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Abstract

Casual empiricism points to the relative reluctance of senior management of Italian companies to raise equity financing for fear of dilution and relinquishing effective control. Our econometric analysis based on panel data for a sample of listed companies demonstrates that investment outlays of analyzed companies are strongly associated with debt rather than equity issuances. In turn, the size and likelihood of equity issuances are negatively associated with the tenure of both CEOs and supervisory board members. After controlling for firm-level fundamentals and time effects, we find that firms with the highest average tenure of senior management exhibit a relative preference for debt financing over equity except for periods, when a company records negative operating cash flows. Generally, firms with higher average tenure of CEOs and supervisory boards implement more conservative financial management strategies preferring to accumulate cash reserves in good times and slashing them or recuring to debt financing when facing operational difficulties. Importantly, the average age of officers is found to exhibit no similar link with the choice of external financing mode. The observed choices of the modes of external financing may be conducive to slowing the growth of Italian companies, reducing the career mobility of officers, creating entrenched boards, and increasing the average level of indebtedness of the corporate sector.

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1. Introduction

The choice of capital structure and modes of external financing is contingent not only on purely financial factors, but also on their possible repercussions for the internal mechanisms of corporate governance and control. Equity issuances may lead to dilution of existing shareholders (Yong et al., 2024), transfer of effective control over strategic decision making through board appointments, and, in some cases, hostile takeovers. The incumbent management may be forced to cooperate with new co-owners of the company and sometimes make concessions in order to meet the financial expectations of investors (Swanson et al., 2022). Debt, on the other hand, may be less intrusive in terms of day-to-day operations and leaves the internal control system intact. On the other hand, it drains the company's contemporaneous cash flows, which may be conducive to financial distress (Fattouh et al., 2024), and, through debt covenants, may impose severe limits on the company's strategic decision making, including M&A activities, shareholder payouts, and transformational pivots.

Anecdotal evidence points to the reluctance of the senior management of Italian companies to issue equity, whenever a company is facing a capital shortfall. Instead, they appear to be more reliant on debt financing, which is overwhelmingly procured through commercial banks (Bronzini et al., 2022). Some analysts attribute this observed proclivity to the ageing of senior cadre (Navaretti et al., 2021) of Italian companies, who may be more reluctant to pursue aggressive organic growth and used to drawing capital primarily through intermediated financing infrastructure. In other cases, it is attributed to the long-standing pattern of family ownership of Italian companies (Mbanyele & McMillan, 2020), whereby founders and their heirs may be loath to share control with outside investors. Yet another explanation derives from agency theory, whereby the management may oppose to changes in ownership structure due to worries of being replaced (Baker & Xuan, 2016) or facing opposition to the current strategy.

While all these explanations are plausible and the factors impacting the choice between debt and equity financing have been subject to extensive empirical analysis (Hovakimian et al., 2001; Sony & Bhaduri, 2021; Mvita et al., 2022), we contribute to the discussion by arguing that the impact of the factors favoring debt over equity tends to grow along with the tenure of senior management. The strength of arm's length banking relationships, reluctance to relinquish effective control, prioritization of projects with readily available debt financing, and scrapping of projects for which only equity would be a viable option, including non-organic growth, are all likely to become

stronger as the incumbent management team becomes more entrenched with time. Therefore, we postulate a strong link between senior management's tenure and the preference towards debt over equity financing. In order to verify the presented conjecture, we track the dynamics of the overall level of leverage of sampled Italian listed companies and attempt to outline the determinants associated with decisions to issue new debt or equity throughout the analyzed period.

The following findings stand out. To start with, the overall level of indebtedness of listed Italian companies remains moderate, and there are no marked disproportions between the use of debt and equity, which would deviate from international benchmarks. Secondly, we find a strong link between discretionary capital expenditures and debt issuances. No similar link is observed between investments and equity financing. These findings point to the dominant role of debt financing and the relative preference for debt over by Italian companies in funding their investment needs. Thirdly, we find a strong associative link between the companies' propensity to rely on debt rather than equity and the tenure of senior management, including CEOs and supervisory board members. This link appears to weaken and reverse only when a company is facing a negative cash flow shock. What is more, tenure appears to be associated with a more conservative financial management strategy, whereby companies with plentiful operational cash flows tend to accumulate precautionary cash reserves, which are subsequently used to smooth any intermittent fluctuations in operating performance. This approach allows to reduce reliance on external financing and refrain from issuing new liabilities. On the other hand, it inevitably inflates the balance sheet and erodes return on invested capital. Thirdly, we find no link between the age of senior cadre and the choices of the mode of external financing. Nor is there a correlation between the age and tenure of senior management within sampled companies. The latter is important since the problems of organic development of the corporate sector observed in some mature economies (Belenzon et al., 2019) are frequently ascribed to the factor of officers' ageing.

The paper contributes to the strand of empirical literature focusing on the interplay between corporate governance and capital structure. We demonstrate that tenure of senior officers may be associated with decision-making patterns, which in the long run could result in slowing the growth of companies by limiting their access to external capital. In fact, one of the most lamentable critiques pointed at Italian executives is that at certain point they stop prioritizing growth and decide to refrain from further organic development, which would necessitate capital injections. The observed proclivity to avoid equity issuances may also limit the development of public capital

markets in Italy, which remain relatively shallow compared to other EU countries. Companies also remain tied in the system of intermediated financing (Errico et al., 2024), where banks remain the predominant conduit for capital allocation. The specificity of legal framework and backlogs in the court system appear to exacerbate the problems of prevalence of intermediated financing. Debt recovery remains time-consuming and costly, while recovery ratios remain relatively low. The statistics on non-performing corporate loans (Bolognesi et al., 2020) in Italy suggest that the savers could benefit from the development of other investment vehicles to compete with the banking system for financial resources.

The remainder of the paper is organized as follows. First, we present the theoretical framework and an overview of existing literature. Then we present the data collection process and the dataset. The third section focuses on the presentation of empirical findings. A separate section is concentrated on the discussion of implications and remedial mechanisms, which could contribute to the alleviation of the problems highlighted in the empirical part of the paper.

Literature Review

For decades now, the Italian companies have been beset with relatively slow growth. While Italy has excellent statistics on new business creation and a large layer of medium-sized companies, it has an underrepresentation of large companies in the structure of the corporate sector and below-average number of national champions capable of competing on the international markets. The entire stock market of Italy was valued at about 626 billion euros as of the end of 2022. Among the top 500 global companies by sales evidenced in the Fortune Global 500 list, less than ten are of Italian origin based. A lot of the problems underlying such underperformance can be traced to factors, which impede or altogether preclude growth of companies once they achieve a specific development stage.

One of the major factors impeding or disincentivizing growth if the regulatory framework (Bianco & Bripi, 2010), which becomes more convoluted once businesses cross certain size thresholds. In face of a growing administrative and compliance burden, the senior management of some companies may decide to stop pursuing further growth and settle for a medium-sized business.

Another major reason is the relatively low depth and liquidity of the Italian public capital market. This concerns not only the stock market, which is incommensurate with the size of the Italian economy, but also private equity and debt markets. The limited capital availability may impede the

growth of companies by limiting the amount of capital companies can tap (Bond et al., 2015), increasing the average cost of capital, lowering valuations due to lack of demand and competition among investors. The exit opportunities may also be limited as attested by the limited number of initial public offerings (Cattaneo et al., 2015). Sales on the equity market may be costly and possibly disadvantageous compared to market benchmarks simply because of insufficient market depth. The imperfections of the Italian equity market may be forcing many companies to choose alternative international locations for listings and cross-listings (Pagano et al., 2002) in order to access a deeper public capital market.

The above are institutional and regulatory problems, which can be dealt with only through concerted legislative effort promoting a systemic reform of capital markets. These factors are exogenous and out of control of the senior management of Italian companies.

This paper is instead focused on the choices of external financing options, which are at the discretion of senior management. Both casual empiricism and existing literature point to the propensity of Italian companies to choose debt over equity, when facing the need to procure additional capital. Banks are also documented to shape the dynamics of firm creation (Agostino et al., 2022). As a result of reliance on debt financing, that some Italian companies may end up incurring too much debt and face financial distress (Tron et al., 2023). The preference towards debt financing may also mean that companies may forego issuing equity even if recapitalization through equity injection makes business sense.

There are some fundamental reasons, which may precondition the preference for debt over equity on the part of Italian companies' senior management. Some of them can be traced to the architecture of the Italian capital markets, where the equity segment appears underdeveloped, thus relegating the companies to the mechanisms of intermediated financing through the banking system. But the predominance of bank loans over other forms of external financing is characteristic not only of the Italian market, but also others like that of Germany (Antoniou et al., 2008). It has been argued that. to a certain extent. the preponderance of debt can be traced to the discretionary choices of the senior management, who may refrain from using equity financing for fear of adverse consequences of non-economic nature.

Start with the fact that most Italian companies maintain long-standing relationships with commercial banks. While larger companies can have a network of relationships with different financial institutions, most privately owned companies have one principal bank servicing their

needs and are more likely to recur to the services of local banks (Aristei & Gallo, 2017). The length of the bank-firm relationship is likely to be associated with the terms of loans (Cosci & Meliciani, 2002), i.e., interest rate, penalties, strictness of covenants etc. Therefore, longer relationships are likely to result in higher reliance on bank financing, as tapping arm's length bank capital becomes the easiest option. Senior management may also gradually tune internal decision making, analytical and reporting processes to the dynamics of firm-bank relationship. As a result, new investment projects may be analyzed under assumption of all-debt financing by default. This may result in organizational inertia, whereby other financing options may be ignored.

Another factor, which may have rendered debt more attractive, is the relative financing cost compared with equity financing. The relatively lax monetary policy implemented by the European Central Bank and the Federal Reserve up until 2022 made debt substantially cheaper (Todorov, 2020) relative to equity. Debt financing has also been abundant and relatively easily available, since the declining financing costs made more investment endeavors viable by lowering the hurdle rate of return. The frictions on public capital markets coupled with significant transaction costs associated with equity issuances, including underwriting costs, legal intermediation, and compliance costs, may have discouraged firms from entering stock exchanges and instead tap private capital through intermediated financing.

Perhaps the most important effect of equity issuance is that on ownership structure, effective control (Sharpe & Woo, 2005) and the mechanism of corporate governance (Calvi, 2021). Equity issuances on the private markets usually mean a transfer of a sizeable equity stake to a new co-owner. In case of secondary public offerings, the ownership structure of a newly issued equity block can be dispersed or highly concentrated. The issuance of new shares may lead to dilution of the voting power of existing shareholders. As a result, changes to the ownership structure may indirectly precipitate a vote on the changes in senior management. The new investors may disagree with the strategy of incumbent management or with the viewpoints of controlling shareholders (Xiao, 2012). The power dynamics on the supervisory boards can also change. Managerial decisions are more likely to be questioned and scrutinized by new investors. New investors may also prioritize short- and medium-term investment return over long-term strategy, which may involve significant trade-offs in the area of investment planning and organic development. Most importantly, the principal shareholders may have to relinquish effective control. The fear of the latter may push them to oppose any equity issuances (Lyu & Chen, 2022). In some cases, CEOs

may be ready to forgo valuable investment opportunities for lack of necessary financing instead of recurring to equity issuance. The aversion to sharing effective control may be particularly strong within family-controlled companies (Basu et al., 2009), which are dominating some sectors of the Italian economy. Empirical studied demonstrate that family-run businesses are more likely to refrain from equity issuances, possibly for fear of losing control.

In addition to repartition of effective control and voting power, changes to the ownership structure resulting from equity issuance are likely to engender other effects, which may look undesirable from the standpoint of incumbent management. In the short run, issuing new shares is likely to contribute to deterioration of key performance indicators (KPI), which are conventionally used as benchmarks for evaluating managerial outcomes, such as earning per share and total shareholder return. Management and existing shareholders may also beware of the possibility that markets perceive equity issuance as a negative signal (Dissanaike et al., 2014) of uncertain financial condition. The pecking order dictates that equity be tapped only once the cheaper and more readily available sources of financing, i.e., internally generated operating cash flows and different forms of debt financing, have been exhausted (Frank & Goyal, 2003). In case of public companies, this perception may result in a decline of share price. For private companies, it may entail a stronger dilution effect after recapitalization.

The links between the factors listed above and the propensity of non-financial companies to issue debt over equity are generally well-investigated in the empirical literature. The present study contributes to the discussion by making an argument that the impact of all these factors on the choice of mode of external financing is growing along with tenure of senior management. If that is the case, there should be an empirically observable relationship between the tenure of senior management and the firms' reliance on debt rather than equity. We advance the following main research hypotheses:

H1. The firm's relative propensity to issue debt rather than equity is positively associated with the tenure of senior management.

Longer management tenures are likely to contribute to stronger firm-bank relationships. Cooperation with the same managerial team facilitates the process of loan approval, improves communication, reduces information asymmetry, renders the relationship more predictable, thus conducing to more recurring transactions. The long-term bank relationship may also be conducive to better debtor discipline (Ozelge & Saunders, 2012). The longer-serving managerial teams are

more likely to become entrenched opposing shifts in effective control and ownership and preferring to rely on debt financing in the event of a financing shortfall. Once the firm has approached its debt capacity, tenured officers may also become more risk-averse, preferring to forego an investment altogether rather than raise equity financing to fund it. Alternatively, they may prefer to accumulate precautionary cash reserves (Han & Qiu, 2007), which can be used to fund new investments, for which debt financing is likely to be unavailable.

With regard to the main research hypothesis, the Italian market represents an interesting study object. It is struggling with a number of systemic issues precluding large companies from raising sufficient capital to meet their investment demand. In many cases, the relative shallowness of public capital market may push companies to list on other exchanges, e.g., in UK or Netherlands. The bank debt has traditionally played an outsized role in procuring external financing to companies at all stages of development. The result has been a steady growth of corporate sector's indebtedness. In the recent decade, the Italian banks improved credit allocation processes (Russo et al., 2024). However, while the dynamics of non-performing loans has been favorable, the recovery ratios remain below-average of the Italy's peer group. Italy also has a long tradition of majority-family ownership of a sizeable portion of medium and large companies. While these days, listed companies have a dispersed shareholder base, the reluctance to share effective control through equity issuances may persist through tradition and informal governance structures favoring closely-held ownership.

Database and Research Design

The study relies on data collected for a sample of Italian listed companies. In addition to firm-year financial data, we had to collect data on tenure of CEOs and supervisory board members. The latter was necessary to test the supplementary hypothesis that the observed relationships are intermediated by the impact of the board rather than executives. In order to compile these data, we first collected historical records of the officers serving in executive and non-executive positions of Italian listed companies between 2003 and 2023. The data were taken from Refinitiv Eikon, which details the profiles of senior officers employed by a particular company. It is worth noting that in many cases, the records are incomplete with some officers missing from the database, which should be taken into consideration when generalizing the results. Within the record of officers employed by the sampled companies, we identified those, who served as CEO / Chair(wo)man of the

management board. By identifying their start and (whenever applicable) end-of-employment dates, we managed to calculate their overall tenure on the position. Subsequently, we had to merge the database on CEO tenures with firm-level financial database. An important caveat is that in some cases, it was impossible to establish the exact dates of employment, only the year. In such cases, we rounded the tenure up to full years. Refinitiv provides tenure for some incumbent officers as integer years without detailing the dates of employment, which also impacts the accuracy of the data. This procedure may have impacted the empirical results, since if an example CEO quit company ABC in March of 2022, the cell with CEO tenure for this company would still be populated with this CEO's tenure rounded to full years. This was not a problem, if we managed to precisely identify the dates, when a given officer assumed their position. Of the around 490+ companies, which are listed on Italian stock exchange in Milan, we managed to collect data on CEO tenure for 237 (either for the full period of observation or for a part of it) with the remainder either having missing data on boards composition or on officers' start/end dates, which preclude the possibility of calculating tenure.

Additionally, we collected data on tenures of supervisory board members and non-executive directors. To that end, we first filtered the compiled dataset of officers employed by sampled public companies by position. We subsequently calculated tenure for every officer, for whom the start/end dates of employment were known. Next, we aggregated the officers by company and year and calculated the average tenure of all officers present in the sample, who were employed by a specific company during a specific year. Importantly, if a given person was employed even for a few months during a given year, they would still count towards the calculation of the average tenure during a given year. It is worth noting that the data on officers was incomplete as we failed to identify the start/end dates for many of them, while some could have just been absent from the Refinitiv Eikon database. We cannot reliably establish, whether the missing data had a material impact on the reported results. Generally, we ejected the observations for a given company if we failed to calculate the tenure for at least two non-executive / supervisory board officers. As a result, we managed to assemble partial or complete data for 295 companies.

We were also able to collect data on the age of CEOs and supervisory board members as Refinitiv Eikon reports the age of companies' officers. We managed to identify CEOs' age (across the entire or partial observation span) for 213 companies. The mean age of supervisory board members was

established for a full or partial observation period for 275 companies. We imposed a limit that data on at least two officers should be available for a given company in order to calculate a mean.

In order to test the main research hypothesis, we also assembled firm-level data on debt and equity issuances of sampled companies and other relevant yearly financial statement data (with gaps due to data unavailability for some companies in Refinitiv Eikon). The resulting firm-year unbalanced panel dataset was merged with officer data. The full list of variables assembled for the purposes of empirical analysis is presented in Table 1. Nominal variables were scaled and subsequently cleaned of outliers by performing 1st and 99th percentile winsorization (except for age data, which are presumed to contain no outliers). The descriptive statistics for the research sample are presented in Table 2.

[TABLE 1 HERE]

[TABLE 2 HERE]

The empirical part of the paper relies on univariate and multivariate analysis including static and dynamic regression analysis. At stage one, we rely on univariate analysis to test our hypothesis about the link between senior management tenure and firms' propensity to choose a specific mode of external financing. We split the research sample into three terciles (repartition into differently-sized subsamples, for example, quartiles or vintiles produce qualitatively similar results) based on the key explanatory variables – CEO tenure and non-executive officer tenure. We subsequently check the cross-sectional differences between these subsamples in terms of key parameters characterizing the recurrence to external sources of capital.

The second stage of analysis relies on multivariate regression modeling on firm-level data in order to establish whether the postulated links between officer tenure and procurement of external financing hold after controlling for macroeconomic conditions and firms' financials. This stage comprises separate investigations of equity and debt financing dynamics. The first set of explained variables subject to multivariate modeling includes the net amounts of issued capital in the form of equity and debt – NET.EQUITY.ISSUANCES and NET.DEBT.ISSUANCES respectively. We use dynamic GMM panel modeling (Arellano & Bond, 1991) with lags of dependent variables in order to mitigate endogeneity concerns. The baseline regression model design is as follows:

$$NET.EQUITY(DEBT).ISSUANCES_{ij} = \beta_0 + \beta_1 NET.EQUITY(DEBT).ISSUANCES_{i-1j} +$$
$$\beta_2 NET.EQUITY(DEBT).ISSUANCES_{i-2j} + \beta_3 CEO(NONEXEC).TENURE_{ij} +$$
$$\beta_4 CONTROL_{i-1j} + \beta'Year_i + \beta'Industry_i + \beta'Error_{ij}, (1)$$

where $CONTROL_{i-1j}$ represents a set of firm-level and macroeconomic control variables; $Year_i$; $Industry_i$ represent year and industry fixed effects. The set of macroeconomic controls includes GDP per capita and lending interest rates dynamics over the studied period. Firm-level control comprise and standard set of variables associated with external financing needs, such as the company's size, investment demand, profitability, and the degree of information asymmetry approximated by the time elapsed since a given company went public. The list of variables used in the models along with their definitions are presented in Table 1.

The needs for external financing may become particularly acute, when a company experiences an operating cash flow shock, i.e., if operating cash flows become negative, or if the company's available financial resources from operations and cash reserves are insufficient to finance the outstanding investment needs. In order to test, whether the nexus between officer tenure and external financing preferences change under adverse conditions, we create two binary variables: NEG.OCF and INV.SHORTFALL. The first one binary-codes firm-years, when a given company generated negative operating cash flows. The second one binary-codes firm-years, when the sum of the company's contemporaneous operating cash flows and available cash reserves (both scaled by total assets) are lower than the investment outlays, which would signal the need to recur to external financing. We re-run model specification (1) after including these variables and interaction terms featuring them and the main explanatory variables – CEO.TENURE and NONEXEC.TENURE.

The second set of explained variables we use for multivariate regression modeling concerns the frequency and the relative likelihood of external capital issuances. We create binary variables EQUITY.ISSUANCE.BIN and DEBT.ISSUANCE.BIN, which binary-code firm-years when a given company issued new equity (regardless of the amount) or incurred new debt, i.e., its total interest-bearing debt went up year-on-year. With the goal of estimating the relative propensity of sampled companies to recur to new financing, we run multivariate binary logit models, where issuances of new capital are the explained variables. The baseline specification of these models is as follows:

$$logit(EQUITY(DEBT).ISSUANCE.BIN_{ij}) = \beta_0 + \beta_1 CEO(NONEXEC).TENURE_{ij} +$$
$$\beta_4 CONTROL_{ij} + \beta'Year_i + \beta'Industry_i + \beta'Error_{ij}, (2)$$

In addition to checking, whether senior management tenure is associated with the relative frequency of incurring external capital through either debt or equity issuances, we also check, how

these patterns may be influenced by the NEG.OCF and INV.SHORTFALL by including respective interaction terms into the model. The analysis is run separately for equity and debt issuances.

At the final stage of econometric analysis, we check whether management tenure may affect the broader patterns of cash flow allocation within the studied companies. The methodological problem of the preceding stages resides in the endogenous links between the studied financial variables. The needs for external financing may be dictated not only by the dynamics of operating cash flows, but also by the pending capital budgeting decisions, the need to smooth dividend payouts, or service the previously incurred financial liabilities. The decisions to allocate cash at the disposal of an enterprise are taken simultaneously. Therefore, analysis of a system of simultaneous equations describing firms' patterns of cash flow allocation (Dasgupta et al., 2011) may reveal, how different domain of decision making interact. To that end, we use a system of equations describing how sampled companies allocate contemporaneous operating cash flows. From the econometric standpoint, these are static panel regressions with firm controls based on cash flow equation. The specification of the system of equations is as follows:

$$\begin{cases} ICF_{it} = \alpha_{1i} + \beta_1 OCF_{it} + \beta' FIRM.CONTROL_{it} + \varepsilon_{1it} \\ DIVIDENDS_{it} = \alpha_{2i} + \beta_2 OCF_{it} + \beta' FIRM.CONTROL_{it} + \varepsilon_{2it} \\ -NET.EQUITY.ISSUANCES_{it} = \alpha_{3i} + \beta_3 OCF_{it} + \beta' FIRM.CONTROL_{it} + \varepsilon_{3it}, \\ -NET.DEBT.ISSUANCES_{it} = \alpha_{3i} + \beta_3 OCF_{it} + \beta' FIRM.CONTROL_{it} + \varepsilon_{3it} \\ D.CASH.RESERVES.YoY_{it} = \alpha_{4i} + \beta_4 OCF_{it} + \beta' FIRM.CONTROL_{it} + \varepsilon_{4it} \end{cases} \quad (3)$$

These equations presume that the operating cash flows generated by a company can be used to finance its investment outlays (ICF), dividend payouts, repayment of incurred financial liabilities (including stock repurchases) or to increase cash reserves (D.CASH.RESERVES). The analysis of intra-sample differences in the patterns of use of operating cash flows by companies depending on the explained variables of interest (CEO.TENURE, NONEXEC.TENURE) can corroborate evidence obtained using different methodology at prior stages of analysis. These equations may also reveal how companies behave under negative operating cash flows. Under such circumstances they may choose to slash investments, investor payouts, incur additional external capital or use cash reserves to plug the funding gap. In the latter case, firms need to have precautionary cash reserves, which may be used to compensate for weak operating cash flows.

Empirical Findings

The analysis of descriptive statistics for the sample point to several important findings. To start with, we find that the average tenure of senior management employed by sampled listed companies remains relatively stable in time oscillating between 5 and 6 years (Figure 1). At the same time, there are significant within-sample differences: the average tenure of CEOs in the top tercile of observations is 10.22 years higher than in the bottom tercile. The same applies to the tenure of nonexecutives with the difference between top and bottom terciles of observations reaching 5.79 years (Table 3). There is a somewhat marked decline in average tenure of senior executives (incl. CEOs) observed since 2020, which may be attributable to multiple factors including the pandemic-related turmoil. Secondly, we observe a progressive increase in average age of senior cadre of Italian companies (Figure 2). The ageing factor is sometimes pointed at when explaining the growth problems encountered by the Italian corporate sector. Interestingly, the differences in tenure do not correlate with differences in average age between sampled officers, implying that longer tenures do not go together with more advanced age. The correlation matrix presented in Table 4 demonstrates that the link between CEO age and tenure stands at just 0.19, while for nonexecutives the correlation between age and tenure equals 0.24 (Table 4). The present paper argues that tenures rather than age may precondition the choice of the modes of external financing, however, we also analyze age as a possible confounding or intermediating factor in shaping the postulated relationships.

[FIGURE 1 HERE]

[FIGURE 2 HERE]

[TABLE 3 HERE]

[TABLE 4 HERE]

The analysis of descriptives also suggests that there have been no major changes in the overall level of indebtedness (measured by debt-to-assets ratio) of sampled companies over the studied observation period (Figure 3), which creates a stable setting for testing the main research hypothesis.

In order to establish an associative link between senior management tenure and the preference for different modes of external financing, we split the sample into three terciles based on senior officer tenure. Subsequently, we ran a number of univariate tests. The results are presented in Table 5. To start with, we observe statistically significant differences in the amount of net equity issuances between terciles of observations created on the basis of CEO.TENURE. The bottom tercile is

observed to record the highest average net equity issuances (diff. 0.016; sig.: 5% with the second tercile; diff. 0.024; sig.: 1% with the third tercile). The relationship does not hold if age is substituted for tenure. No significant differences are found between tenure-based terciles in terms of net debt issuances. This result is corroborated with boxplot analysis (Figure 4), which points to progressively lower variance of net debt issuances in the second and third terciles compared to the first. The means are, however, found to be very close. The same results regarding reliance on debt and equity financing hold if only issuances of new capital excluding repayments/redemptions/buyouts are taken into consideration. There seems to be a significantly higher reliance on equity in the bottom tercile by officer tenure, while the sizes of debt issuances (excluding debt repayments) exhibit no statistically significant differences.

[FIGURE 3 HERE]

[FIGURE 4 HERE]

It is reasonable to hypothesize that the observed differences are driven by the differences in the effective cost of capital from particular sources. In order to test this conjecture, we check the cross-tercile differences in the average cost of debt and equity. The latter is calculated using capital asset pricing model. The results presented in Table 5 suggest that there are no statistically significant differences between subsamples in terms of effective cost of debt. The cost of equity is somewhat lower (diff. -0.59 pp.; sig.: 10%) in the third tercile compared to the first.

Overall, the univariate analysis points to a significant positive associative link between senior management tenure and reliance on equity financing. In order to corroborate these findings, we ran a set of multivariate econometric tests exploring the determinants of the size and frequency of debt and equity issuances over the analyzed period.

[TABLE 5 HERE]

Table 6 presents the results of multivariate dynamic regression analysis of NET.EQUITY.ISSUANCES of sampled companies. The results point to the validity of the principal research hypothesis postulating a link between senior management tenure and the proclivity of companies to issue debt over equity. Both CEO.TENURE (coef.: -0.001; sig.: 5%) and NONEXEC.TENURE (coef.: -0.004; sig.: 1%) are found to be negatively and significantly associated with the size of net equity issuances. Higher tenure of senior management appears to be conducive to lower reliance on equity financing. This may be partially due to the differences in operating cash flows, as companies with more plentiful resources may refrain from issuing equity

in accordance with the standard pecking-order theory. The control variables behave in line with expectations and casual empiricism: the size of net equity issuances is inversely related to the companies' size and profitability.

The analysis of interaction terms in Table 6 suggests that the size of net equity issuances may be positively associated with senior officers' tenure under conditions of negative operating cash flows the coefficients at NEG.OCF x CEO.TENURE and NEG.OCF x NONEXEC.TENURE are positive and statistically significant. While tenured management may be reluctant to recur to equity financing under normal circumstances in order to avoid diluting the existing shareholders and diminishing their effective control, they may be more inclined to do so if the company's internally generated resources are insufficient to cover its immediate needs, therefore, necessitating external financing. No such increased reliance on equity is noted in case of INV.SHORTFALL, whereby the sum of operating cash flows and available cash reserves are lower than the contemporaneous investment outlays. This may suggest that under such circumstances, companies may prefer to issue debt or downscale their investment projects.

In order to corroborate the above findings related to NET.EQUITY.ISSUANCES, we run additional binary logit models investigating the relative proclivity of companies to issue equity over the analyzed period. Importantly, the explained variable binary-codes the instances, when a given company issues new equity, i.e., when NET.EQUITY.ISSUANCES are positive. The results are presented in Table 7. The results are qualitatively similar to those obtained from dynamic regression analysis of the continuous variable NET.EQUITY.ISSUANCES. The coefficients at key variables point to the same directions of the associative links as those observed in the context of GMM analysis. We find that CEO.TENURE and NONEXEC.TENURE are negatively and significantly associated with the likelihood of equity issuances by sampled companies. Officers' tenure is, thus, found to contribute to a reduction of the relative size and frequency of equity issuances. These relationships are reversed under negative operating cash flows, as suggested by coefficients at the variables interacting NEG.OCF with tenure measures. Investment shortfalls are found to bear no significant relationship with the propensity of studied companies to issue equity.

The corollary of the observed pattern of negative tenure-equity nexus could be a positive relationship between managerial tenure and debt issuances. The results of the tests of model (1) on the data for NET.DEBT.ISSUANCES are presented in Table 8. The noteworthy finding relates to the discovered strong positive link (coef.: 0.247; sig.: 1%) between capital expenditures and net

debt issuances, which was absent in case of equity issuances. This may point to the greater preponderance of debt financing in shaping investment processes within sampled companies. CEO.TENURE is evidenced to exhibit no significant relationship with the size of debt issuances, while in case of NONEXEC.TENURE, there is a non-persistent (observable in models 4 and 6, but not in model 5 in Table 8) positive tenure-debt nexus. While longer tenures appear to contribute to lower reliance on equity financing, the patterns of procuring debt appear unaffected. The tenures of both CEOs (coef.: 0.005; sig.: 1%) and nonexecutives (coef.: 0.008; sig.: 1%) are found to be positively associated with the size of net debt issuances under conditions of negative operating cash flow shocks. The qualitatively similar findings are obtained by analyzing the propensity of sampled companies to issue debt (DEBT.ISSUANCE.BIN, which binary-codes firm-years with positive net debt issuances) with binary logit modeling. The results are presented in Table 9. Similar to GMM, logit models indicate no significant links between officer tenure and the relative likelihood of issuing debt. At the same time, there is a strong correlation between firms' capital expenditures and debt issuances, which may point to the relative preference for debt over equity when financing discretionary investment projects.

[TABLE 6 HERE]

[TABLE 7 HERE]

[TABLE 8 HERE]

[TABLE 9 HERE]

At the final stage of analysis, we study how senior management tenure may be related with the patterns of cash flow allocation. The results of tests of the system of simultaneous equations (3) are presented in Table 10 (Panel A). The coefficients at OCF variable show, how contemporaneous operational cash flows are allocated among different uses, including investment outlays (INVEST.CF), net equity and debt issuances, and accumulation / depletion of cash reserves. Dividend payments are omitted. The same equations are tested on three sample terciles based on nonexecutive officer tenure. The results ensuing from sample partition based on CEO.TENURE are qualitatively similar. The following findings stand out. First, the cash flow sensitivity of investment (Hovakimian, 2009) outlays is progressively growing along with senior officer tenure (models 1, 2, 3 in Table 10). While in the first tenure tercile, the OCF coefficient in the investment cash flow equation is 0.175, in the third one, it equals 0.346. Firms with longer-tenured officers appear significantly more reliant on operating cash flows to fund their investments. They are also

more prone to slashing investment expenditures when faced with negative dynamics of operating cash flows. The et equity issuances demonstrate the opposite pattern. When facing a decline in operating cash flows, first from the first tercile appear significantly more likely to recur to equity financing. Each unit of decline in OCF is associated with a net equity issuance of 0.269 units. The relative propensity to issue equity declines in the second tercile, and the coefficient becomes insignificant in the third tercile. No similar monotonicity is observed in case of net det issuances (models 7,8,9 in Table 10). The third tercile exhibits a somewhat higher reliance on debt financing with a decline in OCF associated by one unit associated with a net debt issuance of 0.322 units (compared to 0.257 in the first tercile). It is worth noting, however, that the third tercile also exhibits a much higher sensitivity of investments with respect to cash flow dynamics. Therefore, we conclude that these companies may prefer slashing investment outlays instead of raising external capital. The patterns of accumulation / depletion of cash reserves are found to be similar across all subsamples. We run an additional set of regressions (Panel B in Table 10) aimed at establishing whether the patterns of cash flow allocation change under conditions of operating cash flow shocks, i.e., when a company records negative operating cash flows. Some of the previously discovered patterns of cash flow allocation hold. The highest relative propensity to raise equity and debt is recorded in the second tercile by officer tenure. The more significant cross-tercile difference is observed in terms of the patterns of accumulation and depletion of cash reserves. A decline in contemporaneous cash flows by one unit is associated with slashing cash reserves by 0.226 units within the first tercile and by 0.397 within the third. An increase in OCF by one unit is associated with an accumulation of 0.226 units of cash reserves within the first tercile and of 0.397 units in the third tercile.

The results obtained with simultaneous equation modeling are in line with our prior findings pointing to the links between senior officer tenure and relative propensities of the studied companies to issue debt / equity capital. Companies with longer-tenured management appear less likely to recur to external financing through equity issuances, and are instead more likely to curtail investment adverse OCF dynamics. Tenure also appears to be associated with more conservative financial management strategies. The companies from the top tercile by tenure appear more likely to accumulate precautionary cash reserves and deplete them under adverse circumstances. They also exhibit a higher propensity to scale investments in line with operating cash flow dynamics instead of using external capital as a buffer.

[TABLE 10 HERE]

Conclusions

The results of the study pinpoint the patterns underpinning the choice of the modes of external financing by sampled listed Italian companies. We evidence that Italian companies tend to rely on debt as the primary source of funding for investment outlays. Debt issuances tend to correlate with investment outlays, which is not the case for equity issuances. In turn, the reluctance to issue equity is increasing along with the tenure of senior management – including CEOs and nonexecutive officers. Higher tenure is found to be associated with lower likelihood of and size of net equity issuances, while no similar relationship is observed in case of net debt issuances. Tenure is also evidenced to conduce to conservative financial management strategies, whereby in response to fluctuations in operating cash flows, firms with tenured management tend to scale investments and cash reserves, the latter being used as a precautionary buffer. Equity issuances are thus avoided, allowing the incumbent management and shareholders to retain effective control. Importantly, age is found to play no similar role in shaping the preferences for debt and equity financing.

It remains unclear whether the documented patterns of external financing procurement may be detrimental to the development of sampled companies or to the long-term prospects of shareholder value creation. Anecdotally, refraining from raising equity is frequently associated with the need to downsize investments and, as a result, with slower growth.

The solution to the problems associated with the skewed structure of external financing may ultimately stand on two pillars. The first one should be an in-depth institutional reform promoting the growth of public capital markets in Italy. The expensiveness of raising equity coupled with the uncertainty ensuing from sharing effective control may disincentivize firms in search of capital from raising new equity. Under such circumstances, debt remains the preferred and familiar option with plentiful capital available. The second pillar is shareholder discipline. Mandatory term limits imposed on senior officers or requirements on strict officer independence may be too restrictive and narrowly focused. The disciplining effect will materialize once investors start penalizing de-prioritization of growth and excessive conservatism in corporate decision making. The composition of senior management should also be scrutinized, and if necessary pressure should be mounted to induce changes at senior positions in order to align the interests of shareholders and senior management. Compensation structures tying managerial payouts to shareholder returns or growth-

oriented metrics could assure that management is pursuing ambitious investment endeavors, even if that means relinquishing effective control and having to negotiate with new investors.

The described patterns may also be in large part attributable to the long-standing traditions prioritizing concentrated (frequently in the hands of a family) ownership. Those are unlikely to subside quickly. The extent to which the factors enumerated above are conducive to the observed reliance on debt over equity remains to be determined and quantified.

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Figure 1. Average tenure of sampled officers of listed Italian companies by year

Average tenure of all sampled officers

Average tenure of sampled executives (incl. CEO)

Average tenure of sampled non-executives & supervisory board members
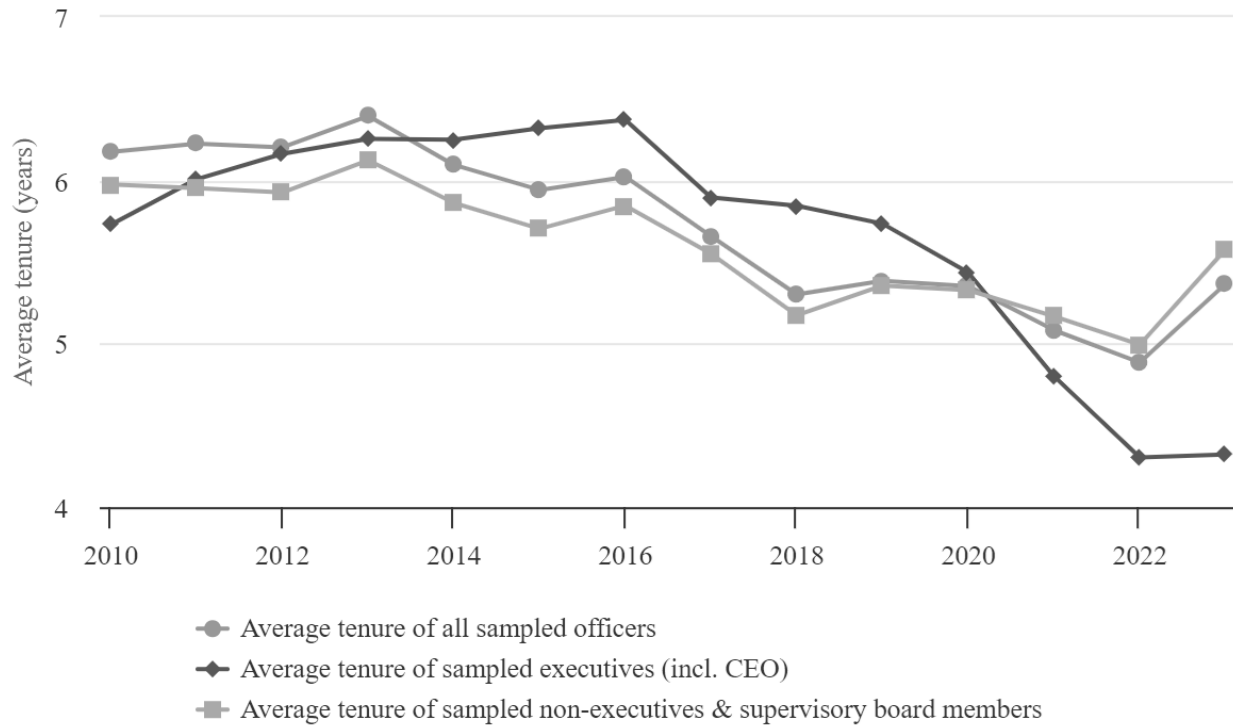
Figure 2. Average age of sampled officers of listed Italian companies by year

Legend:
- Average age of all sampled officers
- Average age of sampled executives (incl. CEO)
- Average tenure of sampled non-executives & supervisory board members
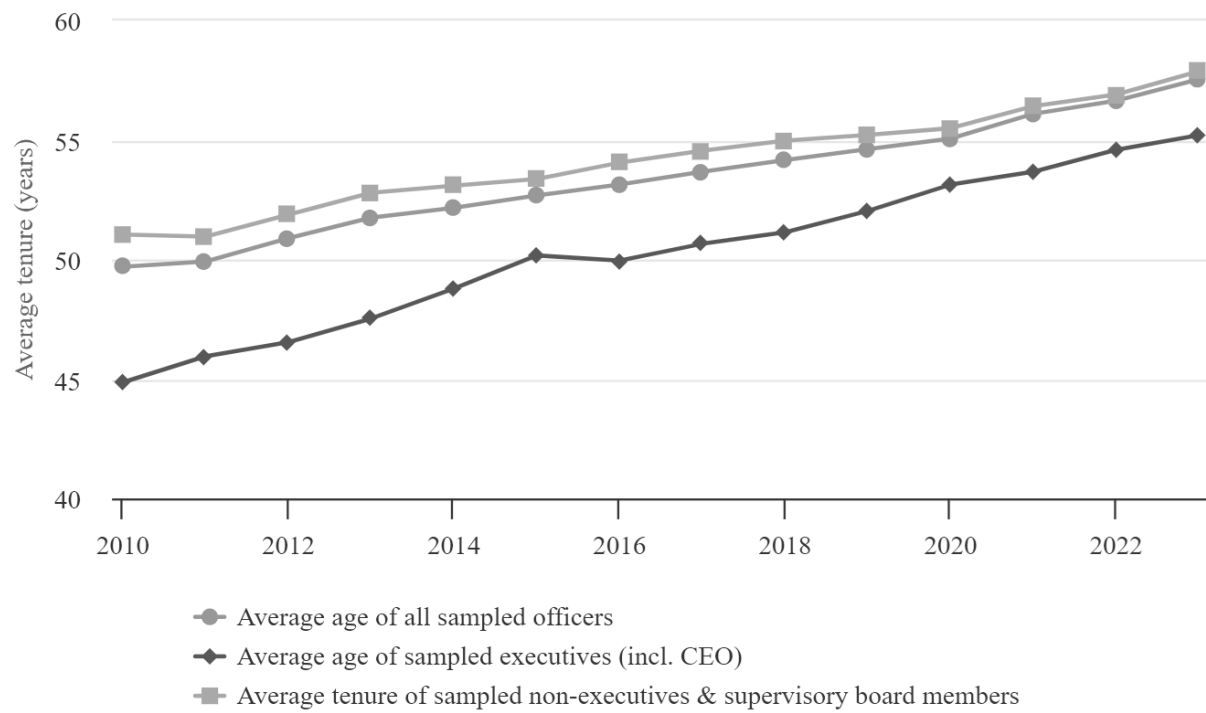
Figure 3. The average level of indebtedness (measured by debt-to-assets ratio, left axis) and average debt maturity (right axis) of sampled listed companies in 2010-2022
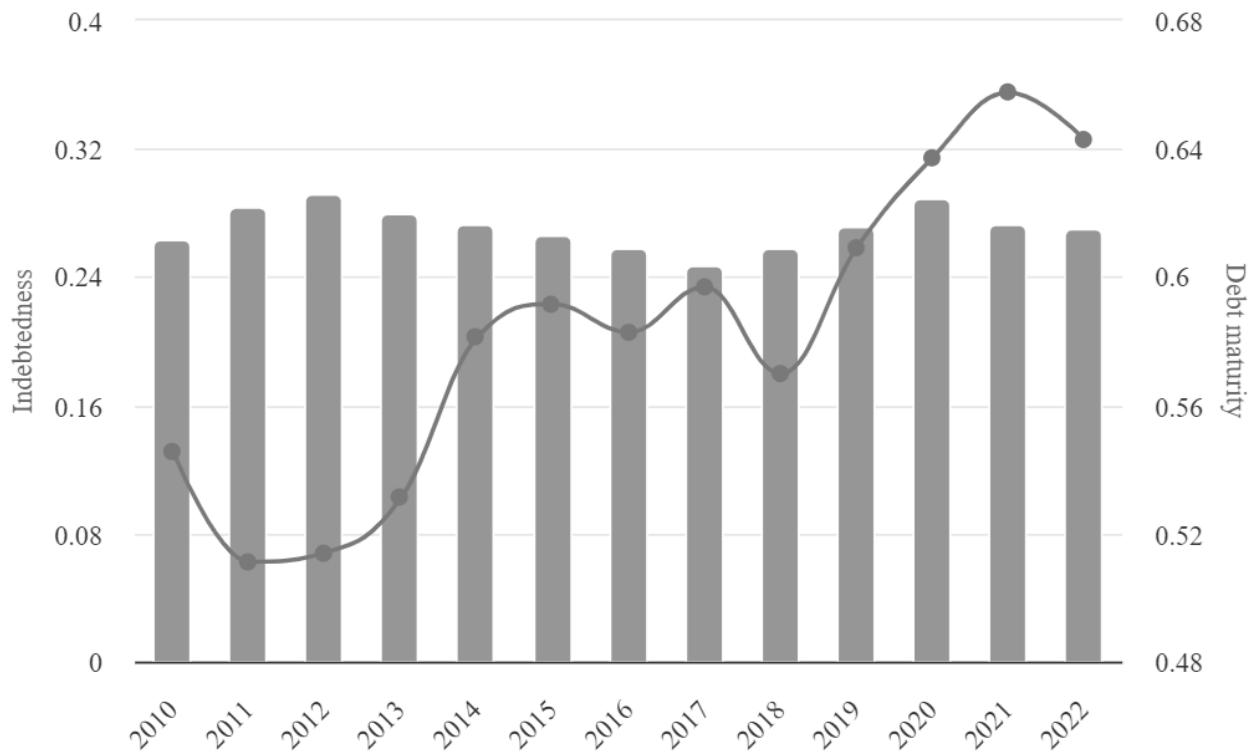
Figure 4. Average net debt issuances by sampled companies split into three terciles depending on the average age of all sampled officers (executives and non-executives)
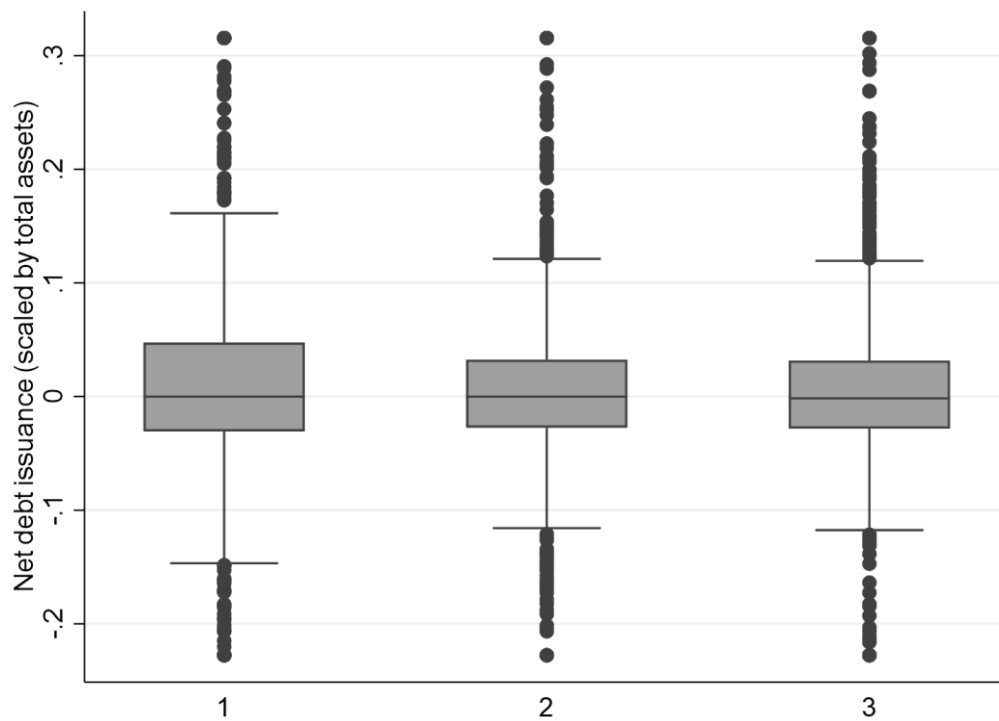
Table 1. List of variables

Variable name	Definition
FIRM.SIZE	Natural logarithm of contemporaneous reported total assets
CAPEX	Discretionary capital expenditures scaled by contemporaneous total assets
ROE	Return on equity, income available to common stock excl. extraordinary items for the fiscal period divided by the average common equity
TIME.PUBLIC	The amount of time (years) elapsed since the company went public
INV.SHORTFALL	Binary variable equal to 1 if during a given year a given company reported investment cash flows larger than the sum of operating cash flows and existing cash reserves
NEG.OCF	Binary variable equal to 1 if during a given year a given company reported negative operating cash flows
OCF	Operating cash flows scaled by contemporaneous reported total assets
NET.EQUITY.ISSUANCES	The net amount of equity issued (+) or retired (-) during a given year by a given company scaled by contemporaneous total assets
NET.DEBT.ISSUANCES	The net amount of debt issued (+) or repaid (-) during a given year by a given company scaled by contemporaneous total assets
NET.CHANGE.CASH	The net cash flows during a given year of a given company scaled by contemporaneous total assets
EQUITY.ISSUANCES	The amount of equity issued (disregarding retirement) during a given year by a given company scaled by contemporaneous total assets
DEBT.ISSUANCES	The amount of debt issued (disregarding repayment of outstanding debt) during a given year by a given company scaled by contemporaneous total assets
EQUITY.ISSUANCE.BIN	Binary variable equal to 1 if during a given year a company issued new equity
DEBT.ISSUANCE.BIN	Binary variable equal to 1 if during a given year a company incurred new debt in any form (loans, bonds etc.) and of any maturity
DEBT.MATURITY	The ratio of long-term debt to total debt outstanding at the end of a given reporting period
DEBT	Total interest-bearing debt scaled by contemporaneous total assets
COST.OF.EQUITY	The cost of equity calculated using CAPM model
COST.OF.DEBT	Effective cost of interest-bearing debt for a given company
LENDING.RATE	Lending interest rate (Italy) as reported by the World Bank
GDP.GROWTH	The YoY growth of GDP per capital in Italy
CEO.TENURE	The tenure of incumbent CEO at the end of existing year (rounded to full years)
NONEXEC.TENURE	The average tenure of nonexecutives / supervisory board members employed by the company during a given year
CEO.AGE	The age of incumbent CEO at the end of existing year (rounded to full years)
NONEXEC.AGE	The average age (rounded individually to full years) of nonexecutives / supervisory board members employed by the company during a given year

Table 2. Summary statistics

Variable name	Mean	Std. Dev.	Min	Max
FIRM.SIZE	19.604	2.644	8.517	27.698
CAPEX	0.032	0.044	0	0.252
ROE	1.838	38.07	-223.58	85.849
OCF	0.045	0.107	-0.397	0.344
INV.SHORTFALL	0.037	0.189	0	1
NEG.OCF	0.122	0.328	0	1
NET.EQUITY.ISSUANCES	0.042	0.122	-0.093	0.694
NET.DEBT.ISSUANCES	0.011	0.081	-0.228	0.316
NET.CHANGE.CASH	0.013	0.089	-0.286	0.401
EQUITY.ISSUANCES	0.101	0.175	0	0.982
DEBT.ISSUANCES	0.068	0.073	0	0.375
DEBT.MATURITY	0.587	0.299	0	1
DEBT	0.264	0.182	0	0.878
COST.OF.EQUITY	7.254	3.886	0.479	18.063
COST.OF.DEBT	1.873	1.811	-0.163	8.485
LENDING.RATE	4.392	1.41	2.026	6.837
GDP.GROWTH	0.102	3.369	-8.53	8.874
CEO.TENURE	5.71	5.523	1	42
NONEXEC.TENURE	4.825	2.596	1	21.5
CEO.AGE	52.016	8.967	20	79
NONEXEC.AGE	53.346	7.215	32.5	70

Table 3. Mean tenure and age of CEOs and nonexecutive officers across distribution terciles

A. Differences of mean CEO.TENURE across terciles created based on CEO.TENURE variable

CEO.TENURE	Contrast	Std. err.	t	[95%	conf. interval]
2_vs_1	2.781625	0.181544	15.32***	2.355846	3.207403
3_vs_1	10.22687	0.179192	57.07***	9.806609	10.64713
3_vs_2	7.445246	0.199205	37.37***	6.978047	7.912445

B. Differences of mean NONEXEC.TENURE across terciles created based on NONEXEC.TENURE variable

NONEXEC.TENURE	Contrast	Std. err.	t	[95%	conf. interval]
2_vs_1	2.095964	0.064709	32.39***	1.9442	2.247729
3_vs_1	5.79462	0.0707867	81.86***	5.628601	5.960639
3_vs_2	3.698656	0.0684404	54.04***	3.53814	3.859172

C. Differences of mean CEO.AGE across terciles created based on CEO.TENURE variable

CEO.AGE	Contrast	Std. err.	t	[95%	conf. interval]
2_vs_1	0.133333	0.044564	2.99***	0.028807	0.237859
3_vs_1	0.25003	0.043881	5.7***	0.147105	0.352954
3_vs_2	0.116697	0.048397	2.41**	0.003179	0.230214

Note: The table presents the results of Student t-tests of differences in mean values of a number of experimental variables. Subsamples were created by splitting the overall sample into terciles based on selected explanatory variables. *, ** and *** denote statistical significance of the test at 10%, 5% and 1% levels respectively

Table 4. Pairwise correlations between age and tenure of CEOs and nonexecutive officers

Variables	1	2	3	4
(1) CEO.TENURE	1			
(2) NONEXEC.TENURE	0.611	1		
(3) CEO.AGE	0.192	0.162	1	
(4) NONEXEC.AGE	0.157	0.243	0.62	1

Note: The table presents pairwise correlation coefficients between age and tenure of selected subsamples of officers: CEOs and nonexecutive officers.

Table 5. Univariate tests of the differences in modes of external financing contingent upon the age and tenure of CEO

Panel A. Differences between terciles based on CEO.TENURE

Panel B. Differences between terciles based on CEO.AGE

NET.EQUITY.ISSUANCES	Contrast	Std. err.	t	[95%	conf. interval]	Contrast	Std. err.	t	[95%	conf. interval]
2_vs_1	-0.01647	0.00628	-2.62**	-0.0312	-0.00173	-0.01465	0.00651	-2.25*	-0.02993	0.000629
3_vs_1	-0.02426	0.006206	-3.91***	-0.0388	-0.00969	-0.00841	0.007085	-1.19	-0.02504	0.008218
3_vs_2	-0.00779	0.006944	-1.12	-0.0240	0.00851	0.006239	0.006695	0.93	-0.00948	0.021954

NET.DEBT.ISSUANCES	Contrast	Std. err.	t	[95%	conf. interval]	Contrast	Std. err.	t	[95%	conf. interval]
2_vs_1	0.000366	0.004997	0.07	-0.0113	0.012088	-0.00152	0.005214	-0.29	-0.01375	0.010718
3_vs_1	0.000704	0.004834	0.15	-0.0106	0.012044	-0.00563	0.005409	-1.04	-0.01832	0.007062
3_vs_2	0.000338	0.005428	0.06	-0.0124	0.013071	-0.00411	0.005247	-0.78	-0.01642	0.008197

EQUITY.ISSUANCES	Contrast	Std. err.	t	[95%	conf. interval]	Contrast	Std. err.	t	[95%	conf. interval]
2_vs_1	-0.02859	0.012954	-2.21*	-0.0590	0.001868	-0.02722	0.013574	-2.01	-0.05915	0.004706
3_vs_1	-0.03905	0.013432	-2.91**	-0.0706	-0.00747	0.004628	0.015894	0.29	-0.03276	0.042015
3_vs_2	-0.01046	0.015295	-0.68	-0.0464	0.025497	0.03185	0.015471	2.06	-0.00454	0.068241

DEBT.ISSUANCES	Contrast	Std. err.	t	[95%	conf. interval]	Contrast	Std. err.	t	[95%	conf. interval]
2_vs_1	-0.01254	0.00651	-1.93	-0.0278	0.002744	-0.00833	0.00662	-1.26	-0.02388	0.007222
3_vs_1	-0.0095	0.006265	-1.52	-0.0242	0.005209	-0.0082	0.007063	-1.16	-0.02479	0.008391
3_vs_2	0.003039	0.007054	0.43	-0.0135	0.019605	0.000127	0.00692	0.02	-0.01613	0.016382

COST.OF.EQUITY	Contrast	Std. err.	t	[95%	conf. interval]	Contrast	Std. err.	t	[95%	conf. interval]
2_vs_1	-0.39193	0.267713	-1.46	-1.0201	0.236301	0.556293	0.332946	1.67	-0.22515	1.337738
3_vs_1	-0.59514	0.276602	-2.15*	-1.2442	0.05395	1.466039	0.331821	4.42***	0.687235	2.244843
3_vs_2	-0.20321	0.297969	-0.68	-0.9024	0.496023	0.909746	0.265329	3.43	0.287004	1.532489

COST.OF.DEBT	Contrast	Std. err.	t	[95%	conf. interval]	Contrast	Std. err.	t	[95%	conf. interval]
2_vs_1	-0.03962	0.125952	-0.31	-0.3351	0.255951	-0.04107	0.152949	-0.27	-0.40005	0.317906
3_vs_1	0.062354	0.130134	0.48	-0.2430	0.367734	0.032547	0.152432	0.21	-0.32522	0.390313
3_vs_2	0.10197	0.140186	0.73	-0.227	0.43094	0.07362	0.121886	0.6	-0.21245	0.359695

Note: The table presents the results of Student t-tests of differences in mean values of a number of experimental variables. Subsamples were created by splitting the overall sample into terciles based on selected explanatory variables: CEO.TENURE and CEO.AGE (subsample sizes do not match due to unavailability of data for some officers). *, ** and *** denote statistical significance of the test at 10%, 5% and 1% levels respectively

Table 6. The link between officers' tenure and the size of equity issuances

The explained variable is NET.EQUITY.ISSUANCES

Model No.	(1)	(2)	(3)	(4)	(5)	(6)
L.NET.EQUITY.ISSUANCES	-0.079	-0.084	-0.087	-0.088	-0.093	-0.095
	(-0.75)	(-0.78)	(-0.81)	(-0.83)	(-0.87)	(-0.87)
L2.NET.EQUITY.ISSUANCES	0.161	0.161	0.160	0.150	0.151	0.149
	(1.33)	(1.34)	(1.32)	(1.24)	(1.25)	(1.24)
L.FIRM.SIZE	-0.004*	-0.004*	-0.004*	-0.005*	-0.004*	-0.004*
	(-1.82)	(-1.80)	(-1.79)	(-1.92)	(-1.88)	(-1.93)
L.CAPEX	-0.022	-0.017	-0.021	-0.029	-0.026	-0.031
	(-0.33)	(-0.26)	(-0.32)	(-0.44)	(-0.40)	(-0.47)
L.ROE	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(-2.65)	(-2.64)	(-2.57)	(-2.60)	(-2.60)	(-2.60)
L.TIME.PUBLIC	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	(-1.00)	(-0.95)	(-1.04)	(-0.59)	(-0.55)	(-0.63)
CEO.TENURE	-0.001**	-0.001**	-0.001**			
	(-1.97)	(-2.34)	(-2.22)			
NEG.OCF x CEO.TENURE		0.002*				
		(1.69)				
INV.SHORTFALL x CEO.TENURE			0.004			
			(1.40)			
NONEXEC.TENURE				-0.004***	-0.004***	-0.004***
				(-2.62)	(-2.68)	(-2.61)
NEG.OCF x NONEXEC.TENURE					0.002*	
					(1.76)	
INV.SHORTFALL x NONEXEC.TENURE						0.004
						(0.95)
_cons	0.084*	0.083*	0.082*	0.101**	0.097**	0.098**
	(1.83)	(1.83)	(1.82)	(2.06)	(2.05)	(2.09)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
ar1	-2.628***	-2.665***	-2.527**	-2.594***	-2.604***	-2.495**
ar2	-0.697	-0.745	-0.722	-0.689	-0.738	-0.727
chi2	64.119***	69.098***	67.134***	66.379***	69.289***	68.399***
Hansen test	4.663	1.610	4.380	4.276	4.299	4.300

The table presents the results of dynamic panel regression modeling (GMM-SYS). All models include the first and second lag of explained variables, year and industry fixed effects, and firm-level controls. Prefixes L. and L2. Indicate the first and second lag of explanatory variables respectively. Statistical significance of variables at 1%, 5% and 10% level is denoted with ***, ** and * respectively.

Table 7. The link between officers' tenure and the likelihood of equity issuances

The explained variable is EQUITY.ISSUANCE.BIN

Model No.	(1)	(2)	(3)	(4)	(5)	(6)
GDP.GROWTH	0.113*	0.124**	0.114*	0.118**	0.127**	0.117*
	(1.823)	(1.984)	(1.843)	(1.888)	(2.020)	(1.876)
LENDING.RATE	0.304	0.320	0.307	0.315	0.326	0.313
	(1.168)	(1.221)	(1.180)	(1.207)	(1.243)	(1.200)
FIRM.SIZE	-0.113***	-0.107***	-0.110***	-0.120***	-0.110***	-0.118***
	(-3.496)	(-3.272)	(-3.396)	(-3.687)	(-3.326)	(-3.591)
CAPEX	1.503	1.740	1.648	1.170	1.413	1.303
	(0.841)	(0.970)	(0.918)	(0.649)	(0.781)	(0.719)
ROE	-0.005***	-0.004**	-0.005***	-0.005***	-0.004**	-0.004**
	(-2.927)	(-2.396)	(-2.761)	(-2.633)	(-1.957)	(-2.408)
TIME.PUBLIC	-0.007	-0.007	-0.007	-0.006	-0.006	-0.006
	(-1.292)	(-1.255)	(-1.319)	(-1.088)	(-1.110)	(-1.118)
CEO.TENURE	-0.027**	-0.034**	-0.029**			
	(-2.043)	(-2.444)	(-2.156)			
NEG.OCF x CEO.TENURE		0.064**				
		(2.286)				
INV.SHORTFALL x CEO.TENURE			0.046			
			(1.048)			
NONEXEC.TENURE				-0.062**	-0.068**	-0.064**
				(-2.130)	(-2.318)	(-2.186)
NEG.OCF x NONEXEC.TENURE					0.088**	
					(2.132)	
INV.SHORTFALL x NONEXEC.TENURE						0.061
						(0.811)
_cons	1.022	0.827	0.962	1.285	1.042	1.254
	(0.782)	(0.629)	(0.735)	(0.974)	(0.784)	(0.950)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Log-likelihood	-659.984	-657.407	-659.452	-656.164	-653.912	-655.840
chi2	81.862***	87.016***	82.926***	81.661***	86.164***	82.309***
r2_p	0.058	0.062	0.059	0.059	0.062	0.059

The table presents the maximum likelihood estimates of binary logit models with the explained variables being the positive net issuance of equity during a given year by a given company. Z-coefficients are reported in parentheses under respective regression coefficients. Significance of respective variables is denoted with asterisks: *p <.1. **p <.05. ***p<.01. The models include year and industry fixed effects and firm-level controls.

Table 8. The link between officers' tenure and the size of debt issuances

The explained variable is NET.DEBT.ISSUANCES

Model No.	(1)	(2)	(3)	(4)	(5)	(6)
L.NET.DEBT.ISSUANCES	-0.052	-0.060	-0.054	-0.046	-0.049	-0.046
	(-1.16)	(-1.42)	(-1.22)	(-1.03)	(-1.14)	(-1.03)
L.FIRM.SIZE	-0.003***	-0.003**	-0.003***	-0.003***	-0.002	-0.003**
	(-2.72)	(-2.09)	(-2.60)	(-2.67)	(-1.58)	(-2.53)
L.CAPEX	0.247***	0.256***	0.248***	0.249***	0.260***	0.249***
	(2.85)	(3.13)	(2.83)	(2.83)	(3.12)	(2.82)
L.ROE	0.000	0.000*	0.000	0.000	0.000**	0.000
	(1.18)	(1.93)	(1.40)	(1.09)	(2.06)	(1.19)
L.TIME.PUBLIC	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	(-0.92)	(-0.91)	(-0.94)	(-1.12)	(-1.06)	(-1.11)
CEO.TENURE	0.000	-0.000	0.000			
	(0.94)	(-0.02)	(0.82)			
NEG.OCF x CEO.TENURE		0.005***				
		(4.46)				
INV.SHORTFALL x CEO.TENURE			0.002			
			(1.29)			
L.LENDING.RATE				0.003	0.003	0.003
				(1.19)	(1.02)	(1.18)
NONEXEC.TENURE				0.002*	0.001	0.002*
				(1.89)	(1.29)	(1.87)
NEG.OCF x NONEXEC.TENURE					0.008***	
					(4.94)	
INV.SHORTFALL x NONEXEC.TENURE						0.001
						(0.28)
_cons	-0.006	-0.015	-0.007	-0.023	-0.040	-0.024
	(-0.19)	(-0.49)	(-0.25)	(-0.81)	(-1.36)	(-0.81)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
ar1	-6.750***	-6.844***	-6.767***	-6.772***	-6.911***	-6.776***
ar2	1.669	1.725	1.692	1.698	1.526	1.697
chi2	151.328***	179.484***	153.156***	157.150***	172.346***	158.925***
Hansen test	3.630	3.978	3.821	3.881	3.415	3.891

The table presents the results of dynamic panel regression modeling (GMM-SYS). All models include the first and second lag of explained variables, year and industry fixed effects, and firm-level controls. Prefix L.. Indicates the first lag of the explanatory variable. Statistical significance of variables at 1%, 5% and 10% level is denoted with ***, ** and * respectively.

Table 9. The link between officers' tenure and likelihood of debt issuance

The explained variable is DEBT.ISSUANCE.BIN

Model No.	(1)	(2)	(3)	(4)	(5)	(6)
LENDING.RATE	5.224	5.330	5.193	5.229	5.324	5.221
	(1.630)	(1.646)	(1.620)	(1.629)	(1.644)	(1.627)
FIRM.SIZE	-0.009	0.003	-0.007	-0.002	0.018	-0.001
	(-0.279)	(0.090)	(-0.220)	(-0.061)	(0.576)	(-0.044)
CAPEX	11.381***	11.746***	11.495***	11.430***	11.902***	11.449***
	(6.487)	(6.630)	(6.534)	(6.504)	(6.699)	(6.507)
ROE	-0.003	-0.001	-0.002	-0.003*	-0.001	-0.003*
	(-1.642)	(-0.675)	(-1.391)	(-1.848)	(-0.565)	(-1.731)
TIME.PUBLIC	-0.014**	-0.015**	-0.015**	-0.014**	-0.016***	-0.015**
	(-2.508)	(-2.499)	(-2.544)	(-2.475)	(-2.625)	(-2.482)
CEO.TENURE	0.009	0.002	0.008			
	(0.885)	(0.221)	(0.765)			
NEG.OCF x CEO.TENURE		0.106***				
		(4.051)				
INV.SHORTFALL x CEO.TENURE			0.046			
			(1.187)			
NONEXEC.TENURE				0.018	0.010	0.018
				(0.761)	(0.433)	(0.753)
NEG.OCF x NONEXEC.TENURE					0.156***	
					(4.312)	
INV.SHORTFALL x NONEXEC.TENURE						0.015
						(0.232)
_cons	-31.250*	-32.061*	-31.096*	-31.446*	-32.350*	-31.410*
	(-1.716)	(-1.742)	(-1.708)	(-1.725)	(-1.757)	(-1.723)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Log-likelihood	-926.180	-917.135	-925.474	-921.370	-911.728	-921.343
chi2	136.034***	154.124***	137.446***	135.404***	154.688***	135.458***
r2_p	0.068	0.078	0.069	0.068	0.078	0.068

The table presents the maximum likelihood estimates of binary logit models with the explained variables being the positive net issuance of debt during a given year by a given company. Z-coefficients are reported in parentheses under respective regression coefficients. Significance of respective variables is denoted with asterisks: *p <.1. **p <.05. ***p<.01. The models include year and industry fixed effects and firm-level controls.

Table 10. The allocation of operating cash flows by sampled companies contingent on the tenure of nonexecutives / supervisory board members

Panel A. Results of the cash flow equation for the entire sample (contingent upon availability of firm-level data)

Model No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Explained variable	INVEST.CF			NET.EQUITY.ISSUANCES			NET.DEBT.ISSUANCES			NET.CHANGE.CASH		
Tercile	1	2	3	1	2	3	1	2	3	1	2	3
OCF	0.175***	0.193***	0.346***	-0.269***	-0.210***	-0.033	-0.257***	-0.246***	-0.322***	0.259***	0.266***	0.234***
	(6.66)	(7.29)	(11.61)	(-7.45)	(-6.12)	(-1.36)	(-9.45)	(-8.52)	(-9.74)	(9.95)	(9.72)	(10.34)
FIRM.SIZE	-0.007***	-0.002	-0.001	-0.010***	-0.009***	-0.002	0.000	0.002	-0.001	-0.002	-0.002	-0.001
	(-4.65)	(-1.64)	(-0.52)	(-5.51)	(-4.41)	(-1.13)	(0.16)	(1.14)	(-0.39)	(-1.60)	(-1.30)	(-1.06)
DEBT.MATURITY	0.024*	0.020*	0.026**	0.005	0.025*	0.006	0.016	0.025*	0.031**	-0.001	0.005	0.002
	(2.48)	(2.32)	(2.83)	(0.41)	(1.96)	(0.74)	(1.60)	(2.45)	(3.01)	(-0.14)	(0.60)	(0.23)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm-level controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Panel B. Results of the cash flow equation for a subsample of companies experiencing negative operating cash flows (unbalanced panel)

Model No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Explained variable	INVEST.CF			NET.EQUITY.ISSUANCES			NET.DEBT.ISSUANCES			NET.CHANGE.CASH		
Tercile	1	2	3	1	2	3	1	2	3	1	2	3
OCF	0.163*	0.232**	0.168	-0.263*	-0.421**	-0.113	-0.246**	-0.076	-0.303	0.226**	0.204*	0.397**
	(2.25)	(2.92)	(1.18)	(-2.29)	(-2.69)	(-0.76)	(-3.15)	(-0.83)	(-1.70)	(2.74)	(2.15)	(3.14)
FIRM.SIZE	-0.007*	-0.004	-0.004	-0.011*	-0.004	-0.002	0.004	0.005	0.002	-0.002	0.000	0.002
	(-2.42)	(-1.38)	(-0.70)	(-2.37)	(-0.75)	(-0.46)	(1.09)	(0.96)	(0.30)	(-0.51)	(0.01)	(0.35)
DEBT.MATURITY	0.021	0.029	0.015	0.011	0.029	0.015	0.000	0.035	-0.025	-0.015	-0.002	-0.015
	(1.00)	(1.51)	(0.65)	(0.31)	(0.78)	(0.66)	(0.00)	(1.43)	(-0.80)	(-0.62)	(-0.09)	(-0.74)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

| Firm-level controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

The table presents the results of static panel regression modeling. All models include year fixed effects, industry fixed effects, macroeconomic and firm-level controls. The coefficients for some of the control variables and the constant term are not reported for reasons of brevity. Statistical significance of variables at 1%, 5% and 10% level is denoted with ***, ** and * respectively.