BANCA D'ITALIA
EUROSISTEMA

Questioni di Economia e Finanza

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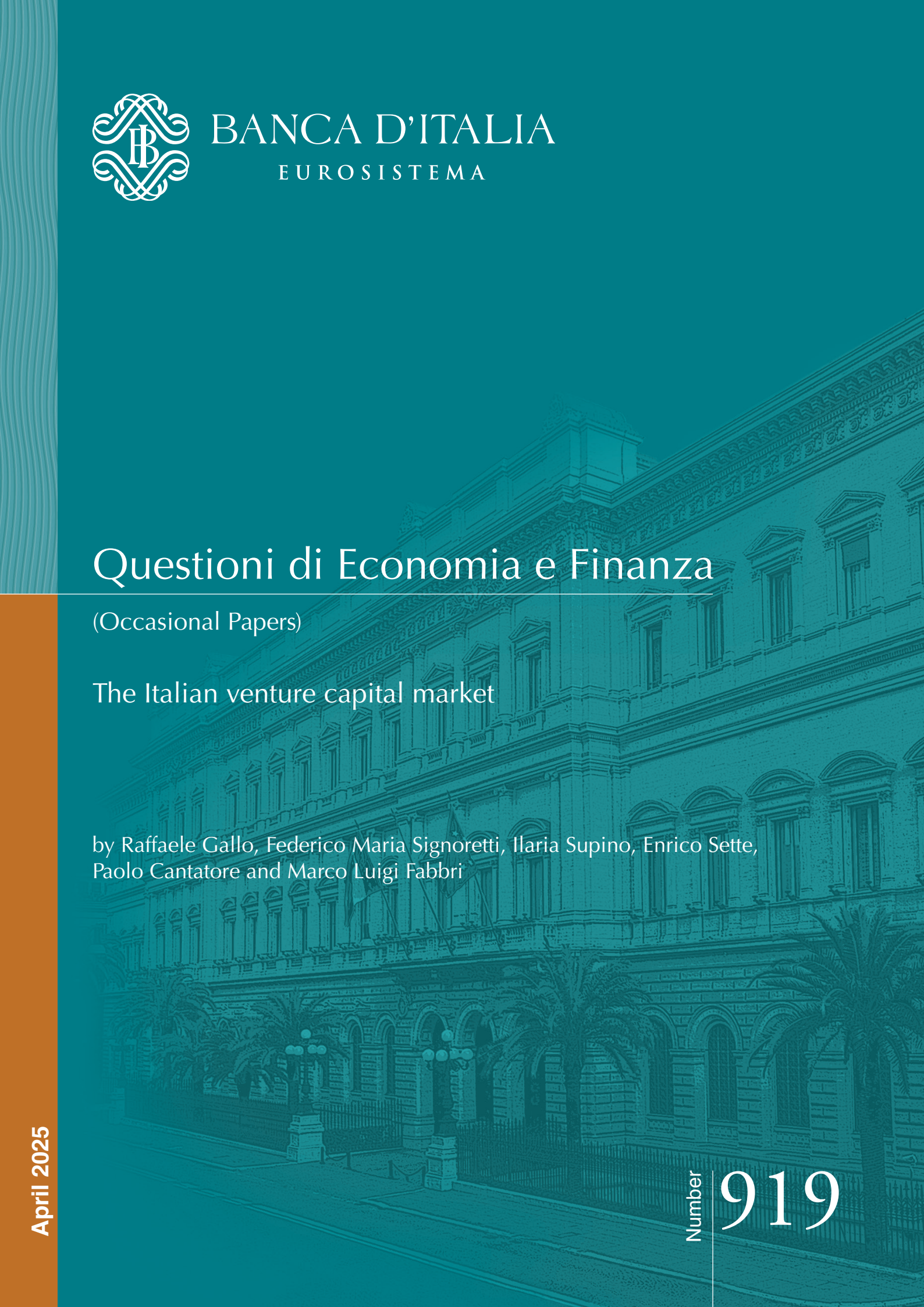

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THE ITALIAN VENTURE CAPITAL MARKET

by Raffaele Gallo*, Federico Maria Signoretti*, Ilaria Supino*, Enrico Sette**,
Paolo Cantatore*** and Marco Luigi Fabbri****

Abstract

This paper describes the characteristics of the Italian venture capital (VC) industry, a key sector to foster the creation and growth of innovative firms. Despite a recent increase, VC investment in Italy is still limited in comparison with the other main European economies. The reasons for this gap can be grouped into three broad factors that affect all the stages of the start-up lifecycle, interacting and negatively reinforcing each other. First, in Italy there are relatively few innovative and marketable ideas, which limits demand for venture financing in the first place. Second, the domestic VC fund industry is undersized compared with France and Germany, reflecting the low involvement of domestic institutional investors and the lagged start of public investment in this sector. Third, in Italy there are comparatively fewer opportunities for successful exits from VC investment, which is an obstacle to investment in the first place. Against this background, public policy should continue to support the growth of the Italian VC ecosystem; given the interdependencies along the entire VC value chain, policies should address weaknesses across multiple dimensions.

JEL Classification: G23, G24, G32.

Keywords: venture capital, start-ups, innovation, investment funds.

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* Bank of Italy, Directorate General for Economics, Statistics and Research – Financial Stability Directorate.

** Bank of Italy, Directorate General for Economics, Statistics and Research – Structural Economic Analysis Directorate.

*** Bank of Italy, Directorate General for Financial Supervision and Regulation – Financial Supervision Directorate.

**** Bank of Italy, Directorate General for Financial Supervision and Regulation – Regulation and Macroprudential Analysis Directorate.

1. Introduction[1]

A developed venture capital (VC) industry is key to foster the birth and growth of innovative firms, which represent the most dynamic segment of the corporate sector. Several studies have shown that VC investment fosters technological innovation and thus increases productivity (Lerner and Nanda, 2020). Start-up financing is characterized by high information asymmetries and high research costs. Investments are typically of relatively small size, as target firms are usually very small (nascent) and intermediaries tend to invest in several different companies in order to diversify the high (idiosyncratic) risk. Especially in the very early stages of the life cycle, VC funds provide broad support to entrepreneurs by providing both financial resources and technical and managerial skills. In later stages larger funds support the expansion of firms.

Venture capitalists usually take minority stakes in businesses, often alongside other VCs and investors and with the aim of making a profit by eventually selling their share. Financing is typically raised in successive rounds of increasing sizes along firms' life-cycle, from pre-seed funding (i.e. before incorporation) to later stages. Along this funding chain, cash can be provided either by the same investors and/or by new ones to support the company as it grows. VC investment is typically held for between five and seven years and is then cashed out, via either floating the business on the stock exchange, merging the company to another corporation or selling it to a private equity house.[2]

The aim of this short note is to provide an overview of the size of the Italian VC ecosystem, in comparison to EA peers, and discuss the possible determinants of the lag in its development.

The VC industry emerged and grew significantly in the United States in the second half of the 20th century thanks to both private initiatives and public support (Lerner, 2009). Growth intensified in the last years of the 1900s, when VC accompanied the IT boom. Venture capital funds have very often been involved in the financing of startups that eventually became the largest and most successful companies in the economy.[3] In Europe, VC took off much later than in the US and the sector lags behind in terms of both volume and number of deals. While in several European countries VC investment were negligible until recently (Arnold *et al*., 2024), the sector has grown in importance over the last decade. Further development of the VC industry is often cited as one of the top priorities for advancing the Capital Markets Union (CMU) agenda (ECB, 2024).

In Italy, VC investment is small in comparison with the other major European economies. Between 2021 and 2023, total VC investment in Italy was a fifth of the amount

[1] We are indebted to Pietro Rizza, who contributed to a policy note on which this paper partly draws. We thank Giovanni Guazzarotti, Silvia Magri, Roberta Occhilupo and Elisabetta Leboroni Pierozzi for their helpful comments and extensive discussions.

[2] For a detailed discussion of the VC business model and eco-system, see Burström *et al*. (2023).

[3] In the US, 47 per cent of firms that went public between 1995 and 2018 had VC backing prior to the IPO; 56 percent of the firms that had initial public offerings from 1995 to 2018 and were still alive at the end of 2019 were backed by venture capital (Lerner and Nanda, 2020). For comparison, just under 0.5 per cent of firms in the economy receive venture capital financing. As of September 2024, the six largest companies in the US by stock market capitalization, each worth more than $1 trillion, were initially financed by VC and are now key global players in the digital revolution.

invested in France and Germany. At the same time, over the last decade growth of VC in Italy outpaced its European peers, suggesting that a catching-up process may be underway.

The reasons behind the small volume of VC investment in Italy can be grouped in three broad factors, which affect all the stages of the start-up lifecycle and interact and negatively reinforce each other.

First, in Italy there are relatively few innovative and marketable ideas, which limits demand for venture financing in the first place. Italian corporates innovate relatively little: their R&D expenditure is about half of the EU27 average. The root causes are of a structural nature (and a thorough discussion of these is beyond the scope of this paper): the small number of large firms, which typically invest more in innovation; the lack of large corporates operating in high-tech sectors, where the potential for growth is higher (Fuest *et al*., 2024); the low contribution from the public sector, which also invests significantly less in R&D compared to France and Germany. In addition, there are hurdles to technology transfer, that is the process of transforming research into marketable products and start-ups: while Italy ranks high in research activity in academia, the number of patents (scaled by population) is about half and one-third, respectively, of those in France and Germany.

Second, the domestic VC fund industry is undersized compared to France and Germany, which limits the pool of resources available for seed financing to domestic innovative firms as well as for future growth in Italy. Local specialized operators are key to overcome the high information asymmetries and search costs associated with early-stage financing of innovative firms. They typically operate by creating networks and recruiting experts with knowledge of the main local research hubs, which are crucial in the screening and selection of venture projects that can then be co-financed by other (national and foreign) investors, possibly in subsequent rounds. The lack of locally available resources thus discourages the creation of new ideas and pushes entrepreneurs to search for financing abroad, may result in the firm also moving abroad.

At the end of 2023 assets under management (AuM) of Italian VC funds were less than 3 billion euro; the number of active asset managers was 39, with an average AuM of about 70 million. By comparison, in Germany the average size of investment per fund in the last five years was about five times larger; the amount of funds raised in the same period by intermediaries in Germany and France were 3 and 2.5 times larger, respectively[4]. Business angels – which are not considered in the statistics on VC investment though provide similar support to innovative entrepreneurs – also invest relatively less in Italy.[5]

The limited size of the domestic VC fund sector, in turn, reflects the low involvement of domestic institutional investors. VC is in principle an attractive asset class for institutional investors such as insurance companies and pension funds (ICPFs), which have a diversified portfolio and invest in longer term activities. In the US venture capital took off only in the 1980s, after pension funds began allocating some of their investment to this asset class (Lerner and Nada, 2020). Despite broadly similar regulatory frameworks, in France institutional

[4] The size of the domestic VC fund industry in Germany and France is proxied here by the cumulative investment and fundraising over a 5-year horizon because data on assets of domestic funds are not available.

[5] Business angels are wealthy individuals – often with experience in mature firms or financial institutions – who provide funding to start-up companies at the very early stage of their life (seed) and, in addition, support the entrepreneurs via their specific expertise and network of contacts. According to AIFI (2024), in 2022-2023 business angels invested about 120 million in Italian start-ups.

investors accounted for about one fifth of total funds raised by the domestic VC sector in 2019-23, compared to 2 per cent in Italy. As of December 2023, investment in VC funds as a share of ICPFs total financial investments was about eleven times higher in France than in Italy (0.15 per cent *vs* 0.01).

In addition, the smaller size of the Italian VC fund sector also reflects the lagged start of public investment in the sector, as compared to France and Germany. Public intervention is key to the development of the domestic VC sector, as government-backed funds act as 'anchor' investors, nurturing a supportive VC ecosystem and attracting resources from other venture capitalists (Beraja *et al*., 2024; Moretti, 2024). In France and Germany, a public player – *Banque publique d'investissement* (BPI) and *Kreditanstalt für Wiederaufbau* (KfW) – started to invest a significant amount of resources in early 2010s. In Italy CDP Venture Capital SGR was created in 2019, investing the resources of *Fondo Nazionale Innovazione* via a number of dedicated VC funds. The dynamic observed in the Italian market since 2019 appears in line with those of France and Germany after the public intervention gained traction: in all three countries the market size started to grow after a discrete jump in the level of public investment, doubling within a few years.

Third, in Italy there are comparatively less opportunities of successful exit from VC investment, which constitutes an obstacle to investment in the first place. A profitable liquidation is the main driver of VC investors, who seek large returns and need to cash out their illiquid assets after a finite period of time. The lack of large domestic funds is an endogenous reason that complicates liquidation by early investors as a company grows; foreign funds typically step in only when deal sizes reach a dimension that is sufficient to cover high searching, screening and regulatory compliance costs entailed by geographical diversification. In addition, the relatively scant presence of large innovative firms, which offer a possibility of exit to VC via acquisition of the start-up also contributes. Moreover, the small size of the Italian stock market and its lack of attractiveness to foreign investors limit shares sales through initial public offerings. Last but not least, institutional factors, such as the high complexity of the Italian tax and legal systems, also tend to discourage foreign investment.

Public policy should continue supporting the growth of the Italian VC ecosystem, as this is key to boosting productivity; given the feedback along the entire VC value chain, policies should address weaknesses along different dimensions. On innovation, some progress has occurred recently: private expenditure for R&D increased steadily from the mid-90s to 2020; patents posted by Italian residents increased by almost 40 per cent since 2014. These improvements benefited from legislative initiatives adopted in the 2010s which incentivized innovation (*Industria 4.0*, *Transition 4.0* and *5.0*). In addition, the *Start-up Act* (adopted in 2012) introduced the definition of *Innovative start-up*, which simplified regulation for firms that satisfied certain criteria:[6] as of July 2024 there were 13,500 of those firms in Italy. Regarding the domestic VC industry, funds would benefit from a simplification of the regulatory obligations and a reduction of compliance costs for managers of smaller investment funds, which could be considered in the context of the reform of the Italian Consolidated Law on Finance (Banca d'Italia, 2024). As in other jurisdictions, an increase in the involvement of institutional investors, which currently invest a small share of their assets in VC, could determine a significant increase in the size of the domestic market. Higher investment by *Cassa*

[6] See Section 4.1 below for details.

Depositi e Prestiti (CDP) will also contribute, whose AuM are projected (according to their business plan) to increase to 8 billion by 2028 (CDP, 2024). An increase in the size of the domestic sector will also endogenously increase incentives for large institutional investors, including foreign ones, to enter the market helping overcome the fixed costs of due diligence and regulatory compliance. Finally, the Italian VC sector will also benefit from further progress in the CMU agenda. Initiatives to enhance cross-border investment and make divestments easier would encourage the entry of foreign VC funds and the ability of domestic funds to raise finance from abroad.

The rest of this paper is organized as follows. Section 2 describes the basic functioning of the VC market. Section 3 presents a comparison of VC investment across the main euro area countries. Section 4 focuses on the main determinants of the Italian VC market gap. Section 5 briefly summarizes initiatives at the European and the Italian levels that may contribute to the development of the VC sector.

2. The VC market: a primer

Venture capital (VC) refers to equity investment in private companies in the early stages of their lifecycle.[7] Notwithstanding the lack of a harmonized definition across data sources and jurisdictions, VC generally refers to investment in the start-up or early development of a business (*early stage VC*) or in the immediately following expansion phase (*late stage VC*). Specifically, early stage includes investments in companies before the production or the distribution of products (*seed*) and those aimed at starting production once the product or service has been developed (*start-up*). Late stage refers to investments in operating companies that have started commercializing products or services and often have already received early stage VC funding.

Venture capitalists usually take minority stakes in businesses, often alongside other VCs and investors and with the aim of making a profit by eventually selling their share. Financing is typically raised in rounds of increasing sizes, which accompany start-ups' life-cycle. Along this funding chain, cash can be provided either by the same investors and/or by new ones to support the company as it grows. Venture capital houses typically hold their investments for between five and seven years. The investment is then cashed out either by floating the business on the stock exchange (via IPO), selling or merging the company to another corporation or selling to another investor, such as a private equity house.[8]

Target firms generally operate in high growth and highly innovative industries. Given the small size of young companies, VC investments are therefore typically very risky, although the amount invested is often small.

[7] According to the FSB (2023), in 2022 VC funds' AuM amounted to roughly 4 trillion globally, about one third of total private equity AUM. It is important to note that the term 'private equity' often refers to (larger) investment in later phases of a firm life-cycle; therefore, equity investment in firms that have been active in the market for some time are generally considered as private equity transactions. For more details on VC transactions see, for instance, the European Private Capital Association (Invest Europe) website.
[8] For a detailed discussion of the VC business model and eco-system, see Burström *et al*. (2023).

The bulk of finance in this segment is provided via dedicated VC investment funds.[9] In the EU legislative framework, no specific definition exists for VC funds, which are included in the broader category of alternative investment funds (AIFs). Asset managers operating in the VC sector must comply with the Directive on alternative investment fund managers (AIFMD). Where authorized by the competent national authority,[10] they must comply with prudential requirements, including those related to corporate governance, organization and capital adequacy. Once authorized to operate in at least one Member State, asset managers can operate EU-wide; they can also establish AIFs according to each Member State's legislation, if the specific fund type is not disciplined at the EU level (see Section 5). VC AIFs are typically set up as closed-end funds as they invest in illiquid assets with a medium-term horizon (4-7 years).

In addition to VC funds, several entities are involved during the start-up lifecycle, including incubators, accelerators, as well as other non-financial firms. Other firms, typically large ones, may be involved as *corporate venture capitalists* (CVC) or as potential acquirers of equity stakes in a start-up. Banks tend to be less involved in the industry and typically provide indirect support, investing in VC funds or via lending to funds and start-ups. In contrast, investment by 'business angels' is generally not considered in the statistics on VC investment. Business angels are wealthy individuals – often with experience in mature firms or financial institutions – who provide funding to start-up companies at the very early stage of their life (seed) and, in addition, support the entrepreneurs via their specific expertise and network of contacts.

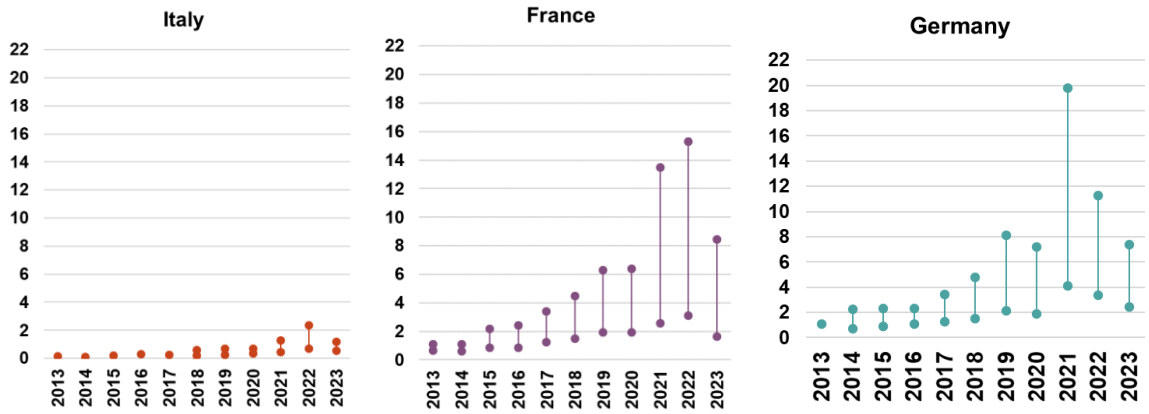
3. A cross-country comparison

A precise quantification of the amount of VC investment in a given country is difficult. VC transactions are private deals that are recorded by multiple, non-official, sources according to various, non-harmonized, criteria. As a result, no "official" figures exist for investment in this asset class and (sometimes large) differences may emerge in available statistics across different sources. The two most quantitatively relevant reasons for these divergences are: (i) how investors and target firms are classified by nationality and, in particular, whether firms with a resident founder but based abroad are included in the domestic perimeter; (ii) what deal-size threshold is used to classify a transaction as private equity rather than VC, which determines to what extent large transactions are included or excluded from the perimeter of VC.

VC investment in Italy is low compared to other European countries, regardless of the source and the definition of VC used (Figure 1). Between 2021 and 2023, total VC investment in Italian firms was a fifth of the amount invested in France and Germany. As a percentage of GDP, VC investment in Italy was 0.03 per cent on average over the period 2021-2023 compared to 0.09 per cent in France and in Germany.

[9] In this work, the term 'fund' refers both to collective investment undertakings with a contractual (funds) and statutory form (SICAV and SICAF).
[10] Smaller asset managers may be exempted from authorization according to article 3 of AIFMD, see Section 5.

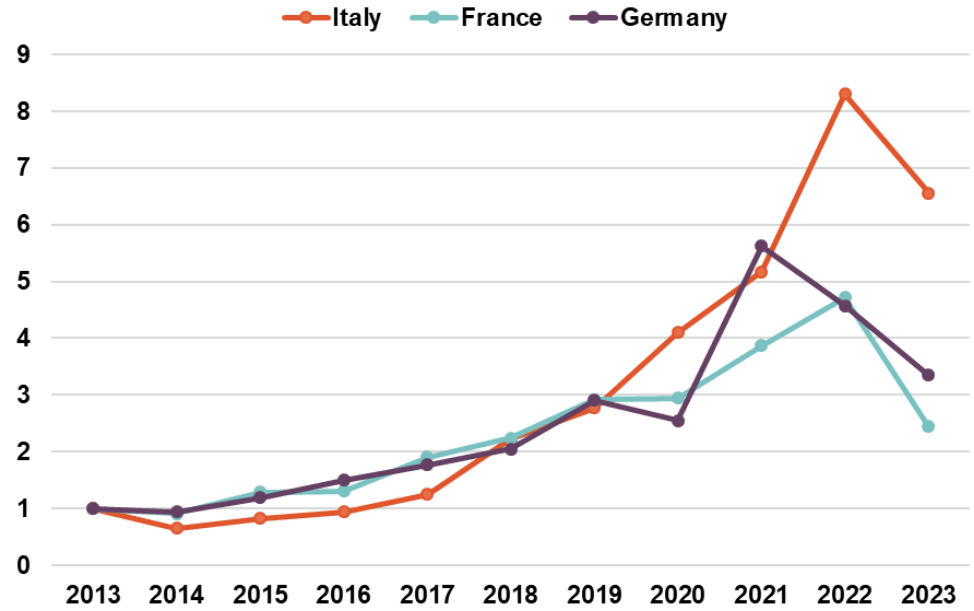
Figure 1: VC investments by country (*€ billion*)



Source: AIFI, Ernst & Young, Growth Capital-Pitchbook, Invest Europe, P101-Dealroom. Note: the range between investments reported by different sources is shown for each year.

The growth in VC investment in Italy over the last decade outpaced its European peers, suggesting the beginning of a catch-up. Between 2013 and 2023 VC investment in Italy has grown seven-fold, compared to about three times in France and Germany (Figure 2). Compared to these countries, growth rates in Italy have been particularly strong, likely owing to the catalyst effect of the scale-up of public interventions by CDP since 2020. Second, the Italian market was less sensitive to the sharp rise in interest rates since mid-2022, likely as it is in the early phase of development and features on average smaller deals with respect to the peers.

Figure 2: VC investment growth (*index: 1=2013*)

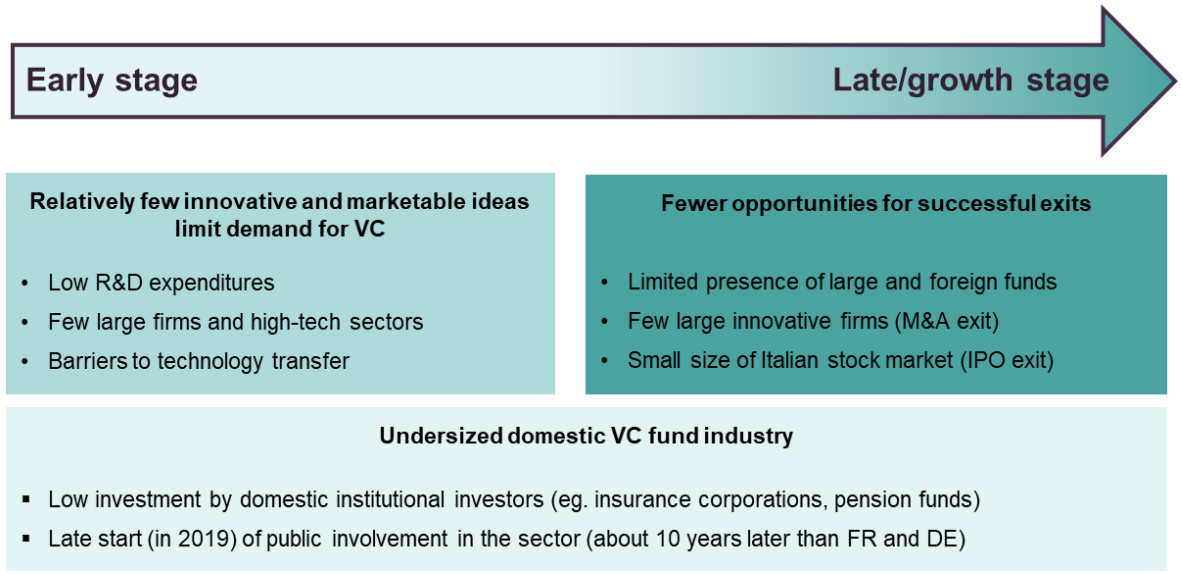


Source: Invest Europe.

4. Determinants of the Italian VC market gap

The underdevelopment of the Italian VC market is related to a number of factors that affect the whole ecosystem and are interdependent (Figure 3). In what follows we analyze the main obstacles to the growth of venture capital in Italy, distinguishing among the stages of the VC lifecycle which they influence the most. An important caveat is that, while such classification is useful for the sake of exposition, these factors are themselves endogenous to the amount of investment.

Figure 3: The underdevelopment of the Italian VC market is related to a number of factors that affect the whole ecosystem and are interdependent



4.1. Relatively few innovative and marketable ideas limit demand for VC financing in Italy

In Italy there are relatively few innovative and marketable ideas, which limits demand for venture financing in the first place. A less innovative economy comes with less knowledge spillovers, less human capital, which directly obstacle the birth of new innovative ventures. It reduces the size of the domestic market for the products or services of innovative start-ups.[11]

Italian corporates innovate relatively little. Italy has a low level of private business research and development (R&D) expenditure ("BERD").[12] In 2022, latest available data, it stood at 0.78 per cent of GDP, against 1.43 per cent in France, 2.11 per cent in Germany, 1.48 per cent in the EU27 average. According to data from the European Patent Office, patenting

[11] Bertolotti et al. (2024) provide a comparative analysis of innovation activity in the EU and of the public measures to support it, focusing on R&D expenditure and innovative firms.
[12] See the "Frascati Manual" for the definition of BERD and of the other aggregates commonly used to measure R&D expenditure.

intensity in Italy was substantially lower (0.8 patent per 10,000 inhabitants as of 2023) than in France (1.6) and Germany (3.0).

The root causes are of a structural nature (and a thorough discussion of these is beyond the scope of this paper). First, in **Italy there is a comparatively small number of large firms that** have a sufficient size to sustain the fixed costs associated with R&D activities. According to the latest available Structural Business Statistics data, in 2022 the share of firms with more than 50 employees in Italy was 0.65 percent of the total, slightly higher than France (0.59), but lower than Spain (0.8) and Germany (2.14). In terms of employees and value added (2021 data), their share was substantially lower than in the other peer countries (Table 1).

Medium-large companies are typically faster and stronger adopters of new technologies, thus creating higher demand for innovative products, processes or services, which would foster a local market for the products and services of young innovative firms. The larger this market, the greater the incentive to start a new business. Large firms also perform the important role of corporate venture capitalists, enlarging the availability of VC funding for start-ups.

Table 1: share of firms with more than 50 employees across countries

	Italy	France	Germany	Spain
Relative to Number of Firms	0.65	0.59	2.14	0.80
Relative to Total Employees	38.21	55.52	59.36	47.24
Relative to Total Value Added	55.66	67.96	67.34	59.87

Source: Structural Business Statistics.

In addition, innovative activity in Italy, as well as in other European countries, concentrates more in mid-tech sectors, in particular automotive, than in high-sectors. In the US the latter, mainly software and pharmaceuticals, account for about 85 per cent of total business R&D expenditure (Fuest et al., 2024). This is important for VC investment because R&D in the high-tech sector have larger chances of leading to breakthroughs in fast-growing, very high-return industries. Mid-tech industries tend to be more mature, with lower growth potential, and therefore relatively less attractive to VCs.

In Italy, public sector expenditure in R&D is also low in international comparisons, although the gap is somewhat narrower. Italian public expenditure in R&D was 0.56 per cent of GDP in 2022, about 0.2 percentage points lower than in France or Germany.

Finally, in Italy there is evidence of hurdles in technology transfer and, more generally, in the creation of start-up projects from the academia, where key research centers are. Public data on technology transfer are scant, which makes it difficult to perform international comparisons. However, in general, while Italy ranks high in research activity in academia (World Bank, 2024), start-ups generated in the academic research sector are relatively uncommon (EPO, 2024a). This likely reflects internal incentives of the academia and the lack of countervailing incentives coming from the outside, including from the public sector. Germany has a specific program ("Exist") to support start-up creation from academics and doctoral students, providing both funding and practical guidance (OECD, 2022). The French government – directly as well as through the BPI – has specific initiatives to support the creation of start-ups from universities and research centers. These initiatives may be useful to increase the number of projects that venture capital intermediaries may be willing to finance.

Recent policy initiatives helped address some of these obstacles. First, private expenditure for R&D increased steadily from the mid-90s to 2020. Between 2014 and 2023 patents posted by Italian residents increased by almost 40 per cent; that number was roughly stable (and higher) in France and Germany (EPO, 2024b). These improvements benefited from policy actions: Italy has strengthened its system of incentives for R&D and more generally to support start-ups and innovative firms. Key turning points occurred in the 2010s with the introduction of the *Start-up Act* and the *Industria 4.0* package to support R&D expenditure and new technology adoption. These measures, especially the Start-Up Act, contribute to sustain the demand for VC financing.

In particular, the Start-up Act contains a comprehensive package that encourages the creation of innovative start-ups and the equity financing through a comprehensive framework. Among other things, it envisaged interventions aimed at reducing red tape and entry barriers, simplifying insolvency procedures, providing tailor-made flexible employment and financial regulations, and offering tax incentives for equity investments.[13] A first evaluation of the Start-Up Act conclude that the law is in line with international best practices and had a positive effect on firm growth and potentially, more generally, on entrepreneurship (Finaldi *et al*. 2016; De Stefano *et al*., 2018). Importantly, it also suggests that start-ups who participated in the policy have been more likely to receive VC support and at an earlier time than non-participants, although this evidence is not necessarily causal.

The Start-up Act introduced a national register of innovative start-ups,[14] which includes about 13,500 firms (as of July 2024). Not all innovative start-ups may be interested in receiving VC funds, not all of them may be good targets for VC investors, and many of these are relatively later stage companies. Yet, even assuming that only a fraction of these fit all the conditions (and that they have not received funding yet), there may be a sufficient pool of firms to sustain a substantial expansion of the market in the next few years.

Italy started investing substantially to boost technology transfer through several initiatives included in the National Industry 4.0 plan 2017-2020. The package is complex and somewhat fragmented. It includes: i) "competence centers" (8) which are partnerships among universities and local firms offering several services to provide training and information to firms, specially SMEs; ii) Digital Innovation Hubs (277), created by the local entrepreneurial associations to support the adoption of new digital technologies; iii) Digital Points for Firms (89) created within the Chambers of Commerce that support the adoption of new technologies by firms, including digital and green technologies. CDP has set up a specific fund devoted to boost technology transfer: it currently has an investment capacity of 285 million euros, but has a fundraising target of 425 million euros. The Italian Ministry of Made in Italy (formerly Ministry of Economic Development) announced 350 million investment, partly coming from the National Recovery and Resilience Plan (NRRP), to strengthen technology transfer centers.

[13] According to Bertolotti *et al*. (2024), the extent of tax incentives for venture capital investments in Italy are comparable to those existing in other EU countries.

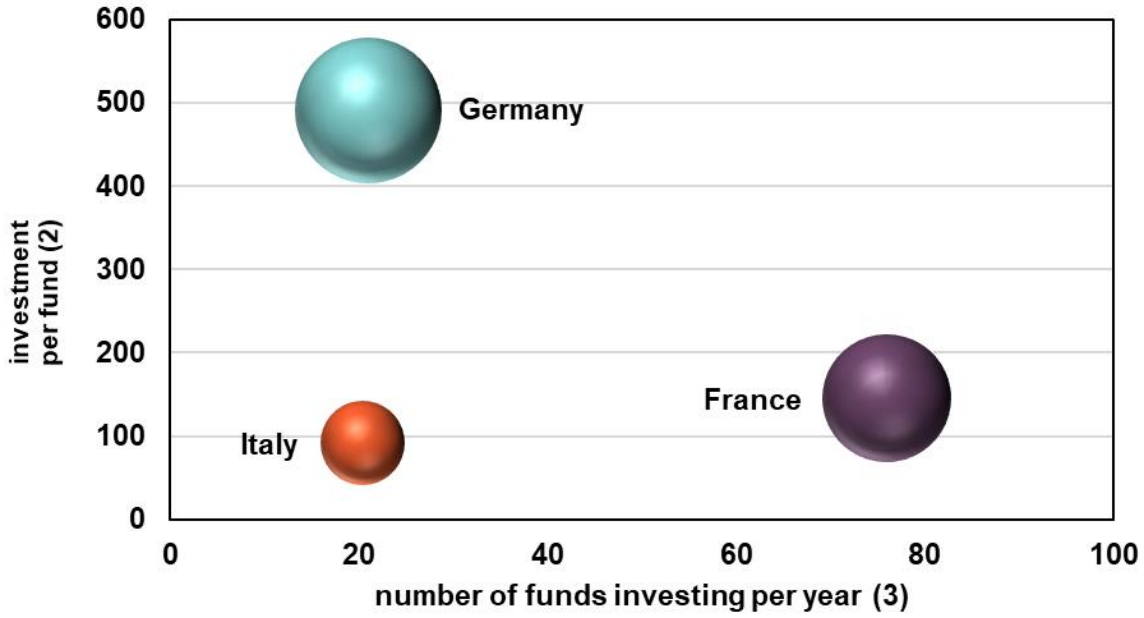
[14] A start-up to be included in the national list of "Innovative start-ups" must satisfy a set of requirements, including at least one of the following: i) R&D expenditure larger than 15 per cent of the greater of cost or value of production; ii) at least 1/3 of the employees have a PhD, are enrolled in a PhD program, are researchers or 2/3 have a master's degree; iii) it holds a registered patent or software.

4.2. The domestic VC fund industry is undersized, which limits the pool of resources available to domestic start-ups

Domestic investors play a crucial role for the development of the local sector in each stage of firm lifecycle. Indeed, the VC segment is characterized by high information asymmetries and search costs, especially in the earlier stages where investors have to select projects with higher growth opportunities by relying on a very limited set of information. Local specialized operators generally develop skills that are particularly useful in this screening process (e.g. by creating a network and recruiting experts with knowledge of the main local research hubs), which help them to select promising projects that can also be co-financed by other (national and foreign) investors in future rounds. Especially in the very early stage, VC investors provide broad and diversified support to entrepreneurs, offering both financial resources as well as technical and managerial skills; while in the following stages larger funds are needed to support relatively larger firms with higher financing need.

Given this, the limited number and size of Italian VC funds represents a significant obstacle to the growth of start-ups throughout their life cycle. In the last five years the number of domestic funds investing per year in Italy was significantly lower than in France, the average size of investment per fund was one fifth of that in Germany; the overall funds raised in the same period by Italian intermediaries were respectively one third and two fifths lower than those in Germany and France (Figure 4).

Figure 4: average number of domestic funds investing per year and average investment per fund in 2019-23 (1) (*€ million and units*)

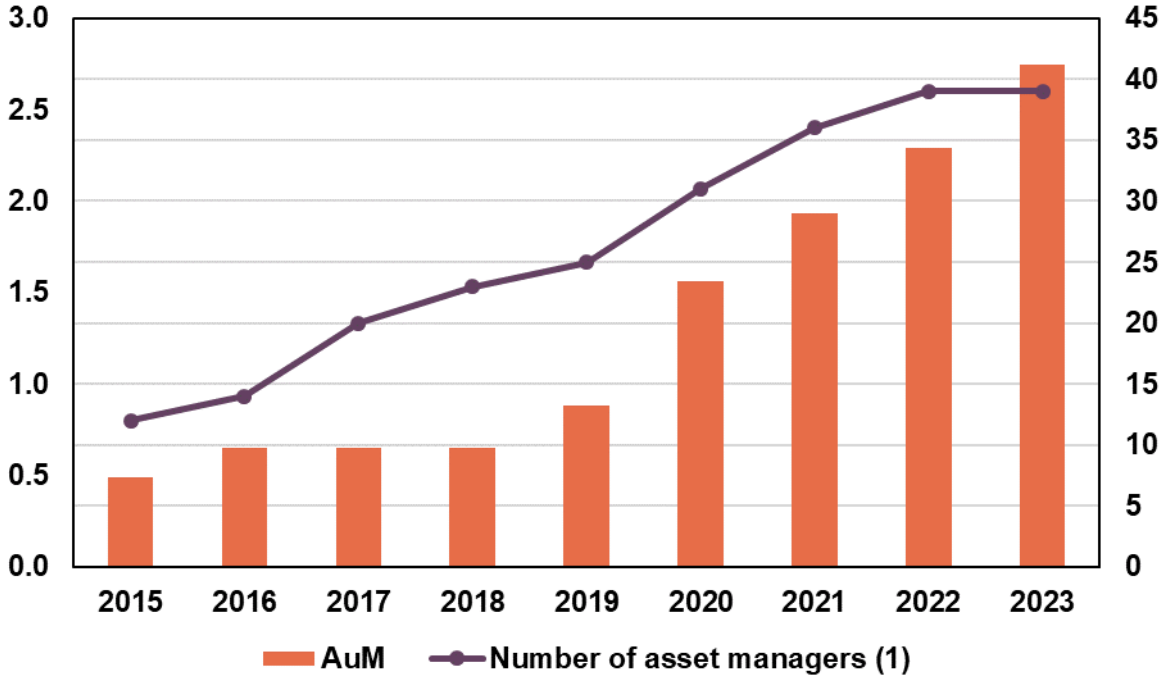


Source: Invest Europe. Notes: (1) The bubble size is equal to the sum of funds raised between 2019 and 2023 by domestic funds. (2) The ratio of VC investment made in 2019-23 to the average number of funds investing per year. (3) The average of funds that made at least an investment in the considered period.

The Italian VC industry has steadily grown in the last five years but its overall size remains limited. At the end of 2023 the amount of assets under management (AuM) of Italian

VC funds was slightly less than 3 billion of euros (Figure 5), with an average yearly growth of 33 per cent since 2019. Since over 70 per cent of funds has been established less than five years ago, the large majority is still investing collected resources and, therefore, a track record of their performance is not available. The number of Italian asset managers active in this segment was 39, about double the number registered in 2019; also their size is low: the average AuM is about €70 million and 85 per cent do not exceed €100 million. This figure indicates a lack of operators specialized in the later stage, where typically larger funds support the growth of companies with a bigger size of deals.

Figure 5: AuM of Italian funds and number of asset managers (*€ billion and units*)



Source: Supervisory report. Notes: (1) Right-hand scale.

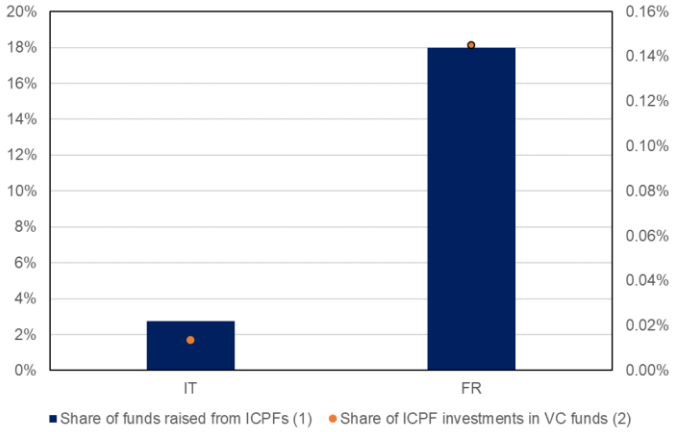
In turn, two factors are likely to contribute to the limited size of the Italian VC fund industry compared to other EU peers.

First, the involvement of domestic institutional investors, such as insurance corporations and pension funds, is limited. Given the characteristics of the segment, investing in VC funds is generally a risky and illiquid investment, and thus not particularly suitable for retail investors, but rather for long-term investors. Notwithstanding broadly similar European and national regulatory frameworks for ICPFs that limit their VC investment,[15] the amount of funds raised from ICPFs is higher in some EU jurisdictions. In 2019-23 the share of funds raised by the domestic VC sector from institutional investors was 18 per cent in France, against only 2 per cent in Italy (Figure 6). The difference is quite remarkable also comparing

[15] For insurance companies, under Solvency II, venture capital investments qualify as Type 2 exposures, therefore an equity capital charge of 22 per cent (for long-term or strategic investments) or 49 per cent (for non-long-term and non-strategic investments) is applied. The actual applicability of the 22 per cent risk-weight to equity investments seems to be quite limited (see Art. 169(2), 171 and 171a of Delegated Regulation (EU) 2015/35 as amended by Delegated Regulation 2019/981). In contrast, Italian pension funds are subject to a direct limit of 30 per cent of their assets in non-listed financial instruments and in AIFs (art. 5(1) of Ministerial Decree 166/2014).

ICPFs' investment in VC funds in 2019-23 to their total financial investments (as of December 2023): this share is about eleven times higher for French (0.145 per cent) than for Italian ICPFs (0.014 per cent). Given the very recent development, the Italian VC market may be still characterized by high information asymmetry (e.g. small sample of target firms and limited track records of fund performance), which increase the fixed costs of allocating funds to this asset class (e.g. due diligence and research), which can be hardly compensated by the returns given the limited size of the deals. Italian ICPFs' portfolio allocation is more structurally oriented to highly liquid securities (Bank of Italy, 2024), such as government bonds. European banks have a limited exposure to the sector also for regulatory reasons across jurisdictions.[16]

Figure 6: the role of institutional investors in Italy and France *(percentages)*



Source: own calculation on ECB and Invest Europe data. Notes: (1) Share of funds raised by the domestic VC sector from ICPFs in 2019-23. (2) Investments in VC funds made by ICPFs in 2019-23 expressed as a share of ICPFs total financial investments in 2023; right-hand scale.

Second, the smaller size of the Italian VC fund sector also reflects the lagged start of public investment in the sector, as compared to France and Germany. Public intervention is key to develop the domestic VC sector. State-backed investors play a role of 'anchor' investors, nurturing a supportive VC ecosystem and attracting resources of other venture capitalists. State-backed investments in high potential firms helps to mitigate information uncertainty especially in earlier stages of firm development; the act of investing conveys information and sends out an important signal to other market actors (Beraja et al., 2024). In many countries, the VC industry was created and developed as a result of significant public interventions: these measures have been successful especially when they activated partnerships

[16] The CRD/CRR framework is rather stringent on the own funds requirements for venture capital investments: CRD V/CRR II set a risk weight (RW) of 150 per cent for *high risk* exposures (art. 128(2) of CRR) under the standardised approach. As per the IRB approaches, the RW ranges from 190 per cent to 370 per cent in the *simple risk weight approach*, while it depends on internal estimates of PD/LGD and VaR in more advanced approaches (art. 155). Exposures in the form of units or shares in funds are treated according to a *look-though approach* or a *mandate-based approach* (therefore RWs vary according to the riskiness of the fund's underlying assets); as last resort, credit institutions may use a *fall-back approach* with a RW of 1250 per cent. Under the new CRD VI/CRR III package, applicable since 1 January 2025, IRB approaches will not be allowed for venture capital exposures; therefore, they will be treated under the standardised approach with new RWs, which will range from 250 per cent (for long term investments) to 400 per cent. A temporary regime ending on 31st December 2029 was envisaged in order to gradually converge to the new stricter capital requirements.

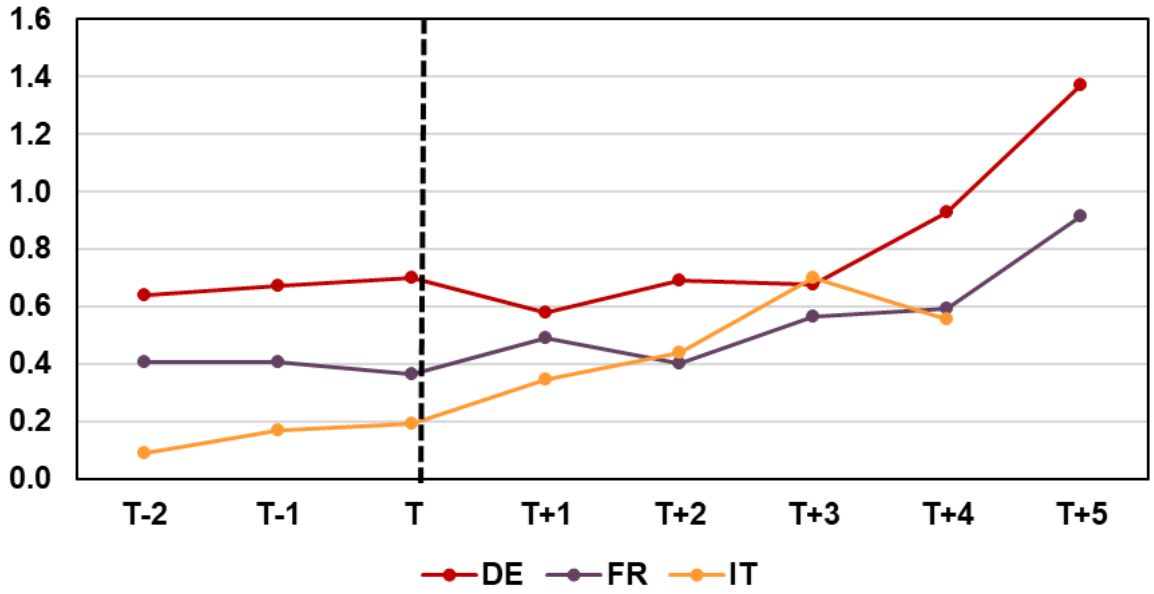
with private investors and focused on supporting the development of broad innovation capabilities in the entrepreneurial local market and in the private VC industry (Moretti, 2024).

In France and Germany, respectively, a public player – BPI and *Kreditanstalt für Wiederaufbau* (KfW) – started to invest a significant amount of resources in 2012 and 2011, respectively. The aim was to create a more favorable environment for VC investment and encourage private investors to participate.[17]

The public intervention in the VC market in Italy started only in 2019, later than in France and Germany. CDP Venture Capital SGR was created in 2019, investing the public resources of *Fondo Nazionale Innovazione*. CDP Venture Capital operates both directly (through 13 funds) and indirectly, by investing in funds managed by other Italian and foreign asset managers. At the end of 2023, the total amount of managed resources was €4.2 billion, of which €1.4 billion already invested.

The dynamic observed in the Italian market since 2019 is in line with those of France and Germany after the start of the public intervention in those countries (Figure 7). In all three countries the market size started to rise a few years after the first significant public investment and doubled after a few years.

Figure 7: the size of the domestic VC market before and after the start of the public intervention by country (1) (*€ billion; DE: T=2011; FR: T=2012; IT: T=2019)*



Source: own calculation on Invest Europe data. Notes: (1) The start of the public intervention in VC (T) is 2011 in Germany, 2012 in France, and 2019 in Italy.

[17] Public intervention has also played a significant role in fostering the growth of the venture capital sector in the United States. Governmental support, initiated in the 1960s with the Small Business Investment Company (SBIC) program, was instrumental. Subsequent expansion in the 1970s and 1980s was propelled by economic growth and pension deregulation, notably the 1979 revision of the 'prudent man' rule, which enabled pension fund diversification into venture capital. The subsequent participation of public and global pension funds with substantial capital further catalyzed the expansion of the US venture capital market.

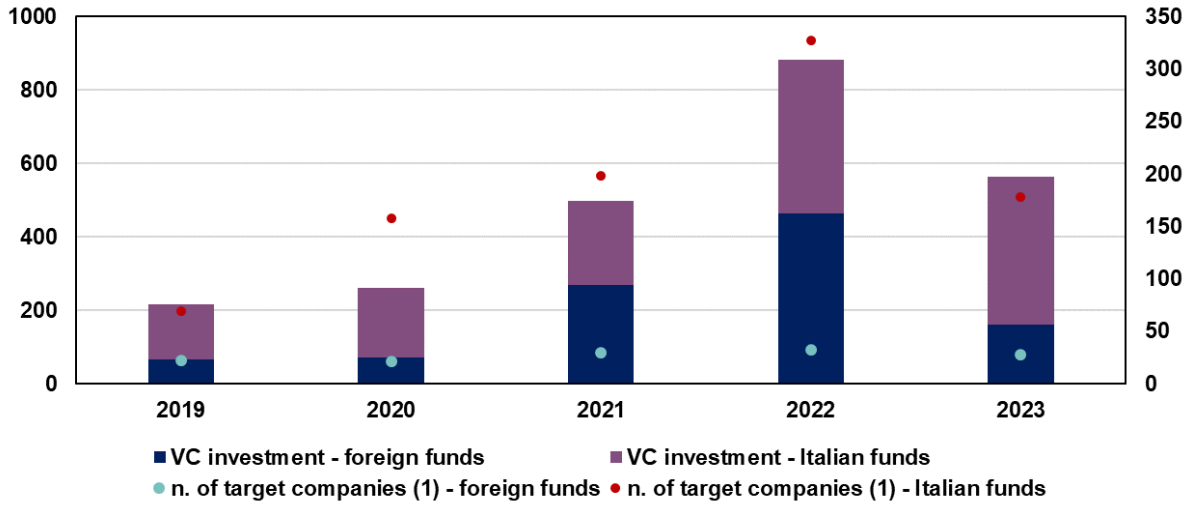
4.3. Comparatively less opportunities of successful exit from VC investment constitutes an obstacle to investment in the first place

The prospect of a successful exit is a major driver for venture capitalists to invest in early-stage companies and take risks. Exits are essential for VC investors because they provide a way to cash out their illiquid assets, realize returns and build reputation for future fundraising.

First, the overall small size of the domestic industry – both in terms of fundraising and number of funds – is itself an endogenous reason that makes divestment more difficult, creating frictions along the VC funding chain. In particular, as a company grows, the lack of large domestic players complicates liquidation by early investors. Foreign funds typically step in only when deal sizes reach a sufficient dimension, as geographical diversification entails larger fixed costs – in particular related to searching, screening and regulatory compliance – which are worth undertaking only when ticket sizes are large enough. Indeed, since 2019 foreign intermediaries have targeted fewer companies compared to domestic funds (on average 27 versus 186; Figure 8) and invested in larger deals (on average, 7 million versus 2). Overall, foreign funds invested about €1 billion between 2019 and 2023, accounting for over 30 per cent of total VC investments in Italy.[18]

Figure 8: Italian and foreign funds' investment in Italy and number of target companies

(€ million and units)



Source: AIFI data. Notes: (1) right-hand scale.

The relatively smaller size of Italian firms in general also limits exit opportunities via selling stakes to larger companies. These are typically those interested in acquiring smaller firms, for example to acquire a new technology developed by the target company.

Moreover, the small size of the Italian stock market and its lack of attractiveness to foreign investors limit shares sales through public offerings. The link between the VC market and the stock market has been studied theoretically and empirically, suggesting that efficient and well-developed stock exchanges facilitate VC exit from mature firms and help

[18] Italian funds accounted for about 45 per cent of investments, while the remaining part was made by other national (15 per cent) and foreign (10 per cent) investors.

reallocate funds to new ventures.[19] In Italy, the IPO exit route has a very limited role. VC-backed IPOs are rare: based on Invest Europe data, only 3 per cent of the total exits between 2013 and 2023 have been through public offerings, compared to 16 per cent in France. A contributing factor is the lack of liquidity in the target market for smaller companies seeking to go public (Euronext Growth Milan, EGM), which – although it has grown in terms of the number of new listings – continues to be characterized by low transaction volumes.

Finally, an overly complex tax system and the long litigation times would also discourage the participation of foreign funds. The average time taken to resolve a commercial dispute is 1,120 days in Italy, compared with 510 days in Spain, 499 days in Germany and 447 days in France (Doing Business, 2019). These figures include the time for the enforcement of judgments, which is particularly important for investors.

5. European and Italian initiatives to support the VC market development

A number of regulatory and public initiatives in support of the development of the VC sector in Europe and Italy have been adopted or are currently under review. At the European level, after the AIFMD introduced a harmonized framework for fund managers in 2011, the European Parliament and the Council adopted two regulations for specific types of AIFs, with the explicit aim of channelling funding into the real economy. The European Venture Capital Funds (EuVECA)[20] and the European Long-term Investment funds (ELTIF)[21] labels have been introduced, respectively, in 2013 and 2015 in order to allow managers to set up and market their funds across the EU using a single set of rules, without further requirements demanded by host Member States.

However, since the introduction of the new rules, the development of the ELTIF segment has not scaled up as expected. According to European Commission estimates, only a few ELTIFs have been authorised, with limited overall AuM (approximately €2.4 billion in 2021); the factors mentioned to explain this modest growth are the limited range of eligible assets and too tight restrictions for investors (European Parliament and Council, 2023). In 2023 the ELTIF Regulation has been amended to expand the eligible assets funds may invest in, allow fund-of-fund ELTIF structures, prescribe lighter access limits for retail investors[22] and promote the development of a secondary market of the ELTIF shares.

[19] Black, B., Gilson, R., 1998, *Venture capital and the structure of capital markets: banks versus stock markets*, Journal of Financial Economics 47, 243-277; Michelacci, C., Suarez, J., 2004, *Business creation and the stock Market*, Review of Economic Studies 71, 459-481.

[20] To register an AIF for the EuVECA label, managers must set up a fund that: invests 70 per cent of the capital it receives from investors in supporting eligible companies, such as young and innovative SMEs; provides equity or quasi-equity finance to these companies; does not use leverage (European Parliament and Council, 2013).

[21] To register an AIF for the ELTIF label, managers must set up a fund that: invests 55 per cent of the capital it receives from investors in eligible investment assets, such as equity, quasi-equity instruments or debt instruments issued by low-cap undertakings that are not admitted to trading on a regulated market or on a multilateral trading facility, units or shares of other AIFs/UCITS real assets, *et alia*; has limited use of leverage, 50 per cent or 100 per cent of net asset value, whether the fund is marketed to retail investors or not (European Parliament and Council, 2015).

[22] In particular, on the retail investor participation, fixed quantitative thresholds to access the shares (10.000 minimum investment and concentration limit of 10 per cent of the investor's financial portfolio) have been dropped in favour of disclosure and MiFID requirements (European Parliament and of the Council, 2023).

More recently, one of the areas identified in the "Competitiveness Compass" of the EU Commission, which outlines the overall strategy to boost competitiveness in the EU over the next five years, is the creation of an ecosystem to support the growth of innovative companies (European Commission, 2025). In particular, the Commission will propose a dedicated EU strategy to address the obstacles that are preventing new companies from emerging and scaling up and sector-specific measures (e.g. initiatives to foster the adoption of Artificial Intelligence in key sectors). Moreover, the Commission will also propose the creation of an opt-in EU-wide system for innovative companies (so called "28th regime") to simplify applicable rules, reduce the costs of failure, and facilitate foreign and cross-border investments, including those of venture capital funds. This new "legal status" will include relevant aspects of corporate law, insolvency, labour, and tax law.

In Italy, the domestic industry would benefit from a simplification of the regulatory obligations and a reduction of compliance costs for smaller asset managers of AIFs (including VC ones), which could be considered in the context of the reform of the Italian Consolidated Law on Finance (Banca d'Italia, 2024).[23] By derogating from the fully fledged regime, the AIFMD prescribes that each jurisdiction may exempt smaller asset managers of AIFs from the authorization procedure and prudential requirements (so called sub-threshold regime; see Appendix A). Under this regime, sub-threshold managers face lower compliance costs but they cannot operate cross-border. This less burdensome process is widely employed throughout the EU as it may foster the investment of smaller funds in SMEs and younger firms, which are unlikely to be targeted by larger intermediaries and may have less access to bank credit. In Italy, since the sub-threshold regime is stricter with respect to that adopted in other jurisdictions (see Appendix A), a simplification of the relative obligations could promote the development and activity of VC funds by lowering regulatory compliance costs.

Other initiatives may boost exit opportunities for venture capitalists. In addition to the simplification of the regulatory obligations, the comprehensive reform would also include measures to facilitate, among others, the financing and transition of companies to listing in regulated markets.[24] The scope of the Parliament's mandate is broad and amendments are still possible, therefore its relevance in making an actual impact could be assessed only upon completion of the legislative reform.

Finally, according CDP Venture Capital SGR 2024-2028 Business plan, new resources will be invested in the VC domestic sector (CDP, 2024). The amount of funds managed by CDP is envisaged to grow to €5.3 billion in 2025 and to €7.9 billion in 2028. Most of the funds invested will come from the public sector, but the CDP estimates that it will be able to raise around €1 billion from private investors by 2028. It will concentrate investment in strategically relevant sectors (i.e. healthcare & life science, industry-tech, agri-tech & food-tech, clean-tech, infra-tech & mobility, and space-tech, with a particular focus on artificial intelligence), which will represent over the half of its portfolio by 2028.

[23] The Italian Parliament has delegated the Government to adopt, by March 2026, a comprehensive reform of the capital markets provisions currently included in the Consolidated Law on Finance (see art. 19 of Law n. 21/2024, so called *Legge Capitali*).
[24] See the *Legge Capitali* mentioned in footnote 23.

Appendix A: The Italian sub-threshold regime for Alternative Investment Fund managers

In the European framework, the sub-threshold regime is applicable to asset managers where (i) the assets of AIFs under management fall below a threshold of €100 million or (ii) below a threshold of €500 million for asset managers that manage only unleveraged AIFs and that do not grant investors redemption rights during a period of 5 years. Under this regime, sub-threshold managers (STAMs) are not subject to the full authorisation regime of the AIFMD but to registration in their home country. Moreover, they still have to comply with a more limited set of minimum requirements to ensure an adequate monitoring of potential systemic risks.[25] However, the European framework allows EU Member States to introduce ad hoc stricter national regimes compared to that granted in the AIFMD.

In Italy, the sub-threshold regime is regulated by specific provisions included in the Consolidated Law on Finance (Legislative Decree 58/1998) and in the Regulation on Collective Asset Management (*Provvedimento della Banca d'Italia* 19th January 2015, as last amended on 12th March 2024). In transposing the AIFMD, the Italian legislator did not exercise the option to grant STAMs a mere registration regime; consequently, such managers have still to be authorized by the Bank of Italy to operate, although they benefit from simplified rules.[26]

The main regulatory and procedural simplifications compared to the AIFMD-authorization relate to:

- the minimum initial capital threshold of €50 thousand, which is lower than for above-threshold/fully fledged managers (€500 thousand if they only manage closed-ended reserved AIFs or €1 million otherwise);
- the possibility of establishing/setting up a single control function, which performs/carries out the tasks of compliance, risk management and internal audit;
- the option to outsource risk management to entities not subject to supervision;
- the exemption from the rules regarding remuneration policies and certain information requirements (e.g. pre-emptive communications for the outsourcing of essential operational functions).

Overall, the Italian sub-threshold regime is stricter vis-à-vis those of other Member States' jurisdictions, where STAMs are subject to registration in lieu of authorization (e.g. Germany, Ireland) or to more flexible organizational requirements, including no depositary obligations as long as the AIFs are not marketed to retail investors (e.g. Spain).

At the end of 2023, STAMs accounted for about 46 per cent of the total number of Italian AIF asset managers (75 out of 162) and about 3 per cent of the total AuM (about €4 billion). The average size of AuM was €60 million, significantly below the regime threshold; also the average size of each fund managed by STAMs is €30 million (about one-fifth of the size of funds run by larger asset managers). The large majority of STAMs is active in the venture capital segment. Most of the initiatives are originated from entrepreneurs with experience in highly innovative sectors or from managers with previous roles in Italian and foreign asset managers.

[25] In particular, they only have to provide their competent authorities relevant information regarding the identification of the asset managers and the AIFs managed, the main instruments in which they are trading and on the principal exposures and most important concentrations of their AIFs. Similarly, they remain subject to investigation, inspection and intervention powers of national competent authorities in the exercise of their functions (art. 46).

[26] After this type of authorization, Italian STAMs still do not benefit from rights provided for in the AIFMD, most notably cross-border operability, and in the national legislation (e.g. marketing of funds to retail investors).

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