

Pension Funds, Unlisted Firms, and Europe's Capital Markets Union

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Suggested teaser

Europe's capital markets union debate is again centred on how to turn savings into productive investment. Evidence from Danish ownership and register data shows that pension fund equity investment is associated with higher productivity only among unlisted firms, through four channels: capital supply, long-term commitment, engagement, and signaling. This has implications for the tension between microprudential safety and macroeconomic risk-bearing.

Column

Following Letta's (2024) and Draghi's (2024) landmark reports and stimulated further by the technological developments in China and the US, Europe's capital markets union (CMU) debate is hot again, now under the banner of the Savings and Investments Union. In March 2026, EU finance ministers discussed the market integration and supervision package, and in April the Commission urged member states to move from strategy to delivery. The policy question is urgent: Europe has abundant savings, yet too little reaches firms as patient risk capital. The Council of the EU notes that around EUR10 trillion of household savings sit in low-yield bank deposits while many smaller firms still face financing constraints (Council of the European Union, 2026).

Recent VoxEU columns have made related points from different angles, emphasising the need to mobilise private investment for Europe's strategic transitions (Revoltella et al., 2026) and to make capital market reform work for innovation and scale-up finance (Angeloni and Cavallini, 2026). Pension funds are natural candidates in this debate. They tend to be large, they have long-horizon liabilities, and their investment mandates can match the long pay-off period of capital deepening, digitalisation, green investment, and organisational change. Earlier VoxEU contributions argued that private pensions can deepen European capital markets and improve risk sharing (van Ewijk and Bovenberg, 2011), while work on institutional ownership has shown that patient institutional investors may support innovation rather than simply impose short-term pressure (Van Reenen, Zingales and Aghion, 2009; Aghion, Van Reenen and Zingales, 2013). In an earlier column, we documented that pension fund investment is associated with higher firm productivity and innovation (Beetsma et al., 2022). However, that evidence left open a key question: what changes inside firms once pension funds become equity owners? The present work addresses this question by identifying the channels through which pension fund ownership is linked to firm outcomes, and by examining whether these channels differ between listed and unlisted firms.

In Beetsma et al. (forthcoming), we provide this direct micro-level evidence by linking detailed Danish administrative registers with a reconstructed database of domestic firm ownership over the period 2003–2019. The data allow us to identify domestic pension fund equity stakes, including indirect holdings, and to connect those stakes to firm balance sheets, employment, investment, and productivity.

The distinction between listed and unlisted firms is central. Most existing evidence on institutional ownership comes from listed companies, where securities are liquid, information is public, and alternative investors are already present. But the CMU problem is not only about deeper listed markets. It is also about whether Europe's savings can reach unlisted firms, which are far more numerous, collectively provide more employment, and often lack the stable equity base needed for productivity-enhancing projects.

Denmark is a useful laboratory. It has one of the most developed funded pension systems in the OECD, and administrative data allow ownership and firm outcomes to be observed with unusual precision. Our main sample contains about 58,000 firm-year observations covering roughly 10,000 unlisted firms with at least ten employees. Of these, 272 firms receive pension fund investment at some point in the sample. Conditional on investing, pension funds hold an average stake of about 12% and remain invested for roughly four consecutive years.

The first finding is that firms receiving pension fund capital do not display diverging productivity trends before the first observed investment. Figure 1 shows an event-study pattern for value added per worker: productivity is broadly similar before pension fund entry and rises afterwards. This is not, by itself, causal evidence. But it is an important diagnostic, because a simple concern is that pension funds merely select firms already on a stronger productivity path. The event-study evidence does not support that particular hypothesis.

**Figure 1. Value added per worker around pension fund entry:
event study estimates for unlisted Danish firms**

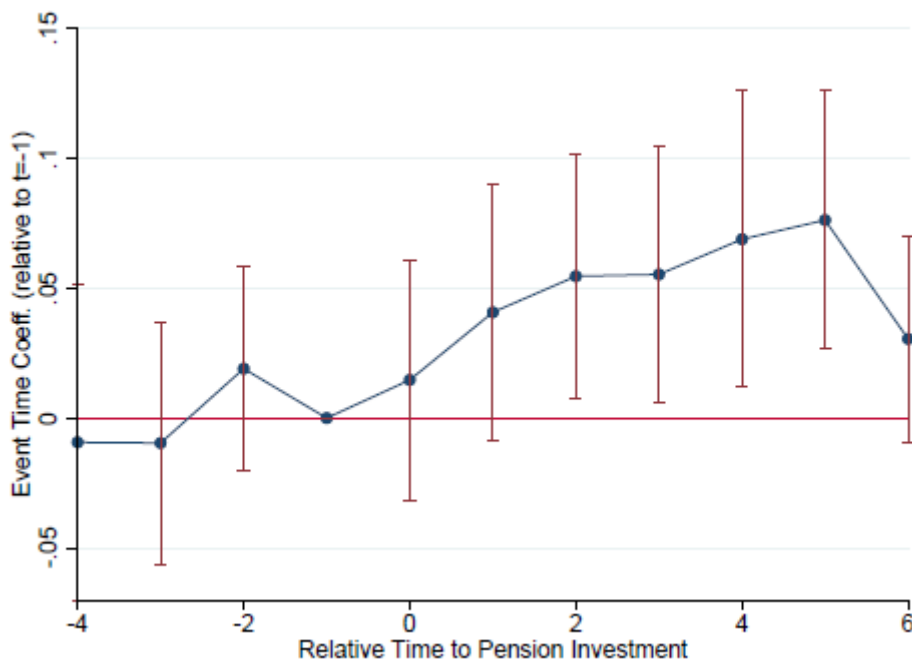


Figure 1. Pension fund entry and productivity in unlisted Danish firms. Notes: The outcome is the log of value added per worker. Year 0 is the first year of pension fund investment. Estimates are relative to year -1; vertical bars show 95% confidence intervals. Source: Authors' calculations based on Danish register and ownership data.

We then estimate firm productivity more directly using a structural production-function approach, while conditioning on past productivity and working with a matched sample to reduce selection on observables. Across specifications, pension fund equity investment in the previous year is associated with a 3.4-4.7% higher level of productivity in unlisted firms. The relationship remains when we control for exporting status, alter the matching strategy, use alternative estimators, and account for co-investment by other domestic financial investors. We do not label the estimates causal, but the association is robust and meaningful.

Just as important, the positive association with productivity appears only for unlisted firms. In a separate analysis of listed firms, we find no comparable productivity association. This is a key policy result. If pension fund equity investment matters because it provides scarce, patient, engaged capital, the positive association should be strongest where capital is scarce and ownership is consequential. Listed firms already have broader access to finance, public information, and a larger investor base; an additional pension fund owner may add much less at the margin.

The results point to four complementary channels. The first is a supply-of-capital channel: the association is stronger when pension funds hold larger stakes, and a one percentage point increase in the aggregate pension fund ownership share is associated with about 0.1% higher productivity. The second is a long-

term-commitment channel: each additional year of pension fund investment is associated with roughly 0.5-0.9% higher productivity. The third is an engagement channel: when pension funds are closer to the firm in the ownership chain, either directly or through fewer intermediaries, the productivity association is larger. The fourth is a signaling channel: pension fund entry is followed by an increase in the number of additional owners, especially other pension funds, suggesting that pension fund involvement may reassure other investors about firm quality or governance. Figure 2 suggests that a pension fund taking an equity stake in an unlisted company encourages other investors to come on board of the company.

Figure 2. Total number of additional investors

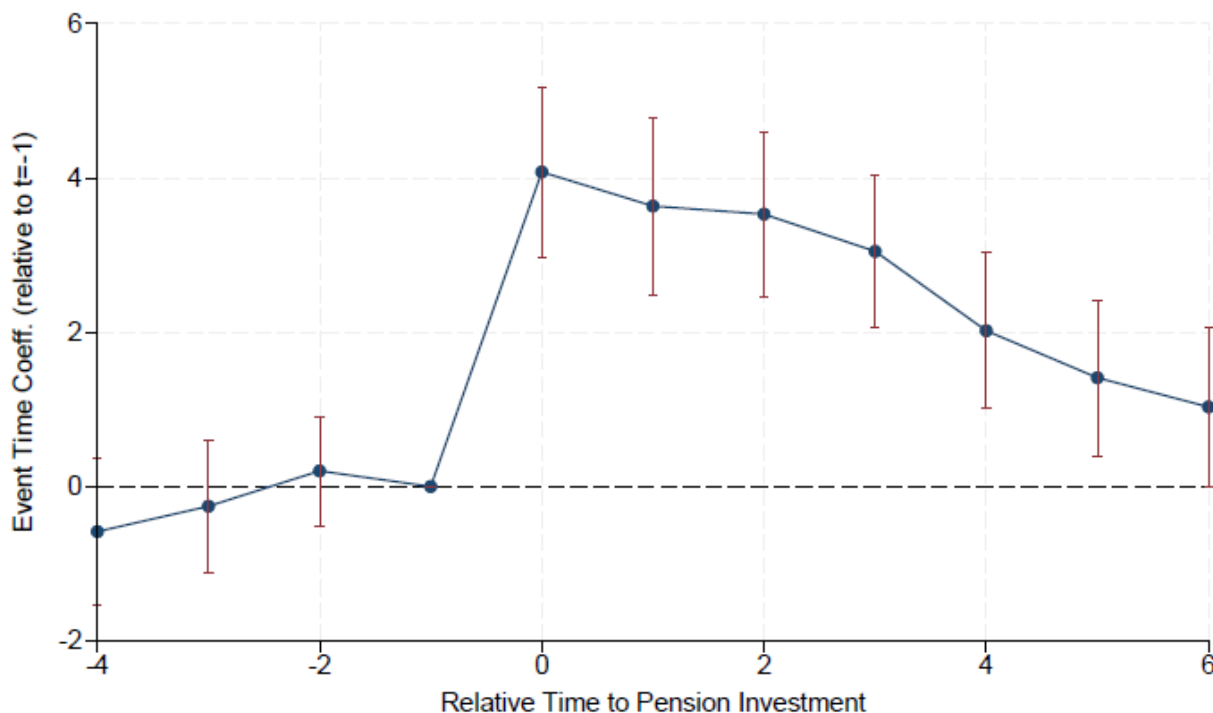


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The example in Beetsma et al. (2024) of PensionDanmark's investment in Stiesdal, a developer of green-transition technologies including floating offshore wind foundations, illustrates all four channels in action. PensionDanmark's investment provides funding for Stiesdal's capital-intensive operations, pointing to the supply-of-capital channel. The fund's financing commitment is long-term, allowing for the development of new technologies that have not yet fully proven themselves and enabling management to focus on its core business rather than having to worry continuously about financing. This highlights the relevance of the long-term-commitment channel. The engagement channel is also important: PensionDanmark has a seat on the board and provides expertise that supports Stiesdal's professionalisation. Finally, PensionDanmark's involvement may also serve as a market signal, a role explicitly referred to in conversations with those involved.

These channels clarify the link to CMU. While CMU is often framed around market-infrastructure reforms, our evidence suggests that the key issue is not only whether savings enter capital markets, but whether they reach firms in a form that preserves scale, patience, governance capacity, and tolerance for illiquidity. This matters especially for unlisted firms, where market access is weakest and where we find the strongest link between pension capital and productivity.

The findings also highlight a tension between microprudential and macroprudential objectives. Regulation aims to keep each pension institution diversified, liquid and transparent. Yet excessive caution at the institutional level may create too little risk-bearing for the economy as a whole. If pension funds are pushed too strongly toward liquid, low-risk, listed, or government assets, firms with high productivity potential may face a shortage of patient equity capital.

This is not an argument for directing pension funds into domestic firms or using retirement savings as industrial policy. Rather, prudential design should recognise the macroeconomic value of well-governed risk-taking. A well-designed CMU should support investment vehicles that allow pension funds to invest in unlisted equity while preserving diversification, transparency, and saver protection.

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