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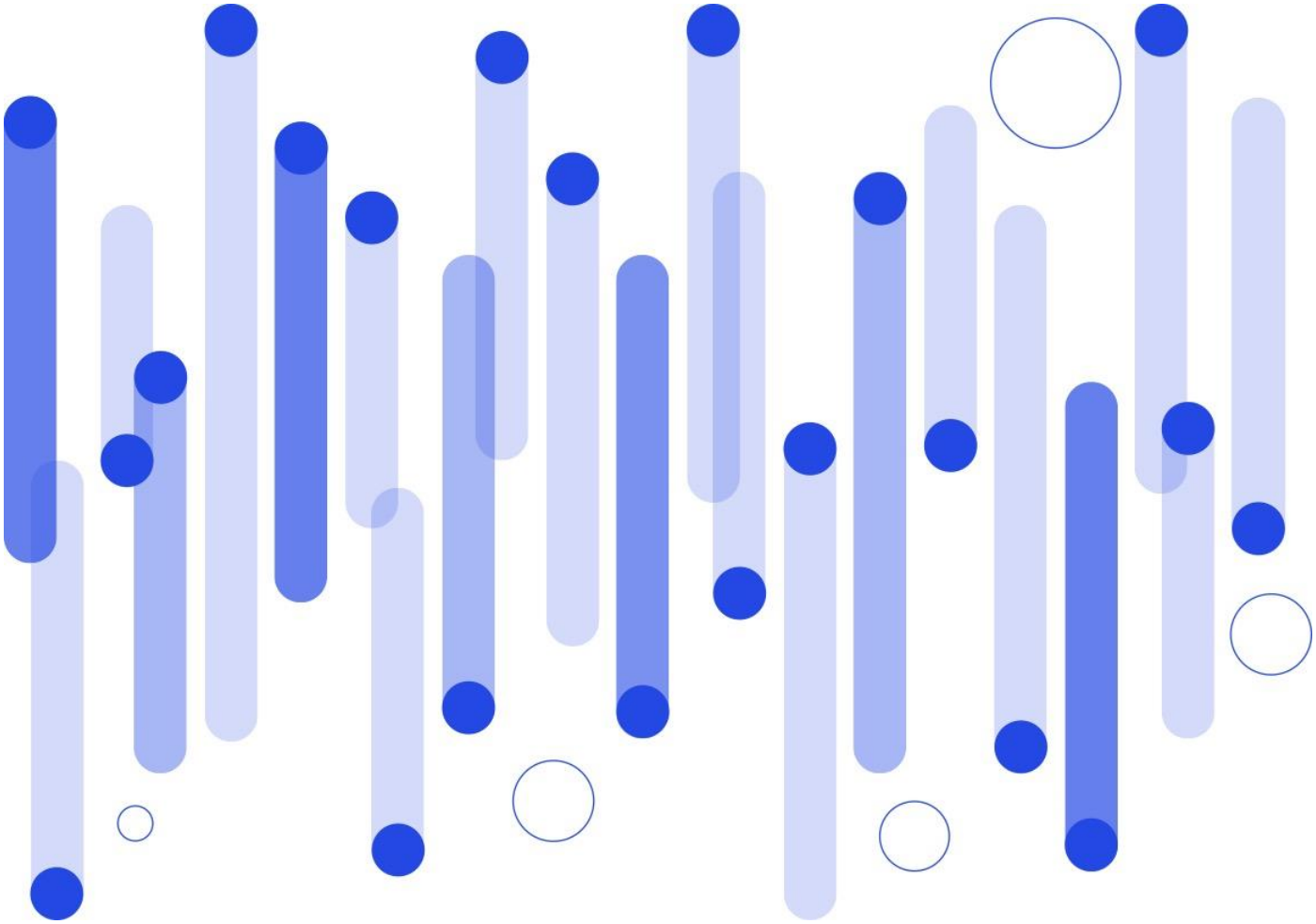

Assessing the economic impact of EIF-supported equity financing: the case of Lower-Mid Market

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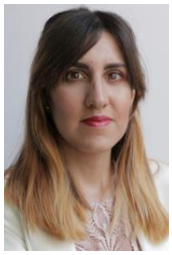

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Preface

Growth-phase companies in Europe often face limited access to equity and hybrid debt-equity financing. Private investors may consider these firms too large for early-stage venture capital yet not sufficiently appealing for large-scale private equity investments.

To address this gap, the EIF supports growth, expansion, and mid-market funds through its lower mid-market (LMM) activity. These funds are managed by first-time teams, emerging managers, or more established managers. Their objectives include fostering company growth, enhancing management professionalism, improving internal processes, facilitating family succession, and implementing turnaround strategies for distressed firms.

By facilitating access to financing and mitigating market shortcomings, the EIF plays a crucial role in the LMM space. Therefore, assessing the impact of this support is of critical importance. The EIF's interventions not only assist firms during pivotal growth stages but also aim to drive innovation, enhance productivity, and create jobs. As a result, impact measurement must extend beyond return metrics to capture concrete improvements in firm performance and broader economic contributions.

This study uses advanced econometric techniques to rigorously compare firms that received EIF-backed equity financing with those that did not, enabling the isolation of causal effects. By applying this causal inference approach, the analysis provides credible evidence of the impact of LMM investments.

The EIF has a strong tradition of conducting rigorous impact assessments. Through access to large-scale microdata and collaborations with leading academics, the EIF has developed a robust methodological framework and extensive expertise in evaluating the impact of its activities, including equity investments, guarantees, and other financial instruments.

This study holds significant policy relevance by offering valuable insights into the effectiveness of equity investments in supporting LMM firms. Additionally, it explores how specific firm characteristics — such as size, sector, or growth stage — affect the impact of equity investments. Understanding these dynamics enables better resource targeting, ensuring that public support generates maximum value, achieves its economic objectives, and informs the design of future equity programs.

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Executive summary[1]

This report evaluates the impact of equity finance on company performance for investments received from private equity (PE) investors supported by the European Investment Fund (EIF). Specifically, these investments fall under the EIF's Sustainable Growth division responsible for the Lower Mid-Market (LMM) investment strategy. By December 2024, the EIF allocated approximately €16.5 billion to this segment. Understanding the impact of LMM investments is crucial for guiding future initiatives with similar policy objectives.

Despite the lack of a universally accepted definition of LMM PE deals, the scientific literature and practitioners agree that these deals refer to smaller private equity transactions in terms of investment amounts and/or target company size than "classical" buyout deals. The EIF's LMM activity provides growth-phase companies with equity and hybrid debt-equity finance through local or pan-European private equity funds. These funds aim to support company growth, management professionalization, internal process improvements, and family succession.

This report is the first international study to assess the impact of LMM PE deals, focusing on those supported by the EIF. The study analyses a sample of 1,757 LMM PE investments from 2007 to 2023, categorizing them into two treatment groups: a Main Treatment group (full acquisitions or "majority" investments where the equity stake exceeds 30%) and a Secondary Treatment group ("minority" investments where the equity stake is below 30% and the investment amount is higher than or equal to 7.5 million EUR). The Main Treatment group is primarily composed by companies in their growth-phase that have reached an efficient scale of production, as demonstrated by the low rate of negative EBTIDAs (13%). Companies in the Secondary Treatment group are instead smaller on average and more likely to be still in the scale-up phase.

The study employs a robust methodological approach to ensure reliable findings. It uses a comprehensive set of performance indicators, including the growth of total assets, intangible assets, turnover, employment, and financial ratios. The research combines Coarsened Exact Matching (CEM) and Propensity Score Matching (PSM) techniques to select appropriate counterfactuals, ensuring comparability between treated and untreated firms. We resort to fixed-effect panel data regression models to analyse the data alongside several robustness checks. This methodology aims to identify the treatment effects of LMM investments on the performance of investee companies.

The findings confirm that LMM PE investments significantly enhance company growth performance, especially growth in total assets, intangible assets, and employment cost. However, we detect a negative effect on productivity growth, measured by the ratio of turnover to employment costs, although this finding might be linked to the human capital improvements and/or rationalizations triggered by LMM investments. Nonetheless, these investments remain vital for economic growth and innovation in Europe.

[1] This report benefitted from the comments and input of many EIF colleagues, for which we are very grateful. In particular, we would like to acknowledge the invaluable help of our Impact Assessment colleagues Camila Carlos Ballerini, Andrea Crisanti and Elena Stasi. Moreover, we are thankful to Matteo Squilloni and Desislava Zlateva for the useful comments and review.

Companies in the Main Treatment group saw a 6.5% higher growth in total assets, and a 3.6% higher growth in employee costs compared to control companies. Notably, they experienced a 148% higher growth in intangible assets, which is a key indicator of innovation underscoring the transformative impact of PE finance on fostering innovation. However, the treatment effect on turnover was positive, but not statistically significant. As a result, productivity (proxied by the turnover-to-employee costs ratio) experienced a statistically significant decrease by 4.7% compared to the control group. The positive effects were more significant for larger ICT sector companies and varied based on company location and whether venture capital investors previously backed them.

Companies in the Secondary Treatment group experienced an overall positive short-term growth in total assets, turnover, and employee costs after obtaining LMM finance, in line with the theory of change of scale-up investments. The effects were more pronounced in smaller companies, those in ICT sectors, and those located in DACH countries, with some variations based on venture capital backing and regional differences. However, the smaller number of observations in this sub-sample reduces the power of our analysis, making it difficult to identify if the treatment effect of these LMM PE investments is statistically significant.

Future research should investigate under what conditions and through which mechanisms LMM PE investments positively influence target companies' performance. Special attention should be devoted to disentangling improvements in companies' operational performance (arising e.g., from recruitment of skilled managers, adoption of effective organizational and managerial practices, and cost rationalization) from relaxation of financial constraints (arising e.g., from equity infusion and access to more debt with lower interest rates). Research should also examine how LMM PE investments influence target companies' modes of growth (i.e., organic vs. external growth), e.g., by favouring the adoption of "buy-to-build" strategies.

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1 Introduction

This report evaluates the impact of receiving equity finance from private equity investors supported by the European Investment Fund (EIF) under its "Lower Mid-Market" (LMM) investment strategy on the performance of target companies. As of December 2022, the EIF had allocated 13.5 billion EUR to this segment of the Private Equity industry in Europe (source: EIF website). Analysing both the short- and long-term effects of these investments is crucial for informing the development of new policies with similar objectives.

1.1 The definition of LMM

The term “Mid-Market” in the academic and grey literature usually refers to a subset of Private Equity transactions characterized by smaller deals involving private companies (Kaplan and Stromberg, 2009; Davis et al., 2021), as compared to more traditional buyout deals, typically public-to-private transactions or divisional buyouts involving large, publicly traded companies.

For example, the National Center for the Middle Market defines middle market firms as those with annual sales between $10 and $1,000 million, while Clark and Bawden (2011) find that in the UK, funds described as Mid-Market target companies with valuations between £2 and £500 million. In terms of deal size, PitchBook classifies Mid-Market deals as those between $25-1,000 million, whereas in the UK, the BVCA defines Mid-Market as involving equity investments between £10 million and £100 million.

Mid-market transactions are further divided into "Lower Mid-Market” (LMM) and “Upper Mid-Market", though the distinction between the two segments is often unclear. The BVCA defines LMM as the transactions with equity invested in the £5-15 million range, or the total transaction value in the £10-50 million range (see BVCA 2003). Meanwhile, Invest Europe (2020) defines LMM as deals ranging from €15 million to €50 million, with Core Mid-Market transactions falling between €50 million and €100 million, and Upper Mid-Market deals ranging from €100 million to €150 million.

However, quantitative thresholds are not the only defining criteria for LMM. According to BVCA (2003), “most GPs and LPs feel strongly that there are a range of qualitative characteristics that are at least as, if not more, important in defining the Mid-Market.” In terms of investment firms, LMM transactions are typically pursued by national or regional player, generalist funds with less than £200 million under management. LMM deals often involve management buyouts or buy-ins, aimed at developing or replacing existing management, and may include a buy-and-build strategy, whereby smaller companies are acquired and merged into portfolio companies to achieve synergies (Hammer et al., 2022). LMM investments are often made through majority stakes and may involve a moderate level of leverage. The sellers in these transactions are generally private companies, often owned by entrepreneurs or family members, and sometimes include corporates or previous private equity investors. Exits are usually trade sales or secondary buyouts, typically occurring within a 3 to 5-year period.

1.2 The impact on investees of LMM transactions

In traditional buyout deals, PE investors acquire large companies to generate returns by reselling these companies after reducing inefficiencies. Typical examples of such inefficiencies are over-entrenched management, unproductive divisions and redundancies among workers (Marchesi and Soo Jang, 2023). Instead, scholars have highlighted that in Mid-Market transactions, the private equity funds generate two main sources of value added. To begin with, private equity investors can help target firms to more effectively exploit growth opportunities and assist them in improving operations. “To the extent that small, private firms may more likely lack the necessary human capital to identify growth opportunities, there may be a greater scope for private equity investors to provide assistance and thereby unlock values in such firms.” (Marchesi and Soo Jang, 2023). Another value added derives from private equity investors alleviating target firms’ financing constraints in two ways (Boucly et al., 2011; Marchesi and Jang, 2023). First, they inject equity resources, thus reducing the risk of default and improving the targets’ access to cash flow-based debt (Haque et al., 2022). Second, they rely on their reputation and relationship with lenders to strike better loan deals for their portfolio companies, such as cheaper interest rates, looser covenants, and flexibility in distress resolution (Haque and Kleymenova, 2023).

Because of these effects, Mid-Market companies grow faster than their peers and are more productive. As shown by Davis et al. (2021) in the US, compared to similar firms not backed by private equity, employment decreased by an average of 11.5%-12.6% over two years following traditional buyout deals (public-to-private or divisional buyouts). In contrast, employment increased by an average of 9.9%-12.8% after Mid-Market transactions (private-to-private deals or secondary buyouts). Interestingly, 3.1-6.1 percentage points (p.p.) of the additional growth generated by Mid-Market deals is due to organic expansion. Moreover, traditional buyouts do not improve productivity, while private-to-private deals experience a 14.7% productivity gain relative to the control group.

Outside the US, evidence is scarce with Boucly et al. (2011) being an exception. They found that private-to-private transactions in France trigger improvements in target companies’ sales, profitability, and employment growth relative to comparable firms not supported by private equity. Results are not significant for larger, public-to-private transactions.

1.3 The EIF LMM mandates and the theory of change

This report focuses on LMM deals pursued by investment funds supported by the EIF LMM activity. Prior to its 2023/2024 reorganization, the EIF LMM activity represented a subdivision of the EIF's Equity Investments team, covering growth, expansion, and Mid-Market funds. It offered SMEs in their growth phase access to equity and hybrid debt-equity finance through local or pan-European

private equity funds.[2] These funds may be generalist or sector-focused and managed by first-time teams, emerging managers, or more established managers.

The main source of capital to the EIF comes from its Mandators – the European Investment Bank, the European Commission, local authorities and National Promotional Institutions (NPIs), and other external investors. Specific initiatives active before 2020 included the Joint European Resources for Micro to Medium Enterprises (JEREMIE), the Risk Capital Resources (RCR) of the European Investment Bank, the MidCap Growth Finance (MGF) of the European Investment Bank and the European Commission, and the Mezzanine "Fund of Fund" for Germany (MDD).

The objectives of the mandates vary, ranging from policy focuses, such as providing resources to target groups or industries, as in the case of JEREMIE, to specific financial goals, with detailed policy focuses, such as supporting firms in distress due to the COVID-19 recession, or addressing succession issues in certain regions. Some initiatives aim to achieve a target financial return, as in the case of RCR.

The LMM team aims to transform policy objectives into financing solutions for small businesses through Private Equity fund managers. These LMM-supported fund managers are chosen based on their ability to meet various mandate objectives, including[3] :

- Company growth: achieving growth both organically and via acquisitions.
- Professionalization of management teams: by appointing experienced CFOs or financial controllers, restructuring organizational hierarchies, introducing talent management policies and adequate remuneration incentives, and bringing in external industry-specific experts for management or advisory roles.
- Improvements in internal processes and governance: by implementing proper financial controls and management reporting, updating KPIs to monitor business operations and value drivers, supporting strategic management decisions, optimizing costs, implementing ESG principles, improving risk management processes, and enhancing reporting.
- Family succession: assisting family-owned businesses where successors are either unwilling or unable to take over.
- Turnaround: intervening in distressed companies to facilitate recovery and growth[4].

The ultimate beneficiaries of LMM investments are the portfolio companies of the LMM funded investment managers. These companies are expected to improve their performance through various mechanisms described in the LMM theory of change:

- Relaxed financial constraints: beneficiaries are expected to see their financial constraints eased, allowing them to pursue investment opportunities, improve profitability, expand sales, and generally "scale up" after receiving support.

[2] The EIF's Equity Investment team provides equity investments and co-investments to venture capital, private equity, and private credit funds that pursue generalist, specialized, or mixed investment strategies.
[3] In addition, the EIF's LMM team has engaged with a range of fund managers who employ alternative investment approaches, such as Hybrid Debt-Equity investments. However, these approaches fall outside the scope of this study, which focuses primarily on 'Equity-first' strategies—where gaining control in the investee company, whether through minority or majority stakes, is a central part of the investment approach.
[4] This particular policy goal was only recently introduced, therefore its intended effects are not addressed in this study.

- Management changes: companies are likely to experience changes in their management teams, including succession, which should enhance financial structure, professionalization, sales growth, and cost efficiency after an initial adjustment period.
- Buy-and-build strategy: companies could benefit from their investors' "buy-and-build" strategy, leading to faster geographic and industry expansion into new markets, further fostering growth and profits after an adjustment period.
- Exits: final beneficiaries are expected to offer good chances for successful exits (e.g., via acquisition) for their investment managers and ultimately deliver attractive risk-adjusted financial returns.

1.4 The contribution of this study

To the best of our knowledge, international studies have yet to assess the impact of Mid-Market deals, especially those focusing on the LMM segment.

This report contributes to filling this gap by presenting a comprehensive analysis of the treatment effect of the EIF's LMM activity on the performance of beneficiary companies, i.e., the companies in which supported LMM funds invest. For this purpose, we investigate a sample of LMM deals performed by investors backed by the EIF LMM teams from 2007 to 2023.

Given the diverse nature of LMM support and the various theories of change that might drive growth in the ultimate beneficiaries, we identify two distinct treatment groups within the universe of private beneficiaries of EIF support. The Main Treatment group includes majority investments (ownerships higher than 30%), typically targeting well-established SMEs. The Secondary Treatment group includes minority investments (ownerships lower than 30%) in companies that can pursue substantial growth opportunities with investments larger than 7.5 million EUR. For both treatment groups, we analyse a comprehensive set of firm performance indicators, including the growth of total assets, intangible assets, turnover, employment, and the ratio of turnover-to-cost of employees (our proxy for productivity), the ratio of equity-to-total assets and the ratio of short-to-long term debt. Our methodological approach combines Coarsened Exact Matching and Propensity Score Matching to select an appropriate counterfactual. We then run fixed-effect panel data regression models and perform several robustness checks to ensure the reliability of our findings.

Our results indicate that beneficiaries in the Main Treatment group experienced significant growth in several areas. Specifically, these companies saw a 6.5 percentage point (p.p.) higher growth in total assets, a 148 p.p. higher growth in intangible assets, and a 3.6 p.p. higher growth in the cost of employees. These findings align with the predicted theory of change, suggesting that beneficiaries utilize LMM-raised resources for innovative investments and talent recruitment. However, we did not detect any significant positive effects of LMM PE investments on turnover growth. We also highlighted a reduction in productivity equal to 4.7 p.p.

We also examined several moderating factors. The positive effect on total asset growth was generally more pronounced for larger companies in the ICT sector. Conversely, the effect on intangible asset growth was greater in the long term and smaller for venture capital (VC)-backed companies located in DACH countries and France.

For the Secondary Treatment group of minority deals, we found a positive effect of the LMM activity only in the short term on the growth in total assets, turnover and cost of employees. This may be because target companies are smaller, younger and perhaps riskier. Within this group, the effect of LMM PE investments on turnover growth is higher for smaller companies, those in the ICT sector, and companies based in DACH countries. The effect on the growth of intangible assets was higher for non-VC-backed companies, while the effect on total asset growth was more significant for companies in British Isles.

The rest of the report is structured as follows: in Section 2 , we describe the data source, the sample construction, and the econometric techniques used in this study. In Section 3 , we present the results of the empirical analysis. Finally, Section 4 presents the conclusions and proposes future research directions.

2 Methods

2.1 Identification of LMM investments from the EIF equity portfolio

To identify a homogeneous sample of Lower Mid-Market (LMM) deals, we implemented a multi-step filtering process using data from the European Investment Fund (EIF) on investments made by EIF-backed investors between 2007 and 2023[5]. First, we discarded all investments with either missing stakes or missing invested amounts.

Second, we excluded investments where the cumulative investment amount was below 1 million EUR. Specifically, we aggregated the investments made by a given investor in a focal company over five-and-a-half years from its first investment, referred to as “chunk 1”. This time window corresponds to the period in which fund managers actively seek investment opportunities and perform first-time investments. Investments made after this period, termed "chunk 2" and considered follow-on investments, were excluded from this analysis[6].

Third, consistent with prior research, we applied additional thresholds: investments were excluded if both the total invested amount was below 7.5 million EUR and the maximum stake was below 30%. This ensures the exclusion of investments that do not qualify as LMM[7].

Fourth, we restricted our sample to investments in European target companies, specifically those located in the European Union, the United Kingdom, Norway, and Switzerland. Fifth, we discarded deals not initiated within the largest EIF investment areas, namely ITI (Innovation and Technology Investments); and LMM[8].

Sixth, we excluded tech transfer and proof of concept investments, as these typically occur in pre-seed or early-stage, which are outside the scope of our analysis. Similarly, we eliminated early-stage investments done by the LMM EIF business unit in companies less than two years old at the time of first investment. Seventh, we discarded both Venture Debt and Hybrid Debt-Equity deals as these are not aimed at driving change in target companies[9].

To refine our analysis, we considered the target companies' EBITDA status, although we did not use it as a filter due to insufficient data for many observations. Instead, we accounted for it in the matching strategy.

[5] The data provided by the EIF already classifies investments according to the business area in which they were initiated (this includes the LMM investment unit). However, this classification alone was not sufficient to derive a homogeneous set of deals pursuing similar investment objectives.
[6] Note that the dataset solely tracks EIF-backed investments. Due to the lack of information on non-EIF-backed capital providers, complete financing round details for EIF-backed investees cannot be retrieved.
[7] The threshold on the amount is comparable to other LMM definitions (BVCA, 2023; Invest Europe, 2020), and together with the threshold on the stake allows us to exclude all the small investments (i.e., under 7.5 million EUR) that do not allow control over the target company (i.e., neither majority nor minority control).
[8] These two main areas can sometimes pursue similar and/or overlapping investment objectives. This is not the case for the residual EIF investment activities, e.g., social impact investments, secondary investments.
[9] Indeed, venture debt deals usually happen in earlier stages compared to LMM deals, although later than venture capital deals and hybrid debt equity are typically “debt-first, equity-second” deals.

These steps led to an initial sample of 3,049 observations[10]. To better categorize the observations in the sample, in line with the "heterogeneous nature" of LMM support and the different theories of change that may be in place and addressed in the introduction, we identified two treatment groups: the Main Treatment group and the Secondary Treatment group. The Main Treatment group includes 2,407 investments where the equity stake exceeded 30%. Within this group, 1,738 investments involved amounts higher than or equal to 7.5 million EUR, while 669 were below this threshold. The Secondary Treatment group consists of 623 investments with amounts higher than or equal to 7.5 million EUR but with an equity stake lower than 30%. The Secondary Treatment group represents large investments that conform to LMM characteristics even though the stake is lower than the conventional threshold of 30%.

2.2 Retrieval of financial accounts and control group creation

To obtain detailed accounting information on the target companies, we integrated our database with the Orbis database managed by Moody's[11]. This integration required further refinement of our sample. We discarded 251 observations from the Main Treatment group and 220 from the Secondary Treatment group due to various issues: 133 companies from the Main Treatment group and 205 from the Secondary Treatment group were not present in the Orbis database, 49 from the Main Treatment group and 10 from the Secondary Treatment group had missing incorporation years, and 69 from the Main Treatment group and 5 from the Secondary Treatment group lacked NACE Rev.2 industry classifications. Additionally, we removed 4 observations (3 from the Main Treatment group and 1 from the Secondary Treatment group) because the target companies operated in industries outside the scope as defined by Invest Europe[12].

Given the aim of our analysis, we further restricted our sample to include only those investments where target companies had non-missing total assets values in Orbis, either in the year before or in the same year as the first LMM investment.[13] We focused on companies with non-missing total assets because our empirical analysis relied on total assets' growth as the dependent variable or included company size, measured through total assets, as a control variable.

This process resulted in a final sample of 1,483 LMM investments in the Main Treatment group and 274 in the Secondary Treatment group. The Main Treatment group includes 291 investments in target companies that were already venture capital (VC)-backed at the time of their first LMM deal. The Secondary Treatment group includes 118 investments involving VC-backed target companies (source for VC investments: VICO 6.0[14]). This methodological approach ensures robust identification of LMM deals by adhering to established criteria and focusing on significant investment activity within the specified geographic scope.

[10] The initial sample contains 54% of all deals (67% of overall mobilised investments) originated by the LMM investment team in the 2007-2023 period. In addition, we included 5% of all deals (25% of overall mobilised investments) originated by the ITI investment team with similar characteristics.
[11] Orbis is a comprehensive global database provided by Bureau van Dijk, a Moody's Analytics company. It contains detailed information on millions of private and public companies worldwide, including financials, ownership structures, industry classifications, and more.
[12] https://www.investeurope.eu/research/about-research/methodology/.
[13] The number of observations with non-missing total assets in the year before the first LMM investments was 53% of the initial sample.
[14] VICO 6.0 (https://docs.risis.io/datasets/metadata/vico) is a proprietary database developed at Politecnico di Milano with the support of the RISIS and RISIS2 projects, funded by the European Commission under the FP7 and Horizon 2020 programs. It contains the population of VC-backed firms founded after 1988 and located in the European Union countries, the UK, and Israel.

Table A1, Table A2, and Table A3 in the Annex provide descriptive statistics comparing the initial LMM population and the final sample obtained after the Orbis matching and data retrieval process. The initial LMM population was extracted from the EIF database, excluding deals considered outside the scope of LMM analysis. The tables present statistics separately for the Main Treatment and Secondary Treatment groups. These statistics are reported only for data available in both the initial population and final sample observations (i.e., data not sourced from Orbis). Importantly, we did not detect any statistical differences between the initial population and the final sample for the variables reported in the tables.

2.3 Descriptive Statistics for the Main and Secondary Treatment groups

Apart from the invested amount and stake distributions, which differ by design, the Main Treatment and the Secondary Treatment groups show qualitatively different distributions. The Main Treatment group includes a higher percentage of younger companies (0-1 year at first investment), a higher percentage of Manufacturing companies, and a lower percentage of ICT companies compared to the Secondary Treatment group. Additionally, the geographical distributions differ between the groups. The top three geographic areas for the Main Treatment, France, Nordics, and Baltics, and British Isles, each represent around 15% of the sample. In contrast, these areas account for 25%, 15% and 16% of the Secondary Treatment group, respectively. Regarding EBITDA categories, the Main Treatment group has a lower percentage of firms with negative EBITDA (13%), whereas this is much higher in the Secondary Treatment group (36%).

2.4 Matching

To identify the control group for each of the two treatment groups, we used a combination of Coarsened Exact Matching (CEM, Iacus et al., 2012) and Propensity Score Matching (PSM, Rosenbaum and Rubin, 1983). We applied the CEM technique followed by a 1-to-1 and 1-to-3 nearest neighbour PSM. This approach combines the benefits of the two matching methods. Indeed, Iacus et al. (2012) suggest that a PSM based on samples “cropped” using CEM could improve PSM results since CEM eliminates treated and non-treated companies with peculiar characteristics that would otherwise cause an imbalance. Consequently, a PSM restricted to the “cropped” sample should achieve better balance than a standard PSM. Post-matching statistics indicate that the combination of CEM and PSM does have a Rubin’s R within the limits.

To apply our matching approach, we started by collecting a random sample of companies from Orbis that operate in the same countries and were incorporated in the same years as the treated ones, with a treatment-to-control ratio of 1:400. From this batch of companies sampled from Orbis, we then excluded those that had received an LMM investment (i.e., firms that received a Private Equity investment from investors not financed by the EIF[15]).

We performed the CEM for each investment year included in our horizon (2007-2023, i.e. 17 years in total) obtaining 51.000 strata, based on the following variables:

[15] To retrieve information on investments we used the *Zephyr* database.

- company's age: 5 categories corresponding to age distribution quintiles;
- geographic area: 8 categories i.e., Benelux, France, DACH countries, Iberic Peninsula, Italy and Malta, Nordic and Baltic countries, British Isles, Eastern countries[16];
- industry of operation: 5 categories: Green Technologies, ICT, Life Sciences, Manufacturing, Services;[17]
- total assets: 5 categories, corresponding to asset distribution quintiles (either in the year of the reception of the first LMM investment or the year before);
- EBITDA: 3 categories, i.e., EBITDA lower than or equal to 0, higher than 0, and missing (either in the year of the reception of the first LMM investment, or the year before).

By applying the CEM, we successfully matched 1,378 companies in the Main Treatment group and 223 companies in the Secondary Treatment group.

Subsequently, we performed a PSM model for each dependent variable (Y) used in our models (see Section 2.3), separately for each geographical area, based on:

- The level – in natural logarithm unless otherwise specified – of Y in the year of the reception of the first LMM investment, or the year before;
- The company's age in natural logarithm;
- The company's main industry of operation: 5 categories, based on the sectoral classification used in the CEM;
- A dummy equal to 1 for companies that received an early-stage VC investment before their first LMM deal, 0 otherwise[18].

Post-PSM summary statistics for the two treatment groups are reported in the tables in Annexes B. These results reveal our matching algorithm is successful in reducing the imbalances in the average values of covariates for the treatment and control group. In fact, besides the VC dummy, none of the mean differences remains statistically significant after the matching.

2.5 Variables

Dependent Variables

The dependent variables ($log - diff\ Y_{i,t}$) in the panel regression models measure the growth performance of investee companies. Specifically, we calculated the growth of the performance measure by taking the logarithmic difference of the variable at time t and the variable at time $t-1$.

We used seven measures of firm's performance: total assets ($log - diff\ Total\ Assets_{i,t}$), intangible assets ($log - diff\ Intangible\ Assets_{i,t}$), turnover ($log - diff\ Turnover_{i,t}$), cost of employees ($log - diff\ Cost\ of\ Employees_{i,t}$), turnover to cost of employees ratio (our measure of productivity, $log - diff\ Turnover\ to\ Cost\ of\ Employees\ Ratio_{i,t}$), equity to total assets ratio ($log -$

[16] Geographical groups are defined as follow: Benelux – Belgium, Netherlands, Luxembourg; DACH – Austria, Germany, Switzerland; Iberic Peninsula – Portugal, Spain; Nordic and Baltic countries –Denmark, Estonia, Latvia, Lithuania, Finland, Norway, Sweden; British Isles – Ireland, United Kingdom; Eastern Countries – Bulgaria, Cyprus, Czechia, Greece, Croatia, Hungary, Polonia, Romania, Slovenia, Slovakia.
[17] These are based on the sectoral classification described by Invest Europe in its Research Methodology https://www.investeurope.eu/research/about-research/methodology/.
[18] Information on early-stage VC investment is sourced from the VICO database.

$diff\ Equity\ to\ Total\ Assets\ Ratio_{i,t}$), and short-term to long-term debt ratio ($log - diff\ Short\ Term\ Debt\ to\ Long\ Term\ Debt\ Ratio_{i,t}$).

All accounting variables, obtained from Orbis for the period 2004–2024, were winsorized at 1% (in some cases at 5%) to limit the impact of outliers. Additionally, monetary values were deflated using country, year and NACE Rev.2 sector-level producer price indices[19].

Independent Variable

The primary independent variable in our analysis is a step dummy identifying whether the company has received an EIF backed LMM investment ($LMM_{i,t-1}$). Note that we label the investment year t-1 and consider it part of the pre-investment period to avoid considering the investment itself as growth (i.e. we are interested in the additional asset growth brought by the investment, not the extra assets brought by the investment itself).

Notably, when year t is included in the post-investment period, the estimated treatment effect becomes slightly larger. Meaning, the estimates presented in this report are to be considered conservative and that any observed positive and significant effects are likely underestimated[20]. As a result, our independent variable is a dummy that takes value 1 from that year onwards.

Control Variables

We control for a comprehensive set of firm-level covariates across all models. These include: the logarithmic growth at the beginning of the year t ($log - diff\ Y_{i,t-1}$), the logarithm of the dependent variable at beginning of year t ($Y\ (ln)_{i,t-1}$) the logarithm of total assets at beginning of year t ($Total\ Assets\ (ln)_{i,t-1}$), the ratio of cash to total assets at the beginning of the year t ($Cash\ over\ Total\ Assets_{i,t-1}$), the ratio of debt (measured as total liabilities) to total assets at beginning of year t ($Debt\ over\ Total\ Assets_{i,t-1}$). Additionally, we include a step dummy variable taking value 1 the year following the firm's first VC investment ($VC_{i,t-1}$), and the logarithm of the firm's age ($Age\ (ln)_{i,t}$).

Moreover, we add fixed effects for macro-region (8 regional groups), industry (5 industry groups), and year. To account for the long-term impact of LMM investments, we also introduce a step variable (Dummy t+3), taking value 1 from three years after the first LMM investment or matching. Summary statistics and correlation matrices for all variables used in the main models can be found in Annexes C.

We use the following model to test the effect of LMM financing on firms' growth performance:

$$\log diff\ Y_{i,t} = \alpha_0 + \beta_1 \log diff\ Y_{i,t-1} + \beta_2 Y_{i,t-1} + \beta_3 LMM_{i,t-1} + \beta_4 x_{i,t-1} + \mu_i + \varepsilon_{i,t} \quad (1)$$

where $log - diff\ Y_{i,t}$ represents the logarithmic growth of each performance measures for firm i in year t. Similarly, $log - diff\ Y_{i,t-1}$ refers to the logarithmic growth of the performance measures in

[19] For each industry–year, we proxied the PPI by dividing the value added expressed in current EUR prices by the value added expressed in chain-linked volumes for a given base year. Sourced from Eurostat.
[20] A more detailed discussion of this is provided in the robustness check section.

year $t-1$, while $Y_{i,t-1}$ indicates the level of the performance measure for firm i in year $t-1$. The variable $X_{i,t-1}$ captures the set of control variables, whereas $\mu_i$denotes firm-fixed effects, included to account for unobserved heterogeneity at firm-level, thus mitigating potential biases in the estimate of the $LMM_{i,t-1}$ coefficient. Lastly $\varepsilon_{i,t}$ is an i.i.d. error term. Our primary interest lies in the sign, magnitude, and significance of the β_3 coefficient. We estimate Equation (1) using panel data fixed effect models.

3 Results

3.1 Main Treatment group

Table 1 presents the results based on the matching algorithm for the Main Treatment group across the dependent variables in Models 1-7.

Model 1 examines the effect of LMM PE investments on the logarithmic growth of total assets. The LMM coefficient is positive and statistically significant (b=0.063, p-value<0.001). This implies that, compared to the control group, the estimated additional growth in total assets for treated companies following an LMM investment equals $e^{0.063} - 1 = 6.5$ p.p. In terms of control variables, smaller companies and those with a higher cash ratio experience greater growth in total assets.

Model 2 estimates the treatment effect of LMM investments on the logarithmic growth of turnover. While the LMM coefficient is positive, it is not statistically significant (b=0.069, p-value>0.1). The results for control variables are similar to those in Model 1.

Moreover, the level of turnover in the previous year shows a negative and statistically significant coefficient. In contrast, total assets have a positive and statistically significant coefficient, suggesting that firms with more assets (relative to turnover) tend to grow more rapidly. The other control variables are not significant at conventional confidence levels.

Model 3 estimates the logarithmic growth of intangible assets. Compared to the control group, the estimated impact of LMM is an additional 148 p.p. of growth in intangible assets and statistically significant at 1%. This indicates a strong positive effect of LMM PE investments on innovation. Regarding the control variables, we find a positive correlation with total assets and a negative correlation with the level of intangibles in the previous period. Also, the ratio of debt to total assets shows a negative and significant coefficient, suggesting that companies with higher leverage are less likely to invest in innovation.

Model 4 examines the logarithmic growth in employment costs. The treatment effect of LMM corresponds to an additional 3.6 p.p. of growth in employee costs, positive but weakly significant (p-value <0.1) result. The results for the control variables are consistent with those in previous models. Furthermore, we observe a positive correlation between early-stage VC-backing and growth in employee costs.

Model 5 shows results for the logarithmic growth of the turnover-to-employee-costs ratio, our main measure of productivity. Compared to the control group, treated companies experienced 4.7 p.p. less growth in productivity after receiving LMM PE investments, a statistically significant result (p-value<0.001). This outcome is unexpected, especially considering previous studies (e.g., Davis et al., 2021). Overall, the negative effect of LMM PE investments on labour productivity growth, combined with the positive effect on the growth of employment costs (shown in Model 4), suggest that LMM investments lead to an increase in employment cost that outpaces the increase in turnover. One possible explanation for this is that the human capital improvements triggered by LMM investments, might be linked to the rationalization of the firms' operations and/or improvements in their financial structure (Jang, 2022; Haque and Kleymenova, 2023.; Marchesi

and Jang, 2023). On the contrary, these improvements may not directly result into better market opportunities or increased sales growth.

Model 6 shows the estimated treatment effect of LMM on the logarithmic growth of the equity-to-total-assets ratio, a measure of financial leverage. We find a negative and statistically significant effect of LMM investment (b= -0.215.; p-value<0.001), meaning treated companies experienced a 19.3 p.p less growth in the equity-to-total-assets ratio compared to the control group. This negative effect suggests that LMM beneficiaries may be using the new equity to finance substantial and rapid asset growth, such as by taking on more debt. As a result, the growth in assets outpaces the growth in equity, leading to a decline in the ratio.

Model 7 estimates the treatment effect of LMM on the logarithm growth of the short-term-to-long-term debt ratio. We find a negative but not statistically significant effect, suggesting that LMM investment do not significantly impact a company's liability structure.

Table 1 – Main Model – Panel Main

DV: log-diff Y	Total Assets (1)	Turnover (2)	Intangible Assets (3)	Cost of Empl. (4)	Turnover to Cost of Empl. (5)	Equity to Total Assets (6)	Short to Long term Debt (7)
log-diff Y_{t-1}	0.017	-0.007	0.076***	0.03	0.014	0.119***	0.108***
	(0.018)	(0.02)	(0.013)	(0.02)	(0.022)	(0.021)	(0.015)
Y_{t-1}	-0.363***	-0.675***	-0.532***	-0.559***	-0.664***	-1.342***	-1.259***
	(0.023)	(0.059)	(0.015)	(0.042)	(0.033)	(0.036)	(0.024)
Total Assets(ln)$_{t-1}$	n.a.	0.396***	0.521***	0.240***	0.008	-0.860***	-0.161
		(0.101)	(0.076)	(0.029)	(0.02)	(0.065)	(0.134)
LMM_{t-1}	0.063***	0.069	0.907***	0.035*	-0.048***	-0.215***	-0.233
	(0.019)	(0.053)	(0.113)	(0.02)	(0.018)	(0.049)	(0.211)
Dummy t+3	-0.095***	-0.121***	-0.329***	-0.041***	-0.014	0.062*	-0.146
	(0.013)	(0.033)	(0.075)	(0.012)	(0.015)	(0.034)	(0.167)
Age (ln)$_{t-1}$	-0.048	0.025	-0.286	-0.035	0.056	-0.117	0.641**
	(0.043)	(0.122)	(0.241)	(0.046)	(0.042)	(0.098)	(0.264)
Debt over Total Assets$_{t-1}$	0.001**	0.001	-0.014***	-0.002***	-0.005***	0.057***	-0.001***
	(0.001)	(0.002)	(0.003)	(0)	(0)	(0.012)	(0)
Cash over Total Assets$_{t-1}$	-0.097	-0.3	-0.106	-0.017	-0.037	0.205*	0.237
	(0.064)	(0.194)	(0.26)	(0.057)	(0.063)	(0.123)	(0.546)
VC_{t-1}	0.022	-0.075	-0.096	0.060**	-0.050**	-0.024	0.032
	(0.035)	(0.055)	(0.183)	(0.028)	(0.024)	(0.081)	(0.38)
Constant	3.788***	2.519***	-2.063**	2.443***	0.823***	6.079***	0.024
	(0.237)	(0.787)	(0.958)	(0.24)	(0.218)	(0.619)	(1.403)
N	**15,812**	**12,489**	**12,366**	**11,988**	**10,939**	**10,182**	**10,338**

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model) The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. LMM beneficiaries (the treated units) are matched to non-beneficiaries using PSM. Each dependent variable is expressed as the logarithmic difference between time t and time $t-1$. LMM t-1 is an indicator variable equal to one for beneficiaries. Robust standard errors in round brackets.

3.2 Moderators for Main Treatment group

This section analyses the interaction of our main variable of interest (LMM investment) with various moderator effects. This allows us to examine whether the effect of LMM investment varies based on different company characteristics.

Specifically, we assess whether the average marginal effect of LMM differs across the following moderators:

- long term vs. short term (i.e., Dummy t+3);
- company size (i.e., total assets);
- company age;

- whether the company received an early-stage VC investment (i.e., VC dummy);
- industry categories;
- geographical regions;
- different time periods (i.e., pre-2010, 2010-2014, 2015-2019, 2020-2023).

Results are presented separately for each moderator in Table D1- Table D6 in the Annexes. Table 2 reports the estimates incorporating only the significant moderators for each dependent variable investigated.

Table 2 – All significant interactions – Panel Main

DV: log-diff Y	Total Assets (1)	Turnover (2)	Intangible Assets (3)	Cost of Empl. (4)	Turnover to Cost of Empl (5)	Equity to Total Assets (6)	Short to Long term Debt (7)
log-diff Y_{t-1}	0.016	-0.009	0.077***	0.031	0.014	0.120***	0.108***
	(0.018)	(0.02)	(0.013)	(0.02)	(0.022)	(0.021)	(0.015)
Y_{t-1}	-0.372***	-0.674***	-0.539***	-0.566***	-0.665***	-1.342***	-1.260***
	(0.025)	(0.059)	(0.015)	(0.041)	(0.0339	(0.036)	(0.024)
Total Assets(ln)$_{t-1}$	n.s.	0.356***	0.481***	0.246***	0.009	-0.857***	-0.173
		(0.102)	(0.076)	(0.029)	(0.02)	(0.065)	(0.132)
LMM_{t-1}	-0.343*	-0.639	1.149***	0.404*	-0.189**	-0.528***	2.322***
	(0.191)	(0.531)	(0.412)	(0.229)	(0.085)	(0.193)	(0.898)
Dummy t+3	-0.100***	-0.134***	-0.656***	-0.035***	-0.016	0.059*	-0.121
	(0.013)	(0.034)	(0.093)	(0.012)	(0.015)	(0.034)	(0.167)
Age (ln)$_{t-1}$	-0.033	0.024	-0.253	-0.05	0.066	-0.088	0.663**
	(0.044)	(0.127)	(0.244)	(0.047)	(0.042)	(0.098)	(0.264)
Debt over Total Assets$_{t-1}$	0.001**	0.001	-0.016***	-0.002***	-0.005***	0.057***	-0.001***
	(0.001)	(0.002)	(0.003)	(0)	(0)	(0.012)	(0)
Cash over Total Assets$_{t-1}$	-0.088	-0.275	-0.027	-0.024	-0.037	0.207*	0.243
	(0.063)	(0.19)	(0.259)	(0.057)	(0.063)	(0.123)	(0.551)
VC_{t-1}	0.023	-0.094*	0.265	0.061**	-0.049**	-0.022	0.052
	(0.034)	(0.054)	(0.236)	(0.028)	(0.024)	(0.081)	(0.379)
LMM_{t-1} # Dummy t+3	n.s.	n.s.	0.668***	n.s.	n.s.	n.s.	n.s.
			(0.127)				
LMM_{t-1} # Total Assets(ln)$_{t-1}$	0.049**	0.148**	n.s.	-0.019	n.s.	n.s.	n.s.
	(0.02)	(0.063)		(0.023)			
LMM_{t-1} # Age (ln)$_{t-1}$	n.s.	-0.242***	n.s.	-0.067**	0.048*	0.108*	n.s.
		(0.093)		(0.029)	(0.026)	(0.06)	
LMM_{t-1} # VC_{t-1}	n.s.	n.s.	-0.605**	n.s.	n.s.	n.s.	n.s.
			(0.266)				
LMM_{t-1} # Manufacturing	0.013	n.s.	n.s.	0.079**	n.s.	n.s.	n.s.
	(0.041)			(0.037)		.	
LMM_{t-1} # Green Tech	-0.103	n.s.	n.s.	0.07	n.s.	n.s.	n.s.
	(0.125)			(0.086)			

DV: log-diff Y	Total Assets (1)	Turnover (2)	Intangible Assets (3)	Cost of Empl. (4)	Turnover to Cost of Empl (5)	Equity to Total Assets (6)	Short to Long term Debt (7)
Table 2 continued							
LMM_{t-1} # ICT	0.087*	n.s.	n.s.	0.104**	n.s.	n.s.	n.s.
	(0.045)			(0.043)			
LMM_{t-1} # Life Sciences	0.168***	n.s.	n.s.	0.121**	n.s.	n.s.	n.s.
	(0.064)			(0.052)			
LMM_{t-1} # DACH	-0.141**	n.s.	-1.034**	-0.005	n.s.	n.s.	n.s.
	(0.07)		(0.492)	(0.08)			
LMM_{t-1} # France	-0.111*	n.s.	-1.289***	-0.210***	n.s.	n.s.	n.s.
	(0.058)		(0.452)	(0.081)			
LMM_{t-1} # Eastern	-0.176**	n.s.	-0.398	0.033	n.s.	n.s.	n.s.
	(0.081)		(0.47)	(0.067)			
LMM_{t-1} # Iberia	-0.145	n.s.	-0.213	0.068	n.s.	n.s.	n.s.
	(0.089)		(0.52)	(0.064)			
LMM_{t-1} # Italy-Malta	-0.087	n.s.	0.219	-0.02	n.s.	n.s.	n.s.
	(0.078)		(0.465)	(0.062)			
LMM_{t-1} # Nordic	-0.038	n.s.	-0.146	-0.082	n.s.	n.s.	n.s.
	(0.061)		(0.5)	(0.07)			
LMM_{t-1} # British Isles	-0.008	n.s.	0.278	-0.028	n.s.	n.s.	n.s.
	(0.062)		(0.529)	(0.066)			
LMM_{t-1} # y2010_2014	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	-1.650*
							(0.911)
LMM_{t-1} # y2015_2019	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	-2.772***
							(0.913)
LMM_{t-1} # y2020_2023	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	-2.559***
							(0.917)
Constant	3.826***	2.904***	-1.727*	2.504***	0.777***	5.959***	0.037
	(0.24)	(0.801)	(0.96)	(0.232)	(0.224)	(0.626)	(1.389)
N	**15,812**	**12,489**	**12,366**	**11,988**	**10,939**	**10,182**	**10,338**

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.s. not significant. N.s. values are not reported here as their significance level is negligible; the full list of marginal effects can be found in Annex D. The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. LMM beneficiaries (the treated units) are matched to non-beneficiaries using PSM. Each dependent variable is expressed as the logarithmic difference between time t and time $t-1$. LMM t-1 is an indicator variable equal to one for LMM beneficiaries. Robust standard errors in round brackets.

The interaction effect of the Dummy t+3 with the LMM variable captures the effects of LMM investments in the short versus long-term. We found a positive and significant moderation effect only for intangible asset growth. In particular, the average marginal effect of LMM in the short term (i.e., in t, t+1 and t+2) is positive (b=0.77) and statistically significant (p= 0.000). In the long term (i.e., from t+3 onwards), the effect is positive, almost double in size (b=1.41), and statistically significant (p= 0.000). The two average marginal effects are different at conventional significance levels (p= 0.000).

The interaction effect between LMM investment and company size, measured by total assets, shows a positive and significant effect for both total assets growth (Model 1, Table 2) and turnover growth (Model 2, Table 2). This result shows the LMM effect is more pronounced for relatively

larger companies Specifically, the average marginal effect of LMM on the growth of total assets increases from 0.018 (p-value = 0.569) for companies with total assets equal at the first quartile of the distribution (4.367 million EUR) to 0.104 (p-value < 0.001) for companies with total assets at the third quartile of the distribution (35.395 million EUR). These two average marginal effects are statistically different from each other (p = 0.019).

Figure 1 illustrates the plot of the average marginal effect of LMM funding on total assets growth at different asset values, from minimum to maximum. For turnover growth, the marginal effect increases from 0.054 (p-value = 0.310) at the first quartile (3.780 million EUR), to 0.169 (p-value = 0.024) at the third quartile (32.682 million EUR) as shown in Figure 2 in Annexes. Again, the two average marginal effects are statistically different (p = 0.047). Moreover, the moderation effect of company size on employment cost growth is negative but only weakly significant (p-value<0.1) and non-significant for other dependent variables.

The effect of LMM funding on turnover growth is stronger for younger companies, though only weakly significant (p-value<0.1), as indicated by the interaction effect between LMM investment and company's age. On the contrary, employment cost growth is negatively influenced by company's age (p-value<0.05). Indeed, the marginal effect of LMM funding on employment cost growth decreases from 0.08 (p-value = 0.004) for companies in the first quartile of company's age distribution (9 years), to 0.011 (p-value = 0.015) for companies in the third quartile (26 years). The two average marginal effects are statistically different from each other (p-value<0.010) as shown in Figure 3 in Annexes. We also find a slightly significant positive effect on our measure of productivity, suggesting that more experienced firms are better able to translate increased equity into higher productivity yields.

Our analysis suggests that LMM investments foster innovation, especially for companies not-VC-backed. In fact, as shown by the interaction term between LMM and having received an early-stage Venture Capital investment, the effect is negative only for the growth of intangible assets. In particular, the average marginal effect of LMM on intangible asset growth is 0.977 (p=0.000) for non-VC-backed companies, compared to 0.315 (p=0.218) for VC-backed companies.

When examining different industries, we observe LMM funding having a stronger effect on the growth of total assets in the Life Sciences sector compared to Services. Additionally, LMM has a greater effect on the growth of employment cost in Manufacturing, ICT, and Life Sciences sectors compared to Services (Table D5).

Interactions between LMM and different geographical areas are generally not significant, or only weakly significant, except in the model for intangible assets growth. In this case, the effect of LMM funding is smaller in DACH countries and France compared to Benelux. For employment cost growth, the effect of LMM funding is lower in France compared to Benelux.

Finally, we analyse the interaction between LMM funding and different time periods, with years before 2010 as baseline. We only find significant results for the short-to-long-term-debt ratio growth, where investments happening after 2010 has considerably lower estimates than the baseline.

3.3 Secondary Treatment group

This section presents the results for the Secondary Treatment group for each dependent variable, results are summarized in Table 3.

Table 3 – Main Model – Panel Secondary

DV: log-diff Y	Total Assets (1)	Turnover (2)	Intangible Assets (3)	Cost of Empl. (4)	Turnover to Cost of Empl. (5)	Equity to Total Assets (6)	Short to Long term Debt (7)
log-diff Y_{t-1}	-0.046	0.088	0.067*	-0.024	0	0.120**	0.112**
	(0.046)	(0.07)	(0.034)	(0.028)	(0.039)	(0.047)	(0.043)
Y_{t-1}	-0.509***	-0.898***	-0.599***	-0.567***	-0.682***	-1.330***	-1.243***
	(0.126)	(0.05)	(0.043)	(0.051)	(0.107)	(0.091)	(0.072)
Total Assets(ln)$_{t-1}$	n.a.	0.606***	0.611***	0.263***	0.02	-0.838***	-0.321
		(0.105)	(0.192)	(0.045)	(0.05)	(0.104)	(0.225)
LMM_{t-1}	0.054	0.175	-0.352	0.051	0.085	-0.413***	-0.049
	(0.082)	(0.122)	(0.27)	(0.047)	(0.089)	(0.142)	(0.564)
Dummy t+3	-0.121**	-0.109	-0.716***	-0.063**	-0.089**	0.029	0.032
	(0.055)	(0.083)	(0.212)	(0.028)	(0.042)	(0.104)	(0.575)
Age (ln)$_{t-1}$	0.11	0.479*	-0.192	-0.01	0.153	-0.064	-1.033
	(0.122)	(0.27)	(0.464)	(0.09)	(0.12)	(0.225)	(0.858)
Debt over Total Assets$_{t-1}$	0.001***	0.013***	-0.120***	0.052	0.266***	-0.082	-0.900**
	(0)	(0.003)	(0.045)	(0.039)	(0.1)	(0.164)	(0.429)
Cash over Total Assets$_{t-1}$	-0.435**	0.01	-0.934	0.088	0.087	0.207	1.173
	(0.18)	(0.345)	(0.637)	(0.084)	(0.167)	(0.416)	(1.006)
VC_{t-1}	-0.008	-0.153*	0.285	0.003	-0.06	0.028	0.834
	(0.116)	(0.093)	(0.342)	(0.06)	(0.053)	(0.194)	(0.715)
Constant	5.466***	1.614*	-2.694	2.479***	0.071	7.231***	5.588*
	(1.274)	(0.915)	(2.375)	(0.619)	(0.656)	(1.321)	(3.193)
N	**2,270**	**1,797**	**2,179**	**1,733**	**1,500**	**1,426**	**1,239**

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. LMM beneficiaries (the treated units) are matched to non-beneficiaries using PSM. Each dependent variable is expressed as the logarithmic difference between time t and time $t-1$. LMM t-1 is an indicator variable equal to one for beneficiaries. Robust standard errors in round brackets.

In line with the Main Treatment group, we find a negative and significant effect of LMM funding for the growth of the equity-to-total-assets ratio. However, all other dependent variables show no statistically significant effect. This finding is likely due to the smaller sample size and the imbalance in the number of observations between the Main and Secondary Treatment groups.

In fact, the Secondary Treatment group is too small to produce statistically significant results, even if the effect sizes are similar to the Main Treatment group. In simple statistical terms, if a t-test on the effect of LMM on intangible assets on the Main Treatment group would reject the null hypothesis in more than 99% of random samples, having the same analysis conducted on the

smaller Secondary Treatment group would result in the power to drop to about 68%, given the smaller sample size[21]. This power is generally considered low, as commonly accepted thresholds lie between 80% and 90%. Figure 4 in the Annexes illustrates the test's power for different sample sizes.

3.4 Moderators for Secondary Treatment group

We also conducted the moderation analysis for the Secondary Treatment group, using the same moderator variables as in the Main Treatment group. Table 4 shows results for the significant effects, whereas Table E1 - Table E7 in the Annexes run the estimate for each moderator separately.

Table 4 – All significant interactions – Panel Secondary

DV: log-diff Y	Total Assets (1)	Turnover (2)	Intangible Assets (3)	Cost of Empl. (4)	Turnover to Cost of Empl. (5)	Equity to Total Assets (6)	Short to Long term Debt (7)
log-diff Y_{t-1}	-0.046	0.094	0.062*	-0.024	-0.003	0.123***	0.111**
	(0.044)	(0.07)	(0.034)	(0.028)	(0.039)	(0.047)	(0.043)
Y_{t-1}	-0.535***	-0.919***	-0.601***	-0.567***	-0.685***	-1.341***	-1.244***
	(0.135)	(0.051)	(0.042)	(0.051)	(0.107)	(0.091)	(0.072)
Total Assets(ln)$_{t-1}$	n.s.	0.628***	0.616***	0.263***	0.031	-0.845***	-0.336
		(0.116)	(0.19)	(0.045)	(0.04)	(0.103)	(0.219)
LMM_{t-1}	-1.092*	-0.057	0.067	0.051	-0.644*	0.451	-0.503
	(0.654)	(0.413)	(0.322)	(0.047)	(0.331)	(0.777)	(0.577)
Dummy t+3	-0.142**	-0.088	-0.676***	-0.063**	-0.102**	0.037	-1.701**
	(0.057)	(0.08)	(0.207)	(0.028)	(0.042)	(0.107)	(0.83)
Age (ln)$_{t-1}$	0.171	0.474*	-0.187	-0.01	0.153	-0.088	-1.093
	(0.13)	(0.272)	(0.463)	(0.09)	(0.12)	(0.226)	(0.847)
Debt over Total Assets$_{t-1}$	0.001**	0.013***	-0.122***	0.052	0.269***	-0.08	-0.912**
	(0.001)	(0.003)	(0.042)	(0.039)	(0.098)	(0.162)	(0.435)
Cash over Total Assets$_{t-1}$	-0.398**	0.024	-1.014	0.088	0.087	0.196	1.088
	(0.175)	(0.348)	(0.632)	(0.084)	(0.169)	(0.417)	(0.992)
VC_{t-1}	-0.004	-0.184*	0.437	0.003	-0.074	0.055	0.988
	(0.119)	(0.105)	(0.383)	(0.06)	(0.052)	(0.196)	(0.717)
LMM_{t-1} # Dummy t+3	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	2.259**
							(0.905)
LMM_{t-1} # Total Assets(ln)$_{t-1}$	0.092	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
	(0.058)						

[21] For instance, in the case of intangible asset growth, the estimated treatment effect is 0.076 with a standard error of 0.013. With 12,366 observations, an analysis testing the population mean is 0.076, with a two-tailed test and a 5% significance level, the probability of rejecting the null hypothesis is over 99%. If the same analysis was conducted on the smaller Secondary Treatment group, which has 2,179 observations, the power drops to approximately 68%.

DV: log-diff Y	Total Assets (1)	Turnover (2)	Intangible Assets (3)	Cost of Empl. (4)	Turnover to Cost of Empl. (5)	Equity to Total Assets (6)	Short to Long term Debt (7)
Table 4 continued							
LMM_{t-1} # Age $(ln)_{t-1}$	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
LMM_{t-1} # VC_{t-1}	n.s.	n.s.	-0.542	n.s.	n.s.	n.s.	n.s.
			(0.405)				
LMM_{t-1} # Manufacturing	n.s.	n.s.	1.232*	n.s.	n.s.	0.214	n.s.
			(0.717)			(0.302)	
LMM_{t-1} # Green Tech	n.s.	n.s.	0.895	n.s.	n.s.	1.164***	n.s.
			(1.119)			(0.354)	
LMM_{t-1} # ICT	n.s.	n.s.	-0.92	n.s.	n.s.	0.065	n.s.
			(0.718)			(0.325)	
LMM_{t-1} # Life Sciences	n.s.	n.s.	-1.021	n.s.	n.s.	0.075	n.s.
			(0.683)			(0.214)	
LMM_{t-1} # DACH	0.103	0.792*	n.s.	n.s.	n.s.	n.s.	n.s.
	(0.269)	(0.429)					
LMM_{t-1} # France	0.216	0.314	n.s.	n.s.	n.s.	n.s.	n.s.
	(0.199)	(0.248)					
LMM_{t-1} # Eastern	0.152	-0.056	n.s.	n.s.	n.s.	n.s.	n.s.
	(0.356)	(0.248)					
LMM_{t-1} # Iberia	-0.183	0.087	n.s.	n.s.	n.s.	n.s.	n.s.
	(0.224)	(0.266)					
LMM_{t-1} # Italy-Malta	0.114	0.45	n.s.	n.s.	n.s.	n.s.	n.s.
	(0.22)	(0.308)					
LMM_{t-1} # Nordic	0.45	1.033*	n.s.	n.s.	n.s.	n.s.	n.s.
	(0.304)	(0.555)					
LMM_{t-1} # British Isles	0.540**	0.054	n.s.	n.s.	n.s.	n.s.	n.s.
	(0.262)	(0.556)					
LMM_{t-1} # y2010_2014	0.360***	-0.045	n.s.	n.s.	0.11	-0.979	n.s.
	(0.139)	(0.231)			(0.231)	(0.785)	
LMM_{t-1} # y2015_2019	-0.098	-0.033	n.s.	n.s.	0.722**	-0.985	n.s.
	(0.14)	(0.312)			(0.328)	(0.746)	
LMM_{t-1} # y2020_2023	-0.057	-0.174	n.s.	n.s.	0.743**	-0.961	n.s.
	(0.138)	(0.325)			(0.334)	(0.755)	
Constant	5.592***	1.618*	-2.653	5.466***	-0.029	7.349***	6.113*
	(1.329)	(0.929)	(2.338)	(1.274)	(0.57)	(1.326)	(3.131)
N	**2,270**	**1,797**	**2,179**	**1,733**	**1,500**	**1,426**	**1,239**

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.s. not significant. N.s. values are not reported here as their significance level is negligible; the full list of marginal effects can be found in Annex E. The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. LMM beneficiaries (the treated units) are matched to non-beneficiaries using PSM. Each dependent variable is expressed as the logarithmic difference between time t and time $t-1$. LMM t-1 is an indicator variable equal to one for LMM beneficiaries. Robust standard errors in round brackets.

Our analysis shows that the average marginal effect of LMM on turnover decreases as company size increases, a contrasting result with that of the Main Treatment group. For companies with total

assets equal to the first quartile of the distribution (12.728 million EUR), the average marginal effect is 0.402 (p-value = 0.046), whereas for companies with total assets equal to the third quartile (136.629 million EUR), the effect becomes non-significant (0.040, p-value = 0.713). The two average marginal effects are statistically different from each other (p = 0.043). Figure 5 in the Annexes shows the plot of the average marginal effect of LMM on turnover growth at different values of total assets, from minimum to maximum.

Contrary to the Main Treatment group, receiving an LMM funding negatively impacts innovation for already VC-backed companies, as measured by the growth of intangible assets. In fact, the average marginal effect of LMM on intangible asset growth for non-VC-backed companies is non-significant (0.029, p = 0.924). However, for VC-backed companies the effect is significantly negative (-0.830, p = 0.029).

For the Secondary Treatment group, we find that the effect of LMM on turnover growth is higher in the Life Sciences sector compared to the Services sector. And it is higher for DACH countries, compared to Benelux. As for growth in total assets, we observe the effect of LMM being higher in British Isles compared to Benelux.

Finally, we find that the effect of LMM on total asset growth is higher in the 2010-2014 period compared to the pre-2010 period. The effect of LMM on labour productivity growth is higher in the 2015-2019 and 2020-2023 periods compared to the pre-2010 period.

3.5 Robustness checks

To ensure the robustness of our findings, we performed several robustness checks and additional analyses.

First, we adjusted the main independent variable (LMM) to start from the year of the company's first LMM investment, addressing potential conservative bias in previous estimates. The results remained consistent, with slightly larger coefficients for the independent variable, as expected.

Second, we replaced the lagged LMM variable with multiple LMM lag dummies in our panel fixed-effects estimates to capture year-on-year effects over time. Table F1 shows a decrease in the positive effect of LMM investments on total assets growth over time (Model 1), likely due to an initial phase of rapid asset acquisition, followed by consolidation. The table also shows a positive effect on turnover growth, significant only at the start of the treatment period (Table F1, Model 2), and a growing positive effect on intangible assets growth (Table F1, Model 3), suggesting a shift towards intellectual property, brand value, and technological capabilities, crucial for attaining a long-term competitive advantage. Employee costs is found positive and significant at the beginning of the treatment period ($t0$) (Table F1, Model 4), turning negative from $t + 3$ onwards. Lastly, there is a consistent negative effect of LMM on the equity-to-assets ratio growth.

For the Secondary Treatment group robustness checks presented in Table F2, the results align with those of the Main Treatment group, except for intangible assets growth, where no significant effect is found. Similar patterns appear for turnover growth and employee cost growth, which are significant only early in the treatment period. The negative effect on equity-to-assets ratio growth is also consistent.

Next, we ran a repeated cross-section specification, analysing each year after the first LMM investment. Results (Table F3 to Table F9 for the Main Treatment group and in Table F10 to Table F16 for the Secondary Treatment group) were aligned with the panel fixed-effects models, except for Secondary Treatment group turnover and employee cost growth (Table F11), where no significant effects were found.

We also ran models excluding the lagged dependent variable, and this did not significantly change the key coefficients, confirming the robustness of our results.

After excluding bankrupt companies from the sample, results remained consistent, further supporting our findings. Finally, we repeated our estimates on a subsample of Treatment Main that includes only investments with invested amount higher than or equal to 7.5 million EUR, thus excluding small deals with stake higher than or equal to 30%.

Results are generally similar to our main ones, except for the moderation effect of company size (total assets) and geographical area in the model on total assets growth, the moderation effect of age in the model on turnover growth and equity to total assets growth, and the effect of LMM and its interaction with company size and age respectively on employment cost growth and the ratio of turnover-to-cost of employees growth, which are not significant anymore. Overall, these robustness checks reinforce the reliability of our conclusions regarding the impact of LMM PE investments on the various performance measures of investee companies.

4 Conclusion

This report investigates the treatment effect of Lower Mid-Market (LMM) PE investments on the growth performance of investee companies. The analysis is based on a sample of LMM PE deals supported by investors backed by the European Investment Fund (EIF) between 2007 and 2023. We assess firm growth using a comprehensive set of indicators, including total assets, intangible assets, turnover, employment cost, and the ratio of turnover-to-cost of employees. By employing a robust methodological approach that combines CEM and PSM techniques with fixed-effect panel data regression models and multiple robustness checks, we ensure the reliability of our findings.

Our results indicate that beneficiaries in the Main Treatment group – those receiving LMM investments - experienced a 6.5 p.p. higher growth in total assets, a 148 p.p. higher growth in intangible assets, and a 3.6 p.p. higher growth in employee costs after receiving investment, compared to similar firms that did not receive an LMM investment.

These findings align with the predicted theory of change, which suggests that beneficiaries may use the capital raised from LMM PE investors to fund new innovative investments and recruit talent. However, contrary to previous studies (e.g., Boucly et al., 2011; Davis et al., 2024), we did not observe any statistically significant positive effect of LMM PE investments on turnover growth. Additionally, we identified a negative 4.7 p.p. effect on labour productivity, as measured by the logarithmic growth of the turnover to employment costs ratio. One possible explanation is that the increase in employment costs, reflecting improvements in human capital due to LMM PE investments, might lead to operational rationalization or enhancements in the financial structure of target firms (Jang, 2022; Haque and Kleymenova, 2023; Marchesi and Jang, 2023), rather than to the exploitation of market opportunities and sales expansion.

We also explored various moderating factors affecting these results. Notably, the positive impact on total asset growth was more pronounced in larger companies within the ICT sector. The positive effect on intangible asset growth increased over time, although it was smaller for beneficiaries located in DACH countries and France.

For the Secondary Treatment group, consisting of minority deals, we observed a positive impact of LMM PE investments on short-term growth in total assets, turnover, and employment costs. This is partially consistent with the theory of change and aligns with the findings from the Main Treatment group. However, due to the smaller sample size, the statistical power of our analysis was limited, which hindered the identification of statistically significant treatment effects in this group.

Our robustness checks included the use of multiple lag dummies to account for the time-dependent effects of LMM, repeated cross-sectional regressions, the exclusion of lagged dependent variables and failed companies, and Heckman correction models. These checks confirm the validity of our findings.

This study paves the way for future research on the role of LMM PE investments in the performance of investee companies. First, the positive impact of these investments on company growth (e.g., total assets, intangible assets, and turnover under certain conditions) could be attributed to the professionalization of employees, the adoption of more effective management

practices, and/or the rationalization of firms' operations, all of which are facilitated by the expertise of fund managers. Furthermore, growth may be driven by improvements in firms' financial structures, which alleviate the financial constraints they faced prior to receiving LMM funding. Future research, using more granular data, could identify the "transmission mechanisms" underlying the impact of LMM PE investments, distinguishing between the effects of improved financial structures and eased financial constraints, and those arising from operational and managerial changes. Additionally, it would be valuable to explore heterogeneity among beneficiaries of LMM PE investments. For example, distinguishing between companies pursuing organic growth versus those expanding through acquisitions, or between those internationalizing or diversifying into new markets, could provide deeper insights. These distinctions are not possible with the current data but represent promising avenues for future research.

Annexes

Annex A: Descriptive statistics of target companies

Table A1 - Descriptive Statistics on Target Companies' Geographic Area – Comparison between initial population and final sample

	Treatment Main		Treatment Secondary	
	Final Sample	Initial Population	Final Sample	Initial Population
Geographic Area				
Benelux	10.86%	10.10%	8.39%	8.51%
France	15.51%	17.37%	25.18%	25.84%
DACH	8.36%	10.76%	18.61%	21.67%
Iberia	11.73%	10.05%	8.39%	7.22%
Italy-Malta	12.68%	10.59%	5.47%	4.01%
North	16.79%	16.99%	14.60%	11.08%
Eastern	8.97%	8.10%	2.92%	2.41%
British Isles	15.10%	16.04%	16.42%	19.26%

Table A2 – Descriptive Statistics on Target Companies' Age at first investment, Industry and EBITDA Categories

	Treatment Main	Treatment Secondary
Age		
0-1	14.63%	7.66%
2-5	12.61%	25.18%
6-10	16.05%	28.47%
11-15	14.90%	10.22%
16-20	11.94%	11.68%
21-25	9.91%	5.47%
26+	19.96%	11.31%
Industry		
Green Technologies	2.02%	2.55%
ICT	18.68%	28.47%
Life Sciences	5.39%	9.49%
Manufacturing	20.23%	7.30%
Services	53.67%	52.19%
EBITDA Categories		
EBITDA <=0	13.01%	35.77%
EBITDA >0	67.30%	45.26%
EBITDA missing	19.69%	18.98%

Table A3 – Descriptive Statistics on Invested Amount (th EUR) and Maximum Invested Stake – Comparison between initial population and final sample

	Treatment Main		Treatment Secondary	
	Final Sample	Initial Population	Final Sample	Initial Population
Invested Amount				
25p	6,650	6,885	10,400	10,280.91
Median	13,269.18	13,283.24	15,995.16	15,000
75p	24,050.3	23,886.24	28,847.16	25,520
Min	1,000	1,000	7,500	7,500
Max	185,100	185,100	200,000	200,000
Mean	19,148.84	19,291.82	25,528.59	22,474.33
Standard Deviation	19,640.05	19,880	26,340.83	22,040.94
Maximum Invested Stake				
25p	0.485	0.488	0.085	0.089
Median	0.631	0.633	0.153	0.158
75p	0.778	0.783	0.232	0.231
Min	0.3	0.3	0.002	0.002
Max	1	1	0.299	0.299
Mean	0.637	0.641	0.157	0.158
Standard Deviation	0.195	0.199	0.083	0.082

Annex B: Post PSM statistics

Table B1 – Post PSM Statistics – Growth of Total Assets

		PANEL MAIN			PANEL SECONDARY		
	Unmatched VS Matched	*Mean Treated*	*Mean Control*	*Difference p-value*	*Mean Treated*	*Mean Control*	*Difference p-value*
Total assets (ln)	*U*	9.392	5.274	0.000	10.518	6.529	0.000
	M	9.392	9.404	0.874	10.518	10.608	0.663
VC	*U*	0.166	0.002	0.000	0.475	0.006	0.000
	M	0.166	0.133	0.014	0.473	0.401	0.126
Age (ln)	*U*	2.365	1.989	0.000	2.271	1.943	0.000
	M	2.365	2.399	0.378	2.272	2.190	0.314
Green tech	*U*	0.020	0.003	0.000	0.027	0.002	0.000
	M	0.020	0.028	0.213	0.027	0.027	1.000
ICT	*U*	0.184	0.053	0.000	0.278	0.280	0.949
	M	0.184	0.182	0.922	0.279	0.266	0.750
Life Sciences	*U*	0.054	0.019	0.000	0.090	0.005	0.000
	M	0.054	0.062	0.369	0.090	0.059	0.206
Manufacturing	*U*	0.197	0.066	0.000	0.072	0.080	0.636
	M	0.197	0.221	0.111	0.072	0.077	0.857
Services	*U*	0.546	0.860	0.000	0.534	0.633	0.002
	M	0.546	0.507	0.043	0.532	0.572	0.392
EBITDA <=0	*U*	0.154	0.085	0.000	0.332	0.132	0.000
	M	0.154	0.154	1.000	0.333	0.270	0.148
EBITDA >0	*U*	0.648	0.572	0.000	0.475	0.428	0.152
	M	0.648	0.667	0.297	0.473	0.496	0.636
EBITDA missing	*U*	0.198	0.342	0.000	0.193	0.441	0.000
	M	0.198	0.179	0.206	0.194	0.234	0.299

Table B2 – Post PSM Statistics – Growth of Turnover

		PANEL MAIN			PANEL SECONDARY		
	Unmatched VS Matched	*Mean Treated*	*Mean Control*	*Difference significance*	*Mean Treated*	*Mean Control*	*Difference significance*
Turnover (ln)	*U*	8.972	5.948	0.000	9.756	7.476	0.000
	M	8.972	8.976	0.975	9.739	9.921	0.553
VC	*U*	0.166	0.002	0.000	0.452	0.006	0.000
	M	0.166	0.127	0.011	0.449	0.359	0.095
Age (ln)	*U*	2.455	2.093	0.000	2.423	2.149	0.000
	M	2.455	2.436	0.672	2.425	2.362	0.499
Green tech	*U*	0.019	0.002	0.000	0.036	0.003	0.000
	M	0.019	0.021	0.761	0.036	0.018	0.312
ICT	*U*	0.178	0.038	0.000	0.238	0.092	0.000
	M	0.178	0.194	0.347	0.240	0.246	0.899
Life Sciences	*U*	0.052	0.015	0.000	0.077	0.004	0.000
	M	0.052	0.046	0.550	0.078	0.066	0.673
Manufacturing	*U*	0.233	0.070	0.000	0.077	0.118	0.107
	M	0.233	0.250	0.339	0.078	0.096	0.561
Services	*U*	0.518	0.875	0.000	0.571	0.783	0.000
	M	0.518	0.488	0.168	0.569	0.575	0.912
EBITDA <=0	*U*	0.176	0.106	0.000	0.345	0.192	0.000
	M	0.176	0.209	0.049	0.347	0.299	0.351
EBITDA >0	*U*	0.756	0.777	0.097	0.583	0.652	0.061
	M	0.756	0.721	0.063	0.581	0.611	0.579
EBITDA missing	*U*	0.068	0.117	0.000	0.071	0.156	0.003
	M	0.068	0.070	0.865	0.072	0.090	0.548

Table B3 – Post PSM Statistics – Growth of Intangible Assets

		PANEL MAIN			PANEL SECONDARY		
	Unmatched VS Matched	*Mean Treated*	*Mean Control*	*Difference significance*	*Mean Treated*	*Mean Control*	*Difference significance*
Intangible assets (ln)	*U*	2.851	-4.127	0.000	3.891	-2.462	0.000
	M	2.851	2.603	0.292	3.871	4.332	0.467
VC	*U*	0.165	0.002	0.000	0.479	0.007	0.000
	M	0.165	0.141	0.078	0.476	0.400	0.116
Age (ln)	*U*	2.376	2.061	0.000	2.291	2.009	0.000
	M	2.376	2.360	0.708	2.292	2.155	0.102
Green tech	*U*	0.021	0.003	0.000	0.028	0.003	0.000
	M	0.021	0.025	0.441	0.029	0.029	1.000
ICT	*U*	0.186	0.048	0.000	0.265	0.221	0.123
	M	0.186	0.191	0.768	0.267	0.281	0.743
Life Sciences	*U*	0.052	0.017	0.000	0.085	0.005	0.000
	M	0.052	0.056	0.670	0.086	0.052	0.179
Manufacturing	*U*	0.198	0.070	0.000	0.076	0.090	0.465
	M	0.198	0.225	0.090	0.076	0.052	0.321
Services	*U*	0.543	0.861	0.000	0.545	0.681	0.000
	M	0.543	0.504	0.041	0.543	0.586	0.377
EBITDA <=0	*U*	0.154	0.089	0.000	0.336	0.148	0.000
	M	0.154	0.168	0.320	0.338	0.338	1.000
EBITDA >0	*U*	0.656	0.635	0.114	0.488	0.493	0.884
	M	0.656	0.630	0.160	0.486	0.433	0.283
EBITDA missing	*U*	0.190	0.276	0.000	0.175	0.359	0.000
	M	0.190	0.202	0.438	0.176	0.229	0.182

Table B4 – Post PSM Statistics – Growth of Cost of Employees

		PANEL MAIN			PANEL SECONDARY		
	Unmatched VS Matched	*Mean Treated*	*Mean Control*	*Difference significance*	*Mean Treated*	*Mean Control*	*Difference significance*
Cost of employees (ln)	*U*	7.788	4.648	0.000	8.831	6.227	0.000
	M	7.788	7.783	0.939	8.819	8.978	0.451
VC	*U*	0.175	0.002	0.000	0.494	0.007	0.000
	M	0.175	0.147	0.085	0.494	0.350	0.009
Age (ln)	*U*	2.510	2.119	0.000	2.418	2.225	0.004
	M	2.510	2.505	0.918	2.425	2.405	0.822
Green tech	*U*	0.017	0.002	0.000	0.031	0.004	0.000
	M	0.017	0.020	0.628	0.031	0.038	0.760
ICT	*U*	0.179	0.038	0.000	0.265	0.074	0.000
	M	0.179	0.174	0.774	0.269	0.269	1.000
Life Sciences	*U*	0.055	0.016	0.000	0.080	0.005	0.000
	M	0.055	0.061	0.512	0.081	0.050	0.260
Manufacturing	*U*	0.227	0.075	0.000	0.068	0.145	0.005
	M	0.227	0.256	0.113	0.063	0.025	0.102
Services	*U*	0.522	0.869	0.000	0.556	0.772	0.000
	M	0.522	0.488	0.115	0.556	0.619	0.258
EBITDA <=0	*U*	0.158	0.109	0.000	0.383	0.181	0.000
	M	0.158	0.170	0.443	0.388	0.313	0.161
EBITDA >0	*U*	0.812	0.815	0.843	0.586	0.741	0.000
	M	0.812	0.796	0.349	0.581	0.631	0.362
EBITDA missing	*U*	0.030	0.077	0.000	0.031	0.078	0.026
	M	0.030	0.033	0.617	0.031	0.056	0.276

Table B5 – Post PSM Statistics – Growth of Turnover to Cost of Employees Ratio

		PANEL MAIN			PANEL SECONDARY		
	Unmatched VS Matched	*Mean Treated*	*Mean Control*	*Difference significance*	*Mean Treated*	*Mean Control*	*Difference significance*
Turnover to cost of employees	*U*	7.788	4.648	0.000	1.337	1.596	0.021
	M	7.788	7.783	0.939	1.340	1.530	0.262
VC	*U*	0.175	0.002	0.000	0.473	0.007	0.000
	M	0.175	0.147	0.085	0.450	0.393	0.335
Age (ln)	*U*	2.510	2.119	0.000	2.450	2.229	0.001
	M	2.510	2.505	0.918	2.478	2.355	0.247
Green tech	*U*	0.017	0.002	0.000	0.034	0.004	0.000
	M	0.017	0.020	0.628	0.036	0.029	0.736
ICT	*U*	0.179	0.038	0.000	0.243	0.063	0.000
	M	0.179	0.174	0.774	0.257	0.257	1.000
Life Sciences	*U*	0.055	0.016	0.000	0.081	0.005	0.000
	M	0.055	0.061	0.512	0.086	0.057	0.355
Manufacturing	*U*	0.227	0.075	0.000	0.074	0.147	0.013
	M	0.227	0.256	0.113	0.071	0.057	0.627
Services	*U*	0.522	0.869	0.000	0.568	0.781	0.000
	M	0.522	0.488	0.115	0.550	0.600	0.399
EBITDA <=0	*U*	0.158	0.109	0.000	0.351	0.183	0.000
	M	0.158	0.170	0.443	0.329	0.286	0.439
EBITDA >0	*U*	0.812	0.815	0.843	0.615	0.752	0.000
	M	0.812	0.796	0.349	0.636	0.671	0.532
EBITDA missing	*U*	0.030	0.077	0.000	0.034	0.065	0.127
	M	0.030	0.033	0.617	0.036	0.043	0.759

Table B6 – Post PSM Statistics – Equity to Total Assets

		PANEL MAIN			PANEL SECONDARY		
	Unmatched VS Matched	*Mean Treated*	*Mean Control*	*Difference significance*	*Mean Treated*	*Mean Control*	*Difference significance*
Equity to tot. Assets	*U*	1.258	0.467	0.000	-1.763	-141.01	0.889
	M	1.258	0.508	0.334	-1.775	0.354	0.315
VC	*U*	0.165	0.002	0.000	0.484	0.006	0.000
	M	0.165	0.154	0.420	0.481	0.426	0.247
Age (ln)	*U*	2.393	2.036	0.000	2.280	1.944	0.000
	M	2.393	2.353	0.339	2.281	2.237	0.606
Green tech	*U*	0.021	0.003	0.000	0.028	0.002	0.000
	M	0.021	0.024	0.693	0.028	0.023	0.761
ICT	*U*	0.178	0.053	0.000	0.267	0.281	0.645
	M	0.178	0.188	0.508	0.269	0.259	0.828
Life Sciences	*U*	0.053	0.020	0.000	0.088	0.005	0.000
	M	0.053	0.052	0.930	0.088	0.060	0.271
Manufacturing	*U*	0.206	0.071	0.000	0.074	0.080	0.725
	M	0.206	0.205	0.961	0.074	0.074	1.000
Services	*U*	0.542	0.853	0.000	0.544	0.631	0.008
	M	0.542	0.531	0.580	0.542	0.583	0.384
EBITDA <=0	*U*	0.146	0.056	0.000	0.327	0.131	0.000
	M	0.146	0.164	0.211	0.329	0.278	0.251
EBITDA >0	*U*	0.667	0.617	0.000	0.479	0.429	0.138
	M	0.667	0.652	0.430	0.477	0.481	0.923
EBITDA missing	*U*	0.187	0.327	0.000	0.194	0.440	0.000
	M	0.187	0.184	0.839	0.194	0.240	0.245

Table B7 – Post PSM Statistics – Short to Long Term Debt

		PANEL MAIN			PANEL SECONDARY		
	Unmatched VS Matched	*Mean Treated*	*Mean Control*	*Difference significance*	*Mean Treated*	*Mean Control*	*Difference significance*
Short to long term debt	*U*	1744.6	772.21	0.000	40783	26587	0.052
	M	1744.6	1868.4	0.510	40783	57013	0.246
VC	*U*	0.1683	0.002	0.000	0.481	0.007	0.000
	M	0.1683	0.157	0.457	0.481	0.432	0.349
Age (ln)	*U*	2.439	2.116	0.000	2.341	2.089	0.000
	M	2.439	2.407	0.487	2.341	2.261	0.398
Green tech	*U*	0.020	0.003	0.000	0.032	0.003	0.000
	M	0.020	0.028	0.211	0.032	0.016	0.313
ICT	*U*	0.183	0.043	0.000	0.276	0.142	0.000
	M	0.183	0.191	0.626	0.276	0.346	0.145
Life Sciences	*U*	0.053	0.015	0.000	0.076	0.004	0.000
	M	0.053	0.050	0.774	0.076	0.059	0.536
Manufacturing	*U*	0.225	0.078	0.000	0.076	0.104	0.205
	M	0.225	0.207	0.306	0.076	0.038	0.116
Services	*U*	0.520	0.861	0.000	0.540	0.746	0.000
	M	0.520	0.525	0.833	0.540	0.541	1.000
EBITDA <=0	*U*	0.166	0.086	0.000	0.351	0.145	0.000
	M	0.166	0.180	0.372	0.351	0.286	0.182
EBITDA >0	*U*	0.721	0.710	0.394	0.535	0.606	0.049
	M	0.721	0.699	0.264	0.535	0.535	1.000
EBITDA missing	*U*	0.113	0.204	0.000	0.114	0.248	0.000
	M	0.113	0.120	0.599	0.114	0.178	0.078

Annex C: Correlation matrix for the variables of main models

Panel Main Treatment

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) log-diff Total Assets$_{t-1}$	1.000													
(2) log-diff Turnover$_{t-1}$	0.271***	1.000												
(3) log-diff Int. Assets$_{t-1}$	0.147***	0.099***	1.000											
(4) log-diff Cost of Empl.$_{t-1}$	0.317***	0.399***	0.092***	1.000										
(5) log-diff Turn. to Cost of Empl.$_{t-1}$	0.088***	0.528***	-0.004	-0.317***	1.000									
(6) log-diff Equity to Total Ass.$_{t-1}$	-0.203***	-0.020**	-0.037***	-0.022**	0.041***	1.000								
(7) log-diff Short to Long t. Debt$_{t-1}$	-0.005	0.010	0.002	0.010	-0.030***	0.024**	1.000							
(8) Total Assets(ln)$_{t-1}$	-0.184***	-0.052***	-0.010	-0.054***	0.001	0.009	0.001	1.000						
(9) LMM$_{t-1}$	0.006	-0.001	0.047***	0.024***	-0.020**	-0.046***	0.001	0.286***	1.000					
(10) Dummy t+3	-0.112***	-0.081***	-0.051***	-0.101***	-0.002	-0.020**	0.000	0.135***	0.437***	1.000				
(11) Age (ln)$_{t-1}$	-0.138***	-0.153***	-0.018	-0.211***	-0.009	-0.015*	-0.001	0.222***	0.083***	0.177***	1.000			
(12) Debt over Total Assets$_{t-1}$	-0.005	-0.003	-0.001	-0.014	-0.042***	0.208***	-0.010	-0.086***	0.008	0.015	-0.007	1.000		
(13) Cash over Total Assets$_{t-1}$	0.087***	0.038***	0.042***	0.036***	-0.015*	-0.005	0.005	-0.319***	-0.049***	-0.060***	-0.061***	0.012	1.000	
(14) VC$_{t-1}$	-0.011	-0.001	-0.004	-0.001	0.016*	-0.021	-0.002	0.063***	0.157***	0.182***	-0.028***	-0.007*	0.073***	1.000

*** p<0.01, ** p<0.05, * p<0.1

Panel Secondary Treatment

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) log-diff Total Assets$_{t-1}$	1.000													
(2) log-diff Turnover$_{t-1}$	0.184***	1.000												
(3) log-diff Int. Assets$_{t-1}$	0.227***	0.089***	1.000											
(4) log-diff Cost of Empl.$_{t-1}$	0.219***	0.327***	0.132***	1.000										
(5) log-diff Turn. to Cost of Empl.$_{t-1}$	0.061**	0.729***	0.009**	-0.158***	1.000									
(6) log-diff Equity to Total Ass.$_{t-1}$	-0.418***	0.033	-0.078***	-0.082**	0.000	1.000								
(7) log-diff Short to Long t. Debt$_{t-1}$	-0.029	-0.006	0.071**	0.012	-0.025	0.091***	1.000							
(8) Total Assets(ln)$_{t-1}$	-0.384***	-0.126***	-0.086***	-0.164***	-0.039	0.166***	-0.005	1.000						
(9) LMM$_{t-1}$	-0.049**	-0.073***	-0.059**	-0.079***	-0.002	-0.004	-0.001	0.302***	1.000					
(10) Dummy t+3	-0.129***	-0.055**	-0.068***	-0.088***	-0.030	0.053*	-0.002	0.215***	0.638***	1.000				
(11) Age (ln)$_{t-1}$	-0.191***	-0.158***	-0.052**	-0.294***	-0.014	0.057*	-0.005	0.360***	0.193***	0.237***	1.000			
(12) Debt over Total Assets$_{t-1}$	0.097***	0.036	-0.046*	0.014	0.111***	0.051*	-0.004	-0.142***	0.023	0.055**	0.010	1.000		
(13) Cash over Total Assets$_{t-1}$	0.095***	0.111***	0.063**	0.118***	0.060**	-0.003	0.054**	-0.283***	-0.011	-0.019	-0.180***	0.010	1.000	
(14) VC$_{t-1}$	-0.004	-0.024	0.016	-0.024	0.000	-0.032	-0.012	-0.025	0.304***	0.399***	0.061***	0.035	0.168***	1.000

*** p<0.01, ** p<0.05, * p<0.1

Annex D: Moderators – Main Treatment group

Table D1– Interaction with Dummy t+3 – Panel Main

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	0.017	(0.018)	-0.007	(0.020)	0.077***	(0.013)	0.030	(0.020)	0.014	(0.022)	0.120***	(0.021)	0.108***	(0.015)
Y_{t-1}	-0.363***	(0.023)	-0.675***	(0.059)	-0.536***	(0.015)	-0.559***	(0.042)	-0.664***	(0.033)	-1.342***	(0.036)	-1.259***	(0.024)
Total Assets$(ln)_{t-1}$	n.a.	n.a.	0.396***	(0.101)	0.497***	(0.076)	0.241***	(0.029)	0.008	(0.020)	-0.859***	(0.065)	-0.157	(0.135)
LMM_{t-1}	0.062***	(0.018)	0.069	(0.051)	0.778***	(0.115)	0.036*	(0.019)	-0.045**	(0.018)	-0.208***	(0.049)	-0.158	(0.219)
Dummy t+3	-0.097***	(0.015)	-0.122***	(0.042)	-0.647***	(0.093)	-0.040***	(0.014)	-0.007	(0.020)	0.077*	(0.044)	-0.029	(0.222)
Age $(ln)_{t-1}$	-0.048	(0.043)	0.025	(0.124)	-0.231	(0.243)	-0.036	(0.046)	0.055	(0.042)	-0.121	(0.098)	0.637**	(0.264)
Debt over Total $Assets_{t-1}$	0.001**	(0.001)	0.001	(0.002)	-0.015***	(0.003)	-0.002***	(0.000)	-0.005***	(0.000)	0.057***	(0.012)	-0.001***	(0.000)
Cash over Total $Assets_{t-1}$	-0.097	(0.064)	-0.300	(0.196)	-0.042	(0.260)	-0.018	(0.057)	-0.039	(0.063)	0.201	(0.124)	0.215	(0.545)
VC_{t-1}	0.022	(0.035)	-0.076	(0.055)	-0.198	(0.184)	0.061**	(0.028)	-0.047*	(0.025)	-0.019	(0.082)	0.058	(0.382)
LMM_{t-1} # Dummy t+3	0.004	(0.021)	0.002	(0.060)	0.637***	(0.126)	-0.004	(0.021)	-0.016	(0.027)	-0.031	(0.059)	-0.239	(0.291)
Constant	3.789***	(0.237)	2.520***	(0.790)	-1.871*	(0.958)	2.442***	(0.241)	0.819***	(0.218)	6.077***	(0.620)	-0.042	(1.419)
N	**15,812**		**12,489**		**12,366**		**11,988**		**10,939**		**10,182**		**10,338**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of long-term vs short term. Robust standard errors in round brackets.

Table D2– Interaction with Size – Panel Main

DV: log-diff Y	Total Assets (1)		Turnover (2)		Intangible Assets (3)		Cost of Empl. (4)		Turnover to Cost of Empl. (5)		Equity to Total Assets (6)		Short to Long term Debt (7)	
log-diff Y_{t-1}	0.016	(0.018)	-0.008	(0.020)	0.076***	(0.013)	0.031	(0.020)	0.013	(0.022)	0.120***	(0.021)	0.108***	(0.015)
Y_{t-1}	-0.370***	(0.025)	-0.675***	(0.059)	-0.532***	(0.015)	-0.560***	(0.042)	-0.664***	(0.033)	-1.343***	(0.036)	-1.259***	(0.024)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.369***	(0.101)	0.501***	(0.079)	0.251***	(0.029)	0.001	(0.019)	-0.873***	(0.066)	-0.162	(0.135)
LMM_{t-1}	-0.328*	(0.174)	-1.027*	(0.552)	0.191	(0.681)	0.354*	(0.193)	-0.273	(0.189)	-0.731**	(0.370)	-0.294	(1.356)
Dummy t+3	-0.100***	(0.014)	-0.135***	(0.034)	-0.341***	(0.076)	-0.037***	(0.012)	-0.017	(0.016)	0.054	(0.034)	-0.146	(0.167)
Age (ln)$_{t-1}$	-0.031	(0.044)	0.064	(0.128)	-0.247	(0.244)	-0.046	(0.047)	0.065	(0.043)	-0.096	(0.098)	0.643**	(0.270)
Debt over Total Assets$_{t-1}$	0.001**	(0.001)	0.001	(0.002)	-0.015***	(0.003)	-0.002***	(0.000)	-0.005***	(0.001)	0.056***	(0.012)	-0.001***	(0.000)
Cash over Total Assets$_{t-1}$	-0.093	(0.063)	-0.280	(0.190)	-0.095	(0.260)	-0.023	(0.057)	-0.033	(0.063)	0.211*	(0.124)	0.237	(0.547)
VCt-1	0.020	(0.034)	-0.089	(0.054)	-0.108	(0.183)	0.063**	(0.028)	-0.052**	(0.025)	-0.034	(0.082)	0.032	(0.381)
LMMt-1 # Total Assets(ln)$_{t-1}$	0.041**	(0.018)	0.115**	(0.058)	0.077	(0.071)	-0.033*	(0.020)	0.024	(0.019)	0.055	(0.038)	0.006	(0.139)
Constant	3.806***	(0.240)	2.649***	(0.773)	-2.006**	(0.960)	2.390***	(0.233)	0.850***	(0.213)	6.125***	(0.623)	0.030	(1.393)
N	**15,812**		**12,489**		**12,366**		**11,988**		**10,939**		**10,182**		**10,338**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of total assets. Robust standard errors in round brackets.

Table D3 – Interaction with Age – Panel Main

DV: log-diff Y	Total Assets (1)		Turnover (2)		Intangible Assets (3)		Cost of Empl. (4)		Turnover to Cost of Empl. (5)		Equity to Total Assets (6)		Short to Long term Debt (7)	
log-diff Y_{t-1}	0.017	(0.018)	-0.008	(0.020)	0.076***	(0.013)	0.029	(0.020)	0.014	(0.022)	0.120***	(0.021)	0.108***	(0.015)
Y_{t-1}	-0.362***	(0.023)	-0.674***	(0.059)	-0.531***	(0.015)	-0.559***	(0.042)	-0.665***	(0.033)	-1.342***	(0.036)	-1.259***	(0.024)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.393***	(0.101)	0.522***	(0.076)	0.239***	(0.029)	0.009	(0.020)	-0.857***	(0.065)	-0.160	(0.135)
LMM_{t-1}	0.021	(0.092)	0.514*	(0.273)	0.392	(0.435)	0.240***	(0.084)	-0.189**	(0.085)	-0.528***	(0.193)	-0.327	(0.664)
Dummy t+3	-0.096***	(0.013)	-0.117***	(0.034)	-0.339***	(0.075)	-0.039***	(0.012)	-0.016	(0.015)	0.059*	(0.034)	-0.148	(0.167)
Age (ln)$_{t-1}$	-0.045	(0.044)	-0.007	(0.124)	-0.199	(0.250)	-0.051	(0.047)	0.066	(0.042)	-0.088	(0.098)	0.645**	(0.262)
Debt over Total Assets$_{t-1}$	0.001**	(0.001)	0.001	(0.002)	-0.014***	(0.003)	-0.002***	(0.000)	-0.005***	(0.000)	0.057***	(0.012)	-0.001***	(0.000)
Cash over Total Assets$_{t-1}$	-0.096	(0.064)	-0.301	(0.195)	-0.099	(0.260)	-0.017	(0.057)	-0.037	(0.063)	0.207*	(0.123)	0.237	(0.546)
VC_{t-1}	0.023	(0.035)	-0.076	(0.055)	-0.095	(0.183)	0.059**	(0.028)	-0.049**	(0.024)	-0.022	(0.081)	0.033	(0.379)
LMM_{t-1} # Age (ln)$_{t-1}$	0.014	(0.028)	-0.153*	(0.082)	0.179	(0.145)	-0.070**	(0.027)	0.048*	(0.026)	0.108*	(0.060)	0.032	(0.212)
Constant	3.774***	(0.233)	2.657***	(0.809)	-2.362**	(0.979)	2.517***	(0.242)	0.777***	(0.224)	5.959***	(0.626)	-0.002	(1.402)
N	**15,812**		**12,489**		**12,366**		**11,988**		**10,939**		**10,182**		**10,338**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of the company's age. Robust standard errors in round brackets.

Table D4 – Interaction with VC – Panel Main

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	0.017	(0.018)	-0.007	(0.020)	0.076***	(0.013)	0.030	(0.020)	0.014	(0.022)	0.119***	(0.021)	0.107***	(0.015)
Y_{t-1}	-0.362***	(0.023)	-0.675***	(0.059)	-0.532***	(0.015)	-0.559***	(0.042)	-0.664***	(0.033)	-1.342***	(0.036)	-1.259***	(0.024)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.397***	(0.101)	0.521***	(0.076)	0.240***	(0.029)	0.008	(0.020)	-0.860***	(0.065)	-0.155	(0.135)
LMM_{t-1}	0.060***	(0.020)	0.068	(0.056)	0.977***	(0.119)	0.040*	(0.020)	-0.051***	(0.019)	-0.200***	(0.050)	-0.329	(0.223)
Dummy t+3	-0.095***	(0.013)	-0.121***	(0.034)	-0.313***	(0.076)	-0.041***	(0.012)	-0.015	(0.016)	0.065*	(0.034)	-0.158	(0.167)
Age (ln)$_{t-1}$	-0.049	(0.043)	0.025	(0.122)	-0.281	(0.241)	-0.035	(0.046)	0.056	(0.042)	-0.117	(0.098)	0.636**	(0.264)
Debt over Total Assets$_{t-1}$	0.001**	(0.001)	0.001	(0.002)	-0.014***	(0.003)	-0.002***	(0.000)	-0.005***	(0.000)	0.057***	(0.012)	-0.001***	(0.000)
Cash over Total Assets$_{t-1}$	-0.097	(0.064)	-0.300	(0.195)	-0.093	(0.260)	-0.017	(0.057)	-0.037	(0.063)	0.204*	(0.123)	0.235	(0.546)
VC_{t-1}	0.010	(0.049)	-0.085	(0.072)	0.387	(0.239)	0.092*	(0.048)	-0.073*	(0.044)	0.102	(0.137)	-0.483	(0.487)
LMM_{t-1} # VC_{t-1}	0.018	(0.049)	0.013	(0.071)	-0.662**	(0.269)	-0.044	(0.054)	0.032	(0.042)	-0.169	(0.144)	0.767	(0.496)
Constant	3.790***	(0.238)	2.520***	(0.786)	-2.145**	(0.957)	2.439***	(0.240)	0.825***	(0.218)	6.063***	(0.619)	0.051	(1.404)
N	**15,812**		**12,489**		**12,366**		**11,988**		**10,939**		**10,182**		**10,338**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of having received an early VC investment. Robust standard errors in round brackets.

Table D5– Interaction with Industry dummies – Panel Main

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	0.017	(0.018)	-0.007	(0.020)	0.076***	(0.013)	0.030	(0.020)	0.014	(0.022)	0.120***	(0.021)	0.108***	(0.015)
Y_{t-1}	-0.363***	(0.023)	-0.675***	(0.059)	-0.532***	(0.015)	-0.560***	(0.042)	-0.665***	(0.033)	-1.343***	(0.036)	-1.259***	(0.024)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.396***	(0.101)	0.525***	(0.076)	0.241***	(0.029)	0.008	(0.020)	-0.859***	(0.065)	-0.162	(0.134)
LMM_{t-1}	0.040	(0.030)	0.077	(0.101)	0.912***	(0.187)	-0.030	(0.036)	-0.026	(0.031)	-0.187***	(0.067)	-0.264	(0.310)
Dummy t+3	-0.094***	(0.013)	-0.121***	(0.033)	-0.333***	(0.075)	-0.040***	(0.012)	-0.015	(0.015)	0.061*	(0.034)	-0.145	(0.167)
Age (ln)$_{t-1}$	-0.049	(0.043)	0.022	(0.121)	-0.244	(0.242)	-0.033	(0.047)	0.055	(0.042)	-0.110	(0.097)	0.633**	(0.266)
Debt over Total Assets$_{t-1}$	0.001**	(0.001)	0.001	(0.002)	-0.014***	(0.003)	-0.002***	(0.000)	-0.005***	(0.000)	0.057***	(0.012)	-0.001***	(0.000)
Cash over Total Assets$_{t-1}$	-0.096	(0.064)	-0.300	(0.195)	-0.114	(0.260)	-0.019	(0.057)	-0.037	(0.064)	0.204*	(0.123)	0.235	(0.547)
VC_{t-1}	0.021	(0.035)	-0.076	(0.056)	-0.086	(0.182)	0.061**	(0.028)	-0.050**	(0.025)	-0.023	(0.081)	0.028	(0.380)
LMM_{t-1} # Manufacturing	0.020	(0.035)	-0.049	(0.095)	0.331	(0.243)	0.093**	(0.038)	-0.049	(0.036)	0.013	(0.098)	-0.030	(0.406)
LMM_{t-1} # Green Tech	-0.105	(0.123)	0.160	(0.136)	-0.469	(0.528)	0.078	(0.080)	0.091	(0.061)	0.151	(0.193)	0.392	(0.664)
LMM_{t-1} # ICT	0.063	(0.045)	0.016	(0.097)	-0.288	(0.269)	0.131***	(0.045)	-0.041	(0.042)	-0.115	(0.125)	0.151	(0.589)
LMM_{t-1} # Life Sciences	0.139**	(0.061)	0.015	(0.108)	-0.192	(0.410)	0.163***	(0.056)	-0.022	(0.067)	-0.175	(0.198)	0.053	(0.705)
Constant	3.795***	(0.237)	2.531***	(0.791)	-2.235**	(0.963)	2.450***	(0.241)	0.826***	(0.219)	6.040***	(0.620)	0.057	(1.410)
N	**15,812**		**12,489**		**12,366**		**11,988**		**10,939**		**10,182**		**10,338**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of the company's industry. Robust standard errors in round brackets.

Table D6 – Interaction with Geographical Area dummies – Panel Main

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	0.018	(0.018)	-0.007	(0.020)	0.076***	(0.013)	0.032	(0.020)	0.014	(0.022)	0.120***	(0.021)	0.108***	(0.015)
Y_{t-1}	-0.363***	(0.023)	-0.675***	(0.059)	-0.535***	(0.015)	-0.565***	(0.042)	-0.667***	(0.033)	-1.343***	(0.036)	-1.260***	(0.024)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.397***	(0.101)	0.506***	(0.076)	0.242***	(0.029)	0.009	(0.020)	-0.859***	(0.065)	-0.154	(0.134)
LMM_{t-1}	0.114**	(0.050)	0.085	(0.084)	1.242***	(0.415)	0.073	(0.056)	-0.051	(0.101)	-0.146	(0.158)	-0.543	(1.055)
Dummy t+3	-0.096***	(0.013)	-0.121***	(0.033)	-0.336***	(0.075)	-0.040***	(0.012)	-0.016	(0.015)	0.061*	(0.034)	-0.147	(0.167)
Age (ln)$_{t-1}$	-0.049	(0.044)	0.022	(0.122)	-0.315	(0.242)	-0.031	(0.046)	0.054	(0.042)	-0.117	(0.098)	0.643**	(0.264)
Debt over Total Assets$_{t-1}$	0.001**	(0.001)	0.001	(0.002)	-0.015***	(0.003)	-0.002***	(0.000)	-0.005***	(0.000)	0.057***	(0.012)	-0.001***	(0.000)
Cash over Total Assets$_{t-1}$	-0.094	(0.063)	-0.300	(0.195)	-0.107	(0.259)	-0.020	(0.057)	-0.035	(0.063)	0.205*	(0.123)	0.265	(0.546)
VC_{t-1}	0.026	(0.034)	-0.075	(0.056)	-0.070	(0.180)	0.061**	(0.028)	-0.051**	(0.024)	-0.027	(0.081)	-0.008	(0.378)
LMM_{t-1} # DACH.	-0.123*	(0.068)	0.018	(0.090)	-1.114**	(0.493)	-0.033	(0.077)	-0.078	(0.141)	0.088	(0.198)	1.352	(1.213)
LMM_{t-1} # France	-0.065	(0.058)	-0.035	(0.183)	-1.329***	(0.452)	-0.217***	(0.083)	0.137	(0.107)	0.003	(0.175)	0.741	(1.152)
LMM_{t-1} # Eastern	-0.148*	(0.080)	-0.047	(0.091)	-0.415	(0.473)	0.079	(0.063)	-0.086	(0.105)	-0.186	(0.203)	-0.264	(1.111)
LMM_{t-1} # Iberia	-0.110	(0.081)	0.026	(0.096)	-0.208	(0.522)	0.074	(0.064)	-0.025	(0.110)	0.030	(0.201)	0.219	(1.077)
LMM_{t-1} # Italy-Malta	-0.021	(0.067)	-0.070	(0.105)	0.214	(0.466)	-0.021	(0.059)	-0.047	(0.104)	-0.203	(0.187)	0.048	(1.113)
LMM_{t-1} # Nordic	-0.022	(0.061)	0.050	(0.133)	-0.193	(0.504)	-0.060	(0.070)	0.028	(0.109)	-0.156	(0.199)	0.032	(1.140)
LMM_{t-1} # British Isles	0.019	(0.063)	-0.051	(0.091)	0.290	(0.528)	-0.042	(0.066)	-0.035	(0.107)	-0.019	(0.202)	0.463	(1.220)
Constant	3.789***	(0.236)	2.528***	(0.790)	-1.848*	(0.959)	2.473***	(0.239)	0.817***	(0.219)	6.071***	(0.620)	-0.038	(1.403)
N	**15,812**		**12,489**		**12,366**		**11,988**		**10,939**				**10,338**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of the company's location. Robust standard errors in round brackets.

Table D7 – Interaction with Period dummies – Panel Main

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	0.017	(0.018)	-0.008	(0.020)	0.076***	(0.013)	0.030	(0.020)	0.015	(0.022)	0.119***	(0.021)	0.108***	(0.015)
Y_{t-1}	-0.363***	(0.023)	-0.675***	(0.059)	-0.533***	(0.014)	-0.559***	(0.042)	-0.666***	(0.033)	-1.342***	(0.036)	-1.260***	(0.024)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.398***	(0.101)	0.508***	(0.076)	0.240***	(0.029)	0.010	(0.020)	-0.860***	(0.065)	-0.173	(0.132)
LMM_{t-1}	0.065	(0.118)	0.535	(0.464)	0.998	(0.711)	0.042	(0.108)	-0.061	(0.099)	-0.104	(0.232)	2.322***	(0.898)
Dummy t+3	-0.096***	(0.013)	-0.116***	(0.034)	-0.357***	(0.076)	-0.042***	(0.012)	-0.012	(0.015)	0.062*	(0.034)	-0.121	(0.167)
Age $(ln)_{t-1}$	-0.048	(0.043)	0.023	(0.123)	-0.257	(0.243)	-0.034	(0.046)	0.056	(0.041)	-0.116	(0.098)	0.663**	(0.264)
Debt over Total Assets$_{t-1}$	0.001**	(0.001)	0.001	(0.002)	-0.015***	(0.003)	-0.002***	(0.000)	-0.005***	(0.000)	0.057***	(0.012)	-0.001***	(0.000)
Cash over Total Assets$_{t-1}$	-0.097	(0.064)	-0.304	(0.195)	-0.082	(0.260)	-0.017	(0.057)	-0.039	(0.063)	0.204*	(0.123)	0.243	(0.551)
VC_{t-1}	0.022	(0.034)	-0.062	(0.055)	-0.136	(0.182)	0.060**	(0.028)	-0.048*	(0.025)	-0.023	(0.082)	0.052	(0.379)
LMM_{t-1} # y2010_2014	0.021	(0.081)	-0.321	(0.390)	-0.663	(0.652)	0.096	(0.094)	-0.147	(0.101)	0.037	(0.246)	-1.650*	(0.911)
LMM_{t-1} # y2015_2019	-0.007	(0.120)	-0.437	(0.459)	-0.273	(0.715)	-0.021	(0.111)	0.041	(0.100)	-0.121	(0.236)	-2.772***	(0.913)
LMM_{t-1} # y2020_2023	0.000	(0.119)	-0.516	(0.460)	0.123	(0.719)	-0.003	(0.110)	0.001	(0.101)	-0.117	(0.237)	-2.559***	(0.917)
Constant	3.789***	(0.237)	2.526***	(0.788)	-2.081**	(0.959)	2.445***	(0.241)	0.808***	(0.219)	6.080***	(0.620)	0.037	(1.389)
N	**15,812**		**12,489**		**12,366**		**11,988**		**10,939**		**10,182**		**10,338**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of the investment year period. Robust standard errors in round brackets.

Annex E: Moderators – Secondary Treatment group

Table E1– Interaction with Dummy t+3 – Panel Secondary

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	-0.045	(0.046)	0.089	(0.070)	0.066*	(0.034)	-0.023	(0.028)	-0.000	(0.039)	0.121***	(0.047)	0.111**	(0.043)
Y_{t-1}	-0.510***	(0.126)	-0.899***	(0.049)	-0.599***	(0.043)	-0.568***	(0.051)	-0.682***	(0.107)	-1.331***	(0.091)	-1.244***	(0.072)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.610***	(0.106)	0.608***	(0.192)	0.263***	(0.047)	0.021	(0.051)	-0.832***	(0.105)	-0.336	(0.219)
LMM_{t-1}	0.035	(0.077)	0.196	(0.128)	-0.390	(0.269)	0.048	(0.046)	0.091	(0.093)	-0.367**	(0.149)	-0.503	(0.577)
Dummy t+3	-0.168**	(0.067)	-0.063	(0.072)	-0.798***	(0.245)	-0.070**	(0.031)	-0.072	(0.046)	0.105	(0.125)	-1.701**	(0.830)
Age (ln)$_{t-1}$	0.115	(0.122)	0.483*	(0.270)	-0.186	(0.466)	-0.009	(0.090)	0.150	(0.120)	-0.069	(0.225)	-1.093	(0.847)
Debt over Total Assets$_{t-1}$	0.001***	(0.000)	0.013***	(0.003)	-0.120***	(0.046)	0.051	(0.040)	0.267***	(0.099)	-0.077	(0.164)	-0.912**	(0.435)
Cash over Total Assets$_{t-1}$	-0.430**	(0.180)	0.006	(0.344)	-0.925	(0.636)	0.089	(0.084)	0.082	(0.167)	0.212	(0.414)	1.088	(0.992)
VC_{t-1}	-0.005	(0.117)	-0.154*	(0.092)	0.284	(0.343)	0.003	(0.061)	-0.061	(0.053)	0.028	(0.196)	0.988	(0.717)
LMM_{t-1} # Dummy t+3	0.093	(0.078)	-0.090	(0.096)	0.161	(0.307)	0.015	(0.057)	-0.033	(0.062)	-0.170	(0.175)	2.259**	(0.905)
Constant	5.481***	(1.278)	1.560*	(0.916)	-2.659	(2.380)	2.488***	(0.642)	0.063	(0.663)	7.148***	(1.327)	6.113*	(3.131)
N	**2,270**		**1,797**		**2,179**		**1,733**		**1,500**		**1,426**		**1,239**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of long-term vs short term. Robust standard errors in round brackets.

Table E2– Interaction with Size – Panel Secondary

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	-0.044	(0.045)	0.091	(0.069)	0.067*	(0.034)	-0.024	(0.028)	0.000	(0.039)	0.119***	(0.046)	0.112***	(0.043)
Y_{t-1}	-0.527***	(0.132)	-0.901***	(0.048)	-0.600***	(0.043)	-0.567***	(0.051)	-0.682***	(0.107)	-1.329***	(0.088)	-1.243***	(0.072)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.663***	(0.120)	0.571***	(0.192)	0.260***	(0.040)	0.044	(0.047)	-0.832***	(0.101)	-0.265	(0.245)
LMM_{t-1}	-0.923*	(0.544)	1.859**	(0.893)	-2.149	(1.444)	-0.028	(0.357)	0.707	(0.437)	-0.197	(1.097)	1.609	(2.598)
Dummy t+3	-0.136**	(0.058)	-0.090	(0.080)	-0.733***	(0.213)	-0.064**	(0.029)	-0.083*	(0.042)	0.032	(0.102)	0.045	(0.576)
Age (ln)$_{t-1}$	0.167	(0.135)	0.413	(0.269)	-0.097	(0.468)	-0.006	(0.090)	0.126	(0.119)	-0.063	(0.225)	-1.180	(0.933)
Debt over Total Assets$_{t-1}$	0.001**	(0.001)	0.015***	(0.004)	-0.121***	(0.041)	0.051	(0.038)	0.272***	(0.098)	-0.080	(0.165)	-0.904**	(0.432)
Cash over Total Assets$_{t-1}$	-0.415**	(0.178)	0.009	(0.345)	-0.920	(0.634)	0.088	(0.084)	0.081	(0.169)	0.210	(0.415)	1.141	(1.010)
VC_{t-1}	0.008	(0.116)	-0.183*	(0.103)	0.297	(0.344)	0.004	(0.058)	-0.072	(0.054)	0.026	(0.194)	0.797	(0.727)
LMM_{t-1} # Total Assets(ln)$_{t-1}$	0.090*	(0.053)	-0.154**	(0.076)	0.169	(0.133)	0.007	(0.032)	-0.058	(0.035)	-0.020	(0.097)	-0.154	(0.253)
Constant	5.506***	(1.276)	1.242	(1.001)	-2.539	(2.355)	2.501***	(0.569)	-0.098	(0.645)	7.170***	(1.321)	5.477*	(3.191)
N	**2,270**		**1,797**		**2,179**		**1,733**		**1,500**		**1,426**		**1,239**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of total assets. Robust standard errors in round brackets.

Table E3– Interaction with Age – Panel Secondary

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	-0.046	(0.046)	0.088	(0.070)	0.067*	(0.034)	-0.024	(0.028)	0.002	(0.039)	0.121**	(0.047)	0.111**	(0.044)
Y_{t-1}	-0.509***	(0.126)	-0.898***	(0.049)	-0.599***	(0.043)	-0.567***	(0.051)	-0.683***	(0.107)	-1.332***	(0.090)	-1.242***	(0.073)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.607***	(0.105)	0.611***	(0.193)	0.263***	(0.045)	0.020	(0.050)	-0.842***	(0.102)	-0.302	(0.230)
LMM_{t-1}	0.033	(0.237)	0.230	(0.403)	-0.371	(0.776)	-0.009	(0.181)	0.273	(0.275)	-0.725	(0.589)	-2.280	(1.513)
Dummy t+3	-0.122**	(0.055)	-0.108	(0.084)	-0.717***	(0.216)	-0.064**	(0.028)	-0.084**	(0.042)	0.026	(0.104)	-0.033	(0.560)
Age (ln)$_{t-1}$	0.114	(0.121)	0.469*	(0.275)	-0.188	(0.473)	0.001	(0.085)	0.118	(0.123)	-0.022	(0.227)	-0.636	(0.867)
Debt over Total Assets$_{t-1}$	0.001***	(0.000)	0.013***	(0.003)	-0.120***	(0.045)	0.051	(0.039)	0.268***	(0.100)	-0.086	(0.164)	-0.957**	(0.427)
Cash over Total Assets$_{t-1}$	-0.435**	(0.180)	0.012	(0.344)	-0.934	(0.636)	0.086	(0.083)	0.094	(0.167)	0.191	(0.422)	1.051	(1.000)
VC_{t-1}	-0.008	(0.117)	-0.155	(0.094)	0.285	(0.344)	0.004	(0.061)	-0.065	(0.055)	0.032	(0.195)	0.860	(0.714)
LMM_{t-1} # Age (ln)$_{t-1}$	0.008	(0.073)	-0.020	(0.120)	0.007	(0.297)	0.022	(0.057)	-0.069	(0.082)	0.115	(0.187)	0.824	(0.521)
Constant	5.456***	(1.279)	1.641*	(0.940)	-2.703	(2.336)	2.450***	(0.616)	0.178	(0.650)	7.144***	(1.353)	4.162	(3.485)
N	**2,270**		**1,797**		**2,179**		**1,733**		**1,500**		**1,426**		**1,239**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of the company's age. Robust standard errors in round brackets.

Table E4 – Interaction with VC – Panel Secondary

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	-0.046	(0.046)	0.089	(0.070)	0.065*	(0.034)	-0.023	(0.027)	-0.001	(0.039)	0.121**	(0.047)	0.113***	(0.043)
Y_{t-1}	-0.508***	(0.126)	-0.900***	(0.050)	-0.598***	(0.043)	-0.568***	(0.051)	-0.685***	(0.107)	-1.331***	(0.090)	-1.245***	(0.071)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.602***	(0.106)	0.618***	(0.191)	0.263***	(0.046)	0.017	(0.049)	-0.836***	(0.105)	-0.334	(0.222)
LMM_{t-1}	0.086	(0.072)	0.039	(0.132)	0.029	(0.300)	0.041	(0.053)	0.025	(0.096)	-0.360***	(0.138)	-0.246	(0.638)
Dummy t+3	-0.120**	(0.055)	-0.120	(0.085)	-0.692***	(0.211)	-0.063**	(0.028)	-0.092**	(0.042)	0.035	(0.104)	-0.003	(0.577)
Age (ln)$_{t-1}$	0.111	(0.122)	0.483*	(0.266)	-0.171	(0.461)	-0.009	(0.089)	0.150	(0.118)	-0.058	(0.226)	-1.026	(0.858)
Debt over Total Assets$_{t-1}$	0.001***	(0.000)	0.013***	(0.003)	-0.119***	(0.042)	0.051	(0.040)	0.263***	(0.098)	-0.080	(0.164)	-0.923**	(0.428)
Cash over Total Assets$_{t-1}$	-0.441**	(0.179)	0.041	(0.352)	-1.020	(0.636)	0.090	(0.084)	0.101	(0.167)	0.199	(0.419)	1.239	(1.020)
VC_{t-1}	0.009	(0.122)	-0.270*	(0.151)	0.593	(0.389)	-0.004	(0.057)	-0.110	(0.080)	0.068	(0.224)	0.614	(0.769)
LMM_{t-1} # VC_{t-1}	-0.062	(0.108)	0.323	(0.242)	-0.859**	(0.414)	0.022	(0.084)	0.144	(0.142)	-0.123	(0.262)	0.508	(0.865)
Constant	5.457***	(1.279)	1.689*	(0.925)	-2.847	(2.354)	2.486***	(0.636)	0.118	(0.647)	7.177***	(1.358)	5.781*	(3.164)
N	**2,270**		**1,797**		**2,179**		**1,733**		**1,500**		**1,426**		**1,239**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of having received an early VC investment. Robust standard errors in round brackets.

Table E5– Interaction with Industry dummies – Panel Secondary

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	-0.046	(0.046)	0.090	(0.070)	0.063*	(0.034)	-0.024	(0.028)	-0.003	(0.038)	0.124***	(0.047)	0.112**	(0.043)
Y_{t-1}	-0.511***	(0.126)	-0.909***	(0.050)	-0.602***	(0.043)	-0.566***	(0.051)	-0.689***	(0.108)	-1.343***	(0.091)	-1.247***	(0.071)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.614***	(0.110)	0.612***	(0.190)	0.263***	(0.045)	0.021	(0.051)	-0.843***	(0.103)	-0.330	(0.238)
LMM_{t-1}	0.066	(0.101)	-0.058	(0.163)	-0.118	(0.291)	0.033	(0.061)	-0.018	(0.117)	-0.517***	(0.182)	0.065	(0.702)
Dummy t+3	-0.120**	(0.054)	-0.122	(0.083)	-0.687***	(0.207)	-0.065**	(0.028)	-0.094**	(0.041)	0.023	(0.106)	0.072	(0.574)
Age $(ln)_{t-1}$	0.113	(0.121)	0.618**	(0.257)	-0.217	(0.464)	-0.011	(0.086)	0.201	(0.125)	-0.076	(0.226)	-1.098	(0.875)
Debt over Total Assets$_{t-1}$	0.001***	(0.000)	0.013***	(0.003)	-0.123***	(0.044)	0.050	(0.039)	0.258***	(0.095)	-0.075	(0.161)	-0.839*	(0.434)
Cash over Total Assets$_{t-1}$	-0.431**	(0.181)	0.034	(0.344)	-0.968	(0.631)	0.085	(0.084)	0.101	(0.165)	0.204	(0.417)	1.173	(0.979)
VC_{t-1}	-0.008	(0.115)	-0.122	(0.090)	0.236	(0.336)	0.004	(0.060)	-0.051	(0.052)	0.047	(0.197)	0.744	(0.741)
LMM_{t-1} # Manufacturing	0.090	(0.132)	0.288	(0.188)	1.196	(0.730)	0.017	(0.073)	0.297	(0.215)	0.212	(0.302)	1.573	(1.452)
LMM_{t-1} # Green Tech	-0.311	(0.342)	-0.040	(0.205)	1.031	(1.127)	-0.023	(0.065)	-0.014	(0.107)	1.159***	(0.353)	-0.915	(1.631)
LMM_{t-1} # ICT	0.016	(0.147)	0.405	(0.298)	-1.070	(0.736)	0.109	(0.103)	0.188	(0.218)	0.065	(0.328)	-0.238	(0.904)
LMM_{t-1} # Life Sciences	-0.074	(0.113)	0.965**	(0.478)	-1.218*	(0.664)	-0.000	(0.118)	0.339	(0.217)	0.090	(0.213)	-1.777	(1.468)
Constant	5.488***	(1.289)	1.214	(0.960)	-2.503	(2.337)	2.477***	(0.624)	-0.062	(0.691)	7.305***	(1.327)	5.964*	(3.215)
N	**2,270**		**1,797**		**2,179**		**1,733**		**1,500**		**1,426**		**1,239**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of the company's industry. Robust standard errors in round brackets.

Table E6– Interaction with Geographical Area dummies – Panel Secondary

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	-0.049	(0.046)	0.093	(0.069)	0.064*	(0.035)	-0.023	(0.028)	0.003	(0.039)	0.122**	(0.048)	0.113**	(0.044)
Y_{t-1}	-0.511***	(0.126)	-0.916***	(0.051)	-0.599***	(0.043)	-0.572***	(0.051)	-0.697***	(0.109)	-1.341***	(0.093)	-1.246***	(0.073)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.621***	(0.114)	0.618***	(0.193)	0.269***	(0.045)	0.019	(0.051)	-0.848***	(0.101)	-0.331	(0.238)
LMM_{t-1}	-0.157	(0.173)	-0.184	(0.216)	-0.339	(0.539)	-0.551	(0.483)	0.269	(0.289)	-0.033	(0.412)	-1.617	(1.399)
Dummy t+3	-0.124**	(0.054)	-0.095	(0.078)	-0.730***	(0.210)	-0.066**	(0.028)	-0.078*	(0.041)	0.024	(0.105)	0.091	(0.585)
Age $(ln)_{t-1}$	0.120	(0.121)	0.479*	(0.270)	-0.189	(0.460)	0.003	(0.083)	0.153	(0.119)	-0.063	(0.227)	-0.973	(0.844)
Debt over Total Assets$_{t-1}$	0.001***	(0.000)	0.013***	(0.003)	-0.118***	(0.043)	0.044	(0.039)	0.265***	(0.099)	-0.069	(0.166)	-0.999**	(0.435)
Cash over Total Assets$_{t-1}$	-0.415**	(0.178)	0.026	(0.348)	-0.987	(0.629)	0.095	(0.083)	0.100	(0.161)	0.168	(0.424)	1.393	(1.029)
VC_{t-1}	-0.027	(0.119)	-0.177*	(0.104)	0.288	(0.347)	-0.012	(0.060)	-0.061	(0.054)	0.050	(0.196)	0.792	(0.712)
LMM_{t-1} # DACH.	0.001	(0.227)	0.821**	(0.415)	-0.177	(0.696)	0.521	(0.489)	-0.221	(0.303)	-0.560	(0.628)	0.143	(2.154)
LMM_{t-1} # France	0.225	(0.188)	0.326	(0.248)	-0.195	(0.595)	0.619	(0.480)	-0.129	(0.309)	-0.353	(0.446)	1.615	(1.609)
LMM_{t-1} # Eastern	0.238	(0.338)	-0.042	(0.252)	1.213	(1.164)	-0.499	(0.504)	-0.482	(0.340)	0.145	(0.478)	-1.069	(2.674)
LMM_{t-1} # Iberia	-0.152	(0.225)	0.094	(0.263)	0.864	(0.608)	0.522	(0.485)	-0.303	(0.323)	-0.564	(0.457)	2.325	(1.472)
LMM_{t-1} # Italy-Malta	0.233	(0.213)	0.473	(0.304)	0.720	(0.652)	0.699	(0.487)	-0.363	(0.302)	-0.385	(0.473)	1.400	(2.044)
LMM_{t-1} # Nordic	0.422	(0.288)	1.027*	(0.554)	-0.556	(1.399)	0.685	(0.507)	0.065	(0.371)	-0.660	(0.568)	2.442	(1.574)
LMM_{t-1} # British Isles	0.509**	(0.240)	0.078	(0.551)	-0.257	(0.836)	0.682	(0.497)	-0.385	(0.387)	-0.606	(0.573)	2.335	(1.778)
Constant	5.486***	(1.298)	1.635*	(0.930)	-2.722	(2.406)	2.441***	(0.623)	0.077	(0.661)	7.318***	(1.314)	5.593*	(3.349)
N	**2,270**		**1,797**		**2,179**		**1,733**		**1,500**		**1,426**		**1,239**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of the company's location. Robust standard errors in round brackets.

Table E7 – Interaction with Period dummies – Panel Secondary

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	-0.045	(0.046)	0.089	(0.070)	0.069**	(0.035)	-0.021	(0.025)	-0.003	(0.039)	0.119**	(0.047)	0.111**	(0.043)
Y_{t-1}	-0.512***	(0.126)	-0.899***	(0.050)	-0.601***	(0.044)	-0.575***	(0.050)	-0.685***	(0.107)	-1.329***	(0.091)	-1.242***	(0.072)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.612***	(0.106)	0.608***	(0.191)	0.258***	(0.037)	0.031	(0.040)	-0.840***	(0.104)	-0.266	(0.214)
LMM_{t-1}	0.080	(0.165)	0.238	(0.364)	1.982	(2.186)	0.697*	(0.394)	-0.644*	(0.331)	0.524	(0.742)	-3.572	(2.427)
Dummy t+3	-0.129**	(0.056)	-0.105	(0.086)	-0.675***	(0.213)	-0.051*	(0.026)	-0.102**	(0.042)	0.043	(0.104)	-0.090	(0.569)
Age (ln)$_{t-1}$	0.122	(0.124)	0.474*	(0.272)	-0.222	(0.463)	-0.002	(0.094)	0.153	(0.120)	-0.075	(0.225)	-1.081	(0.867)
Debt over Total Assets$_{t-1}$	0.001***	(0.000)	0.013***	(0.003)	-0.120***	(0.045)	0.049	(0.037)	0.269***	(0.098)	-0.087	(0.165)	-0.883**	(0.429)
Cash over Total Assets$_{t-1}$	-0.434**	(0.180)	0.007	(0.347)	-0.965	(0.636)	0.090	(0.084)	0.087	(0.169)	0.199	(0.416)	1.191	(1.005)
VC_{t-1}	-0.002	(0.116)	-0.160*	(0.094)	0.302	(0.343)	0.016	(0.050)	-0.074	(0.052)	0.036	(0.193)	0.712	(0.724)
LMM_{t-1} # y2010_2014	0.350**	(0.150)	-0.008	(0.227)	-1.688	(1.364)	0.034	(0.244)	0.110	(0.231)	-0.970	(0.774)	1.496	(3.642)
LMM_{t-1} # y2015_2019	-0.097	(0.169)	0.007	(0.335)	-2.211	(2.204)	-0.629	(0.401)	0.722**	(0.328)	-0.959	(0.731)	3.749	(2.303)
LMM_{t-1} # y2020_2023	-0.008	(0.151)	-0.110	(0.352)	-2.440	(2.195)	-0.664	(0.405)	0.743**	(0.334)	-0.930	(0.739)	3.604	(2.420)
Constant	5.469***	(1.269)	1.602*	(0.914)	-2.579	(2.324)	2.568***	(0.476)	-0.029	(0.570)	7.270***	(1.320)	8.306**	(3.635)
N	**2,270**		**1,797**		**2,179**		**1,733**		**1,500**		**1,426**		**1,239**	

Legend: ***: p-value<1%, **: p-value<5%, *: p-value<10%, n.a. not applicable (i.e. variable not included in the model). The table reports diff-in-diff estimates on 1-year growth in total assets, turnover, intangible fixed assets, employment cost, turnover to cost of employees ratio (our measure of productivity), equity to total assets ratio, short-term to long-term debt ratio. Main variable of interest is the moderation effect of the investment year period. Robust standard errors in round brackets.

Annex F: Robustness checks

Table F1 – Multiple LMM dummies – Panel Main

DV: log-diff Y	Total Assets (1)		Turnover (2)		Intangible Assets (3)		Cost of Empl. (4)		Turnover to Cost of Empl. (5)		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	0.017	(0.018)	-0.007	(0.020)	0.077***	(0.013)	0.030	(0.020)	0.014	(0.022)	0.124***	(0.019)	0.133***	(0.016)
Y_{t-1}	-0.363***	(0.023)	-0.675***	(0.059)	-0.534***	(0.015)	-0.559***	(0.042)	-0.665***	(0.033)	-1.353***	(0.029)	-1.325***	(0.025)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.398***	(0.102)	0.505***	(0.076)	0.240***	(0.029)	0.007	(0.020)	-0.909***	(0.053)	-0.026	(0.120)
LMM_t	0.175***	(0.023)	0.055	(0.037)	0.382***	(0.115)	0.048***	(0.015)	0.034*	(0.017)	-0.076	(0.050)	0.042	(0.260)
LMM_{t-1}	0.170***	(0.021)	0.120**	(0.057)	0.886***	(0.136)	0.071***	(0.020)	-0.019	(0.023)	-0.230***	(0.057)	0.805***	(0.273)
LMM_{t-2}	0.132***	(0.023)	0.095	(0.071)	1.352***	(0.165)	0.050	(0.031)	-0.044	(0.027)	-0.212***	(0.065)	-0.032	(0.315)
LMM_{t-3}	0.104***	(0.028)	0.063	(0.083)	1.343***	(0.168)	0.042	(0.032)	-0.052*	(0.031)	-0.244***	(0.073)	1.013***	(0.337)
$LMM_{t-4 \text{ and before}}$	0.086***	(0.028)	-0.012	(0.087)	1.295***	(0.181)	0.019	(0.032)	-0.049	(0.034)	-0.272***	(0.079)	0.507	(0.327)
Age (ln)$_{t-1}$	-0.054	(0.043)	0.024	(0.124)	-0.279	(0.243)	-0.038	(0.046)	0.054	(0.042)	-0.105	(0.097)	0.121	(0.266)
Debt over Total Assets$_{t-1}$	0.001**	(0.001)	0.001	(0.002)	-0.016***	(0.003)	-0.002***	(0.000)	-0.005***	(0.000)	-0.019	(0.084)	0.001***	(0.000)
Cash over Total Assets$_{t-1}$	-0.108*	(0.063)	-0.304	(0.196)	-0.066	(0.260)	-0.021	(0.057)	-0.039	(0.063)	0.185	(0.113)	0.349	(0.507)
VC_{t-1}	0.024	(0.035)	-0.062	(0.057)	-0.277	(0.188)	0.069**	(0.030)	-0.039	(0.027)	-0.018	(0.077)	-0.327	(0.356)
_cons	3.715***	(0.232)	2.415***	(0.782)	-2.422**	(0.962)	2.421***	(0.240)	0.816***	(0.218)	6.687***	(0.492)	0.215	(1.355)
N	**15,812**		**12,489**		**12,366**		**11,988**		**10,939**		**10,171**		**10,243**	

Table F2– Multiple LMM dummies – Panel Secondary

DV: log-diff Y	Total Assets		Turnover		Intangible Assets		Cost of Empl.		Turnover to Cost of Empl.		Equity to Total Assets		Short to Long term Debt	
log-diff Y_{t-1}	-0.043	(0.046)	0.089	(0.067)	0.073**	(0.034)	-0.022	(0.027)	0.000	(0.039)	0.131***	(0.043)	0.101**	(0.047)
Y_{t-1}	-0.511***	(0.127)	-0.900***	(0.048)	-0.602***	(0.043)	-0.575***	(0.052)	-0.680***	(0.109)	-1.253***	(0.071)	-1.200***	(0.081)
Total Assets(ln)$_{t-1}$	n.a.	n.a.	0.612***	(0.103)	0.618***	(0.193)	0.267***	(0.048)	0.026	(0.051)	-0.689***	(0.126)	0.060	(0.139)
LMM_t	0.319***	(0.068)	0.397*	(0.219)	0.326	(0.306)	0.124***	(0.041)	-0.012	(0.067)	0.093	(0.202)	-0.231	(0.468)
LMM_{t-1}	0.204**	(0.099)	0.527***	(0.176)	-0.007	(0.352)	0.149***	(0.054)	0.131	(0.102)	-0.358*	(0.205)	0.884	(0.615)
LMM_{t-2}	0.196*	(0.107)	0.239	(0.160)	-0.138	(0.398)	0.088	(0.075)	0.067	(0.079)	-0.550***	(0.184)	1.316*	(0.704)
LMM_{t-3}	0.223*	(0.118)	0.197	(0.147)	-0.424	(0.411)	0.073	(0.075)	-0.025	(0.082)	-0.523**	(0.217)	1.787**	(0.746)
$LMM_{t-4 \text{ and before}}$	0.152	(0.146)	0.322	(0.209)	-0.609	(0.485)	0.098	(0.104)	0.022	(0.100)	-0.384*	(0.204)	1.515*	(0.820)
Age (ln)$_{t-1}$	0.101	(0.120)	0.495*	(0.260)	-0.189	(0.474)	0.002	(0.090)	0.138	(0.119)	-0.224	(0.304)	-1.454*	(0.851)
Debt over Total Assets$_{t-1}$	0.001***	(0.000)	0.013***	(0.003)	-0.122***	(0.046)	0.053	(0.041)	0.269***	(0.099)	-0.649	(0.456)	-0.607	(0.523)
Cash over Total Assets$_{t-1}$	-0.425**	(0.175)	0.015	(0.341)	-0.870	(0.636)	0.098	(0.083)	0.080	(0.169)	0.644*	(0.344)	-1.287	(1.093)
VC_{t-1}	-0.021	(0.117)	-0.148	(0.100)	0.227	(0.333)	0.000	(0.062)	-0.062	(0.051)	0.001	(0.237)	0.232	(0.828)
_cons	5.375***	(1.264)	1.364	(0.969)	-3.386	(2.355)	2.395***	(0.638)	-0.009	(0.652)	6.549***	(1.687)	4.400	(3.389)
N	**2,270**		**1,797**		**2,179**		**1,733**		**1,500**		**1,407**		**1,239**	

Table F3- Multiple Cross Section models – Total Assets – Panel Main

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	-0.009	(0.028)	0.009	(0.013)	0.153***	(0.056)	0.125	(0.089)	0.069	(0.045)
Y_{t-1}	-0.103***	(0.020)	-0.025**	(0.011)	-0.022*	(0.012)	-0.011	(0.006)	0.012	(0.013)
LMM	0.129***	(0.032)	0.141***	(0.022)	0.063***	(0.019)	0.012	(0.024)	0.072***	(0.022)
Age (ln)$_{t-1}$	-0.069***	(0.024)	-0.003	(0.015)	0.010	(0.016)	0.018	(0.013)	0.033*	(0.019)
Debt over Total Assets$_{t-1}$	0.088	(0.069)	-0.002***	(0.000)	0.000	(0.000)	-0.000***	(0.000)	0.000	(0.000)
Cash over Total Assets$_{t-1}$	-0.036	(0.148)	-0.006***	(0.001)	-0.003	(0.073)	-0.000	(0.001)	0.002**	(0.001)
VC_{t-1}	-0.050	(0.050)	0.014	(0.030)	0.040*	(0.024)	0.070***	(0.025)	0.007	(0.040)
Constant	1.420***	(0.250)	0.131	(0.179)	-0.063	(0.140)	-0.020	(0.262)	-0.231	(0.168)
N	**1,708**		**1,718**		**1,719**		**1,447**		**1,143**	

Table F4 – Multiple Cross Section models – Turnover – Panel Main

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	-0.115	(0.094)	-0.205	(0.141)	-0.146**	(0.059)	-0.078	(0.049)	0.100	(0.126)
Y_{t-1}	-0.093	(0.065)	-0.361***	(0.077)	-0.254***	(0.074)	-0.070	(0.067)	0.034	(0.068)
Total Assets(ln)$_{t-1}$	0.076	(0.064)	0.276***	(0.081)	0.229***	(0.066)	0.037	(0.053)	0.012	(0.060)
LMM	0.022	(0.050)	-0.032	(0.054)	0.058	(0.058)	0.091*	(0.055)	-0.037	(0.060)
Age (ln)$_{t-1}$	-0.045	(0.035)	-0.025	(0.051)	-0.109**	(0.043)	-0.048	(0.036)	0.016	(0.036)
Debt over Total Assets$_{t-1}$	0.002	(0.031)	0.130**	(0.054)	-0.103	(0.099)	-0.001	(0.001)	0.000	(0.000)
Cash over Total Assets$_{t-1}$	0.296**	(0.148)	-0.006	(0.207)	0.460***	(0.173)	-0.218	(0.320)	0.064	(0.338)
VC_{t-1}	0.055	(0.067)	-0.150**	(0.074)	-0.042	(0.062)	0.020	(0.047)	0.067	(0.066)
Constant	0.433**	(0.198)	0.725	(0.468)	0.642***	(0.235)	-0.461	(0.776)	0.277	(0.683)
N	**1,173**		**1,368**		**1,352**		**1,373**		**1,174**	

Table F5 – Multiple Cross Section models – Intangible Assets – Panel Main

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	-0.070**	(0.034)	-0.077**	(0.034)	0.011	(0.025)	0.025	(0.026)	-0.019	(0.038)
Y_{t-1}	-0.147***	(0.021)	-0.185***	(0.020)	-0.146***	(0.020)	-0.118***	(0.020)	-0.100***	(0.021)
Total Assets(ln)$_{t-1}$	0.207***	(0.062)	0.100**	(0.045)	0.207***	(0.052)	0.187***	(0.044)	0.202***	(0.045)
LMM	-0.106	(0.159)	0.140	(0.139)	1.008***	(0.136)	0.745***	(0.140)	0.604***	(0.144)
Age (ln)$_{t-1}$	-0.251**	(0.100)	-0.018	(0.101)	0.067	(0.102)	0.077	(0.095)	0.057	(0.105)
Debt over Total Assets$_{t-1}$	0.127	(0.109)	0.152	(0.134)	-0.118	(0.120)	0.075	(0.096)	-0.178**	(0.084)
Cash over Total Assets$_{t-1}$	-0.070	(0.442)	-0.554	(0.402)	0.468	(0.433)	0.764*	(0.391)	0.651	(0.551)
VC_{t-1}	0.245	(0.179)	0.153	(0.202)	0.116	(0.195)	0.177	(0.157)	0.180	(0.165)
Constant	1.034	(1.494)	-1.631	(1.079)	0.843	(1.543)	-2.865***	(1.001)	-2.035***	(0.510)
N	**1,294**		**1,575**		**1,525**		**1,203**		**988**	

Table F6 – Multiple Cross Section models – Cost of Employees – Panel Main

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	-0.052	(0.083)	0.006	(0.037)	0.073	(0.070)	0.096	(0.059)	0.140	(0.122)
Y_{t-1}	-0.081***	(0.028)	-0.069***	(0.021)	-0.030	(0.022)	-0.020	(0.017)	-0.052**	(0.025)
Total Assets(ln)$_{t-1}$	0.028	(0.019)	0.014	(0.016)	0.010	(0.020)	0.001	(0.016)	0.054***	(0.021)
LMM	0.044**	(0.022)	0.022	(0.019)	0.078***	(0.023)	0.057**	(0.029)	0.005	(0.024)
Age (ln)$_{t-1}$	-0.062***	(0.015)	-0.022	(0.014)	-0.039**	(0.019)	0.006	(0.016)	0.018	(0.019)
Debt over Total Assets$_{t-1}$	-0.022**	(0.011)	0.029	(0.028)	-0.040*	(0.022)	-0.036	(0.024)	-0.060	(0.037)
Cash over Total Assets$_{t-1}$	-0.001	(0.060)	0.069	(0.062)	0.127	(0.082)	0.014	(0.084)	0.049	(0.064)
VC_{t-1}	0.102	(0.071)	0.038	(0.029)	0.059**	(0.029)	-0.007	(0.024)	0.038	(0.024)
Constant	0.809***	(0.210)	-0.586***	(0.100)	0.299**	(0.145)	0.035	(0.242)	-0.108	(0.090)
N	**1,077**		**1,293**		**1,296**		**1,352**		**1,145**	

Table F7 – Multiple Cross Section models – Turnover to Cost of Employees – Panel Main

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	-0.116*	(0.063)	-0.207***	(0.075)	-0.182*	(0.100)	-0.172**	(0.082)	-0.230**	(0.100)
Y_{t-1}	-0.063***	(0.019)	-0.118***	(0.032)	-0.111***	(0.022)	-0.098***	(0.026)	-0.113***	(0.023)
Total Assets(ln)$_{t-1}$	0.000	(0.009)	0.012	(0.011)	-0.004	(0.012)	0.028**	(0.011)	0.010	(0.009)
LMM	0.033	(0.024)	-0.085***	(0.031)	-0.035	(0.034)	-0.085**	(0.034)	-0.061*	(0.033)
Age (ln)$_{t-1}$	-0.016	(0.017)	0.005	(0.022)	0.046*	(0.027)	-0.013	(0.017)	0.003	(0.018)
Debt over Total Assets$_{t-1}$	0.032	(0.021)	0.021	(0.027)	0.065*	(0.033)	-0.001	(0.026)	-0.004*	(0.002)
Cash over Total Assets$_{t-1}$	-0.104	(0.071)	-0.062	(0.085)	-0.231*	(0.121)	0.110	(0.118)	0.010	(0.104)
VC_{t-1}	0.034	(0.044)	-0.076	(0.051)	-0.026	(0.035)	0.026	(0.035)	0.049	(0.033)
Constant	0.393***	(0.135)	0.100	(0.140)	0.165	(0.149)	-0.038	(0.152)	0.100	(0.108)
N	**994**		**1,168**		**1,137**		**1,193**		**1,007**	

Table F8 – Multiple Cross Section models – Equity to Total Assets – Panel Main

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	-0.095	(0.069)	-0.207***	(0.055)	-0.195***	(0.048)	-0.167***	(0.056)	-0.091	(0.078)
Y_{t-1}	-0.691***	(0.072)	-0.604***	(0.053)	-0.589***	(0.061)	-0.554***	(0.063)	-0.687***	(0.076)
Total Assets(ln)$_{t-1}$	-0.005	(0.021)	0.010	(0.022)	-0.012	(0.018)	-0.013	(0.017)	0.010	(0.018)
LMM	-0.024	(0.069)	-0.145**	(0.070)	-0.227***	(0.066)	-0.102	(0.072)	-0.128*	(0.071)
Age (ln)$_{t-1}$	0.114**	(0.047)	0.166***	(0.049)	0.120***	(0.041)	0.037	(0.033)	0.056	(0.048)
Debt over Total Assets$_{t-1}$	-1.252***	(0.194)	-1.084***	(0.177)	-0.626***	(0.227)	-0.998***	(0.202)	-1.653***	(0.210)
Cash over Total Assets$_{t-1}$	-0.118	(0.189)	0.003	(0.173)	0.176	(0.165)	0.098	(0.182)	0.235	(0.169)
VC_{t-1}	0.140	(0.119)	0.060	(0.115)	0.111	(0.075)	-0.067	(0.094)	-0.112	(0.093)
Constant	-1.098***	(0.304)	-0.025	(0.417)	-1.305*	(0.706)	-0.235	(0.350)	-0.219	(0.445)
N	**956**		**1,083**		**1,058**		**1,052**		**879**	

Table F9– Multiple Cross Section models – Short to Long Term Debt – Panel Main

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	-0.313***	(0.044)	-0.369***	(0.042)	-0.367***	(0.041)	-0.286***	(0.044)	-0.371***	(0.047)
Y_{t-1}	-0.394***	(0.044)	-0.352***	(0.042)	-0.328***	(0.037)	-0.370***	(0.042)	-0.393***	(0.046)
Total Assets(ln)$_{t-1}$	-0.159	(0.107)	0.052	(0.097)	0.044	(0.078)	-0.039	(0.091)	0.196*	(0.104)
LMM	-0.306	(0.364)	0.840**	(0.353)	0.110	(0.319)	0.937***	(0.355)	-0.159	(0.388)
Age (ln)$_{t-1}$	0.049	(0.218)	0.469**	(0.190)	0.061	(0.134)	-0.125	(0.187)	0.273	(0.216)
Debt over Total Assets$_{t-1}$	-0.097***	(0.011)	0.003***	(0.001)	0.001***	(0.000)	0.002***	(0.000)	0.618	(0.502)
Cash over Total Assets$_{t-1}$	1.688*	(1.005)	-1.335	(1.032)	0.411	(0.987)	-1.324	(1.183)	0.687	(1.202)
VC_{t-1}	-0.674	(0.589)	0.402	(0.586)	0.229	(0.393)	-0.625	(0.441)	0.529	(0.465)
Constant	3.010	(2.213)	-3.159*	(1.713)	-3.892*	(2.021)	-0.502	(1.512)	-1.262	(1.688)
N	**847**		**989**		**1,162**		**975**		**832**	

Table F10 – Multiple Cross Section models – Total Assets – Panel Secondary

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	0.090	(0.092)	-0.344*	(0.187)	0.026	(0.077)	0.278***	(0.102)	0.282	(0.200)
Y_{t-1}	0.000	(0.078)	-0.122**	(0.059)	-0.001	(0.013)	0.002	(0.010)	-0.012	(0.023)
LMM	0.267***	(0.090)	0.122	(0.082)	0.135***	(0.047)	0.026	(0.046)	0.022	(0.068)
Age $(ln)_{t-1}$	-0.034	(0.072)	-0.167**	(0.074)	-0.024	(0.029)	-0.075**	(0.029)	-0.018	(0.041)
Debt over Total $Assets_{t-1}$	0.025	(0.070)	-0.114*	(0.064)	-0.006	(0.004)	0.049	(0.065)	0.056	(0.057)
Cash over Total $Assets_{t-1}$	0.770**	(0.368)	-0.230	(0.229)	0.012	(0.159)	0.045	(0.148)	-0.240	(0.154)
VC_{t-1}	0.142	(0.166)	-0.066	(0.086)	-0.025	(0.056)	0.035	(0.048)	0.001	(0.077)
Constant	-0.301	(0.815)	2.132**	(0.929)	0.098	(0.138)	0.130	(0.195)	-2.267***	(0.371)
N	**291**		**285**		**240**		**179**		**144**	

Table F11– Multiple Cross Section models – Turnover – Panel Secondary

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	-0.322	(0.209)	-0.243**	(0.103)	0.114***	(0.043)	0.036	(0.051)	0.595*	(0.355)
Y_{t-1}	-0.374***	(0.065)	-0.234*	(0.119)	0.243**	(0.095)	-0.018	(0.025)	-0.312**	(0.135)
Total Assets$(ln)_{t-1}$	0.272***	(0.068)	0.112	(0.089)	-0.184***	(0.065)	0.020	(0.027)	0.271**	(0.113)
LMM	-0.083	(0.123)	0.142	(0.134)	-0.240	(0.158)	-0.137**	(0.063)	0.077	(0.110)
Age $(ln)_{t-1}$	0.031	(0.096)	0.071	(0.104)	0.036	(0.109)	-0.042	(0.036)	-0.072	(0.065)
Debt over Total $Assets_{t-1}$	-0.465	(0.346)	0.268**	(0.108)	0.007	(0.062)	0.132**	(0.061)	0.060	(0.063)
Cash over Total $Assets_{t-1}$	0.764*	(0.454)	0.538	(0.393)	0.683**	(0.298)	0.452**	(0.198)	-0.050	(0.356)
VC_{t-1}	-0.020	(0.109)	-0.004	(0.144)	0.179	(0.138)	-0.001	(0.062)	-0.024	(0.101)
Constant	1.661***	(0.534)	0.850*	(0.458)	-0.376	(0.463)	0.687***	(0.256)	-0.445	(0.480)
N	**207**		**230**		**225**		**192**		**137**	

Table F12– Multiple Cross Section models – Intangible Assets – Panel Secondary

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	-0.157**	(0.074)	0.085***	(0.032)	-0.094	(0.112)	-0.039	(0.137)	-0.252	(0.176)
Y_{t-1}	-0.169***	(0.046)	-0.170***	(0.053)	-0.105**	(0.042)	-0.045	(0.031)	-0.062*	(0.034)
Total Assets(ln)$_{t-1}$	0.050	(0.096)	0.205	(0.134)	0.111	(0.115)	0.029	(0.057)	0.164*	(0.088)
LMM	0.094	(0.353)	-0.432	(0.307)	-0.044	(0.273)	0.525**	(0.226)	0.252	(0.352)
Age (ln)$_{t-1}$	0.093	(0.207)	0.140	(0.238)	-0.027	(0.211)	0.200	(0.152)	0.039	(0.151)
Debt over Total Assets$_{t-1}$	-0.163***	(0.008)	-0.043	(0.096)	-0.058	(0.064)	-0.285***	(0.016)	-1.148***	(0.414)
Cash over Total Assets$_{t-1}$	-0.076	(1.245)	-1.602*	(0.856)	0.232	(0.742)	-1.705***	(0.656)	0.589	(0.670)
VC_{t-1}	0.913**	(0.447)	0.565	(0.362)	0.151	(0.307)	-0.040	(0.228)	0.333	(0.331)
Constant	-0.228	(1.067)	-0.332	(1.426)	-0.407	(2.581)	-0.132	(0.703)	-0.894	(1.092)
N	**247**		**279**		**283**		**240**		**181**	

Table F13– Multiple Cross Section models – Cost of Employees – Panel Secondary

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	0.142	(0.095)	0.027	(0.069)	0.130	(0.106)	-0.003	(0.060)	-0.049	(0.194)
Y_{t-1}	-0.116**	(0.057)	-0.027	(0.023)	0.032	(0.042)	-0.041*	(0.022)	-0.040	(0.031)
Total Assets(ln)$_{t-1}$	0.077**	(0.032)	-0.037	(0.024)	-0.032	(0.036)	0.046**	(0.019)	0.053**	(0.026)
LMM	0.016	(0.076)	-0.001	(0.049)	0.009	(0.062)	0.059	(0.049)	0.030	(0.057)
Age (ln)$_{t-1}$	-0.075**	(0.035)	-0.008	(0.031)	0.030	(0.056)	-0.031	(0.025)	-0.056	(0.038)
Debt over Total Assets$_{t-1}$	-0.016***	(0.005)	-0.057**	(0.024)	0.035	(0.062)	0.088***	(0.029)	-0.027	(0.034)
Cash over Total Assets$_{t-1}$	0.403**	(0.200)	-0.002	(0.184)	0.271**	(0.122)	0.188*	(0.096)	0.342*	(0.183)
VC_{t-1}	-0.062	(0.074)	0.030	(0.054)	0.102*	(0.058)	0.080*	(0.048)	-0.043	(0.059)
Constant	0.467	(0.396)	1.247***	(0.285)	-0.057	(0.218)	0.086	(0.130)	0.553***	(0.207)
N	**213**		**229**		**221**		**178**		**130**	

Table F14 – Multiple Cross Section models – Turnover to Cost of Employees – Panel Secondary

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	0.154*	(0.091)	-0.603**	(0.264)	0.027	(0.039)	-0.051	(0.089)	0.338	(0.297)
Y_{t-1}	-0.166**	(0.070)	-0.271***	(0.104)	-0.005	(0.030)	-0.059	(0.048)	0.019	(0.041)
Total Assets(ln)$_{t-1}$	0.059	(0.050)	0.034	(0.032)	0.011	(0.012)	0.007	(0.022)	-0.036	(0.031)
LMM	0.042	(0.066)	0.123	(0.106)	-0.120	(0.077)	-0.076	(0.064)	-0.056	(0.071)
Age (ln)$_{t-1}$	0.102**	(0.045)	0.002	(0.061)	0.025	(0.050)	0.039	(0.039)	-0.009	(0.052)
Debt over Total Assets$_{t-1}$	-0.210*	(0.110)	0.224***	(0.048)	0.015	(0.029)	0.008	(0.061)	0.093*	(0.047)
Cash over Total Assets$_{t-1}$	-0.417	(0.422)	0.238	(0.479)	0.431*	(0.228)	-0.299	(0.208)	-0.343	(0.386)
VC_{t-1}	0.205*	(0.114)	-0.145	(0.125)	-0.037	(0.056)	-0.020	(0.057)	0.055	(0.077)
Constant	-0.159	(0.233)	-0.724**	(0.297)	-0.075	(0.148)	-0.304	(0.383)	0.417	(0.567)
N	**180**		**200**		**182**		**146**		**106**	

Table F15– Multiple Cross Section models – Equity to Total Assets – Panel Secondary

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	-0.130*	(0.067)	-0.028	(0.073)	-0.112	(0.122)	-0.111	(0.137)	-0.302**	(0.142)
Y_{t-1}	-0.485***	(0.106)	-0.491***	(0.103)	-0.417***	(0.115)	-0.590***	(0.151)	-0.355**	(0.166)
Total Assets(ln)$_{t-1}$	0.085*	(0.044)	0.119**	(0.053)	-0.052	(0.042)	-0.017	(0.046)	-0.086*	(0.050)
LMM	-0.193	(0.204)	-0.240	(0.148)	-0.399**	(0.192)	-0.263	(0.179)	0.051	(0.248)
Age (ln)$_{t-1}$	0.056	(0.109)	0.126	(0.108)	0.144	(0.114)	0.104	(0.095)	0.129	(0.143)
Debt over Total Assets$_{t-1}$	-1.506**	(0.622)	-0.793*	(0.432)	-0.938**	(0.473)	-1.245***	(0.447)	-1.155*	(0.606)
Cash over Total Assets$_{t-1}$	1.451**	(0.626)	0.527	(0.476)	-0.876	(0.546)	-0.651	(0.516)	-0.765	(0.711)
VC_{t-1}	-0.258	(0.231)	-0.657***	(0.217)	0.059	(0.182)	-0.017	(0.179)	0.069	(0.226)
Constant	-2.768***	(0.783)	-1.877***	(0.605)	1.201*	(0.625)	0.097	(0.650)	0.396	(0.709)
N	**160**		**183**		**175**		**156**		**106**	

Table F16– Multiple Cross Section models – Short to Long Term Debt – Panel Secondary

DV: log-diff Y	t0		t1		t2		t3		t4	
log-diff Y_{t-1}	-0.335**	(0.135)	-0.471***	(0.108)	-0.029	(0.084)	-0.216*	(0.128)	-0.422**	(0.167)
Y_{t-1}	-0.294***	(0.106)	-0.253***	(0.087)	-0.281***	(0.097)	-0.315***	(0.112)	-0.348*	(0.179)
Total Assets(ln)$_{t-1}$	0.185	(0.239)	0.262	(0.249)	0.105	(0.259)	-0.440	(0.320)	-0.046	(0.253)
LMM	-0.733	(1.323)	0.003	(1.097)	-0.036	(1.170)	1.322	(1.196)	0.128	(1.548)
Age (ln)$_{t-1}$	0.346	(0.538)	0.285	(0.534)	0.522	(0.474)	0.667	(0.761)	0.385	(0.926)
Debt over Total Assets$_{t-1}$	-0.669	(0.681)	-0.522	(0.376)	1.354	(0.818)	0.355	(1.332)	-0.618	(1.032)
Cash over Total Assets$_{t-1}$	1.038	(2.083)	-0.589	(2.473)	-1.014	(2.043)	-3.761	(2.814)	-5.974**	(2.938)
VC_{t-1}	0.066	(1.022)	-0.125	(0.893)	1.051	(0.901)	0.482	(1.100)	1.561	(1.274)
Constant	-5.571**	(2.639)	-1.922	(2.811)	-3.961	(3.102)	2.210	(3.854)	5.516	(6.198)
N	**122**		**131**		**137**		**122**		**101**	

Annex G: Figures

Figure 1

This figure shows the plot of the average marginal effect of LMM funding on Total Assets Growth (Model 1, Table D2) for Treatment group Main at different values of Total Assets (measured with natural logarithm), from minimum to maximum.

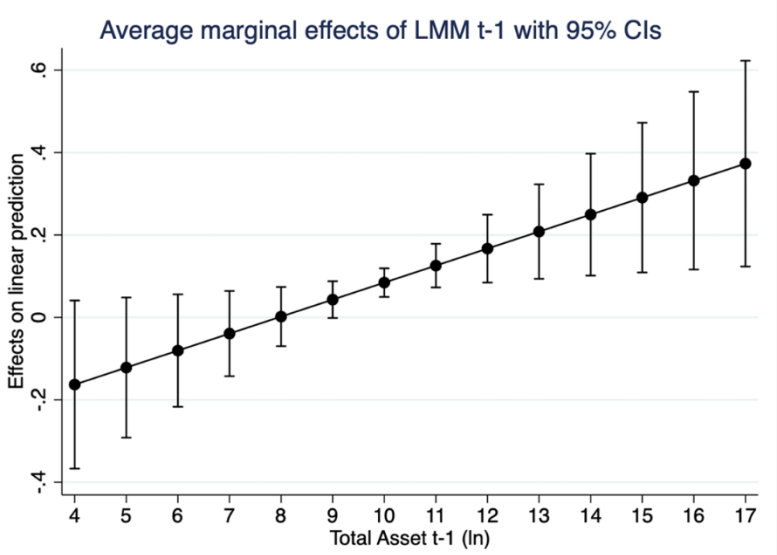


Figure 2

This figure shows the plot of the average marginal effect of LMM funding on Turnover Growth (Model 2, Table D2) for Treatment group Main at different values of Total Assets (measured with natural logarithm), from minimum to maximum.

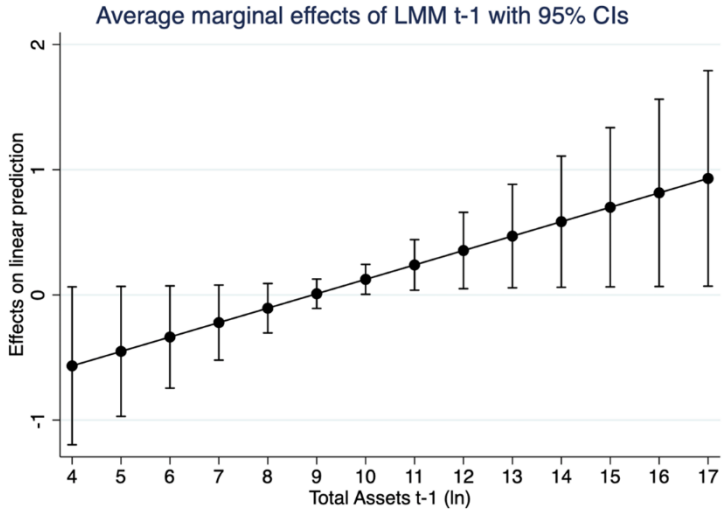


Figure 3

This figure shows the plot of the average marginal effect of LMM funding on Cost of Employees Growth (Model 4, Table D3) for Treatment group Main at different values of company age (measured with natural logarithm), from minimum to maximum.

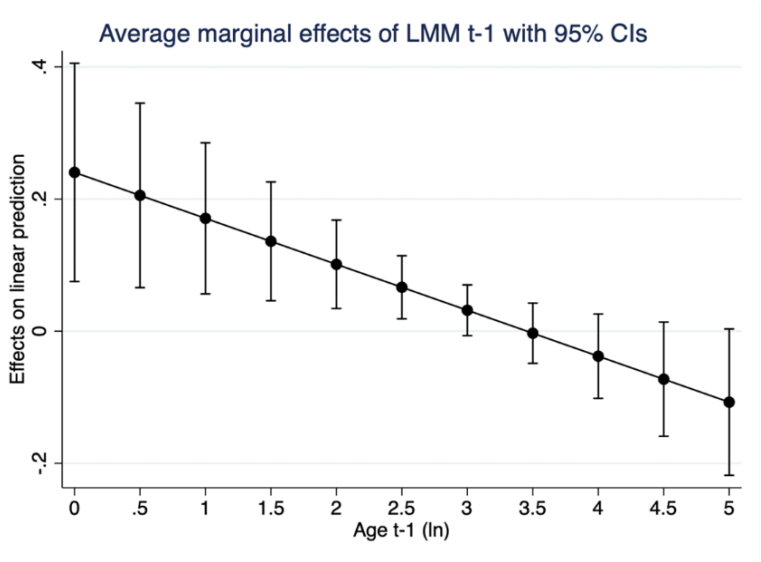


Figure 4

The figure illustrates the results of the power analysis performed for different sizes of the sample, to check for reduced sample size bias in the estimates related to the Secondary Treatment Group.

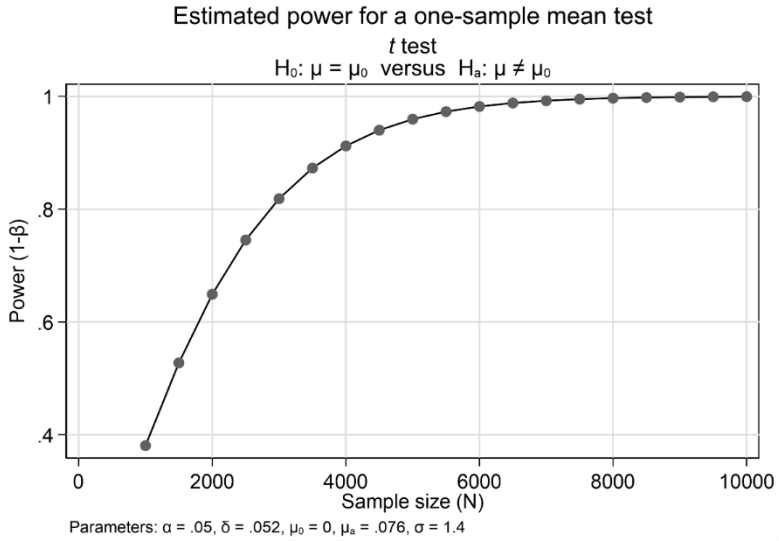
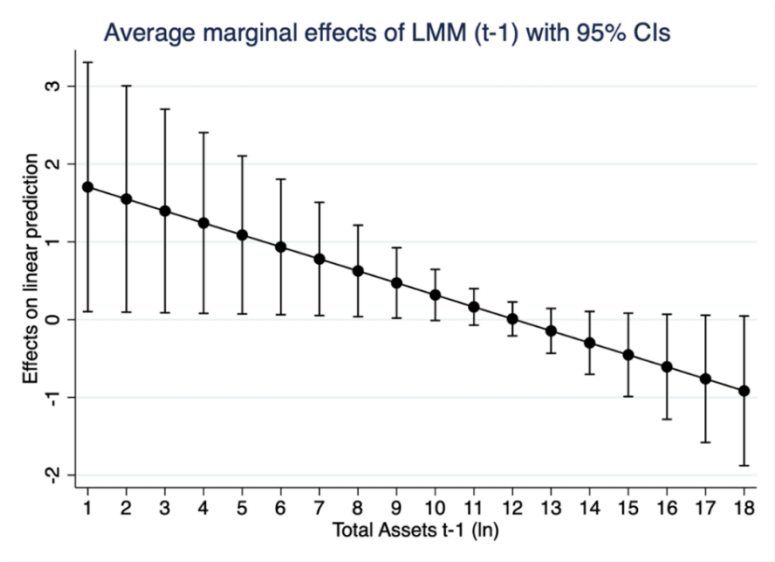


Figure 5

This figure shows the plot of the average marginal effect of LMM funding on Turnover Growth (Model 4, Table D2) for Treatment group Secondary at different values of Total Assets (measured with natural logarithm), from minimum to maximum.



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