

The first result that we obtain concerns the role of intangible assets. Whereas in isolation *D_ICI* is insignificant, when combined with indicators of a relatively robust financial condition, the effect is negative and significant. The size and significance level of the coefficient is consistent across models. This result lends support to the idea that when faced with an economic recession, intangible assets can reduce the probability of exiting the market, but only when combined with a sound financial position, i.e., low debt exposition or high liquidity and/or profitability.

The relevance of the firm's financial position is also confirmed by the results of the finance and profitability indexes, with some differences. While *FINEXP* and *ROA* significantly explain the probability of exit with a positive and negative sign, respectively, *LIQUID* is insignificant. This finding, combined with the negative and significant effect associated with *TCI*, suggests that in the aftermath of a crisis, firm selection depends more on the overall solidity of the firm's budget than on the lack of ready-to-use liquid resources.

[Table 3 here]

Finally, it is interesting to note that in this estimation, we find no significant effects on export-related indicators (*EXPORT*, *D_EU*, *D_EXTRAEU*), *SIZE*, or *AGE*. This result is quite striking, given the international nature of the crisis and the emphasis that is usually placed on firm size and age as drivers of survival. However, part of this result may be due to the relatively long time span that is considered in identifying firm exit (2008-2014). It may be possible that some of these variables are significant in explaining exit during the first phase of the crisis but not during the second phase. If that is the case, the estimates reported in Table 3 do not allow us to arrive at a clear conclusion on the role of these variables.

To solve this issue, we report the multinomial estimates for *early exit* (columns 1-5) and *late exit* (columns 6-10) firms, with *active* firms as the excluded category, in Table 4. The hierarchical structure of the model is the same as above. We first estimate the model by excluding intangible assets, including *D_ICI*, and finally adding interaction terms between *D_ICI* and the robustness indicators D_FINEXP_i, D_LIQUID_i, and $D\_ROA_{i,}$.

By comparing the results across the different models, we obtain the following results. Firstly, we find that while *D_ICI* is almost insignificant in explaining the probability of late exit (with the exception of models 8 and 9 where it is positive but weakly significant), it becomes negative and significant in explaining the probability of early exit. This result holds across all estimated models except model 3, where the sign is negative but insignificant. However, in the latter case, most of the variance related to the intangibles is captured by the interaction term with *D_FINEXP,* which takes a relatively large and highly significant sign. Overall, these estimates suggest that intangible assets affect the chance of firm survival, although their effect is associated with the phase of the crisis. During the initial phase, the presence of intangible assets significantly reduces the probability of exit, while in later stages, the contribution from intangible assets is weaker.

Secondly, we find that even among financial constraints and profitability indicators there is some heterogeneity in the way in which they impact firm exit. While *FINEXP* and *ROA* significantly affect the probability of both early exit and late exit, *LIQUID* negatively and significantly explains only late exit. This result partially confirms the evidence reported in Table 1 on the limited role of liquid resources, suggesting that the latter can indeed become relevant as the recession continues. In this sense liquid resources function as instruments to address prolonged periods of economic contraction, than as tools to draw immediate responses to unexpected shocks.

[Table 4 here]

The differentiated roles of intangible assets and financial and profitability indicators is confirmed by the results of their interaction terms. In particular, we find that while the interaction terms between *D_ICI* and the robustness indicators is always significant and negative in late exit models, it is only significant in one model out of three when we estimate the probability of early exit. These findings confirm the fact that the firm's financial and profitability conditions were more relevant as drivers of firm exit during the second phase of the crisis as opposed to the first phase. On the contrary, intangible assets are key resources for survival, especially in the immediate aftermath of the downturn.

The third result that we obtain concerns the role of export. In particular, we find that having a significant proportion of exports outside the EU is an important factor in differentiating between early exit and late exit. Indeed, the variable *D_EXTRAEU* is positive and highly significant in explaining the probability of early exit, while it is not significant in explaining late exit. No other export-related indicator is significant in our estimates. The most plausible interpretation of this result is that *D_EXTRAEU* captures the negative effect of the rapid decrease in international trade

volumes following the 2008 financial crisis. As the volume of international trade increases during the second phase of the crisis, the level of export becomes less relevant in explaining firm exit. In this sense, our results confirm the findings of Claessens et al. (2012) on the relevance of trade as a crisis transmission channel, especially during 2008-2009.

Finally, the estimates reported in Table 4 confirm that neither size nor age plays a relevant role in explaining firm exit during a crisis. While size is never significant, age is negative but only weakly significant in explaining early exit. These results do not undermine the relevance of size and age as determinant of firm exit in general (although the available evidence in this sense is contradicting, see Santarelli and Vivarelli, 2007), rather, they suggest that in the presence of negative and unexpected macroeconomic shocks, size and age are not characteristics that differentiate between firms' responses.

Overall, the results of our estimates provide a fairly encouraging picture concerning the role of intangible assets as drivers of a firm's resilience. If no distinction is made between the "first" and "second" crisis, intangible assets reduce the probability of firm exit, but only if they are accumulated within the frame of a sound financial position. If a distinction between different phases of the crisis is made, the presence of intangible assets significantly reduces the probability of early exit, independent of the firm's financial position. This result confirms that firms with intangible assets exhibit greater capacity to cope with adverse and unexpected economic conditions than firms without in tangible assets, especially during the years immediately after a shock occurs.

6. Robustness checks

To increase the reliability of our results, we conduct a series of robustness checks. First, we consider different region and industry classifications. With respect to the region we replace the dummies distinguishing North, Centre and South of Italy with regional dummies for the administrative regions. With reference to the industry we replace Pavitt's classification with Istat's Ateco 2-digits classification (equivalent to the Eurostat's Nace). Results are reported in Table 5 and 6. We find that all previous results remain valid. In particular, intangible assets (*D_ICI*) take a negative and significant value in explaining exit before 2015, but only if they are combined with a firm's sound financial position. In the multinomial logit estimates intangible assets significantly reduce the probability of early exit, while their effect on late exit still depends on the interaction with the financial and profitability indexes. Overall, we conclude that our results are robust to alternative region and industry classifications.

[Table 5 here]

[Table 6 here]

Second, we change the threshold value to distinguish between early exit and late exit. In the multinomial logit estimates reported in Section 5, we consider a 90% drop in sales for the years 2011, 2012 and 2014 as a proxy for firm exit. Next, we run the same estimates considering a drop in sales of 85% and 95%, respectively. The results are reported in Tables 7 and 8. We notice that most of the previous results hold. Intangible assets (*D_ICI*) significantly reduce the probability of early exit. In the case of late exit, intangible assets are significant only when they interact with the financial and profitability indexes. At the same time, while *FINEXP* and *ROA* are significant in explaining both early exit and late exit, *LIQUID* is significant only when regressed against the latter. Furthermore, in line with the previous estimate, *SIZE* and *AGE* are insignificant (or of limited significance) in all models.

[Table 7 here]

[Table 8 here]

Given that size is usually considered an important driver of firm survival, we also test to determine how our results react to a different specification of *SIZE*. In particular, we estimated both the probit and the multinomial logit models by substituting the continuous measure given by the log of employees with dummy variables for small (< 49 employees) and large firms (> 250 employees). The results are reported in Tables 9 and 10. Interestingly, we find that the role of size changes depending on the model. In the probit estimates, where we do not distinguish between early and late exit, large size is insignificant. On the contrary, in multinomial logit estimates, large size is positive and significantly associated with early exit and negative and significantly associated with late exit. Results for all the other variables remain unchanged. This odd behaviour of the dummy variable for large firms confirms that the relationship between firm size and survival is at least ambiguous.

[Table 9 here]

[Table 10 here]

7. Conclusion

The recent crisis in Europe has caused several business closures, especially in the EMU periphery. In this paper, we use an original firm-level dataset from Italy to study whether intangible assets reduce the probability of firm exit during the crisis. We argue that intangible assets strengthen the firm's resilience capacity via both the variety and dynamic capabilities effects, which allows firms to develop adequate responses in the face of adverse and unexpected shocks.

On the basis of our analysis, we obtain two main results. First we show that intangible assets significantly reduce the probability of firm exit, especially during the initial phase of the crisis. Second, we show that financial weaknesses become more relevant than intangibles in explaining firm exit at later stages of the crisis. If taken together, these two findings point towards the existence of a different model of firm selection during the first (i.e., 2008-2010) and second crises (i.e., 2011-2014), with financial constraints becoming much more salient during the latter.

In addition, some of our findings confirm the results obtained by the previous literature. First of all, in line with Claessens et al. (2012), we find that trade operates as an important transmission channel through which the subprime crisis spread to Europe. Secondly, we find that at time of crisis, firm age has no effect on firm exit. Finally, we confirm that firm size has a relatively ambiguous effect on firm survival. The latter result reinforces the general scepticism on the role of firm size as a good predictor of survival (e.g., Santarelli and Vivarelli, 2007).

Based on these results, some interesting policy implications can be drawn. As the extensive literature shows, intangible assets are usually associated with positive measures of firm performance, in terms of both productivity and innovativeness. Our results suggest that the prolonged economic recession is likely to produce a distortion in the process of firm selection. If at the beginning of the crisis intangible assets can still ensure a survival premium in favour of best performing firms, this effect weakens during the later stages of the crisis. As the negative economic outlook continues, firm selection is increasingly driven by financial and budgetary weaknesses irrespective of the capabilities accumulated by firms. If this result is confirmed in other EU countries, policy makers should be worried about the significant economic losses entailed by it. In addition to the cost of unemployment, the selection of firms with valuable skills may produce a long-term capability gap with respect to international competitors, which may delay the full recovery of EU economies. In this sense, we should welcome policy interventions aimed at softening the pressure caused by financial constraints (e.g., through easier access to credit) that can potentially reduce the impact of selective distortion.

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Appendix.

A.1 "Active" vs. "exited" firms

The identification of firms that are part of the 2008 MET survey and exited the market before 2015 is based on the information contained in the AIDA-BVD database. For each firm such database makes it possible to establish the "firm status" following different types of legal action. The available classification distinguishes between firms that are "active" and those that are "inactive" or "in liquidation".

Then, independently of the available "firm status", we checked whether the AIDA-BVD database contains information on the specific legal actions to which a firm may be subjected. Although an ending date for pending legal action is not always available in the database, it is plausible to assume that the opening of such an action (for instance the company's liquidation or failure) is a signal of a significant downsizing of the firm's operations, which may even be associated with the firm's actual exit. On this basis, we have identified a series of criteria that help us categorize firms as being either "active" or "exited". In particular, we define a firm as "active" if in 2014:

a) Her status in the AIDA-BVD database is "active" with no pending legal actions;
b) Her status in the AIDA-BVD database is "active" and there are pending legal actions that refer only to a transfer to another province.

A firm is instead categorized as "exited" if in 2014:

a) Her status in the AIDA-BVD database is "in liquidation"
b) Her status in the AIDA-BVD database is "inactive" and there are no pending legal actions related to merges and/or acquisitions
c) Her status in the AIDA-BVD database is "active" and there are pending legal actions related to debt restructuring, failure, liquidation, insolvency, creditor agreement.

Moreover, a third category of firms was created with the label "in transformation". A firm is categorized as "in transformation" if in 2014:

a) Her status in the AIDA-BVD database is "active" and there are pending legal procedures related to merges and/or acquisitions;

b) Her status in the AIDA-BVD database is “inactive” and there are pending legal procedures related to merges and/or acquisitions;

In the present paper we consider only firms that are categorized as “active” or “exited”. Firms categorized as “in transformation” are removed from the sample.

A.2 List of the variables

- *ICI*: intangible assets / tot. assets in 2007.
- *TCI:* tangible assets / tot. assets in 2007.
- *SIZE*: logarithm of the number of employees in 2007.
- *AGE*: logarithm of 2007 less the year of foundation.
- *LAB_PRDTY*: added value / number of employees in 2007.
- *EXPORT*: sales occurred through export / total sales in 2007.
- *D_EU*: = 1 if % of sales in EU countries > 50%, 0 otherwise
- *D_EXTRAEU*: = 1 if % of sales in extra EU countries > 50%, 0 otherwise
- FINEXP: (liabilities – net assets – credits) / net assets in 2007.
- LIQUID: liquid assets / net assets in 2007
- *ROA*: net income / average total assets in 2007
- *D_GROUP*: = 1 if firm belong to a group, 0 otherwise
- *VERT_INT*: added value / total sales in 2007

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Figure 1 – Quantile distribution of ICI in 2007

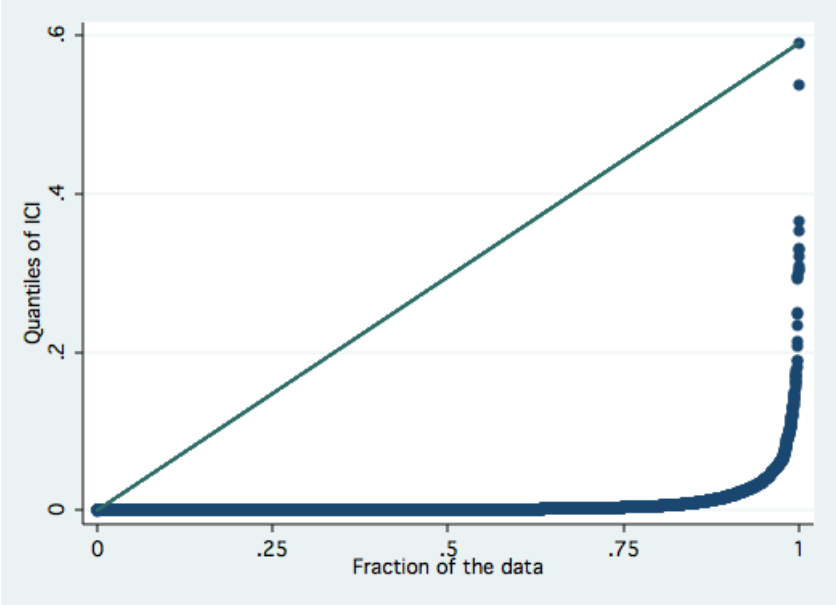

Figure 2 – Evolution of firm's sales: active vs. late exit vs. early exit

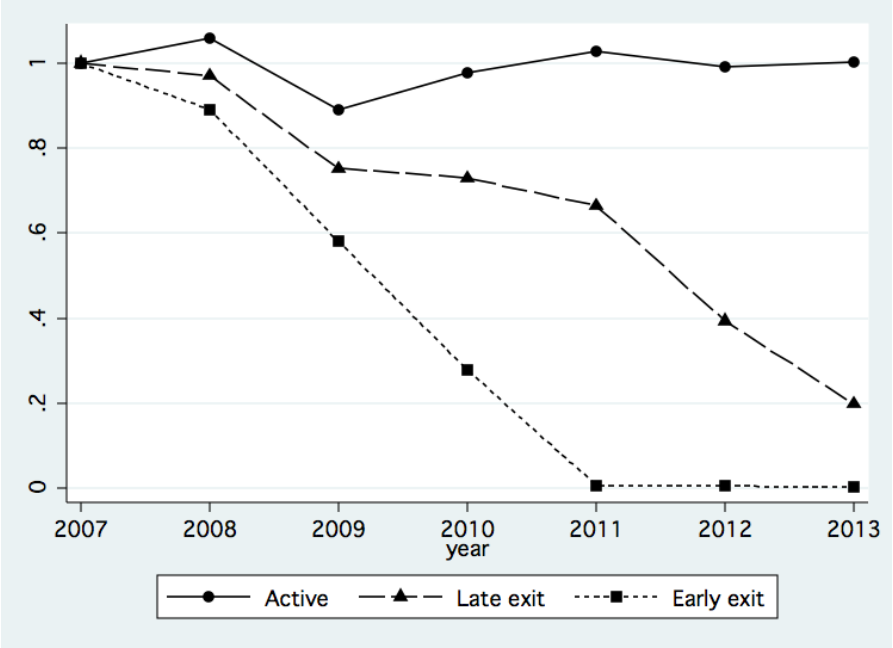

Table 1 – Descriptive statistics

	All (1) (n. 4747)		**Active (2) (n. 4398)**		**Exit (3) (n. 349)**		
	mean	**sd**	**mean**	**sd**	**mean**	**sd**	**F-test**
SIZE	87.196	188.961	87.850	192.616	78.935	134.407	
AGE	35.368	18.292	35.494	18.446	33.782	16.163	*
VERT_INT	0.278	0.151	0.279	0.151	0.267	0.158	
D_GROUP	0.328	0.470	0.328	0.470	0.325	0.469	
LAB_PRDTY	57.208	39.190	57.905	39.190	48.404	38.160	***
TCI	0.210	0.163	0.210	0.162	0.206	0.170	
EXPORT	21.589	29.076	21.576	29.016	21.753	29.869	
D_EU (d)	0.059	0.236	0.059	0.236	0.057	0.233	
D_EXTRAEU (d)	0.029	0.169	0.029	0.167	0.040	0.197	
FINEXP (index)	3.079	10.256	2.776	6.987	6.908	28.353	***
LIQUID (index)	0.073	0.104	0.074	0.104	0.057	0.099	**
ROA (index)	0.068	0.083	0.071	0.083	0.032	0.074	***
ICI	0.008	0.028	0.008	0.026	0.011	0.040	**

Legend: *=sig. 10%; **=sig. 5%; ***=sig. 1%

Table 2 – Correlation matrix

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**
(1) *SIZE*	1.000											
(2) *AGE*	0.216*	1.000										
(3) *VERT_INT*	0.118*	0.042*	1.000									
(4) *D_GROUP*	0.440*	0.037*	0.019	1.000								
(5) *LAB_PRDTY*	0.033*	0.043*	0.022	0.096*	1.000							
(6) *TCI*	0.022	0.074*	0.200*	-0.014	-0.053*	1.000						
(7) *EXPORT*	0.240*	0.096*	-0.024	0.176*	0.065*	-0.036*	1.000					
(8) *D_EU*	0.058*	0.030*	-0.028	0.050*	0.015	-0.014	0.530*	1.000				
(9) *D_EXTRAEU*	0.062*	0.020	-0.022	0.051*	0.036*	-0.040*	0.401*	-0.044*	1.000			
(10) *FINEXP*	-0.056*	-0.099*	-0.034*	-0.033*	-0.084*	0.049*	-0.014	0.012	-0.010	1.000		
(11) *LIQUID*	-0.125*	0.005	0.119*	-0.083*	0.104*	-0.210*	0.029*	0.043*	0.043*	-0.065*	1.000	
(12) *ROA*	-0.027	-0.059*	0.277*	-0.023	0.4120*	-0.141*	0.024	0.016	0.027	-0.127*	0.276*	1.000
(13) *D_ICI*	0.380*	0.040*	-0.050*	0.208*	0.104*	-0.015	0.162*	0.056*	0.035*	-0.037*	-0.137*	-0.032*

Legend: *=sig. 5%

Table 3 – Results of the probit estimates on the probability of firm exit

	(1)	(2)	(3)	(4)	(5)
	Dep. Var.: dummy = 1 if the firm exits before 2015, 0 otherwise				
SIZE	0.007	0.018	0.018	0.017	0.019
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
AGE	-0.08	-0.084	-0.071	-0.092	-0.088
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
VERT_INT	0.314*	0.295	0.333*	0.322*	0.28
	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
D_GROUP	-0.007	-0.006	0.009	-0.009	-0.006
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
LAB_PRDTY	0.000	0.000	0.000	0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
TCI	-0.497***	-0.497***	-0.531***	-0.503***	-0.515***
	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
EXPORT	0.001	0.001	0.001	0.001	0.001
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
D_EU (d)	-0.046	-0.047	-0.038	-0.053	-0.037
	(0.15)	(0.15)	(0.16)	(0.16)	(0.16)
D_EXTRAEU (d)	0.242	0.238	0.239	0.227	0.248
	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
FINEXP (index)	0.033***	0.033***	0.027***	0.032***	0.033***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
LIQUID (index)	-0.032	-0.034	-0.027	-0.034	-0.002
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
ROA (index)	-0.218***	-0.220***	-0.210***	-0.189***	-0.217***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
D_ICI (d)		-0.079	0.041	-0.004	0.034
		(0.07)	(0.07)	(0.07)	(0.07)
D_ICI*D_FINEXP (d)			-0.323***		
			(0.08)		
D_ICI*D_ROA (d)				-0.188**	
				(0.08)	
D_ICI*D_LIQUID (d)					-0.247***
					(0.08)
Regional dummies	*yes*	*yes*	*yes*	*yes*	*yes*
Industry dummies	*yes*	*yes*	*yes*	*yes*	*yes*
Costant	-1.146***	-1.120***	-1.193***	-1.137***	-1.126***
	(0.26)	(0.26)	(0.26)	(0.26)	(0.26)
Obs	4746	4746	4746	4746	4746
LogL	-1178.399	-1177.669	-1168.505	-1175.076	-1172.864
Chi2	131.584***	133.044***	151.373***	138.230***	142.655***

Legend: *=sig. 10%; **=sig. 5%; ***=sig. 1%

Table 4 – Results of the multinomial logit estimates on the probability of exit early vs. late

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Early: firm exit before 2010; excluded category: active firms					Late: firm exit between 2010-2014; excluded category: active firm				
SIZE	0.003	0.111	0.114	0.112	0.112	0.032	0.02	0.023	0.022	0.019
	(0.11)	(0.12)	(0.12)	(0.12)	(0.12)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
AGE	-0.378*	-0.406*	-0.378*	-0.411*	-0.409*	-0.07	-0.067	-0.039	-0.085	-0.074
	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
VERT_INT	0.298	0.115	0.19	0.131	0.103	0.724*	0.746*	0.790**	0.785**	0.698*
	(0.69)	(0.70)	(0.69)	(0.70)	(0.70)	(0.40)	(0.40)	(0.40)	(0.40)	(0.40)
D_GROUP	0.06	0.078	0.109	0.076	0.079	-0.06	-0.061	-0.036	-0.071	-0.059
	(0.26)	(0.26)	(0.26)	(0.26)	(0.26)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
LAB_PRDTY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
TCI	-0.821	-0.818	-0.89	-0.821	-0.841	-0.988**	-0.988**	-1.046**	-1.012**	-1.010**
	(0.71)	(0.70)	(0.70)	(0.70)	(0.70)	(0.43)	(0.43)	(0.43)	(0.43)	(0.43)
EXPORT	-0.011*	-0.01	-0.011	-0.01	-0.01	0.005	0.004	0.004	0.005	0.005
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
D_EU (d)	0.694	0.729	0.75	0.725	0.745	-0.24	-0.243	-0.216	-0.256	-0.222
	(0.65)	(0.66)	(0.66)	(0.66)	(0.66)	(0.35)	(0.35)	(0.35)	(0.35)	(0.35)
D_EXTRAEU (d)	1.822***	1.810***	1.831***	1.801***	1.825***	-0.003	0.002	0.022	-0.022	0.019
	(0.65)	(0.66)	(0.66)	(0.66)	(0.66)	(0.43)	(0.43)	(0.43)	(0.43)	(0.43)
FINEXP (index)	0.055***	0.052***	0.042**	0.051***	0.052***	0.058***	0.058***	0.048***	0.057***	0.058***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)
LIQUID (index)	0.11	0.092	0.105	0.091	0.114	-0.171***	-0.168***	-0.151**	-0.165***	-0.081
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.06)	(0.06)	(0.06)	(0.06)	(0.07)
ROA (index)	-0.425***	-0.433***	-0.411***	-0.407***	-0.432***	-0.431***	-0.432***	-0.411***	-0.359***	-0.427***
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.07)	(0.07)	(0.07)	(0.08)	(0.07)
D_ICI (d)		-0.724***	-0.398	-0.660**	-0.583**		0.091	0.291*	0.24	0.297*
		(0.24)	(0.25)	(0.26)	(0.28)		(0.16)	(0.16)	(0.17)	(0.17)
D_ICI*D_FINEXP (d)			-1.024***					-0.571***		
			(0.37)					(0.18)		
D_ICI*D_ROA (d)				-0.166					-0.448**	
				(0.35)					(0.20)	
D_ICI*D_LIQUID (d)					-0.284					-0.495***
					(0.32)					(0.19)
Regional dummies	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*
Industry dummies	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*
Costant	-1.674*	-1.514*	-1.680*	-1.533*	-1.519*	-3.047***	-3.082***	-3.222***	-3.123***	-3.095***
	(0.90)	(0.91)	(0.91)	(0.91)	(0.91)	(0.65)	(0.66)	(0.66)	(0.66)	(0.66)
Obs	4746	4746	4746	4746	4746	4746	4746	4746	4746	4746
LogL	-1368.882	-1363.987	-1354.383	-1361.2	-1360.257	-1368.882	-1363.987	-1354.383	-1361.2	-1360.257
Chi2	152.611***	162.401***	181.609***	167.976***	169.862***	152.611***	162.401***	181.609***	167.976***	169.862***

Legend: *=sig. 10%; **=sig. 5%; ***=sig. 1%

Table 5 – Results of the probit estimates with different classifications for regions and industries

	(1)	(2)	(3)	(4)	(5)
	Dep. Var.: dummy = 1 if the firm exits before 2015, 0 otherwise				
SIZE	-0.001	0.012	0.011	0.011	0.012
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
AGE	-0.045	-0.049	-0.036	-0.058	-0.054
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
VERT_INT	0.077	0.054	0.095	0.079	0.03
	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
D_GROUP	0.033	0.033	0.049	0.029	0.033
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
LAB_PRDTY	0.000	0.000	0.000	0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
TCI	-0.430**	-0.430**	-0.466**	-0.429**	-0.440**
	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
EXPORT	0.000	0.000	0.000	0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
D_EU (d)	-0.066	-0.068	-0.057	-0.071	-0.057
	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
D_EXTRAEU (d)	0.277	0.272	0.277	0.259	0.28
	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
FINEXP (index)	0.036***	0.036***	0.030***	0.035***	0.036***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
LIQUID (index)	-0.037	-0.040*	-0.033	-0.040*	-0.006
	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)
ROA (index)	-0.220***	-0.222***	-0.211***	-0.187***	-0.219***
	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)
D_ICI (d)		-0.087	0.034	-0.003	0.031
		(0.07)	(0.07)	(0.07)	(0.08)
D_ICI*D_FINEXP (d)			-0.330***		
			(0.08)		
D_ICI*D_ROA (d)				-0.214**	
				(0.09)	
D_ICI*D_LIQUID (d)					-0.261***
					(0.08)
Regional dummies (Ad. Reg.)	*yes*	*yes*	*yes*	*yes*	*yes*
Industry dummies (NACE 2d)	*yes*	*yes*	*yes*	*yes*	*yes*
Costant	-0.676*	-0.642*	-0.718*	-0.666*	-0.668*
	(0.37)	(0.37)	(0.37)	(0.37)	(0.37)
Obs	4746	4746	4746	4746	4746
LogL	-1144.087	-1143.237	-1134.17	-1140.045	-1138.144
Chi2	200.209***	201.908***	220.042***	208.292***	212.095***

Legend: *=sig. 10%; **=sig. 5%; ***=sig. 1%

Table 6 – Results of the multinomial logit estimates with different classifications for regions and industries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Early: firm exit before 2010; excluded category active firm					**Late: firm exit between 2010-2014; excluded category: active firm**				
SIZE	0.004	0.118	0.124	0.12	0.118	0.007	-0.005	-0.003	-0.003	-0.005
	(0.11)	(0.12)	(0.12)	(0.12)	(0.12)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
AGE	-0.332	-0.361	-0.337	-0.369	-0.364	0.01	0.014	0.041	-0.004	0.006
	(0.23)	(0.24)	(0.24)	(0.24)	(0.24)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
VERT_INT	0.096	-0.137	-0.047	-0.125	-0.152	0.227	0.249	0.299	0.28	0.18
	(0.76)	(0.78)	(0.77)	(0.78)	(0.78)	(0.44)	(0.44)	(0.44)	(0.44)	(0.44)
D_GROUP	0.158	0.164	0.188	0.159	0.162	0.025	0.025	0.051	0.017	0.026
	(0.27)	(0.27)	(0.27)	(0.27)	(0.27)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
LAB_PRDTY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
TCI	-0.602	-0.63	-0.709	-0.625	-0.65	-0.861*	-0.857*	-0.920**	-0.860*	-0.863*
	(0.73)	(0.72)	(0.72)	(0.72)	(0.73)	(0.44)	(0.44)	(0.44)	(0.44)	(0.44)
EXPORT	-0.012*	-0.012*	-0.012*	-0.012*	-0.012*	0.004	0.004	0.004	0.004	0.004
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
D_EU (d)	0.839	0.88	0.877	0.874	0.887	-0.308	-0.309	-0.282	-0.311	-0.292
	(0.67)	(0.67)	(0.67)	(0.67)	(0.67)	(0.35)	(0.35)	(0.35)	(0.35)	(0.36)
D_EXTRAEU (d)	1.985***	1.974***	1.986***	1.958***	1.981***	0.069	0.078	0.101	0.058	0.076
	(0.67)	(0.68)	(0.68)	(0.68)	(0.68)	(0.44)	(0.44)	(0.44)	(0.44)	(0.44)
FINEXP (index)	0.058***	0.055***	0.045**	0.054***	0.055***	0.066***	0.065***	0.056***	0.064***	0.066***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
LIQUID (index)	0.086	0.067	0.079	0.067	0.09	-0.169***	-0.166***	-0.150**	-0.163**	-0.077
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.06)	(0.06)	(0.06)	(0.06)	(0.07)
ROA (index)	-0.439***	-0.438***	-0.415***	-0.407***	-0.436***	-0.448***	-0.450***	-0.427***	-0.373***	-0.444***
	(0.11)	(0.11)	(0.11)	(0.12)	(0.11)	(0.07)	(0.07)	(0.07)	(0.08)	(0.07)
D_ICI (d)		-0.747***	-0.419*	-0.663**	-0.602**		0.09	0.283*	0.245	0.303*
		(0.24)	(0.25)	(0.27)	(0.29)		(0.16)	(0.17)	(0.17)	(0.18)
D_ICI*D_FINEXP (d)			-1.044***					-0.555***		
			(0.37)					(0.18)		
D_ICI*D_ROA (d)				-0.227					-0.459**	
				(0.35)					(0.20)	
D_ICI*D_LIQUID (d)					-0.293					-0.514***
					(0.33)					(0.19)
Regional dummies (Ad. Reg.)	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*
Industry dummies (NACE 2d)	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*
Costant	0.046	0.297	0.064	0.272	0.266	-2.650***	-2.683***	-2.841***	-2.709***	-2.726***
	(1.07)	(1.07)	(1.08)	(1.08)	(1.07)	(0.94)	(0.94)	(0.94)	(0.94)	(0.94)
Obs	4746	4746	4746	4746	4746	4746	4746	4746	4746	4746
LogL	-1316.571	-1311.533	-1302.328	-1308.618	-1307.631	-1316.571	-1311.533	-1302.328	-1308.618	-1307.631
Chi2	257.232***	267.310***	285.719***	273.140***	275.113***	257.232***	267.310***	285.719***	273.140***	275.113***

Legend: *=sig. 10%; **=sig. 5%; ***=sig. 1%

Table 7 – Results of the multinomial logit estimates on the probability of exit early vs. late: 85% threshold

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Early: firm exit before 2010; excluded category: active firm					**Late: firm exit between 2010-2014; excluded category: active firm**				
SIZE	0.014	0.138	0.140	0.137	0.137	0.027	0.014	0.017	0.016	0.014
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
AGE	-0.417*	-0.450*	-0.427*	-0.449*	-0.451*	-0.069	-0.066	-0.035	-0.086	-0.074
	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
VERT_INT	0.390	0.182	0.243	0.177	0.175	0.676*	0.701*	0.750*	0.744*	0.651*
	(0.71)	(0.73)	(0.72)	(0.73)	(0.73)	(0.40)	(0.40)	(0.39)	(0.39)	(0.39)
D_GROUP	-0.036	-0.017	0.006	-0.018	-0.017	-0.026	-0.028	0.000	-0.039	-0.025
	(0.28)	(0.28)	(0.28)	(0.28)	(0.28)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)
LAB_PRDTY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
TCI	-0.514	-0.520	-0.577	-0.513	-0.530	-1.076**	-1.076**	-1.139***	-1.104***	-1.105***
	(0.73)	(0.72)	(0.72)	(0.72)	(0.72)	(0.42)	(0.43)	(0.43)	(0.43)	(0.43)
EXPORT	-0.01	-0.009	-0.009	-0.009	-0.009	0.004	0.004	0.003	0.004	0.004
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
D_EU (d)	0.766	0.800	0.818	0.807	0.805	-0.249	-0.253	-0.224	-0.267	-0.228
	(0.67)	(0.67)	(0.67)	(0.67)	(0.67)	(0.35)	(0.35)	(0.35)	(0.35)	(0.35)
D_EXTRAEU (d)	1.720**	1.706**	1.730**	1.715**	1.712**	0.109	0.113	0.132	0.085	0.133
	(0.69)	(0.70)	(0.70)	(0.70)	(0.70)	(0.41)	(0.41)	(0.42)	(0.41)	(0.42)
FINEXP (index)	0.055***	0.052***	0.042**	0.051***	0.051***	0.058***	0.058***	0.048***	0.057***	0.058***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)
LIQUID (index)	0.087	0.064	0.074	0.063	0.077	-0.137**	-0.133**	-0.115*	-0.130**	-0.043
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
ROA (index)	-0.422***	-0.430***	-0.409***	-0.426***	-0.428***	-0.433***	-0.435***	-0.412***	-0.354***	-0.429***
	(0.11)	(0.11)	(0.11)	(0.12)	(0.11)	(0.07)	(0.07)	(0.07)	(0.08)	(0.07)
D_ICI (d)		-0.833***	-0.555**	-0.851***	-0.760**		0.101	0.318**	0.264	0.334*
		(0.25)	(0.27)	(0.28)	(0.30)		(0.15)	(0.16)	(0.16)	(0.17)
D_ICI*D_FINEXP (d)			-0.826**					-0.628***		
			(0.37)					(0.18)		
D_ICI*D_ROA (d)				0.067					-0.500***	
				(0.36)					(0.19)	
D_ICI*D_LIQUID (d)					-0.145					-0.550***
					(0.34)					(0.19)
Regional dummies	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*
Industry dummies	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*
Costant	-1.633*	-1.448	-1.579*	-1.443	-1.449	-3.021***	-3.058***	-3.214***	-3.103***	-3.075***
	(0.94)	(0.94)	(0.94)	(0.94)	(0.94)	(0.65)	(0.65)	(0.65)	(0.65)	(0.65)
Obs	4746	4746	4746	4746	4746	4746	4746	4746	4746	4746
LogL	-1361.263	-1355.37	-1346.21	-1351.864	-1350.891	-1361.263	-1355.37	-1346.21	-1351.864	-1350.891
Chi2	148.204***	159.991***	178.311***	167.004***	168.948***	148.204***	159.991***	178.311***	167.004***	168.948***

Legend: *=sig. 10%; **=sig. 5%; ***=sig. 1%

Table 8 – Results of the multinomial logit estimates on the probability of exit early vs. late: 95% threshold

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Early: firm exit before 2010; excluded category: active firm					**Late: firm exit between 2010-2014; excluded category: active firm**				
SIZE	-0.017	0.098	0.101	0.098	0.099	0.039	0.023	0.026	0.025	0.023
	(0.11)	(0.12)	(0.12)	(0.12)	(0.12)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
AGE	-0.336	-0.367	-0.340	-0.372*	-0.370*	-0.081	-0.076	-0.048	-0.094	-0.084
	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
VERT_INT	0.130	-0.073	0.008	-0.055	-0.085	0.782**	0.813**	0.855**	0.851**	0.763*
	(0.71)	(0.72)	(0.71)	(0.72)	(0.72)	(0.40)	(0.40)	(0.39)	(0.39)	(0.40)
D_GROUP	0.133	0.153	0.183	0.150	0.154	-0.087	-0.089	-0.064	-0.099	-0.087
	(0.25)	(0.26)	(0.26)	(0.26)	(0.26)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
LAB_PRDTY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
TCI	-0.775	-0.767	-0.841	-0.769	-0.790	-1.001**	-1.001**	-1.057**	-1.025**	-1.023**
	(0.69)	(0.69)	(0.69)	(0.69)	(0.69)	(0.43)	(0.43)	(0.43)	(0.43)	(0.43)
EXPORT	-0.011*	-0.010	-0.011*	-0.010	-0.010	0.005	0.005	0.004	0.005	0.005
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
D_EU (d)	0.662	0.701	0.720	0.696	0.717	-0.239	-0.244	-0.216	-0.256	-0.222
	(0.65)	(0.65)	(0.65)	(0.65)	(0.66)	(0.35)	(0.35)	(0.35)	(0.35)	(0.35)
D_EXTRAEU (d)	1.802***	1.790***	1.809***	1.779***	1.804***	-0.005	0.000	0.020	-0.024	0.017
	(0.65)	(0.65)	(0.66)	(0.65)	(0.66)	(0.43)	(0.43)	(0.43)	(0.43)	(0.43)
FINEXP (index)	0.054***	0.052***	0.041**	0.050***	0.051***	0.058***	0.059***	0.049***	0.057***	0.059***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)
LIQUID (index)	0.091	0.072	0.085	0.072	0.095	-0.163**	-0.159**	-0.141**	-0.155**	-0.071
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.06)	(0.06)	(0.06)	(0.06)	(0.07)
ROA (index)	-0.402***	-0.410***	-0.389***	-0.383***	-0.408***	-0.438***	-0.440***	-0.418***	-0.366***	-0.434***
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.07)	(0.07)	(0.07)	(0.08)	(0.07)
D_ICI (d)		-0.763***	-0.434*	-0.694***	-0.619**		0.124	0.322*	0.273	0.335*
		(0.23)	(0.25)	(0.26)	(0.28)		(0.16)	(0.17)	(0.17)	(0.18)
D_ICI*D_FINEXP (d)			-1.043***					-0.564***		
			(0.37)					(0.18)		
D_ICI*D_ROA (d)				-0.185					-0.446**	
				(0.34)					(0.20)	
D_ICI*D_LIQUID (d)					-0.293					-0.500***
					(0.32)					(0.19)
Regional dummies	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*
Industry dummies	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*
Costant	-1.634*	-1.467	-1.632*	-1.488*	-1.471*	-3.083***	-3.133***	-3.272***	-3.174***	-3.148***
	(0.89)	(0.89)	(0.90)	(0.89)	(0.89)	(0.66)	(0.66)	(0.66)	(0.66)	(0.66)
Obs	4746	4746	4746	4746	4746	4746	4746	4746	4746	4746
LogL	-1372.933	-1367.109	-1357.418	-1364.339	-1363.292	-1372.933	-1367.109	-1357.418	-1364.339	-1363.292
Chi2	152.462***	164.110***	183.493***	169.650***	171.744***	152.462***	164.110***	183.493***	169.650***	171.744***

Legend: *=sig. 10%; **=sig. 5%; ***=sig. 1%

Table 9 – Results of the probit estimates with control dummies for firm size

	(1)	(2)	(3)	(4)	(5)
	Dep. Var.: dummy = 1 if the firm exits before 2015, 0 otherwise				
D_LARGE	-0.153	-0.143	-0.134	-0.151	-0.159
	(0.13)	(0.14)	(0.14)	(0.14)	(0.14)
D_SMALL	-0.078	-0.087	-0.088	-0.091	-0.093
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
AGE	-0.080	-0.080	-0.067	-0.089	-0.084
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
VERT_INT	0.317*	0.308	0.345*	0.334*	0.293
	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
D_GROUP	-0.016	-0.009	0.004	-0.014	-0.009
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
LAB_PRDTY	0.000	0.000	0.000	0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
TCI	-0.501***	-0.499***	-0.533***	-0.506***	-0.519***
	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
EXPORT	0.001	0.001	0.001	0.001	0.001
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
D_EU (d)	-0.051	-0.054	-0.043	-0.06	-0.045
	(0.15)	(0.15)	(0.16)	(0.16)	(0.16)
D_EXTRAEU (d)	0.243	0.238	0.239	0.227	0.248
	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
FINEXP (index)	0.033***	0.033***	0.027***	0.032***	0.032***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
LIQUID (index)	-0.032	-0.035	-0.028	-0.035	-0.002
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
ROA (index)	-0.219***	-0.220***	-0.210***	-0.188***	-0.218***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
D_ICI (d)		-0.073	0.046	0.003	0.042
		(0.06)	(0.07)	(0.07)	(0.07)
D_ICI*D_FINEXP (d)			-0.322***		
			(0.08)		
D_ICI*D_ROA (d)				-0.193**	
				(0.08)	
D_ICI*D_LIQUID (d)					-0.253***
					(0.08)
Regional dummies	*yes*	*yes*	*yes*	*yes*	*yes*
Industry dummies	*yes*	*yes*	*yes*	*yes*	*yes*
Costant	-1.064***	-1.010***	-1.081***	-1.026***	-1.011***
	(0.26)	(0.27)	(0.27)	(0.27)	(0.27)
Obs	4746	4746	4746	4746	4746
LogL	-1177.125	-1176.446	-1167.337	-1173.716	-1171.408
Chi2	134.133***	135.490***	153.709***	140.951***	145.567***

Legend: *=sig. 10%; **=sig. 5%; ***=sig. 1%

Table 10 – Results of the multinomial logit estimates on the probability of exit early vs. late: dummies for size

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Early: firm exit before 2010; excluded category: active firm					Late: firm exit between 2010-2014; excluded category: active firm				
D_LARGE	0.767*	0.910**	0.933**	0.903**	0.893**	-0.908**	-0.922**	-0.898**	-0.933**	-0.956**
	(0.41)	(0.42)	(0.42)	(0.42)	(0.42)	(0.40)	(0.40)	(0.40)	(0.40)	(0.40)
D_SMALL	0.090	0.014	0.003	0.013	0.011	-0.264*	-0.254*	-0.256*	-0.258*	-0.266*
	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)
AGE	-0.403*	-0.401*	-0.366	-0.405*	-0.403*	-0.050	-0.051	-0.024	-0.068	-0.058
	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
VERT_INT	0.274	0.167	0.242	0.182	0.159	0.748*	0.766*	0.810**	0.805**	0.717*
	(0.69)	(0.68)	(0.67)	(0.68)	(0.68)	(0.40)	(0.40)	(0.40)	(0.40)	(0.40)
D_GROUP	0.027	0.110	0.134	0.108	0.110	-0.068	-0.077	-0.051	-0.087	-0.076
	(0.25)	(0.26)	(0.26)	(0.26)	(0.26)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)
LAB_PRDTY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
TCI	-0.780	-0.776	-0.847	-0.777	-0.796	-1.023**	-1.026**	-1.083**	-1.054**	-1.053**
	(0.71)	(0.70)	(0.70)	(0.70)	(0.70)	(0.43)	(0.43)	(0.43)	(0.43)	(0.43)
EXPORT	-0.012*	-0.011*	-0.011*	-0.011*	-0.011*	0.005	0.005	0.004	0.005	0.005
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
D_EU (d)	0.777	0.797	0.807	0.793	0.809	-0.281	-0.283	-0.248	-0.297	-0.263
	(0.66)	(0.66)	(0.66)	(0.66)	(0.66)	(0.35)	(0.35)	(0.35)	(0.35)	(0.35)
D_EXTRAEU (d)	1.892***	1.874***	1.897***	1.865***	1.881***	-0.003	0.002	0.021	-0.023	0.025
	(0.66)	(0.66)	(0.66)	(0.66)	(0.66)	(0.43)	(0.43)	(0.43)	(0.43)	(0.43)
FINEXP (index)	0.054***	0.051***	0.041**	0.050***	0.051***	0.057***	0.057***	0.047***	0.056***	0.057***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)
LIQUID (index)	0.115*	0.088	0.102	0.088	0.108	-0.177***	-0.173***	-0.155**	-0.169***	-0.081
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.06)	(0.06)	(0.06)	(0.06)	(0.07)
ROA (index)	-0.422***	-0.431***	-0.408***	-0.408***	-0.430***	-0.436***	-0.438***	-0.417***	-0.363***	-0.433***
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.07)	(0.07)	(0.07)	(0.08)	(0.07)
D_ICI (d)		-0.713***	-0.384	-0.659**	-0.589**		0.099	0.296*	0.251	0.315*
		(0.23)	(0.25)	(0.26)	(0.28)		(0.15)	(0.16)	(0.16)	(0.17)
D_ICI*D_FINEXP (d)			-1.032***					-0.562***		
			(0.37)					(0.18)		
D_ICI*D_ROA (d)				-0.136					-0.457**	
				(0.35)					(0.20)	
D_ICI*D_LIQUID (d)					-0.247					-0.523***
					(0.32)					(0.19)
Regional dummies	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*
Industry dummies	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*	*yes*
Costant	-1.681*	-1.23	-1.397	-1.247	-1.227	-2.799***	-2.873***	-2.996***	-2.907***	-2.884***
	(0.90)	(0.90)	(0.91)	(0.90)	(0.91)	(0.65)	(0.66)	(0.66)	(0.66)	(0.66)
Obs	4746	4746	4746	4746	4746	4746	4746	4746	4746	4746
LogL	-1362.751	-1357.694	-1348.188	-1354.814	-1353.665	-1362.751	-1357.694	-1348.188	-1354.814	-1353.665
Chi2	164.873***	174.986***	193.999***	180.747***	183.046***	164.873***	174.986***	193.999***	180.747***	183.046***

Legend: *=sig. 10%; **=sig. 5%; ***=sig. 1%