Can governance help in making an IPO "successful"?
New evidence from Europe

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Preliminary version – not for citation

Abstract

This paper investigates the determinants of a successful IPO from a corporate governance perspective on a representative sample of European listings from 2000 to 2015. We use an extensive dataset of market performance, financial data and individual corporate governance characteristics to run an innovative investigation. Our analysis embraces both a value creation (with a short-term view) and a value protection (in the medium long-term) strategy of the board of directors. Among the others, we find that board size, board independence, the average age of directors and their experience are associated with a positive performance of the IPO in a short-term horizon and in the medium long-term period, although some differences emerge over time. Findings are particularly relevant for policy makers in the understanding of possible developments of the Capital Markets Union.

JEL Classification codes: G14; G32; G34

Keywords: IPO; Corporate Governance; Capital Markets Union; Stock performance

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1. Introduction

This paper investigates whether and how corporate governance can contribute to the likelihood of a successful IPO, by taking into account a representative sample of listings which have taken place in Europe from 2000 to 2015. Through a painstaking collection of data obtained from different sources, we compute the financial and stock performance achieved by a sample of 1,270 European companies, and investigate the association with several facets of firms' corporate governance (i.e. board size, independence, age, experience, …). Corporate governance seems to be a mature field in the literature related to Initial Public Offerings (IPOs). Nonetheless, as far as we know, less is known about the effects of other corporate governance characteristics on IPO success. We contribute to this strand of corporate governance literature by also considering other relevant features of the board of directors, like director qualifications, their engagement within the company, the number of other boards in which they serve, the aptitude to bring networking to the company (Filatotchev, 2006). In particular, the aim of this paper is to define which and how these facets can affect the likelihood of a successful IPO.

There is an extensive strand of literature supporting empirically the positive link between corporate governance quality and IPO performance, which as above-mentioned is consistent with the value-creation and value-protection roles played by the board of directors. Indeed, most of the previous analyses focus on the relationship between IPO performance and ownership (Engel et al., 2002; Baker & Gompers, 2003; Boulton et al., 2010), board size (Bell et al., 2012; Bertoni et al., 2014) or board independence (Berry et al., 2006; Bell et al., 2012; Chahine & Filatotchev, 2008; Chahine & Goergen, 2013; Chancharat et al., 2012; Filatotchev & Bishop, 2002; Moore et al., 2010; Bertoni et al., 2014; Sanders & Boivie, 2004), nonetheless, there are some corporate governance aspects there are largely unexplored. Engle et al. (2012) define IPOs as key events in separating ownership from control from an agency theory view of the firm (Berle & Means, 1932; Jensen & Meckling, 1976). Bertoni et al. (2014) in a framework of value-creation and value-protection, investigate a sample of 969 IPOs in France, Germany, and Italy between 1995 and 2011 and find that board independence plays a vital role in improving IPO performance. This is in line with previous academic findings by Chahine and Filatotchev (2008) studying 140 French IPO firms; Sanders and Boivie (2004) using a sample of 183 US listed firms and Filatotchev and Bishop (2002) that analyzing 251 UK IPOs find that higher levels of board independence are related to lower underpricing. Furthermore, Bertoni et al. (2014) suggest that, as the firm matures, the board of directors switches from a value-creation to a value-protection strategy.

We consider the performance achieved by the company at the date of the IPO as measured by Tobin's Q, which is widely recognized as a good indicator for IPO valuation (Bertoni et al., 2014; Cirillo et al. 2018). Moreover, we identify the successfulness of an IPO from two perspectives: (i) a short-term perspective, and (ii) a medium-long-term perspective. As concerns the former, the performance is measured at the moment of the IPO, by considering the Tobin's Q achieved via the first closing price. The latter, is obtained by considering the stock performance achieved by the firm against its market within a perspective of 12, 24 and 36 months after the IPO, which has been widely recognized in literature as fundamental milestones for the evaluation of firms' stock performance (Aggarwal et al., 2002; Gompers et al., 2003). For robustness purposes, we also consider the Price to Book Value (P/BV) and the Enterprise Value on Sales (EV/Sales) ratio at the date of the IPO as dependent variables of our analysis. As an alternative and innovative indicator of the successfulness of an IPO within a long perspective, we also consider the circumstance that a company remain listed. In particular, since a delisting maybe determined by an internal strategy of a company, we consider the delisting after a short-medium period (the selected threshold ranges from 5 to 10 years) as a potential sign of failure of the rationale of the IPO.

The two perspectives here proposed lead us to gain a comprehensive view on the implications that may be relevant in terms of policy. Since our sample of investigation is made up of European companies, we refer in particular to the policies set at a European level. In this context, we contribute to the recent debate on the possible effects of the application of the Capital Markets Union's project (CMU). Indeed, the CMU is a key pillar of the Commission's Investment Plan for Europe and plays an important role in the completion of the European Economic and Monetary Union (Brogi & Lagasio, 2018). It aims, inter alia, to reduce the cost of raising capital, with a particular attention in Small and Medium Enterprises (SMEs), so to curb the very high dependence on bank funding of European firms and increase the attractiveness of Europe as a place to invest. One of the fundamental interventions proposed within the CMU framework is to increase the number of listed firms in Europe, we consider our paper of a particular interest, since it acts as a timely investigation upon the main corporate governance characteristics which may positively affect the access of SMEs to capital markets. Furthermore, Hopt (2015) claims that in order to adequately understand the effects of the CMU on the European economy, a comprehensive view, that also includes a connection with corporate law and corporate governance is decisive.

We complement our analysis by focusing on the capability of a firm to remain listed in order to continue to take advantage from that position for a longer period, at least along a short or medium-

term perspective. In this regard, we are aware of a widespread finding of the economic literature: there is a high number of European firms, especially SMEs which opt for delisting even after being listed for a short period (Jensen, 1989; Shleifer, Vishny, 1990; Mitchell, Mulherin, 1996; Wright et al., 2000; Renneboog et al., 2007). Thus, the results of our paper are relevant and contribute also in this strand of economic literature.

In particular, we find that board size, board independence and the average age of directors are associated with a positive performance of the IPO in a short-term horizon. These relationships hold event in the medium long-term period, although board size is less significant in determining IPO performance. Thus meaning that larger boards help firms in the successfulness of the IPO in the short-term (as well as independent and stale directors), but also that boards should be "adjusted" over time in order to maintain their ability to ensure stock market performance. That is *"one size does not fit forever"*. Following these findings, further analysis may be conducted in identifying the reason of the differences in terms of performance of IPOs through the time and investigating whether they are related to investor perceptions, different sentiment within the market or if they are firm-specific.

Our analysis provides interesting findings, which lead us to point out relevant conclusions. First of all, we confirm the key role that corporate governance plays in the valuation of firms, especially when a particular transaction like an IPO occurs. Indeed, information asymmetries and uncertainty which characterize capital markets can be mitigated by a proper and effective governance, that has been recognized to be capable to act both in term of value-protection and value-creation for the firm. Afterwards, by considering the performance achieved by the companies along a medium-long perspective, we are able to identify which governance characteristics are encouraged for firms in order to foster their market performance and attractiveness from potential investors, even within a long perspective.

Finally, by interacting the above-mentioned facets with some of the most significant tools which have been considered by the CMU's project, we are able to perform a first assessment of the CMU's project. At the same time, by comparing the performance achieved by the companies during short and medium-long term after the IPO, we are able to provide some insights about the potential issues that firms (especially SMEs) face in attracting larger investors, as highlighted by the potential underperformance against the market and the consequent decision to delist (Jensen, 1989; Wright et al., 2000; Renneboog et al., 2007).

That being stated, our paper provides relevant contributions from different perspectives. It enriches the corporate governance literature by providing new findings on the relationship between specific

characteristics of the board of directors of firms and their market performance. With respect to policy, our paper provides insightful comments related to the CMU implementation. Lastly, from a practitioner point of view, these evidences may be used by firms' managers as guidelines in the IPO process successfulness.

The structure of the paper is as the following: Section 2 contains the empirical analysis. Findings and concluding comments are respectively reported in Section 3 and 4, where we also list shortcomings of our analysis and suggest further research.

2. Empirical analysis

2.1. Description of the dataset

Our main contributions largely owe to the data we compiled, via a painstakingly collection of different information we gathered from alternative sources. The initial dataset included about 7,516 observations of IPOs occurred in Europe during the period 1999 to 2016 from Zephyr – Bureau van Dijk, which we complemented with data about the stock and index performance obtained from Thomson Reuters and Bloomberg. We obtained data about the financial performance achieved by the companies from Amadeus and WorldScope. When possible, we generally tried to use at least two sources of information in order to check for data consistency. Lastly, we obtained information on firms' corporate governance from BoardEx. The dataset resulting from that collection represents, in our opinion, an interesting opportunity to scrutinize the mechanisms driving the corporate governance of a company in influencing its performance during the IPO process. The merging and the missing values treatment, lead us to a final sample of 1,270 deals over the period 2000-2015. Table 1 provides descriptive statistics of the sample of investigation, with some interesting figures which are already available form that table. Indeed, the statistics (percentiles, mean standard deviation and number of observations) show the performance achieved by the companies, as measured by Q-Tobin and P/BV, from the short-term perspective and also along the medium-long term perspective, via the long run performance (LRP) upon 12, 24 and 36 months after the IPO. As suggested by a well-known literature (Loughran & Ritter, 1995), the companies which are going into an IPO are often characterized by a lower performance than their market index along those time horizons. This is in line with the statistics computed in our analysis, thus making the sample representative and consistent with previous analysis.

– **Insert Table 1 about here** –

In Table 2 and Table 3 we report in detail the availability of the main variables of the investigation, respectively by Country and by Time. By this perspective it is possible to notice the representativeness of our sample in respect to IPOs in Europe: our data span throughout a large sample of European countries and are adequately distributed over the period of observation 2000-2015.

– **Insert Table 2 and Table 3 about here** –

2.2. Methodology of analysis

We propose a two-perspectives methodology. Specifically, we look at the determinants of IPOs successfulness on a short-term and a medium long-term horizon, in order to have a comprehensive view on the answer to our research question. At a first level of investigation, we run a simplified model considering the most relevant determinants of IPOs performance, as already outlined by previous economic literature (Zattoni et al., 2014; Cirillo at al., 2018). To control for returns caused by overall market movements, we calculated the buy-and-hold abnormal market return for each IPO (BHARt) according to the following formula (Westerholm, 2006):

$$BHAR_i = \frac{\text{Closing Price}_{i,t+1\,year} - \text{Closing Price}_{i,t}}{\text{Closing Price}_{i,t}} - \frac{\text{Market Index}_{i,t+1\,year} - \text{Market Index}_{i,t}}{\text{Market Index}_{i,t}}$$

Afterwards, since a relevant topic in IPOs literature has been identified with the delisting phenomenon, occurring especially for smaller firms, we defined the dummy variable *Survive*, which it takes the value of 1 in case the firm remains listed overall the sample we considered, whilst it takes the value of 0 in case of delisting. Then, since the decision of delisting should be ascribed to a specific strategic choice that a firm could take in a reasonable time after the IPO, we define alternative dummy variables (Survive$_{10}$ to Survive$_5$) to control if a firm remains listed at least for 10 to 5 years respectively.

In order to test our hypothesis, we perform ordinary least squares (OLS), hierarchical linear model (HLM) regressions – nested in countries and time – and an instrumental variable (IV) approach – using a two-stage least square (2sls) regression – to perform a first analysis upon our dataset (Table 5). In all the models we considered fixed country and year effects to better controls for unobserved

variables, although for simplicity we do not report those in the tables. The results from all the approaches yield very similar results, thus supporting the robustness and the viability of our findings. Nonetheless, we run further investigation with the IV approach, in order to address for the potential endogeneity between a firm's performance and its BoD structure. More in particular, we follow an approach similar to Bertoni et al. (2014), considering as instrument of the board independence of the firm, the average of the board independence ratio of all the firms belonging to the same industry and listed in the same stock market in the IPO firms.

– Insert Table 4 about here –

3. Empirical evidence

3.1. *Main results*

As already mentioned, our paper brings a new perspective analysis compared to previous work, since it considers both a short and a medium-long term perspective in term of stock performance achieved by the company. Within that perspective, in Table 5 we report the results obtained running a baseline model among different measure of stock performance, both by OLS, HLM and IV approach. In particular, we consider *firm size*, as measured by the logarithm of Total Assets; we control for *firm profitability*, which we defined as the ratio of Ebitda to Total Assets. As concerns corporate governance, we consider *board size*, measured via the logarithm of the Number of Directors; *board independence*, via the ratio of no-executive directors to the number of directors; *board age* (at the moment of the IPO) as a further potential determinant of IPO's performance; *Hot Market*, which takes the value 1 if an IPO occurs in hot issue market (Ljungqvist et al., 2006); *High Tech*, which takes the value 1 if the company operates in a high-tech sector.

– Insert Table 5 about here –

Table 5 shows that when the short-term perspective is considered (Q-Tobin and P/BV), the size of the company negatively and significantly affects the stock performance of firms, leading to the hypothesis that smaller firms are capable to obtain a higher stock premium. The negative and significant sign of profitability, as determined by the ratio of Ebitda to Total Assets, seems to be negatively determined because the definition of the Tobin's Q, as that sign disappears when

considering the P/BV[4]. On the opposite, the size of the board is positively and significantly related to short term stock performance, confirming the hypothesis suggested by economic literature governance as value-creation device (Coff, 1999; Bertoni et al., 2014). More in particular, since in the short-term perspective the level of independency does not seem to play any role, we argue that the second theoretical perspective suggested by Bertoni et al. (2014), the resource-dependence view of the Board of Directors (BoD) occurs. Finally, the age of the firms appears to significantly affect only the P/BV. Very interestingly, a completely different picture comes from the analysis along the medium and long-term perspective. By this perspective, moving throughout a longer perspective the size of the company move from a negative beta to a positive sign, although along the 3 years time horizon it doesn't become significant. On the opposite, the size of the company is positively and significantly related to the survival of the company in the market, both in term of absolute performance – dummy variable "survive" – and relative performance – dummies variables from survive$_{10}$ to survive$_8$. Moreover, within a long-term perspective the number of independent director appears to be positive and particularly significant, confirming the hypothesis of the further role performed by the BoD as a value-protection device (Hermalin & Weisbach, 2001; Bertoni et al., 2014). More in particular, we find that the number of independent directors positively and significantly impact the stock performance achieved after 12, 24 and 36 months after the IPO, confirming the role of BoD to preserve the value of the company after the initial moment. Similarly, the number of independent directors affect the survival of the company, moving from a medium perspective (5 years to an absolute value). On the opposite, the age of the company positively and significantly impacts the likelihood of survival for the company, throughout the whole-time windows. Finally, the dummy variable hot market appears to negatively affect the performance of the company within a long-term perspective (LRP 36 months), as well as it seems to reduce the likelihood for a company to remain listed. This is a confirmation of the hot issues hypothesis, which has been largely investigated by the previous literature highlighting that in hot market period company can be induced to "time" their IPO to coincide with periods of excessive valuations (Ritter, 1984; Baker & Wurgler, 2000; Loughran et al., 1994; Shleifer & Vishny 1990; Lamont & Thaler 2003; Ljungqvist et al., 2006). In conclusion, the evidence obtained from Table 5 lets us to confirm several results which have been already obtained by previous scholars, although it lets us to consider also a new perspective which, in our opinion, could appear of a particular interest within the perspective of the development of the Capital Markets Union in Europe. By this perspective, it

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[4] For robustness purposes, we consider also the ratios Ebitda/Sales and Ebitda/Equity obtaining very similar results, although the inclusion of Ebitda/Total Assets give us the possibility to maintain a large number of observations.

seems that the size of the company plays a different role when considering the two-time horizons, the short one and the medium-long perspective. In particular, we find that smaller firms are more able to achieve better performance within a short-term perspective, although over the longer time horizons perform poorly. On the opposite, larger firms are characterized by a stronger stability, potentially because of the capability to attract attention from larger investors (Mitchell & Mulherin, 1996; Wright et al., 2000; Renneboog et al., 2007). In our view, this is an issue which should be properly considered in the CMU project, since it is not only relevant to create the opportunity for small and medium enterprises (SMEs) to access to capital market, but it becomes essential to determine also the conditions to maintain SMEs listed. For the purpose of our analysis, the evidence we obtained confirm that a good governance can positively affect the likelihood for a firm to perform successfully also within a longer perspective.

– Insert Table 6 and Table 7 about here –

In Table 6 and Table 7 we enrich the baseline model of Table 5 by including some variables related to the quality of firm's governance, together with some interactions terms we consider to better investigate the mechanisms determining the relation between governance and IPOs' performance. We decide to report only two of the above-mentioned performance measures, Tobin's Q and Survive, although similar analysis have been performed for robustness check with other dependent variables. Both the Tables largely confirm the results obtained by the previous model. Indeed, in Table 6 we consider alternative specifications of ***Tobin's Q*** to assess the interaction among several characteristics of firms' governance, together with two specific items which have not been considered in previous Table 5. We report the number (average) of qualifications owned by the Board members together with the number of Boards of other listed companies served by the Board member. We consider those variables as representative of the potential contribution of governance among the two perspectives − value-creation and value-defense. We notice that the number of qualifications is positively related to Tobin's Q, although not very significantly. On the opposite, the number of Boards of other listed companies is positively and very significantly related to the same Tobin's Q measure, confirming the hypothesis that governance contribute to the value creation especially within a short-term perspective. Table 6 considers also the interaction between the number of directors, the percentage of independent director, the age of the company and its size, although those variables do not seem to play any role in influencing firms' performance within a short-term perspective. Similarly, Table 7 reports the result we obtained considering alternative

specification of the variable *Survive*, highlighting the role of corporate governance at influencing the performance of the company within a long-term perspective. In particular, Table 7 confirms the evidence provided by the previous Table 5, although some new evidences are reported regarding the number of qualification owned by the Board's member which appears to be strongly and positively related to the likelihood for the company to remain listed, whilst the number of Boards of other listed company do not appear to assume any relevance. This is a confirmation of the capability of a "good" governance to ensure an advice for company especially within a longer perspective, avoiding the necessity to realize a delisting. More in particular, in Table 7 we included a further dummy variable, Change Gov, which takes the value 1 in case of a change above the 50% of the board members of the firm within two year after the IPO. By this perspective, we notice the negative and significant beta for that variable among all the specifications considered, so that it is possible to consider how instability upon the governance negatively affected the likelihood of the firm to remain listed.

3.2. Robustness checks

We performed several robustness checks. We consider the size as a fundamental determinant for a successful IPO, in Table 8 we compared the performance achieved by larger firms – as defined like firms with size above the median of the group – against the smaller firms. Afterwards, since after the 2008 crisis an increasing attention was dedicated to the governance issues, in Table 9 we compared the performance achieved during IPOs occurred before and after the crisis. Finally, in Table 10 we control for the nationality of the IPOs, distinguishing the performance achieved by the firms in UK against the other European countries.

– Insert from Table 8 to Table 10 about here –

Tables from 8 to 10 largely confirm the results obtained in previous analysis, although some peculiarities are presented for some specific facets. More in particular, in Table 8 we notice that in larger firms the level of profitability becomes a predictor for a successful performance, both within the short and the medium-long perspective. Afterwards, a few differences emerge relatively to the age and the number of independent directors of larger firms, which are reported as more significant if compared with smaller firms. From another perspective, in Table 9 there are not particular differences emerging between the periods pre-crisis and post-crisis, with the exception of the

perspective of survival analysis, which is seems to be influenced by the dataset composition, with post-crisis period characterized by a lower level of delisting, having experimented a shorter period of analysis. Finally, Table 10 provides some insight in terms of geographical composition of the sample, so to distinguish between the performance of UK firms against the other European countries. By this perspective, despite the UK represents more than 50% of the whole sample, our analysis doesn't seem to be affected by a significant selection bias. In particular, we notice only a few differences when considering the survival perspective, with size that seems to be positively related to listed company especially for UK, whilst the hot market issue appears to be relevant especially if considering other European countries.

4.   Conclusion

In this paper, we investigate the determinants of IPOs successfulness from a corporate governance perspective. We consider the already investigated issue of board size and board independence as well as we shed some light on other relevant corporate governance characteristics (e.g. the qualification of board members, their engagement with the company, the number of other boards in which they served as individual members, the capacity to bring networking to the company). We look at how those facets can affect the likelihood to achieve a successful IPO, which we defined by two fundamental perspectives that lead us to identifying very interesting and comprehensive findings. Results from the baseline model show that board size, board independence and the average age of directors are associated with a positive performance of the IPO in a short-term horizon and over a medium long-term period (although board size in the medium long-term is less significant in determining IPO performance). These evidences confirm that governance plays a key role in IPO successfulness, and that *"one size does not fit forever"*. We also propose an advanced model, which supports and enriches the previous findings. In particular, all the relationships among variables are significantly confirmed. Furthermore, we also find that the more the qualifications of the directors and the number of boards in which they seat, the more the likelihood for an IPO to be successful. Thus, the experience of the directors (in terms of education and practice) is vital in improving the performance of the IPO, which is an interesting finding for the management of firms that are going to list their stocks in the market, and especially SMEs. That being stated, our paper also enriches the corporate governance literature by providing new findings on the relationship between specific characteristics of the board of directors of firms and their market performance. With respect to policy, our paper provides insightful comments related to the CMU implementation (i.e. we confirm

that well-functioning boards are key to attracting investment). Lastly, from a practitioner point of view, these evidences may be used by firms' managers as guidelines in the IPO process successfulness.

Nonetheless, we are conscious of the potential limitations of our analysis. A first issue is endogeneity, which is a typical limit in corporate governance research (Wintoki et al., 2012). We partially address this by including different specifications of the model and in particular of the dependent variables and confirming that our results hold in all the proposed investigations. Further analysis may also use different methods (i.e. instrumental variables analysis – 2SLS). Another issue is related with the variables included in the analysis. Even though we provide good contribution in the corporate governance literature by showing evidences of unexplored relationships with IPO performance, there are other relevant aspects of corporate governance that would definitively be worthy of further investigations (e.g. diversity and compensation).

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Annexes
Table 1. Descriptive Statistics – Total Sample

stats	Q-Tobin	P/BV	Ebitda TAw1	Ebitda SAw1	E DEBTtw1	E TAw1	Log (dealsize)	Log (marksize)	Log (TA)
p99	17.75	12.13	0.45	0.81	117.11	0.99	8.16	16.91	17.64
p90	5.04	7.79	0.18	0.32	16.98	0.95	6.53	14.60	15.21
p75	2.82	4.38	0.11	0.19	5.01	0.84	5.45	13.40	13.68
p50	1.37	2.35	0.04	0.08	1.41	0.59	3.74	11.68	11.34
p25	0.65	1.27	-0.08	-0.11	0.60	0.38	2.19	10.22	9.58
p10	0.23	0.45	-0.29	-2.43	0.25	0.21	1.18	9.06	8.34
p1	0.03	0.13	-1.06	-137.83	-0.41	-0.28	-0.84	6.80	6.52
min	0.03	0.13	-1.06	-137.83	-0.41	-0.28	-1.58	6.07	2.83
mean	2.27	3.35	-0.02	-3.36	7.32	0.59	3.78	11.78	11.62
sd	2.81	3.06	0.23	17.10	17.59	0.28	2.05	2.20	2.64
N	957	957	990	833	1,016	1,016	800	1,092	1,016

stats	Hotmarket3	Delisted	Survive	Survive10	Survive9	Survive8	Survive7	Survive6	Survive5	LRP12	LRP24	LRP36
p99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.42	1.54	1.58
p90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.54	0.70	0.76
p75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.27	0.24	0.29
p50	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	-0.20	-0.33
p25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.34	-0.91	-1.29
p10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.83	-1.72	-2.40
p1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-2.25	-3.72	-5.15
min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-5.38	-6.46	-8.81
mean	0.29	0.47	0.53	0.57	0.59	0.61	0.64	0.67	0.71	-0.09	-0.37	-0.62
sd	0.45	0.50	0.50	0.50	0.49	0.49	0.48	0.47	0.45	0.69	1.00	1.34
N	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,097	957	902

stats	Size	Log(Size)	NED	NED%	AGE	NQUAL	NBOARD	SUCC	ATTR	GENDER	NATION	tRET	tROLE	tOBOARD	tFIRM	ChangeG
p99	21.00	3.04	17.00	1.00	151.00	3.22	4.50	1.40	0.40	1.00	0.80	27.80	7.40	8.56	11.28	1.00
p90	11.00	2.40	9.00	0.94	24.00	2.42	2.56	0.90	0.10	1.00	0.60	22.12	2.40	2.85	3.62	1.00
p75	8.00	2.08	6.00	0.80	8.00	2.00	2.00	0.70	0.10	1.00	0.40	19.13	0.83	0.90	1.18	1.00
p50	6.00	1.79	4.00	0.63	2.00	1.60	1.60	0.50	0.00	1.00	0.20	15.69	0.57	0.58	0.60	1.00
p25	5.00	1.61	3.00	0.50	0.00	1.18	1.25	0.40	0.00	0.87	0.00	12.67	0.30	0.30	0.30	0.00
p10	4.00	1.39	2.00	0.40	0.00	0.81	1.08	0.30	0.00	0.78	0.00	9.99	0.10	0.10	0.10	0.00
p1	3.00	1.10	1.00	0.20	0.00	0.33	1.00	0.10	0.00	0.57	0.00	5.14	0.00	0.00	0.00	0.00
min	2.00	0.69	0.00	0.00	-10.00	0.00	1.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	1.00
mean	7.21	1.89	4.81	0.64	11.66	1.61	1.75	0.54	0.05	0.93	0.24	15.94	0.96	1.09	1.36	0.65
sd	3.38	0.40	3.18	0.21	30.92	0.63	0.71	0.25	0.11	0.11	0.25	4.81	1.41	1.67	2.21	0.48
N	1,270	1,270	1,270	1,270	1,261	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270	1,270

This table shows descriptive statistics (e.g. percentiles, minimum, mean, standard deviation and number of observation) for all the IPOs firms included in the analysis. The first set of stats refer to financial data, the second sets reports about market information. The third set is on corporate governance variables. The description of variables follows: Q-Tobin is the ratio between Market Capitalization and Total Assets, P/BV is the ratio between market Price and Book Value of Equity, Ebitda is the Earning before income taxation depreciation and amortization, E is Equity, Delisted is a dummy variable counting 1 if the firm is delisted, $Survive_n$ are dummy variables counting 1 when the firm is still in activity after n years of observation, LRP_m are long run performances after m months of observation, Size is the number of directors on board, NED is the number of Non-Executive Directors, AGE is the average age of directors on board, NQUAL and NBOARD are respectively the average number of qualifications and of other listed boards of directors, SUCC is the measurement of the clustering of directors around retirement age, ATTR is the number of directors that have left a role as a proportion of average number of directors for the preceding reporting period, GENDER is the proportion of male directors, NATION is the proportion of Directors from different countries, tRET, tROLE, tBOARD, and tFIRM are respectively the time to retirement for the individual (assuming a retirement age of 70), the time in role, the time in board and the time in the firm for the individual, ChangeG is a dummy variable counting 1 if a change above the 50% of BoD occurs within 2 years after the IPO.

Table 2. Descriptive Statistics – Sample by Country

Country	Q Tobin	P/ BV	Log (TA)	Log (Size)	NED %	AGE	Hot Market	N QUAL	N BOARD	Change G	LRP1 2	LRP2 4	LRP3 6	Delisted	Survive	Survive 10	Survive 9	Survive 8	Survive 7	Survive 6	Survive 5
AUSTRIA	0.81	1.53	14.59	2.24	0.64	33.14	0.29	1.80	1.37	.	0.11	0.01	- 0.20	0.14	33.14	0.86	0.86	1.00	1.00	1.00	1.00
BELGIUM	2.58	4.03	11.99	2.30	0.70	24.00	0.00	2.00	1.00	.	-0.43			0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
BULGARIA	1.57	3.22	13.36	2.36	0.83	30.64	0.18	2.01	1.71	0.18	0.05	-0.11	-0.03	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CYPRUS	0.88	2.97	13.31	1.84	0.64	7.20	0.20	1.67	1.60	0.80	-0.29	-0.73	-2.97	0.20	0.80	0.80	0.80	0.80	1.00	1.00	1.00
DENMARK	0.76	1.12	14.35	2.07	0.86	59.90	0.20	1.87	1.78	0.50	-0.21	-0.34	-0.01	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FINLAND	1.57	3.78	12.65	1.75	0.79	38.00	0.00	1.90	2.05	0.33	-0.06	-0.66	-0.93	0.33	0.67	0.67	0.67	0.83	0.83	0.83	0.83
FRANCE	1.73	3.22	13.07	2.26	0.78	21.17	0.20	1.79	1.79	0.20	0.05	0.10	0.22	0.21	0.79	0.80	0.80	0.80	0.82	0.85	0.89
GERMANY	1.40	2.45	13.69	2.34	0.66	31.04	0.25	1.51	1.43	0.42	-0.13	-0.29	-0.53	0.30	0.70	0.77	0.78	0.82	0.84	0.84	0.90
GREECE	0.73	2.94	14.08	2.08	0.72	15.40	0.17	1.70	1.57	0.33	0.12	0.23	0.15	0.50	0.50	0.50	0.50	0.50	0.67	0.67	0.83
IRELAND	1.55	2.34	11.60	1.90	0.62	10.00	0.32	1.92	1.43	0.09	-0.06	-0.32	-0.85	0.53	0.47	0.50	0.50	0.53	0.53	0.56	0.59
ITALY	1.65	3.43	13.78	2.24	0.75	29.55	0.21	1.30	1.72	0.39	0.09	0.03	-0.01	0.36	0.64	0.70	0.73	0.79	0.82	0.82	0.85
LUXEMBOURG	0.86	2.94	14.50	2.11	0.78	7.05	0.10	1.95	1.86	0.75	0.00	-0.03	-0.08	0.35	0.65	0.70	0.70	0.70	0.70	0.75	0.75
MALTA	1.29	1.78	11.94	2.20	0.67	0.00	0.00	2.33	1.22	1.00	.	.	.	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
NETHERLANDS	1.29	3.39	13.69	2.05	0.68	15.06	0.24	1.86	1.73	0.76	-0.10	-0.51	-0.79	0.50	0.50	0.54	0.54	0.54	0.56	0.60	0.64
POLAND	0.58	1.47	15.09	2.20	0.61	9.50	0.00	1.84	1.06	0.50	0.45	0.23	0.16	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PORTUGAL	1.37	4.18	14.08	1.95	0.35	105.20	0.00	2.18	1.55	1.00	-0.06	-0.27	-0.56	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SPAIN	2.12	4.53	14.54	2.42	0.82	24.89	0.13	1.74	1.77	0.81	0.04	0.07	0.07	0.23	0.77	0.77	0.81	0.81	0.81	0.81	0.84
SWEDEN	0.40	0.87	14.37	2.03	0.90	20.75	0.06	1.52	1.72	0.68	-0.09	-0.36	-0.59	0.38	0.62	0.64	0.64	0.66	0.68	0.76	0.80
UK	2.76	3.66	10.52	1.75	0.59	5.79	0.33	1.57	1.79	0.73	-0.11	-0.45	-0.74	0.55	0.45	0.50	0.52	0.55	0.58	0.62	0.66
Total	2.27	3.35	11.62	1.89	0.64	11.66	0.29	1.61	1.75	0.65	-0.09	-0.37	-0.62	0.47	0.53	0.57	0.59	0.61	0.64	0.67	0.71

This table reports descriptive statistics of variables descripted in the caption under Table 1, classified by Country. See the caption of Table 1 for a detailed description of reported variables.

Table 3. Descriptive Statistics – Sample by Year

Country	Q Tobin	P/BV	Log (TA)	Log (Size)	NED%	AGE	Hot Market	N QUAL	N BOARD	Change G	LRP12	LRP24	LRP36	Delisted	Survive	Survive 10	Survive 9	Survive 8	Survive 7	Survive 6	Survive 5
2000	1.86	2.69	12.37	2.02	0.59	16.02	0.00	1.49	1.72	0.73	-0.25	-0.57	-0.69	0.62	0.38	0.50	0.55	0.62	0.71	0.74	0.84
2001	2.91	3.53	11.33	2.09	0.57	19.54	0.00	1.30	1.66	0.68	-0.03	-0.01	0.16	0.51	0.49	0.59	0.62	0.62	0.65	0.84	0.95
2002	2.10	3.48	11.72	1.92	0.60	8.56	0.00	1.42	1.64	0.65	0.14	0.31	0.16	0.59	0.41	0.56	0.59	0.59	0.65	0.71	0.76
2003	3.53	4.17	10.93	1.91	0.59	14.32	0.00	1.28	1.73	0.80	0.02	-0.29	-0.44	0.68	0.32	0.36	0.40	0.40	0.40	0.44	0.52
2004	2.56	3.40	10.74	1.80	0.56	7.09	0.00	1.44	1.62	0.77	-0.07	-0.31	-0.48	0.62	0.38	0.45	0.48	0.48	0.53	0.57	0.61
2005	2.40	3.31	10.39	1.75	0.59	7.23	1.00	1.64	1.86	0.66	-0.16	-0.42	-0.78	0.70	0.30	0.37	0.40	0.44	0.49	0.52	0.55
2006	3.04	4.35	10.78	1.86	0.62	10.29	1.00	1.53	1.83	0.62	-0.08	-0.50	-0.85	0.61	0.39	0.42	0.43	0.48	0.49	0.53	0.58
2007	2.51	3.80	11.75	1.93	0.63	11.55	0.00	1.53	1.72	0.61	-0.11	-0.53	-0.66	0.52	0.48	0.50	0.54	0.60	0.63	0.68	0.71
2008	3.60	4.30	11.46	1.94	0.63	5.03	0.00	1.72	2.07	0.55	-0.37	-0.44	-0.71	0.48	0.52	0.52	0.52	0.55	0.58	0.64	0.76
2009	4.23	5.78	9.53	1.85	0.70	39.14	0.00	1.64	1.75	0.71	-0.02	-0.24	-0.64	0.57	0.43	0.43	0.43	0.43	0.43	0.57	0.71
2010	1.33	2.39	12.46	1.88	0.72	14.49	0.00	1.82	1.97	0.69	0.08	-0.11	-0.35	0.35	0.65	0.65	0.65	0.65	0.71	0.71	0.80
2011	1.32	1.88	12.26	1.95	0.70	12.55	0.00	1.83	1.77	0.74	-0.07	-0.34	-0.53	0.37	0.63	0.65	0.65	0.65	0.65	0.67	0.72
2012	1.71	2.78	11.36	1.89	0.64	8.86	0.00	1.67	1.52	0.50	-0.15	-0.49	-0.78	0.43	0.57	0.60	0.60	0.60	0.60	0.60	0.60
2013	2.01	3.41	12.26	1.92	0.70	19.69	0.00	1.69	1.78	0.44	-0.05	-0.09	-0.60	0.18	0.82	0.82	0.82	0.82	0.82	0.82	0.82
2014	2.14	3.25	12.39	1.92	0.71	11.80	0.00	1.80	1.64	0.68	0.02	0.32	0.24	0.17	0.83	0.84	0.84	0.84	0.84	0.84	0.84
2015	1.86	3.27	12.59	1.95	0.74	14.63	0.00	1.78	1.66	0.58	0.79	0.15	0.13	0.10	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Total	2.27	3.35	11.62	1.89	0.64	11.66	0.29	1.61	1.75	0.65	-0.09	-0.37	-0.62	0.47	0.53	0.57	0.59	0.61	0.64	0.67	0.71

This table reports descriptive statistics of variables descripted in the caption under Table 1, reported by year of observation. See the caption of Table 1 for a detailed description of reported variables.

Table 4. Correlation Matrix

	Q-Tobin	P/BV	Log (TA)	Log (Size)	NED%	AGE	Hot Market	NQUAL	NBOAR DS	Change Gov	LRP12	LRP24	LRP36	Delisted	Survive	Survive 10	Survive 9	Survive 8	Survive 7	Survive 6	Survive 5	Ebitda/ TA
Q-Tobin	1.000																					
P/BV	0.728	1.000																				
Log(TA)	-0.381	-0.218	1.000																			
Log(Size)	-0.147	-0.043	0.680	1.000																		
NED%	-0.210	-0.189	0.542	0.424	1.000																	
AGE	-0.074	0.074	0.397	0.401	0.303	1.000																
Hot Market	0.078	0.101	-0.165	-0.069	-0.073	-0.050	1.000															
NQUAL	0.016	0.024	0.166	0.147	0.198	0.061	0.017	1.000														
NBOARDS	0.084	0.059	0.021	-0.104	0.204	-0.014	0.066	0.172	1.000													
Change Gov	0.083	0.046	-0.092	-0.102	-0.094	-0.070	-0.039	-0.002	0.077	1.000												
LRP12	-0.123	-0.042	0.149	0.082	0.118	0.099	-0.057	0.058	0.049	-0.013	1.000											
LRP24	-0.140	-0.020	0.232	0.153	0.203	0.151	-0.057	0.086	0.077	-0.047	0.747	1.000										
LRP36	-0.177	-0.065	0.289	0.206	0.227	0.172	-0.137	0.059	0.058	-0.046	0.598	0.817	1.000									
Delisted	0.045	-0.010	-0.259	-0.153	-0.205	-0.237	0.115	-0.139	-0.037	0.127	-0.106	-0.177	-0.197	1.000								
Survive	-0.045	0.010	0.259	0.153	0.205	0.237	-0.115	0.139	0.037	-0.127	0.106	0.177	0.197	-1.000	1.000							
Survive 10	-0.061	-0.020	0.250	0.160	0.182	0.207	-0.119	0.129	0.021	-0.098	0.103	0.194	0.220	-0.883	0.883	1.000						
Survive 9	-0.048	-0.007	0.242	0.150	0.175	0.201	-0.120	0.124	0.015	-0.087	0.100	0.192	0.225	-0.845	0.845	0.957	1.000					
Survive 8	-0.054	0.019	0.233	0.153	0.169	0.200	-0.104	0.107	0.002	-0.123	0.090	0.201	0.228	-0.786	0.786	0.889	0.929	1.000				
Survive 7	-0.054	0.012	0.208	0.154	0.165	0.190	-0.107	0.123	-0.000	-0.123	0.098	0.208	0.235	-0.723	0.723	0.819	0.856	0.921	1.000			
Survive 6	-0.043	0.003	0.191	0.159	0.158	0.193	-0.117	0.116	-0.013	-0.130	0.089	0.203	0.258	-0.671	0.671	0.759	0.793	0.854	0.927	1.000		
Survive 5	-0.018	0.023	0.190	0.157	0.142	0.171	-0.149	0.094	0.020	-0.089	0.100	0.218	0.293	-0.584	0.584	0.661	0.691	0.744	0.807	0.871	1.000	
Ebitda/TA	-0.377	-0.131	0.500	0.288	0.150	0.195	-0.094	-0.010	-0.058	-0.030	0.282	0.346	0.386	-0.175	0.175	0.186	0.186	0.185	0.163	0.129	0.142	1.000

The above table reports the Parson's correlation matrix for the selected variables of the analysis. See the caption of Table 1 for a detailed description of reported variables.

Tab. 5 - Baseline Model - Short vs Medium-Long Term Perspective

	Q-Tobin	Q-Tobin	Q-Tobin	LRP 12	LRP 12	LRP 12	LRP 24	LRP 24	LRP 24	LRP 36	LRP 36	LRP 36	Survive	Survive	Survive	P/BV	P/BV	P/BV
	ols	*hlm*	*2sls*	*ols*	*hlm*	*2sls*	*ols*	*hlm*	*2sls*	*ols*	*hlm*	*2sls*	*ols*	*hlm*	*2sls*	*ols*	*hlm*	*2sls*
Log(TA)	-0.4207***	-0.4207***	-0.4207***	-0.0007	-0.0007	0.0190	0.0043	0.0043	0.0153	0.0215	0.0215	0.0026	0.0168*	0.0168*	0.0071	-0.4070***	-0.4070***	-0.4783***
	0.056	*0.054*	*0.095*	*0.015*	*0.015*	*0.024*	*0.022*	*0.022*	*0.037*	*0.031*	*0.031*	*0.056*	*0.010*	*0.009*	*0.015*	*0.066*	*0.064*	*0.113*
Ebitda/TA	-2.5787***	-2.5787***	-2.5786***	0.7325***	0.7325***	0.6748***	1.1378***	1.1378***	1.1040***	1.7324***	1.7324***	1.7968***	0.0270	0.0270	0.0549	-0.1502	-0.1502	0.0478
	0.341	*0.334*	*0.397*	*0.093*	*0.091*	*0.106*	*0.144*	*0.141*	*0.166*	*0.196*	*0.191*	*0.251*	*0.061*	*0.060*	*0.069*	*0.403*	*0.395*	*0.472*
Log(Size)	1.3769***	1.3769***	1.3769***	-0.0838	-0.0838	-0.0575	-0.0891	-0.0891	-0.0726	-0.0797	-0.0797	-0.1270	-0.0760	-0.0760	-0.0855	1.7660***	1.7660***	1.7158***
	0.295	*0.288*	*0.293*	*0.083*	*0.081*	*0.085*	*0.126*	*0.123*	*0.131*	*0.177*	*0.173*	*0.210*	*0.052*	*0.051*	*0.053*	*0.348*	*0.341*	*0.349*
NED%	-0.1648	-0.1648	-0.1642	0.3366**	0.3366**	-0.2717	0.7827***	0.7827***	0.4098	1.1726***	1.1726***	1.8987	0.1114	0.1114	0.3849	-0.5802	-0.5802	1.2946
	0.540	*0.528*	*2.104*	*0.150*	*0.147*	*0.580*	*0.226*	*0.221*	*1.007*	*0.310*	*0.302*	*1.853*	*0.095*	*0.093*	*0.358*	*0.638*	*0.625*	*2.501*
Age	0.0047	0.0047*	0.0047*	0.0009	0.0009	0.0010	0.0018	0.0018	0.0020	0.0022	0.0022	0.0017	0.0016***	0.0016***	0.0016***	0.0091***	0.0091***	0.0088***
	0.003	*0.003*	*0.003*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.002*	*0.002*	*0.002*	*0.001*	*0.001*	*0.001*	*0.003*	*0.003*	*0.003*
Hotmarket	-0.0864	0.6572*	0.6572	0.0880	0.1855*	0.2214**	0.1725	0.1725	0.1966	-0.0294	-0.0294	-0.0749	0.0176	0.0176	-0.0007	0.1599	1.2814***	1.1481**
	0.397	*0.393*	*0.419*	*0.104*	*0.103*	*0.109*	*0.147*	*0.144*	*0.157*	*0.195*	*0.190*	*0.223*	*0.071*	*0.069*	*0.073*	*0.470*	*0.465*	*0.498*
High Tech	0.4257**	0.4257**	0.4257**	0.0738	0.0738	0.0649	0.0431	0.0431	0.0379	0.1121	0.1121	0.1211	-0.0558	-0.0558*	-0.0550	0.3466	0.3466	0.3432
	0.194	*0.189*	*0.190*	*0.053*	*0.052*	*0.053*	*0.079*	*0.077*	*0.079*	*0.108*	*0.106*	*0.109*	*0.034*	*0.034*	*0.034*	*0.229*	*0.224*	*0.225*
Constant	3.6406	4.3089***	4.3089***	0.2181	-0.2940*	-0.2489	-0.6229	-0.9648***	-0.9302***	-1.2746	-1.5650***	-1.6310***	0.5282	0.3109***	0.2972**	3.8592	4.4510***	4.3803***
	2.558	*0.655*	*0.659*	*0.510*	*0.174*	*0.181*	*0.960*	*0.257*	*0.273*	*1.274*	*0.349*	*0.388*	*0.463*	*0.114*	*0.116*	*3.026*	*0.774*	*0.783*
N	933	933	933	874	874	874	741	741	741	693	693	693	986	986	986	933	933	933
R-sq	0.29		0.29	0.13		0.11	0.20		0.20	0.25		0.24	0.23		0.22	0.16		0.15
AIC	4339.77	4345.77	4339.77	1749.75	1753.75	1766.74	1970.42	1976.42	1973.27	2232.67	2238.67	2238.44	1222.83	1228.83	1231.46	4653.00	4657.00	4661.97
Centerd R-sq			0.2868			0.1129			0.2003			0.2443			0.2193			0.1533
Cragg-Donald Wald F Statistic			59.994			58.384			35.789			18.071			68.911			59.994
Stock-Yogo weak ID test critical values			16.38			16.38			16.38			16.38			16.38			

	Survive 10	Survive 10	Survive 10	Survive 9	Survive 9	Survive 9	Survive 8	Survive 8	Survive 8	Survive 7	Survive 7	Survive 7	Survive 6	Survive 6	Survive 6	Survive 5	Survive 5	Survive 5
	ols	*hlm*	*2sls*	*ols*	*hlm*	*2sls*	*ols*	*hlm*	*2sls*	*ols*	*hlm*	*2sls*	*ols*	*hlm*	*2sls*	*ols*	*hlm*	*2sls*
Log(TA)	0.0140	0.0140	0.0001	0.0133	0.0133	-0.0021	0.0079	0.0079	-0.0040	-0.0005	-0.0005	-0.0186	-0.0051	-0.0051	-0.0235	-0.0015	-0.0015	-0.0159
	0.010	*0.009*	*0.016*	*0.010*	*0.009*	*0.016*	*0.010*	*0.009*	*0.015*	*0.009*	*0.009*	*0.015*	*0.009*	*0.009*	*0.015*	*0.009*	*0.009*	*0.014*
Ebitda/TA	0.0600	0.0600	0.0998	0.0544	0.0544	0.0988	0.0686	0.0686	0.1028	0.0635	0.0635	0.1154*	0.0372	0.0372	0.0899	0.0581	0.0581	0.0994
	0.061	*0.060*	*0.070*	*0.061*	*0.060*	*0.070*	*0.061*	*0.059*	*0.069*	*0.060*	*0.058*	*0.069*	*0.058*	*0.057*	*0.068*	*0.055*	*0.054*	*0.064*
Log(Size)	-0.0550	-0.0550	-0.0686	-0.0597	-0.0597	-0.0749	-0.0495	-0.0495	-0.0612	-0.0272	-0.0272	-0.0449	-0.0066	-0.0066	-0.0246	-0.0097	-0.0097	-0.0238
	0.053	*0.052*	*0.053*	*0.053*	*0.051*	*0.053*	*0.052*	*0.051*	*0.053*	*0.051*	*0.050*	*0.052*	*0.050*	*0.049*	*0.051*	*0.047*	*0.047*	*0.048*
NED%	0.1422	0.1422	0.5331	0.1497	0.1497	0.5852	0.1574*	0.1574*	0.4933	0.2044**	0.2044**	0.7129**	0.1931**	0.1931**	0.7105**	0.1357	0.1357	0.5408*
	0.096	*0.094*	*0.363*	*0.095*	*0.094*	*0.363*	*0.093*	*0.093*	*0.358*	*0.093*	*0.091*	*0.355*	*0.091*	*0.089*	*0.348*	*0.086*	*0.085*	*0.328*
Age	0.0013***	0.0013***	0.0013**	0.0013**	0.0013***	0.0013**	0.0012**	0.0012**	0.0012**	0.0012**	0.0012**	0.0012**	0.0012**	0.0012**	0.0012**	0.0009*	0.0009**	0.0009*
	0.001	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.000*	*0.001*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*
Hotmarket	-0.1097	-0.1097	-0.1357*	-0.1713**	-0.1713**	-0.2004***	-0.1727**	-0.1727**	-0.1951***	-0.2436***	-0.2436***	-0.2776***	-0.2375***	-0.2375***	-0.2720***	-0.2590***	-0.2590***	-0.2860***
	0.072	*0.070*	*0.074*	*0.072*	*0.070*	*0.074*	*0.071*	*0.069*	*0.073*	*0.069*	*0.068*	*0.073*	*0.068*	*0.067*	*0.071*	*0.065*	*0.063*	*0.067*
High Tech	-0.0343	-0.0343	-0.0332	-0.0432	-0.0432	-0.0420	-0.0379	-0.0379	-0.0369	-0.0351	-0.0351	-0.0336	-0.0308	-0.0308	-0.0293	-0.0157	-0.0157	-0.0146
	0.035	*0.034*	*0.034*	*0.035*	*0.034*	*0.034*	*0.034*	*0.034*	*0.034*	*0.034*	*0.033*	*0.034*	*0.033*	*0.032*	*0.033*	*0.031*	*0.031*	*0.031*
Constant	0.6210	0.4295***	0.4099***	0.7111	0.5143***	0.4925***	0.8016*	0.6053***	0.5885***	0.8961**	0.7132***	0.6877***	0.9317***	0.7538***	0.7278***	0.9992***	0.8319***	0.8116***
	0.468	*0.115*	*0.117*	*0.467*	*0.115*	*0.117*	*0.462*	*0.114*	*0.116*	*0.454*	*0.112*	*0.115*	*0.445*	*0.110*	*0.113*	*0.422*	*0.104*	*0.106*
N	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986
R-sq	0.18		0.16	0.17		0.15	0.15		0.14	0.14		0.11	0.13		0.10	0.13		0.11
AIC	1241.28	1245.28	1258.51	1236.08	1242.08	1257.53	1217.51	1223.51	1230.56	1183.35	1187.35	1214.07	1143.59	1149.59	1176.65	1038.00	1044.00	1060.69
Centerd R-sq			0.1634			0.1480			0.1421			0.1145			0.0962			0.1068
Cragg-Donald Wald F Statistic			68.911			68.911			68.911			68.911			68.911			68.911
Stock-Yogo weak ID test critical values			16.38			16.38			16.38			16.38			16.38			16.38

The table shows the result of the baseline model. See the caption of Table 1 for a detailed description of reported variables. T-stats in Italic. * p<0.05, ** p<0.01, *** p<0.001.

Table 6. Advanced Model – Short Term Perspective

	Q-Tobin Mod 01	Q-Tobin Mod 02	Q-Tobin Mod 03	Q-Tobin Mod 04	Q-Tobin Mod 05	Q-Tobin Mod 06	Q-Tobin Mod 07	Q-Tobin Mod 08	Q-Tobin Mod 09	Q-Tobin Mod 10	Q-Tobin Mod 11
NED%	-0.1642	-0.5754	-2.8543	-0.5154	-0.8027	-0.5738	-0.8204	-2.8857	-0.7188	-1.0541	-0.8205
	2.104	*2.229*	*13.751*	*2.223*	*2.387*	*2.228*	*2.318*	*13.340*	*2.336*	*2.480*	*2.317*
Log(TA)	-0.4207***	-0.4215***	-0.4342***	-0.6713***	-0.4204***	-0.4358***	-0.4287***	-0.4401***	-0.5747***	-0.4277***	-0.4433***
	0.095	*0.094*	*0.056*	*0.168*	*0.095*	*0.096*	*0.092*	*0.056*	*0.186*	*0.093*	*0.094*
Ebitda/TA	-2.5786***	-2.5347***	-2.4916***	-2.4466***	-2.5398***	-2.4861***	-2.5701***	-2.5312***	-2.5209***	-2.5753***	-2.5203***
	0.397	*0.390*	*0.336*	*0.391*	*0.392*	*0.395*	*0.394*	*0.332*	*0.401*	*0.395*	*0.399*
Log(Size)	1.3769***	1.3547***	0.3939	-0.1875	1.3336***	1.3579***	1.5469***	0.6584	0.6298	1.5278***	1.5497***
	0.293	*0.292*	*4.845*	*0.937*	*0.290*	*0.292*	*0.313*	*4.664*	*1.004*	*0.309*	*0.313*
Age	0.0047*	0.0048*	0.0042	0.0044	-0.0008	-0.0174	0.0049*	0.0044	0.0047	-0.0007	-0.0177
	0.003	*0.003*	*0.004*	*0.003*	*0.007*	*0.029*	*0.003*	*0.004*	*0.003*	*0.007*	*0.029*
Hot Market	0.6572	0.6537	0.6137	0.6660	0.6690	0.6621	0.6913	0.6533*	0.6961*	0.7071*	0.6998*
	0.419	*0.418*	*0.397*	*0.418*	*0.422*	*0.418*	*0.421*	*0.394*	*0.421*	*0.426*	*0.421*
High Tech	0.4257**	0.3849**	0.3901**	0.4147**	0.3854**	0.3902**	0.4356**	0.4403**	0.4541**	0.4363**	0.4407**
	0.190	*0.191*	*0.191*	*0.191*	*0.190*	*0.191*	*0.189*	*0.191*	*0.190*	*0.189*	*0.189*
NQUAL		0.2723	0.2748	0.2919*	0.2733*	0.2705					
		0.166	*0.173*	*0.166*	*0.166*	*0.166*					
NBOARD							0.3962**	0.3817***	0.3666*	0.4010**	0.3956**
							0.190	*0.144*	*0.196*	*0.192*	*0.190*
SIZE_NED			1.4384					1.3210			
			7.311					*7.088*			
SIZE_TA				0.1287*					0.0756		
				0.075					*0.077*		
NED_AGE					0.0092					0.0092	
					0.010					*0.010*	
AGE_TA						0.0016					0.0016
						0.002					*0.002*
Constant	4.3089***	4.1867***	5.8831	7.0307***	4.3115***	4.3435***	3.7158***	5.2966	5.4348***	3.8340***	3.8755***
	0.659	*0.658*	*8.684*	*1.776*	*0.677*	*0.689*	*0.694*	*8.382*	*1.905*	*0.691*	*0.723*
N	933	933	933	933	933	933	933	933	933	933	933
R-sq	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
AIC	4339.77	4338.50	4338.96	4337.42	4339.66	4339.91	4333.67	4334.42	4334.51	4334.83	4335.06
Centerd R-sq	0.2868	0.2893	0.2905	0.2917	0.2900	0.2898	0.2930	0.2940	0.2936	0.2935	0.2193
Cragg-Donald Wald F Statistic	59.994	54.264	18.394	54.317	48.833	54.202	51.818	19.345	46.647	51.760	68.911
Stock-Yogo weak ID test critical values	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38

The table shows the result of the advanced model over a short-term perspective. See the caption of Table 1 for a detailed description of reported variables. T-stats in Italic. * p<0.05, ** p<0.01, *** p<0.001.

Table 7. Advanced Model – Medium-Long Term Perspective

	Survive 7 Mod 01	Survive 7 Mod 02	Survive 7 Mod 03	Survive 7 Mod 04	Survive 7 Mod 05	Survive 7 Mod 06	Survive 7 Mod 07	Survive 7 Mod 08	Survive 7 Mod 09	Survive 7 Mod 10	Survive 7 Mod 11
NED%	0.7961**	0.7098*	3.7340	0.7133*	0.6972*	0.7066*	0.8942**	4.3448	0.9088**	0.8862**	0.8910**
	0.355	*0.372*	*2.682*	*0.371*	*0.398*	*0.372*	*0.394*	*2.676*	*0.396*	*0.423*	*0.394*
Log(TA)	-0.0218	-0.0225	-0.0099	-0.0428	-0.0225	-0.0241	-0.0199	-0.0060	-0.0452	-0.0199	-0.0215
	0.015	*0.015*	*0.010*	*0.029*	*0.015*	*0.015*	*0.015*	*0.011*	*0.031*	*0.015*	*0.015*
Ebitda/TA	0.1290*	0.1385**	0.0895	0.1453**	0.1381**	0.1440**	0.1270*	0.0720	0.1352*	0.1268*	0.1326*
	0.069	*0.067*	*0.063*	*0.068*	*0.068*	*0.068*	*0.069*	*0.064*	*0.070*	*0.069*	*0.069*
Log(Size)	-0.0445	-0.0485	1.2048	-0.1736	-0.0496	-0.0486	-0.0708	1.3833	-0.2303	-0.0714	-0.0709
	0.052	*0.052*	*0.944*	*0.164*	*0.051*	*0.052*	*0.057*	*0.934*	*0.176*	*0.056*	*0.057*
Age	0.0012**	0.0012**	0.0019***	0.0012**	0.0009	-0.0014	0.0011**	0.0019***	0.0011**	0.0009	-0.0015
	0.001	*0.000*	*0.001*	*0.000*	*0.001*	*0.005*	*0.001*	*0.001*	*0.001*	*0.001*	*0.005*
Hot Market	-0.2961***	-0.2974***	-0.2477***	-0.2969***	-0.2968***	-0.2964***	-0.3006***	-0.2419***	-0.3002***	-0.3002***	-0.2996***
	0.073	*0.072*	*0.074*	*0.072*	*0.073*	*0.072*	*0.074*	*0.075*	*0.074*	*0.074*	*0.074*
High Tech	-0.0317	-0.0409	-0.0504	-0.0385	-0.0409	-0.0405	-0.0336	-0.0449	-0.0304	-0.0335	-0.0331
	0.034	*0.034*	*0.036*	*0.034*	*0.034*	*0.034*	*0.034*	*0.037*	*0.034*	*0.034*	*0.034*
Change Governance	-0.0985***	-0.0993***	-0.1092***	-0.0980***	-0.0992***	-0.0986***	-0.0943***	-0.1071***	-0.0924***	-0.0943***	-0.0936***
	0.032	*0.032*	*0.034*	*0.032*	*0.032*	*0.032*	*0.032*	*0.035*	*0.032*	*0.032*	*0.032*
NQUAL		0.0610**	0.0560*	0.0626**	0.0609**	0.0611**					
		0.028	*0.032*	*0.029*	*0.028*	*0.028*					
NBOARD							-0.0583*	-0.0399	-0.0627*	-0.0581*	-0.0582*
							0.032	*0.027*	*0.033*	*0.033*	*0.032*
SIZE_NED			-1.8745					-2.1630			
			1.426					*1.422*			
SIZE_TA				0.0105					0.0132		
				0.013					*0.014*		
NED_AGE					0.0005					0.0003	
					0.002					*0.002*	
AGE_TA						0.0002					0.0002
						0.000					*0.000*
Constant	0.7605***	0.7339***	-1.4530	0.9631***	0.7409***	0.7530***	0.8387***	-1.7119	1.1343***	0.8427***	0.8582***
	0.117	*0.116*	*1.679*	*0.310*	*0.120*	*0.121*	*0.122*	*1.667*	*0.328*	*0.122*	*0.127*
N	986	986	986	986	986	986	986	986	986	986	986
R-sq	0.11	0.13	0.03	0.13	0.13	0.13	0.11	-0.01	0.11	0.11	0.11
AIC	1217.23	1201.82	1308.34	1203.62	1202.06	1203.09	1226.96	1350.52	1230.13	1227.74	1228.18
Centerd R-sq	0.1134	0.1290	0.0316	0.1291	0.1305	0.1296	0.1065	0.0108	0.1054	0.1076	0.1072
Cragg-Donald Wald F Statistic	68.846	62.806	17.564	62.858	56.570	62.695	59.460	18.317	58.818	53.395	59.370
Stock-Yogo weak ID test critical values	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38

The table shows the result of the advanced model over a medium long-term perspective. See the caption of Table 1 for a detailed description of reported variables. T-stats in Italic. * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

Table 8. Robustness check – Large vs Small Firms

	Q-Tobin	Q-Tobin	Q-Tobin	Q-Tobin	Q-Tobin	Q-Tobin	Survive 7	Survive 7	Survive 7	Survive 7	Survive 7	Survive 7
	All	*All*	*Large*	*Large*	*Small*	*Small*	*All*	*All*	*Large*	*Large*	*Small*	*Small*
NED%	-0.5754	-0.8204	1.8272	1.3520	-8.3451	-7.7972	0.6224*	0.8123**	0.9372**	1.0390**	0.8290	1.2003
	2.229	*2.318*	*1.967*	*2.061*	*5.892*	*5.877*	*0.372*	*0.395*	*0.396*	*0.424*	*0.860*	*0.906*
Log(TA)	-0.4215***	-0.4287***	-0.4299***	-0.4365***	-0.6965***	-0.6544***	-0.0194	-0.0169	-0.0119	-0.0090	-0.0101	-0.0133
	0.094	*0.092*	*0.094*	*0.094*	*0.152*	*0.160*	*0.015*	*0.015*	*0.018*	*0.018*	*0.024*	*0.026*
Ebitda/TA	-2.5347***	-2.5701***	2.0609***	2.2111***	-3.1901***	-3.3151***	0.1251*	0.1140*	0.4780***	0.4441***	0.1264	0.1309
	0.390	*0.394*	*0.790*	*0.777*	*0.609*	*0.632*	*0.067*	*0.069*	*0.166*	*0.166*	*0.096*	*0.104*
Log(Size)	1.3547***	1.5469***	1.1073***	1.1814***	1.7807***	2.3655***	-0.0490	-0.0706	0.0114	-0.0047	-0.1944*	-0.2309*
	0.292	*0.313*	*0.289*	*0.291*	*0.663*	*0.812*	*0.052*	*0.056*	*0.062*	*0.064*	*0.100*	*0.126*
Age	0.0048*	0.0049*	0.0018	0.0021	0.0361	0.0309	0.0012**	0.0011**	0.0011**	0.0010**	-0.0008	-0.0011
	0.003	*0.003*	*0.002*	*0.002*	*0.028*	*0.027*	*0.000*	*0.001*	*0.000*	*0.000*	*0.003*	*0.003*
Hot Market	0.6537	0.6913	-0.7020	-0.6397	2.0408***	2.0101***	-0.2788***	-0.2827***	-0.2135**	-0.2261**	-0.4136***	-0.4044***
	0.418	*0.421*	*0.445*	*0.449*	*0.762*	*0.747*	*0.072*	*0.074*	*0.095*	*0.098*	*0.112*	*0.115*
High Tech	0.3849**	0.4356**	0.2782	0.2652	0.3935	0.4782	-0.0432	-0.0354	-0.0209	-0.0154	-0.0571	-0.0497
	0.191	*0.189*	*0.234*	*0.230*	*0.318*	*0.307*	*0.034*	*0.034*	*0.049*	*0.049*	*0.049*	*0.050*
AUT	0.2723		0.0359		0.6198**		0.0635**		0.0134		0.0895**	
	0.166		*0.198*		*0.284*		*0.028*		*0.041*		*0.042*	
NBOARD		0.3962**		0.3201*		0.7378*		-0.0570*		-0.0558		-0.0834
		0.190		*0.181*		*0.393*		*0.032*		*0.038*		*0.061*
Constant	4.1867***	3.7158***	4.4046***	4.0261***	8.0506***	6.0484***	0.6594***	0.7672***	0.2253	0.2969	0.8210***	0.9914***
	0.658	*0.694*	*0.922*	*0.918*	*1.840*	*1.588*	*0.114*	*0.119*	*0.196*	*0.197*	*0.270*	*0.249*
N	933	933	453	453	480	480	986	986	481	481	505	505
R-sq	0.29	0.29	0.17	0.19	0.18	0.21	0.13	0.11	0.14	0.13	0.10	0.04
AIC	4338.50	4333.67	1878.36	1869.34	2451.21	2437.55	1199.31	1222.44	520.94	527.04	712.15	745.71
Centerd R-sq	0.2893	0.1844	0.1885	0.1722	0.2930	0.2073	0.1294	0.0977	0.1285	0.1395	0.1088	0.0357
Cragg-Donald Wald F Statistic	54.264	10.838	39.542	43.577	51.818	10.986	62.807	12.502	45.284	50.405	59.077	12.512
Stock-Yogo weak ID test critical values	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38

The table shows the result of the first robustness check. See the caption of Table 1 for a detailed description of reported variables. T-stats in Italic. * p<0.05, ** p<0.01, *** p<0.001.

Table 9. Robustness check – Pre-Crisis vs Post-Crisis

	Q-Tobin	Q-Tobin	Q-Tobin	Q-Tobin	Q-Tobin	Q-Tobin	Survive 7	Survive 7	Survive 7	Survive 7	Survive 7	Survive 7
	All	*All*	*Post-Crisis*	*Post-Crisis*	*Pre-Crisis*	*Pre-Crisis*	*All*	*All*	*Post-Crisis*	*Post-Crisis*	*Pre-Crisis*	*Pre-Crisis*
NED%	-0.5754	-0.8204	-1.2012	-1.6680	0.3847	0.3793	0.6224*	0.8123**	0.3011	0.5035	2.6348**	3.1548**
	2.229	*2.318*	*1.614*	*1.684*	*7.274*	*7.812*	*0.372*	*0.395*	*0.310*	*0.327*	*1.319*	*1.529*
Log(TA)	-0.4215***	-0.4287***	-0.3607***	-0.3728***	-0.4527**	-0.4435*	-0.0194	-0.0169	-0.0228	-0.0176	-0.0562	-0.0582
	0.094	*0.092*	*0.083*	*0.083*	*0.230*	*0.239*	*0.015*	*0.015*	*0.016*	*0.016*	*0.037*	*0.041*
Ebitda/TA	-2.5347***	-2.5701***	-2.8200***	-2.7991***	-1.9934**	-2.0079**	0.1251*	0.1140*	0.0131	-0.0158	0.3304**	0.3373**
	0.390	*0.394*	*0.413*	*0.423*	*0.820*	*0.833*	*0.067*	*0.069*	*0.082*	*0.085*	*0.149*	*0.162*
Log(Size)	1.3547***	1.5469***	1.3882***	1.4696***	1.0349	1.3280	-0.0490	-0.0706	-0.0791	-0.0925	-0.2138	-0.3102*
	0.292	*0.313*	*0.330*	*0.332*	*0.683*	*0.833*	*0.052*	*0.056*	*0.066*	*0.067*	*0.142*	*0.183*
Age	0.0048*	0.0049*	0.0027	0.0029	0.0077	0.0078	0.0012**	0.0011**	0.0012*	0.0011	-0.0003	-0.0006
	0.003	*0.003*	*0.004*	*0.004*	*0.008*	*0.008*	*0.000*	*0.001*	*0.001*	*0.001*	*0.001*	*0.002*
Hot Market	0.6537	0.6913			0.5521	0.6086	-0.2788***	-0.2827***			-0.4057***	-0.4363***
	0.418	*0.421*			*0.777*	*0.822*	*0.072*	*0.074*			*0.138*	*0.157*
High Tech	0.3849**	0.4356**	0.5343**	0.5325**	0.3528	0.4366	-0.0432	-0.0354	-0.0662	-0.0586	0.0189	0.0239
	0.191	*0.189*	*0.231*	*0.232*	*0.329*	*0.322*	*0.034*	*0.034*	*0.046*	*0.046*	*0.067*	*0.071*
AUT	0.2723		-0.0606		0.5463*		0.0635**		0.0925**		0.0442	
	0.166		*0.219*		*0.282*		*0.028*		*0.043*		*0.053*	
NBOARD		0.3962**		0.2511		0.4986		-0.0570*		-0.0619*		-0.1468*
		0.190		*0.192*		*0.404*		*0.032*		*0.037*		*0.077*
Constant	4.1867***	3.7158***	4.8445***	4.5989***	4.1980***	3.4872***	0.6594***	0.7672***	0.9148***	1.0129***	0.4140*	0.6790***
	0.658	*0.694*	*0.754*	*0.755*	*1.083*	*1.215*	*0.114*	*0.119*	*0.145*	*0.147*	*0.217*	*0.239*
N	933	933	421	421	433	433	986	986	440	440	463	463
R-sq	0.29	0.29	0.39	0.39	0.22	0.21	0.13	0.11	0.13	0.11	-0.38	-0.59
AIC	4338.50	4333.67	1776.30	1777.68	2170.09	2170.62	1199.31	1222.44	444.95	455.70	855.93	923.40
Centerd R-sq	0.2893	0.2158	0.3922	0.3942	0.2930	0.2149	0.1294	-0.3779	0.1051	0.1267	0.1088	-0.5941
Cragg-Donald Wald F Statistic	54.264	6.478	76.601	83.060	51.818	5.758	62.807	8.475	83.007	90.778	59.077	7.438
Stock-Yogo weak ID test critical values	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38

The table shows the result of the second robustness check. See the caption of Table 1 for a detailed description of reported variables. T-stats in Italic. * p<0.05, ** p<0.01, *** p<0.001.

Table 10. Robustness check – UK vs Others

	Q-Tobin	Q-Tobin	Q-Tobin	Q-Tobin	Q-Tobin	Q-Tobin	Survive 7	Survive 7	Survive 7	Survive 7	Survive 7	Survive 7
	All	*All*	*UK*	*UK*	*Others*	*Others*	*All*	*All*	*UK*	*UK*	*Others*	*Others*
NED%	-0.5754	-0.8204	-1.5576	-1.7563	4.3267	3.9703	0.6224*	0.8123**	0.5615	0.8122**	1.0402	1.0429
	2.229	*2.318*	*2.263*	*2.347*	*4.098*	*4.215*	*0.372*	*0.395*	*0.367*	*0.388*	*0.800*	*0.856*
Log(TA)	-0.4215***	-0.4287***	-0.4629***	-0.4742***	-0.5035***	-0.5105***	-0.0194	-0.0169	-0.0114	-0.0081	-0.0353	-0.0343
	0.094	*0.092*	*0.112*	*0.110*	*0.133*	*0.130*	*0.015*	*0.015*	*0.018*	*0.017*	*0.025*	*0.025*
Ebitda/TA	-2.5347***	-2.5701***	-2.9343***	-2.9976***	1.2197	1.2825*	0.1251*	0.1140*	0.1116	0.1061	0.0672	0.0528
	0.390	*0.394*	*0.463*	*0.468*	*0.782*	*0.764*	*0.067*	*0.069*	*0.078*	*0.080*	*0.150*	*0.149*
Log(Size)	1.3547***	1.5469***	1.5204***	1.9552***	0.5448	0.5559	-0.0490	-0.0706	-0.1116	-0.1414*	-0.0239	-0.0257
	0.292	*0.313*	*0.422*	*0.439*	*0.504*	*0.500*	*0.052*	*0.056*	*0.071*	*0.075*	*0.106*	*0.108*
Age	0.0048*	0.0049*	0.0121*	0.0129**	0.0016	0.0017	0.0012**	0.0011**	0.0011	0.0010	0.0012**	0.0012**
	0.003	*0.003*	*0.006*	*0.006*	*0.002*	*0.002*	*0.000*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*
Hot Market	0.6537	0.6913	1.5111***	1.4607***	-1.3735*	-1.2374	-0.2788***	-0.2827***	-0.3620***	-0.3500***	-0.2019	-0.1995
	0.418	*0.421*	*0.562*	*0.559*	*0.759*	*0.808*	*0.072*	*0.074*	*0.093*	*0.094*	*0.154*	*0.169*
High Tech	0.3849**	0.4356**	0.3647	0.4443*	0.1647	0.1548	-0.0432	-0.0354	-0.0543	-0.0487	-0.0173	-0.0141
	0.191	*0.189*	*0.271*	*0.266*	*0.263*	*0.260*	*0.034*	*0.034*	*0.046*	*0.046*	*0.053*	*0.053*
AUT	0.2723		0.3907*		0.1442		0.0635**		0.0711**		0.0200	
	0.166		*0.202*		*0.246*		*0.028*		*0.033*		*0.053*	
NBOARD		0.3962**		0.5007**		0.3602		-0.0570*		-0.0768**		-0.0016
		0.190		*0.220*		*0.272*		*0.032*		*0.036*		*0.062*
Constant	4.1867***	3.7158***	3.9947***	3.1597***	2.8126**	2.7164**	0.6594***	0.7672***	0.7888***	0.9088***	0.3620	0.3814
	0.658	*0.694*	*0.920*	*0.957*	*1.254*	*1.226*	*0.114*	*0.119*	*0.152*	*0.158*	*0.260*	*0.258*
N	933	933	609	609	324	324	986	986	641	641	345	345
R-sq	0.29	0.29	0.28	0.29	0.13	0.15	0.13	0.11	0.10	0.07	0.15	0.15
AIC	4338.50	4333.67	2956.45	2953.18	1321.73	1313.35	1199.31	1222.44	856.59	873.46	350.61	350.98
Centerd R-sq	0.2893	0.1310	0.2851	0.2812	0.2930	0.1532	0.1294	0.1510	0.0729	0.0970	0.1088	0.1500
Cragg-Donald Wald F Statistic	54.264	8.889	62.454	64.676	51.818	8.274	62.807	10.968	69.284	72.653	59.077	9.747
Stock-Yogo weak ID test critical values	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38

The table shows the result of the third robustness check. See the caption of Table 1 for a detailed description of reported variables. T-stats in Italic. * p<0.05, ** p<0.01, *** p<0.001.