CHAPTER 4



ENTREPRENEURSHIP AT SCALE

Entrepreneurship fuels business dynamism and, ultimately, economic growth. Across EBRD regions, however, dynamism is slowing, with young, fast-growing firms accounting for a shrinking share of all businesses. The bottleneck lies in firm growth, rather than firm creation: companies entering the market remain smaller than advanced European peers at every stage of the lifecycle. Growth stalls at the financing stage: few firms that raise early funding progress to institutional rounds. Venture funding per firm is scant, comes largely from abroad, is heavily dependent on founders' educational and professional networks, and typically remains concentrated in a single city. Helping more startups to grow into larger firms will, therefore, require deeper venture-capital markets and stronger connections between founders and a broader set of investors.



INTRODUCTION

Young firms are the engine of business dynamism,[1] and that engine is running out of steam in many EBRD regions. New market entrants, particularly the small group of fast-growing startups, account for a disproportionate share of net job creation and aggregate productivity growth.[2] However, in EBRD economies in the EU, young, high-growth firms' share of total firms has fallen steadily over the past two decades. Firms that do enter the market are already somewhat smaller than their advanced European counterparts and the gap widens over the corporate lifecycle: mature enterprises in the region employ far fewer people than their advanced European peers. Business dynamism in the EBRD economies is, therefore, constrained not so much by a shortage of startups but by the fact that too few of those startups scale up. This chapter analyses startups across the EBRD regions and takes stock of what factors drive their ability to reach scale. Three findings stand out.

First, founders of growth-oriented firms in the EBRD regions are internationally connected. The majority have studied or worked abroad before founding their firm – a pattern similar to that seen in advanced Europe. Startups also tend to branch out from what their economies already do well. They are concentrated in computer, professional, financial and trade-related services. In most economies, the majority of startups enter markets for products in which the economy has no revealed comparative advantage (RCA). In more diversified economies (largely EU member states and other advanced European economies), these new products tend to sit close to the economy's existing exports; in less diversified economies (mostly outside the EU), they tend to lie further away from any existing strength. Within an individual economy, startups show only a mild preference for products related to existing exports.

Second, serial founders – people with prior entrepreneurial experience – account for as much as a quarter of all founders in the EBRD regions, and their later ventures tend to be in a different sector to their first. Firms that manage to scale up funding are more likely to attract at least one foreign investor than peers that do not scale up.[3]

Third, the constraints bite at the scaleup stage. Only a small minority of funded startups in the EBRD regions reach a first institutional round, well below the rates in advanced Europe and the United States, and the gap is only partly explained by smaller seed rounds. Startups in EBRD economies also raise less venture capital per firm than those in advanced Europe, although lower funding is consistent with the thin supply of risk capital or weaker demand for it, and does not in itself distinguish between the two.

Most of the capital comes from outside the founding economy, with the overwhelming majority coming from the United States, the United Kingdom and advanced Europe. The sectoral composition of that funding is concentrated in finance and other services. This reliance on international finance is greatest in sub-Saharan Africa (SSA), which has the highest share of firms with at least one foreign investor.

Financial capital tends to follow human capital: founders have a stronger tendency to raise funding from investors in economies where they have previously studied or worked. In EBRD regions, domestic and mixed syndicates dominate early funding rounds, but founders are far more reliant on foreign funders than their advanced European peers when it comes to the later stages. Within economies, venture capital is typically concentrated in just one metropolitan area. As a result, local startups face limited upscaling opportunities.

This chapter starts by documenting the decline in business dynamism in the EBRD regions and its coexistence with continued productivity convergence. It then looks at who founds growth-oriented startups, examining international linkages, product choice and

[1] See Biondi et al. (2025) and Botelho, Fehder and Hochberg (2026).
[2] See Decker et al. (2016).
[3] See Dealroom (n.d.).

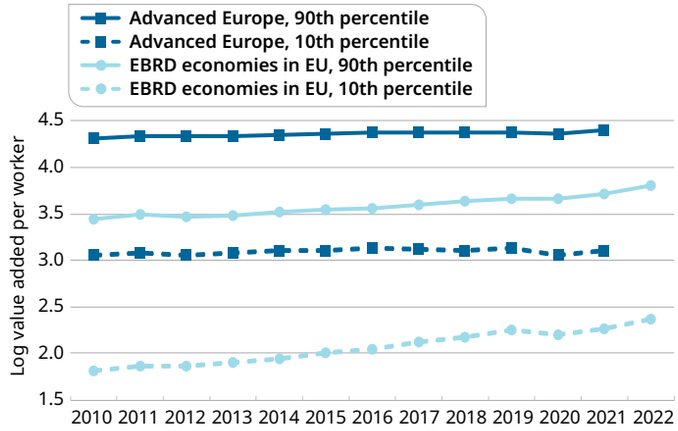
serial entrepreneurship in turn, before asking which founder and firm characteristics distinguish the startups that reach the scaleup stage. It then turns to venture capital, examining how much is raised, in which sectors, where it comes from and where it goes within each economy. Lastly, it considers the lessons from two case studies, looking at founder networks in Estonia and at Tunisia's Startup Act.

DECLINING BUSINESS DYNAMISM AND CONVERGENCE

This section draws on the 10th edition of the database compiled by the Competitiveness Research Network (CompNet) to document trends in firm entry, growth and productivity.[4] CompNet collects harmonised indicators from national statistical institutes and central banks using a common protocol that aggregates information from each country's firm-level records. The database covers 17 European economies (some in the EBRD regions and some in advanced Europe) between the late 1990s and 2023. Coverage varies by country and indicator, with several series restricted to firms with at least 20 employees.

A first look at the CompNet data shows considerable progress on productivity convergence in EBRD economies in the EU since 2010. The improvement is larger for the least productive firms (which have raised their labour productivity by 75 per cent, compared with 45 per cent for the most productive firms; see Chart 4.1). In advanced Europe, both the most and least productive firms have improved their productivity by less than 10 per cent over the same period. Within EBRD economies in the EU, the distance between frontier and laggard firms in the same industry has narrowed, suggesting that technologies and business practices continue to spread between firms, even though the reallocation of jobs between those firms has slowed.

CHART 4.1 Firms in EBRD economies in the EU are catching up with peers in advanced Europe at both ends of the productivity distribution



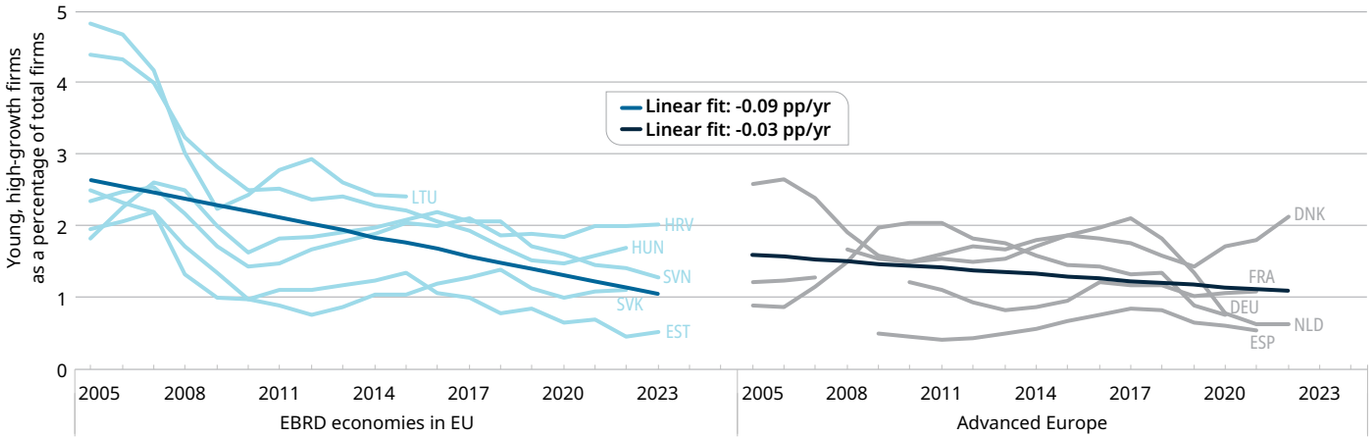
SOURCE: IWH (n.d.) and authors' calculations.
NOTE: Firms are grouped based on the percentiles of log value added per worker, which are computed within cells defined by economy, NACE two-digit industry code[5] and year. Cells with fewer than 20 observations are excluded. The lines correspond to the 10th and 90th percentiles of the productivity distribution. Economy-year figures are firm-count-weighted means across two-digit industries; group-year figures are unweighted means across economies. The panel is balanced from 2010. "EBRD economies in EU" comprises Croatia, Estonia, Hungary, Lithuania, Poland, Romania, the Slovak Republic and Slovenia; "advanced Europe" comprises Denmark, France, the Netherlands, Portugal and Spain, based on data availability.

The least productive firms in EBRD economies in the EU have raised their productivity by **75%**, compared with **45%** for the most productive firms

[4] See IWH (n.d.).

[5] NACE (Nomenclature Statistique des Activités Économiques) is the statistical classification of economic activities in the EU.

CHART 4.2 Young, fast-growing firms' share of total firms in EBRD economies in the EU has more than halved in around two decades



SOURCE: IWH (n.d.) and authors' calculations.
NOTE: Young, high-growth firms ("gazelles") are those aged five years or under that have expanded employment by more than 25 per cent a year, on average, over a period of three years, under CompNet's "definition 0". This chart shows three-year centred moving averages. Bold lines are regional linear fits from an ordinary least squares regression of the raw economy-year share on year, pooled within each region, with figures indicating declines in percentage points (pp) per year. "EBRD economies in EU" comprises Croatia, Estonia, Hungary, Lithuania, the Slovak Republic and Slovenia; "advanced Europe" comprises Denmark, France, Germany, the Netherlands and Spain, based on data availability.

Despite convergence in productivity, sustaining business dynamism will increasingly depend on the ability of new firms to enter the market, grow and innovate. The most productive firms in EBRD economies in the EU (those in the 90th percentile of the productivity distribution) remain 49 per cent less productive than their advanced European counterparts. There is a limit to how far an economy can catch up by improving the firms it already has, which is why sustaining convergence will depend increasingly on new firms reaching scale. Young firms (those aged less than five years) typically account for a disproportionate share of net job creation. Economies with higher rates of firm entry tend to record faster productivity growth, because the entry of new competitors forces less productive incumbents to either improve or go out of business.[6]

Young, high-growth firms' share of total firms in EBRD economies in the EU is declining. It has more than halved since the mid-2000s (see Chart 4.2). Also known as "gazelles", these firms are aged five years or younger and have expanded their employment by more than 25 per cent a year, on average, over a period of three years. In the mid-2000s, gazelles made up 2.6 per cent of firms in EBRD economies in the EU, compared with 1.6 per cent in advanced Europe. The relatively high number of gazelles in EBRD economies in the EU was emblematic of the post-transition decades and supported the rapid convergence of income per capita towards the levels of advanced European economies.

Young, fast-growing firms' share of total firms in EBRD economies in the EU has
MORE THAN HALVED
in the past two decades

[6] See Decker et al. (2016), Haltiwanger et al. (2016) and EBRD (2025).

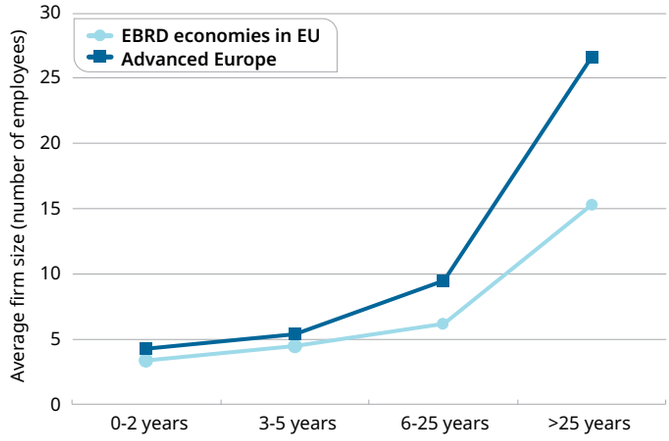
Gazelles' share of total firms in EBRD economies in the EU has since declined by an average of 0.09 percentage points a year, three times the pace of decline recorded in advanced Europe, leaving both groups at around 1.1 per cent of firms in the most recent data. The declining share of gazelles is not specific to the EBRD regions. A similar trend has been documented in the United States, where gazelles' share of total firms has been falling since the mid-1980s.[7]

Another symptom of declining firm dynamism is the decrease in the flow of employment from shrinking to growing firms across 19 European economies over the past two decades, with the steepest drops recorded in EBRD economies, alongside a falling share of employment in young firms.[8]

In addition, firms in EBRD economies in the EU are smaller than their advanced European counterparts in every age band (see Chart 4.3). The average firm aged two or under in the region employs 3.4 people, around 1 employee fewer than an average peer in advanced Europe, a difference of around a quarter at that size. The difference is of a similar order among firms aged 3 to 5 years, at 4.5 against 5.4 employees, and wider among firms aged 6 to 25 years, at 6.2 against 9.5 employees. Chart 4.3 sets age bands side by side rather than following the same firms over time, and the bands are broad, so the chart cannot trace how a given cohort grows. What it does show is a downward shift in size distribution throughout: firms in the region are small when they enter the market and, among those still trading a decade or more later, they remain smaller than their advanced European peers.

Further convergence requires the very dynamism that is now declining. Whether firms that enter go on to grow is therefore a first-order concern for EBRD economies. The rest of this chapter takes a closer look at the founders of growth-oriented startups in the EBRD regions, examining the opportunities and constraints that they face.

CHART 4.3 Firms in EBRD economies in the EU start smaller and stay smaller than their advanced European peers



SOURCE: IWH (n.d.) and authors' calculations.
NOTE: Average firm size is total employment divided by the number of firms, pooled over the 2018-22 period. Figures are employment-weighted group means. "EBRD economies in EU" comprises Croatia, Estonia, Hungary and Slovenia; "advanced Europe" comprises Denmark, the Netherlands and Spain.

GROWTH-ORIENTED STARTUPS

The following analysis focuses on growth-oriented startups, defined as companies designed for rapid growth: firms whose product, platform or business model is scalable by design and whose product or business model is innovative, in most cases enabled by technology. In short, these are companies that could, in principle, attract venture capital, whether or not they have done so. Such growth-oriented startups often introduce new technologies and provide platforms and inputs that allow other firms to grow as well.[9] This distinguishes them from the much larger population of small and relatively stagnant businesses that serve a local market at a stable size.

The analysis draws on two datasets. The first is Dealroom, a database of growth-oriented startups, funding rounds and investors.[10] The second is Revelio

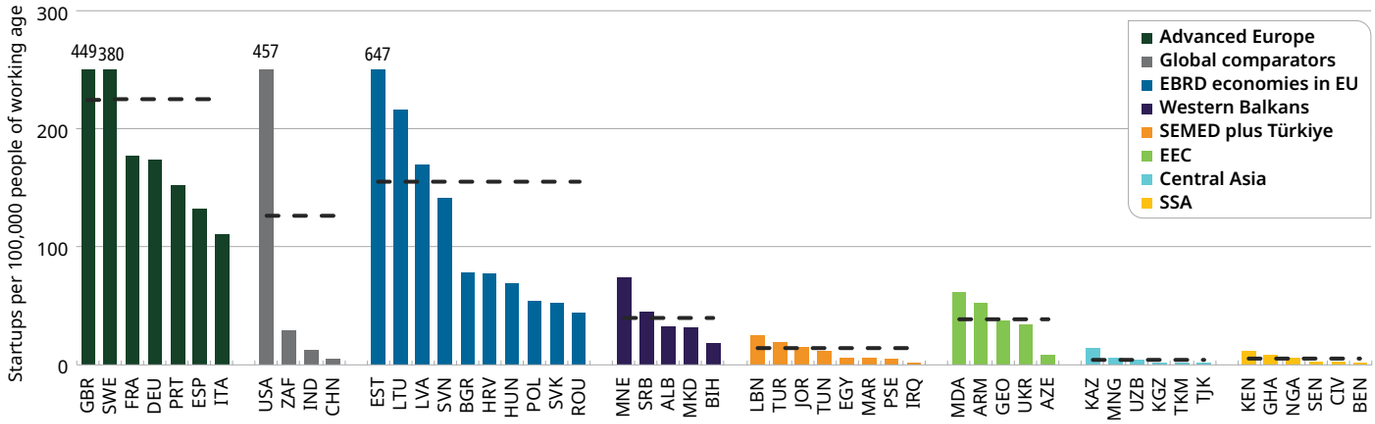
[7] See Sterk, Sedláček and Pugsley (2021).
[8] See Biondi et al. (2025).
[9] See Colonnelli et al. (2026).
[10] See Dealroom (n.d.).

Labs, which constructs individual educational and employment histories from public professional profiles.[11] The two are linked using identifiers common to both sources: firm website domain, company LinkedIn page and, where those are not available, the founder's LinkedIn profile. This procedure matches each founder's education and career history to the funding and growth outcomes of the venture they started.

The prevalence of growth-oriented startups varies substantially across emerging-market and advanced economies, with higher rates in the United States, the United Kingdom and Sweden, as well as Estonia and Lithuania (see Chart 4.4). The variation within geographical regions is as notable as that between them. For example, Kenya has a higher ratio than Egypt and Morocco, despite having lower per capita income, while the ratios in Jordan and Lebanon are comparable to that of Türkiye, where GDP per capita is roughly three times higher.

Startup formation tends to be higher where entrepreneurial ecosystems are supportive – with institutions that protect young firms, highly skilled workers and financial systems that can price risk. Successful startups can themselves reinforce these ecosystems by spawning new ventures, as illustrated by the entrepreneurial lineage of Skype (see Box 4.1). As these features are more commonly found in high-income economies, startup ratios tend to be higher in economies with higher per capita incomes.

CHART 4.4 Advanced Europe, the United States and EBRD economies in the EU have the most startups per 100,000 people of working age

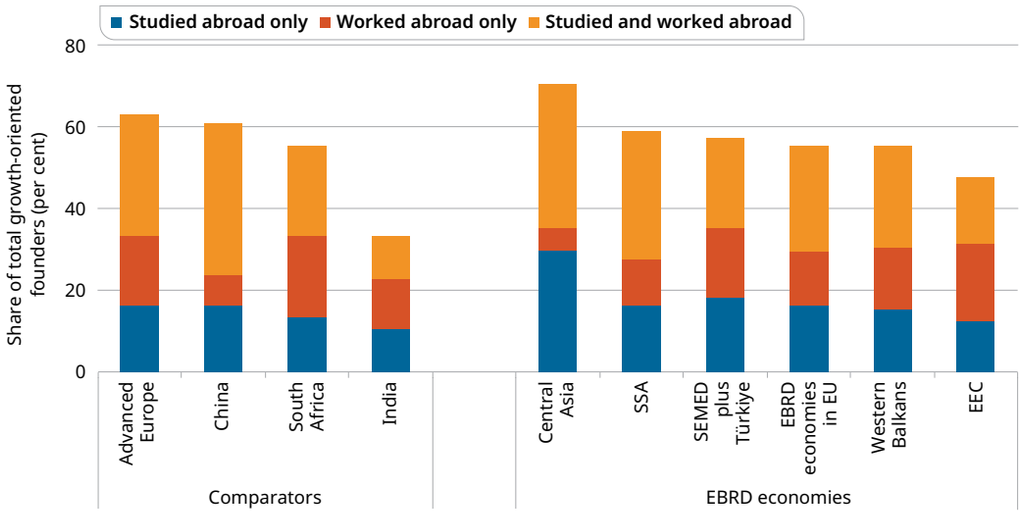


SOURCE: Dealroom (n.d.) and World Development Indicators (World Bank, n.d.).
NOTE: Bars indicate the number of startups currently operating in an economy per 100,000 people of working age (aged 15-64). For values exceeding 250, bars are capped at 250 and actual values are reported above the bar. Horizontal dashed lines are the unweighted means of the economies in each region. A startup is any company in the Dealroom universe, allocated to the economy where its current headquarters are located. Economies with fewer than 10 startups are not shown. SEMED = southern and eastern Mediterranean; EEC = eastern Europe and the Caucasus; SSA = sub-Saharan Africa.

In most EBRD regions,
MORE THAN HALF
of growth-oriented founders studied and/or worked abroad before starting their firm

[11] See Revelio Labs (n.d.).

CHART 4.5 In most EBRD regions, more than half of all growth-oriented founders gained international experience before founding



SOURCE: Dealroom (n.d.), Revelio Labs (n.d.) and authors' calculations.
NOTE: The sample comprises founders from the Revelio Labs dataset with first founding events in 2015-24 who also have at least one venture in the Dealroom data. Bars show the percentage of founders in each category within each founding region, comparator group or economy. "Studied abroad" refers to education completed before the first founding event and "worked abroad" refers to employment held before that event, with each being defined relative to the founding economy. "Advanced Europe" comprises France, Germany, Italy, Portugal, Spain, Sweden and the United Kingdom.

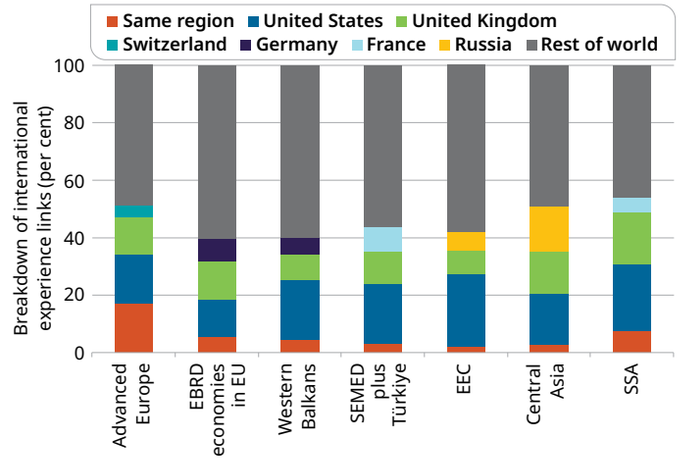
MOST FOUNDERS HAVE STUDIED OR WORKED ABROAD

The analysis in this section looks at founders (as identified in Revelio Labs data)[12] that launched at least one growth-oriented startup in the 2015-24 period.

In most EBRD regions, more than half of all growth-oriented founders studied and/or worked abroad before starting their firm (see Chart 4.5).[13] A substantial minority of founders have both previously studied and worked in a country other than that of their startup. The share of founders with such international experience is particularly high in Central Asia, exceeding that of both advanced Europe and China. It is also high in SSA and the southern and eastern Mediterranean region (SEMED) and Türkiye, at around 60 per cent.

Founders' international experience is concentrated in a small number of destinations. The United States and the United Kingdom together typically account for between a quarter and a third of this experience, with higher shares among founders from SSA. Otherwise, geographical patterns reflect longstanding migration corridors and historical ties: Germany is the third most common destination for founders from the Western Balkans and EBRD economies in the EU, while Russia is the third most popular destination for founders from eastern Europe and the Caucasus (EEC) and ranks second, ahead of the United Kingdom, for founders from Central Asia. The remaining destinations are numerous and widely dispersed (see Chart 4.6).

CHART 4.6 Growth-oriented founders' international experience combines global hubs and regional links



SOURCE: Dealroom (n.d.), Revelio Labs (n.d.) and authors' calculations.
NOTE: Bars show the composition of international experience, with one link per founder and foreign destination economy, drawn from pre-founding education or work, and excluding the founding economy. "Same region" denotes foreign destinations in the founder's own region. Each bar shows the top three destinations outside the founder's own region; the remainder are grouped together as "rest of world". "Advanced Europe" comprises France, Germany, Italy, Portugal, Spain and Sweden.

[12] See Revelio Labs (n.d.).
[13] Founders of firms not in Dealroom have a similar incidence of international experience, at 52 per cent versus 55 per cent for founders of firms in Dealroom.

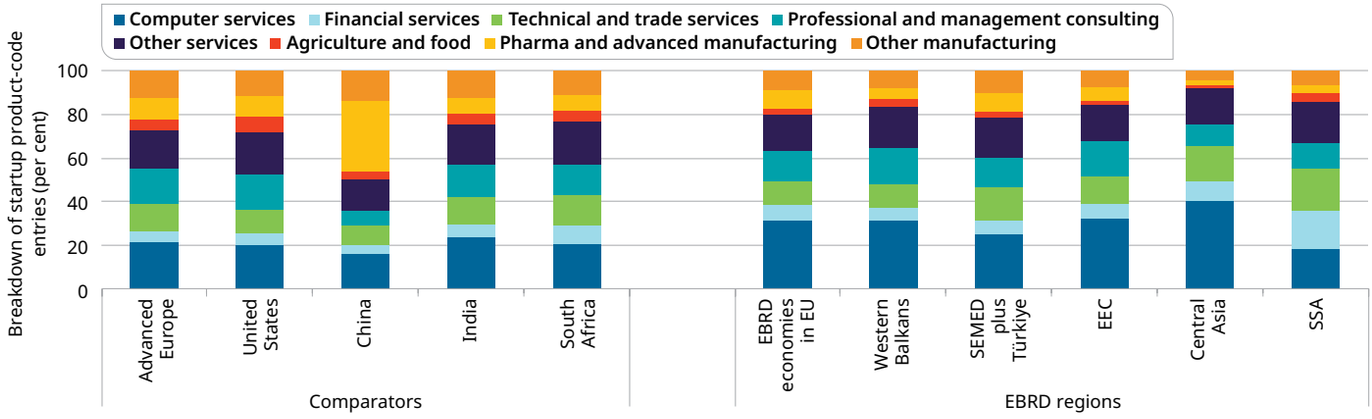
The concentration of international experience exposes founders to risks associated with shifts in visa policies or business cycles in major "experience donor" economies. Scholarship programmes targeting a wide range of destinations, such as Kazakhstan's Bolashak programme, can provide a hedge against such concentration risks. Concentration can also be a source of opportunity, as it facilitates network connections to other entrepreneurs, scientists and financiers.

WHERE STARTUPS COMPETE

Product choice shapes startups' growth prospects. Software and software-enabled services are highly scalable, with low costs for serving additional customers. In manufacturing, by contrast, additional capacity often involves costly and time-consuming investment. The composition of startup activity in the EBRD regions reflects the scalable nature of software and software-enabled services (see Chart 4.7). The product mix is dominated by computer and professional services (in EBRD economies in the EU and in SEMED and Türkiye), as well as financial and trade-related services (in Central Asia and SSA). This concentration in services is greater than in advanced Europe, the United States and China.

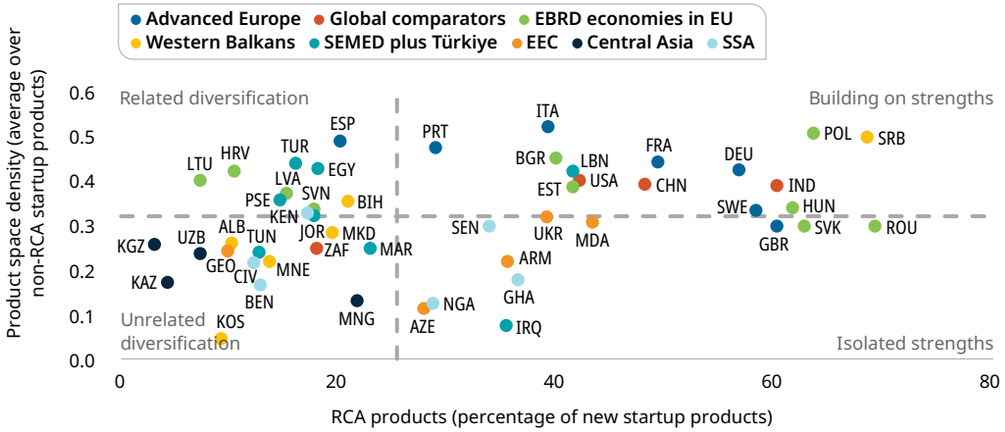
Some founders choose a product close to what the country already does well (such capabilities are measured using the concept of RCA introduced in Chapter 1). In such cases, new firms can draw on established production capabilities, supplier networks and client bases. This lowers the risk of failure, but may also offer more limited upside for founders and investors. Other founders aim to push the frontier of what an economy produces. In doing so, they may help to establish new production capabilities and areas of comparative advantage. They may draw on existing capabilities in related products that are already produced and exported. For example, in an economy with a strong comparative advantage in agriculture, startups may seek to diversify into supply-chain software or agri-fintech. Successful agri-fintech ventures can, for instance, create a pool of engineers and data infrastructure, fuelling

CHART 4.7 Startups in the EBRD regions are more concentrated in services than their peers in comparator countries



SOURCE: Dealroom (n.d.) and authors' calculations.
NOTE: The shares are calculated based on the counts of startup-product combinations. The sample covers all firms in Dealroom for which a product code could be assigned (HS2, 2022 edition, for goods or EBOPS 2010 for services). Where a firm is assigned several codes, its weight is split equally among them. The figures shown are the means of shares across countries within a region, weighted by the number of Dealroom firms. "Agriculture and food" comprises HS chapters 01 to 24; "pharmaceuticals and advanced manufacturing" comprises HS codes 30, 84, 85, 88 and 90. Each firm is placed in its Dealroom founding economy, or the economy of its current headquarters if the founding economy is absent. "Advanced Europe" comprises France, Germany, Italy, Portugal, Spain, Sweden and the United Kingdom.

CHART 4.8 Most startups enter markets for products that their economy does not yet export competitively



SOURCE: BACI (HS2012 version), Gaulier and Zignago (2010), BaTIS (BPM6), Dealroom (n.d.) and authors' calculations.
NOTE: The horizontal axis measures the percentage of startup products in which the economy already has an RCA; the vertical axis indicates the average density of startup products in which the economy has no RCA (ranging from 0 to 1). Firms are assigned one or more of 117 product codes (96 goods and 21 services), with one entry per code (see the notes on Chart 4.7). An economy is considered to have an RCA in a product if the normalised RCA exceeds 0.5 in the firm's founding year. Dashed lines denote the medians of the economy-level means. The sample for this chart comprises firms founded in the 2012-24 period. Economies with fewer than 10 startups or 10 matchable entries are excluded.

further diversification into logistics or finance. In this way, economies can establish new capabilities step by step.

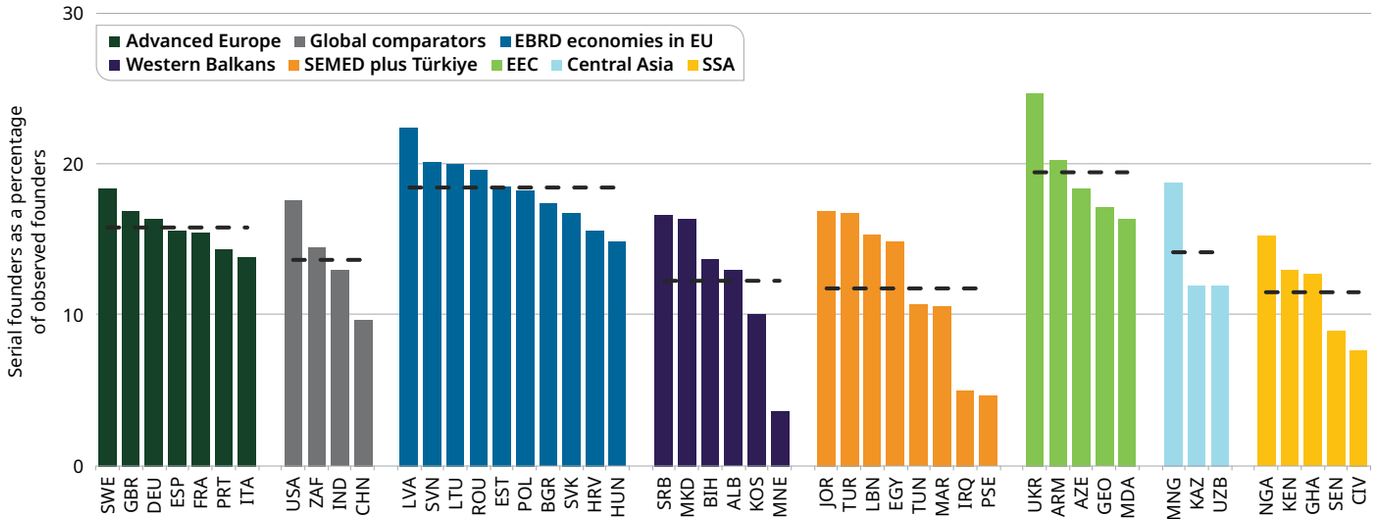
In the analysis presented in Chart 4.8, the horizontal axis tracks the share of startup goods and services in which the economy already holds an RCA. This is a measure of how often startups build on the existing export base. The vertical axis considers the startup products that fall outside that base and measures how close those products are to it, using the "density" measure introduced in Chapter 1. In this analysis, density measures the closeness between startups' non-RCA product mix and the economy's existing RCA basket, with higher values indicating greater proximity.

In most advanced economies and China, larger percentages of startups build on products where the economy already has an advantage (right-hand quadrants), and other startups tend to enter markets for closely related products. This is also the case for several EBRD economies in the EU. Diversification into related products (upper left quadrant) is also prevalent in many economies in SEMED, as well as in Kenya and Bosnia and Herzegovina.

In certain economies in Central Asia, the Western Balkans, SSA and SEMED, many startups enter markets for products that are only loosely related to their economy's existing exports (see Chart 4.8, lower left quadrant). Such entries can be transformative when the conditions are right, as they were in the case of Kenya's M-Pesa, a mobile payment system, which leveraged a combination of donor funding and supportive central bank policies to this end.[14] Such ventures are risky, however, because of the shallow pools of related talent. This places greater emphasis on the informal and public backing of such ventures at the earliest stage of development, before a successful track record helps to attract private venture capital.

[14] See Jack and Suri (2014).

CHART 4.9 Serial founders typically account for 12-19 per cent of founders across the EBRD regions



SOURCE: Dealroom (n.d.) and authors' calculations.
NOTE: Serial founders are founders with more than one venture (anywhere in the world) in their full founded-company history. Each founder is placed in the founding economy of their earliest venture; the founding economy is Dealroom's recorded founding location, where available, or otherwise the current location of the firm's headquarters. Only economies with at least 30 founders are included. Horizontal dashed lines indicate unweighted regional averages.

SERIAL ENTREPRENEURSHIP

Most entrepreneurs start one firm, but a minority start and run several, and the conditional probability of founding another firm rises with the number of firms previously launched.[15] These serial founders carry entrepreneurial know-how from one venture to the next. Previous experience is associated with an increase in the longevity of the newly established firm. Serial founders also tend to enjoy better access to finance, partly due to their networks of existing contacts.

Serial founders typically account for between 12 per cent and 19 per cent of observed founders across the EBRD regions, a share similar to that in advanced Europe (see Chart 4.9). Ukraine, at around 25 per cent, has the highest share in the EBRD regions. Its serial founders have focused on the IT sector, launching companies such as Grammarly, Ajax Systems and Preply, with a significant population of founders now on their second or third venture. Serial founders also make up a large percentage of total founders in Armenia, Latvia, Lithuania and Slovenia. In contrast, numbers of serial founders are relatively low in Côte d'Ivoire, Iraq, Kosovo, Montenegro, Morocco, Senegal, Tunisia and the West Bank and Gaza.

Prior success in attracting funding helps to raise funding for the next venture (see Chart 4.10).[16] The analysis in this section (described in more detail in Box 4.2) examines the business outcomes of two groups: serial founders whose earlier venture succeeded and those whose earlier venture did not. Outcomes include reaching a first institutional equity round (at least Series A, typically US$ 4-15 million), reaching a scaleup round (at least Series B, typically US$ 15-40 million) and having a realised exit. The analysis also estimates differences in the probability that a founder subsequently becomes an angel investor – a private individual who invests their own money in early-stage ventures in exchange for an equity stake.

Founders who previously succeeded in raising funds are around 21 percentage points more likely than first-time founders to achieve a Series A funding round in their next venture and around 13 points more likely to achieve a Series B round (see Chart 4.10). Founders whose earlier venture failed to raise funds are no more likely than

[15] See Lafontaine and Shaw (2016).

[16] See Gompers et al. (2010).

first-time founders to raise funding for their current project. The differences in the likelihood of obtaining funding may reflect both the skill of the fundraisers and information that investors infer from an observable track record of success.[17]

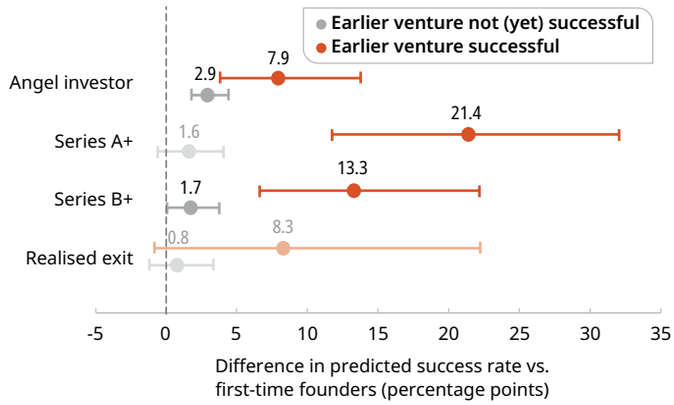
Neither group of serial founders is statistically significantly more likely to achieve a realised exit (possibly because relatively few exits are observed in the data, as some recent ventures have not yet had sufficient time to mature).

Both groups of serial entrepreneurs are more likely than one-off founders to become angel investors – by around 8 percentage points for previously successful founders and 3 percentage points for unsuccessful ones.

As proven founders increase the likelihood of successful fundraising, they also help their first-time co-founders to create a successful track record of fundraising, providing mentoring and strategic guidance in addition to capital.[18] A cohort of successful founders, therefore, helps to develop an ecosystem of early-stage finance.

Around 70 per cent of serial founders' ventures in the EBRD regions target a different product category to the founder's previous one, a ratio similar to those recorded in advanced Europe, the United States, India, China and South Africa (see Chart 4.11).

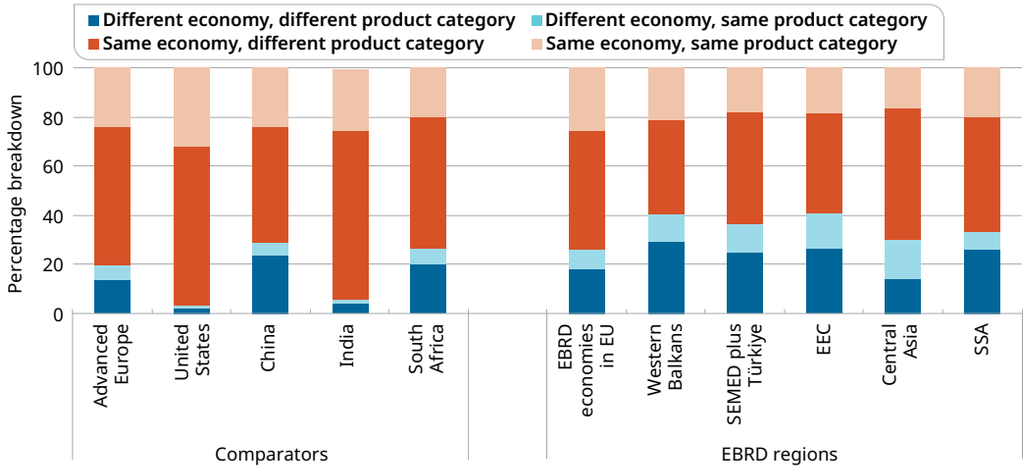
CHART 4.10 Prior entrepreneurial success helps to predict the success of subsequent ventures



SOURCE: Dealroom (n.d.) and authors' calculations.
NOTE: The sample comprises venture capital-backed founder firms headquartered in the EBRD regions and founded in 2010-24. Points are the difference in the predicted probability of raising funding relative to first-time founders, in percentage points, with 95 per cent confidence intervals. Lighter markers denote estimates that are not statistically significant at the 5 per cent level. An earlier venture is considered to have been a "success" if it was successful in raising funding.

Around
70%
of serial founders' ventures are in a different sector to their previous venture

CHART 4.11 Most subsequent ventures are in a different product category, and often a different economy



SOURCE: Dealroom (n.d.) and authors' calculations.
NOTE: The unit of observation is a consecutive venture-to-venture transition by a serial founder, retaining transitions where both the previous venture and the next one carry at least one product code and are founded in an EBRD economy or a sampled comparator. "Same product category" means the two ventures have an identical set of product codes; see the notes on Chart 4.7 for details of the classification. The founding economy is used throughout. "Advanced Europe" comprises France, Germany, Italy, Portugal, Spain, Sweden and the United Kingdom.

[17] See Brandt et al. (forthcoming).
[18] See Lerner et al. (2018).

Moreover, founders often move across national borders in the EBRD regions. In the Western Balkans, EEC, and SEMED and Türkiye, for example, between 37 per cent and 41 per cent of serial founders' ventures are formed in a different country to the previous one (compared with just 3 per cent in the United States, 6 per cent in India, 20 per cent in advanced Europe and 29 per cent in China).

Founders who have raised capital, hired teams and sold to customers in multiple economies build extensive networks of contacts and accumulate broad knowledge. Armenia and Moldova, for instance, have established high-complexity IT sectors by leveraging such international networks.

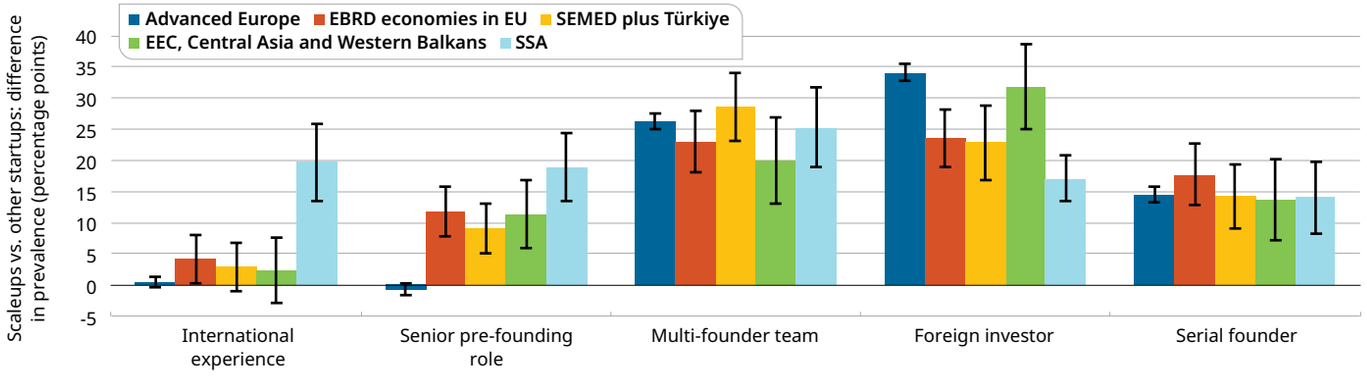
SUPPORTING THE UPSCALING OF FIRMS

High-growth startups are distinguished by their ability to reach scale, expanding from a handful of employees and a local client base to hundreds of staff and an international footprint within a few years. Not only do they create jobs, but they also help to spread new technologies and business practices, making a disproportionate contribution to aggregate employment and productivity growth.[19] Venture capital is designed to identify these firms early and help them to reach their potential. Staged financing funds many experiments and withdraws quickly from the weakest – a model that has backed a large share of the world's most valuable companies. Alphabet, Amazon, Apple, Meta and Microsoft in the United States, and Alibaba and Tencent in China, were all backed by venture capital before their public listings.[20]

This section profiles founders whose firms have reached scale ("scaleups") across the EBRD regions. A scaleup is defined as a startup that has raised at least US$ 15 million in cumulative funding, employs at least 50 people or carries a valuation of more than US$ 100 million. It then examines the financing of these ventures, looking at the geography, sectoral composition and origin of venture capital.

What founder experiences distinguish the firms that reach scale? Chart 4.12 shows the percentage gap in prevalence between scaleups and the rest of the startup population for five founder and financing characteristics: international study or work before founding; having at least one co-founder; having held a director-level or more senior position; having raised funds from a

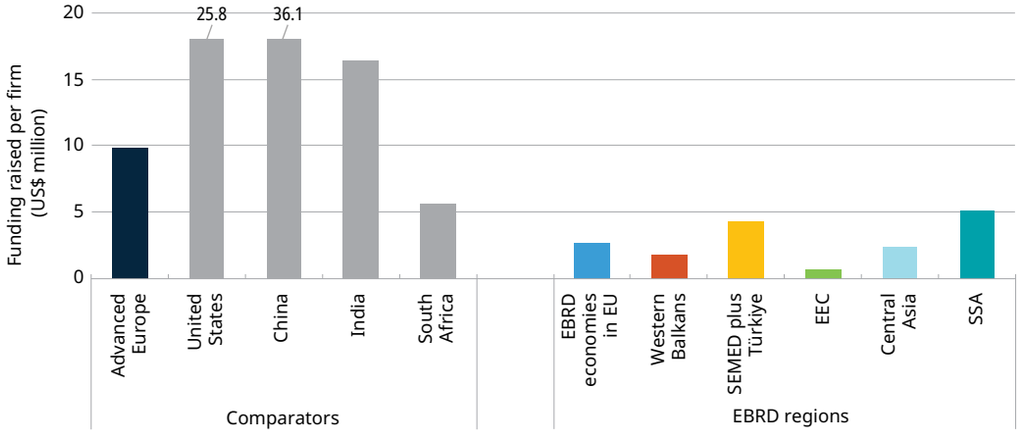
CHART 4.12 Founders of scaleups are more likely to have had a senior pre-founding role and had previous experience as a founder



SOURCE: Dealroom (n.d.), Revelio Labs (n.d.) and authors' calculations.
NOTE: Each bar indicates the percentage-point difference in the prevalence of a founder or firm characteristic between startups at scale and other startups; whiskers denote 95 per cent confidence intervals, with standard errors clustered by firm. "International experience" (meaning the founder studied or worked outside the founding economy before founding) and "senior pre-founding role" (meaning the last pre-founding job was at director level or above) are measured using Revelio Labs data on firms matched to a Revelio founder; see the notes on Chart 4.5. "Serial founder" (meaning at least one founder already had a previous venture at the time of founding), "multi-founder team" (meaning Dealroom records at least two founders) and "foreign investor" (meaning at least one investor was headquartered outside the founding economy) are measured using the full Dealroom sample. The sample comprises firms founded in 2015-24. "Advanced Europe" comprises France, Germany, Italy, Portugal, Spain, Sweden and the United Kingdom.

[19] See Haltiwanger et al. (2016) and Criscuolo, Gal and Menon (2014).
[20] See Lerner and Nanda (2020).

CHART 4.13 Startups in the EBRD regions raise less venture capital per firm than those in advanced Europe and other comparator countries



SOURCE: Dealroom (n.d.) and authors' calculations.
NOTE: Each bar denotes the mean funding raised per firm, in US$ million by region. A firm enters the sample if it records at least one round classified as "accelerator" or "incubator", "seed", "early-stage venture capital", "late-stage venture capital" or "growth and expansion". Funding is the firm's all-time total disclosed amounts for those rounds in nominal US dollars. A firm whose rounds carry no disclosed amount is imputed as zero. Firms are allocated to regions on the basis of their current headquarters. The figures shown are the means of venture capital per firm across countries within a region, weighted by the number of in-sample firms. Bars taller than India's have their height capped so that the smaller groups remain readable, with their true values printed above them; every other bar is drawn at its true height. "Advanced Europe" comprises France, Germany, Italy, Portugal, Spain, Sweden and the United Kingdom.

In the Western Balkans, EEC, and SEMED and Türkiye, between a **THIRD** and **TWO-FIFTHS** of serial founders' ventures are in a different economy to the previous one

foreign investor; and having founded a firm before. Two of these consistently distinguish scaleups from other startups across all regions: multi-founder teams are 20-29 percentage points more common among scaleups, while foreign investors are 17-34 percentage points more prevalent. The traits that most strongly distinguish scaleups from other startups are having foreign investment (in advanced Europe and the EEC region) and having a team of founders (in SSA and in SEMED and Türkiye).

Across the EBRD regions, scaleups are 9-19 percentage points more likely than other startups to have a founder who held a senior position in another firm prior to founding their own. In advanced Europe, there are no links between such pre-founding senior-level experience and scale. While in most EBRD regions, more than half of all growth-oriented founders studied or worked abroad prior to founding their companies (see Chart 4.5), founders' international experience is only strongly associated with scaleups in SSA. Where domestic capital markets and entrepreneurial ecosystems are deep, local networks, mentoring and early-stage finance are available without going abroad. Where they are thin, founders who have been abroad can access capital, know-how and contacts that others cannot, and the trait becomes a determinant of which firms grow.[21]

Lastly, prior founding experience is equally important in all regions: serial founders are 14-18 percentage points more prevalent among scaleups than other startups. This is consistent with the earlier finding that serial founders reach later funding stages more often.

ACCESS TO VENTURE CAPITAL AND FIRM GROWTH

Access to venture capital is also a powerful tool when it comes to scaling up. Startups in the EBRD regions raise relatively little venture capital per firm (see Chart 4.13). Consequently, it is more appropriate

[21] See Nanda and Khanna (2010).

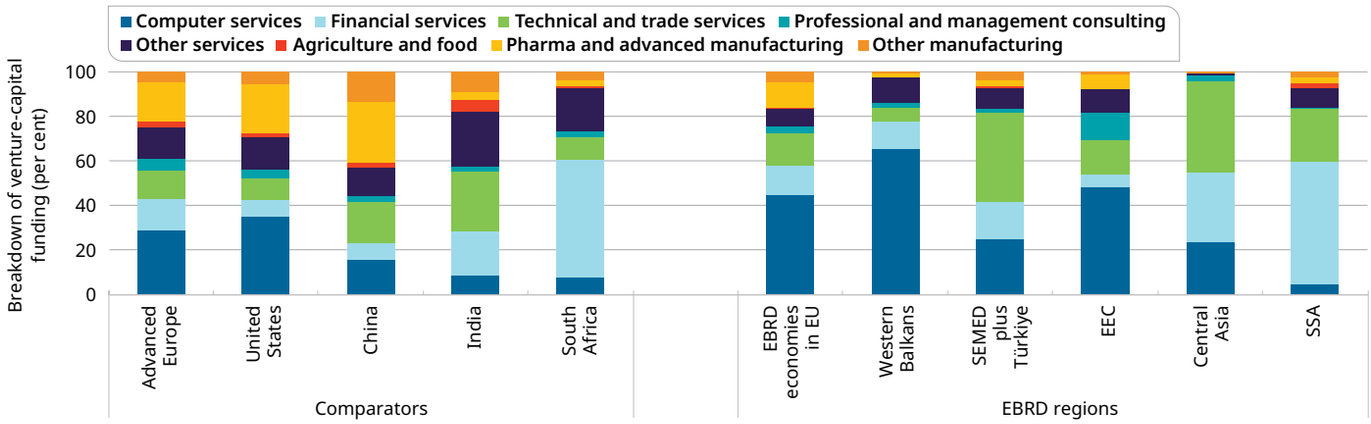
to evaluate them against other middle-income comparators. Funding per firm in the United States and China runs to tens of millions of US dollars, but on the back of capital markets with a depth that no EBRD economy has. On average, India's startups raise around US$ 16.5 million each and South Africa's US$ 5.6 million. No EBRD region achieves the South African figure. SSA comes closest, at US$ 5.1 million, with SEMED and Türkiye following at US$ 4.3 million.

Venture-capital funding is not spread evenly among the EBRD regions. Firms in the EEC region raise US$ 0.7 million, on average, roughly one-seventh of the SSA figure and the lowest of any group shown. Figures for EBRD economies in the EU, Central Asia and the Western Balkans range between US$ 1.7 million and US$ 2.6 million per firm. This ranking does not correlate strongly with economic or financial development. In SEMED and Türkiye and in SSA, fewer startups reach the venture-capital stage than in EBRD economies in the EU, but the average deal per startup is larger.

In capital-scarce environments, the quality of funding may be as important as the quantity. Evidence indicates that growth capital such as private equity creates value not only through the provision of funding, but also by fostering operational and managerial improvements, boosting employment and sales long after investors have exited.[22]

Venture capital in the EBRD regions flows overwhelmingly into services (see Chart 4.14). Services attract more than four-fifths of all venture funding in every EBRD region, compared with around three-quarters in advanced Europe and only about half in China. This largely mirrors the sectors where startups themselves cluster (see Chart 4.7): funding tends to follow the emergence of startups, rather than determine it. Within services, the concentration is sharper still, with funding usually dominated by just one or two categories, which differ from region to region. Computer services dominate in the Western Balkans, soaking up roughly two-thirds of all venture funding, and they account for close to half in EEC and EBRD economies in the EU. In SSA, in contrast, financial services account for a little over half of all funding, reflecting the region's prominent payments and mobile-money firms. Technical and trade-related services lead in Central Asia and in SEMED and Türkiye. Advanced Europe stands apart: no single category accounts for more than about a third, and funding is spread more evenly across services.

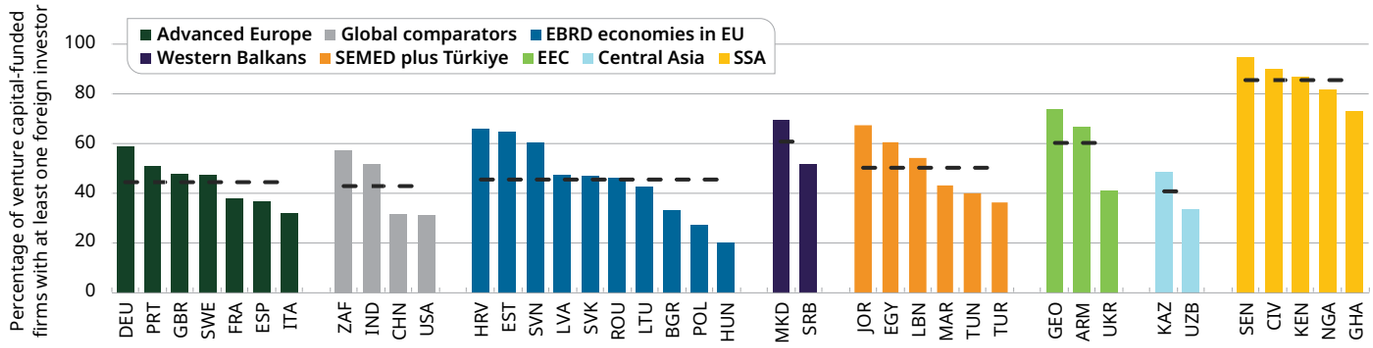
CHART 4.14 In every EBRD region, at least 80 per cent of venture capital is concentrated in services



SOURCE: Dealroom (n.d.) and authors' calculations.
NOTE: Each bar represents a region, and its segments denote each category's share of the region's total venture-capital funding. Coverage, product-code assignment and category definitions are as in Chart 4.7. "Advanced Europe" comprises France, Germany, Italy, Portugal, Spain, Sweden and the United Kingdom.

[22] See Biesinger et al. (2020).

CHART 4.15 Most growth-oriented startups have at least one foreign investor, particularly in SSA



SOURCE: Dealroom (n.d.) and authors' calculations.
NOTE: Each bar represents an economy and its height denotes the percentage of that economy's venture capital-funded firms that have at least one foreign investor. An investor is deemed to be foreign when its headquarters and the headquarters of the firm in question are located in different economies. The denominator is firms that raised funding in any staged round, from pre-seed to Series F. Investor-economy information covers about 96 per cent of staged transaction-investor links, and firms with no identified investor cannot be flagged as foreign backed. Economies with fewer than 10 venture capital-funded firms have been omitted. The horizontal dashed lines are unweighted means for the economies shown in each region. "Advanced Europe" comprises France, Germany, Italy, Portugal, Spain, Sweden and the United Kingdom.

Services absorb more than **FOUR-FIFTHS** of all venture funding in every EBRD region

What venture capital in the EBRD regions barely funds at all is pharmaceuticals and advanced manufacturing. These sectors absorb around a fifth to a quarter of all venture capital in China, the United States and advanced Europe, but only a fraction of that in the EBRD regions – about a tenth of total funding in EBRD economies in the EU, less in EEC and next to nothing elsewhere.

Reliance on foreign investors varies more within the EBRD regions than between those regions and advanced Europe. Chart 4.15 reports, for each economy, the percentage of growth-oriented startups that have at least one investor headquartered abroad. This share ranges from 20 per cent in Hungary to 95 per cent in Senegal. EBRD economies in the EU average around 45 per cent, matching advanced Europe, while Central Asia sits slightly below.

Reliance on foreign investors is consistently high across SSA, averaging around 85 per cent. Recent work on startup financing in the region attributes the scarcity of domestic equity to three factors, each of which has a counterpart in other EBRD regions.[23] The first is the supply of local equity capital, which is small relative to the savings that could, in principle, fund it. The second is the pool of local entrepreneurs able to attract startup finance at all. The third is the set of frictions limiting those entrepreneurs' access to foreign investors, which means that capital reaches founders who are already connected to it rather than those with the strongest ventures.

The first and third factors lend themselves most readily to policy intervention. On the supply of local equity capital, the binding constraint is rarely a regulatory ceiling: pension funds and insurers across SSA hold substantial and fast-growing assets, but use only a small fraction of their permitted allocation. What holds institutional investors back is complex fund licensing, a thin pipeline of investable opportunities

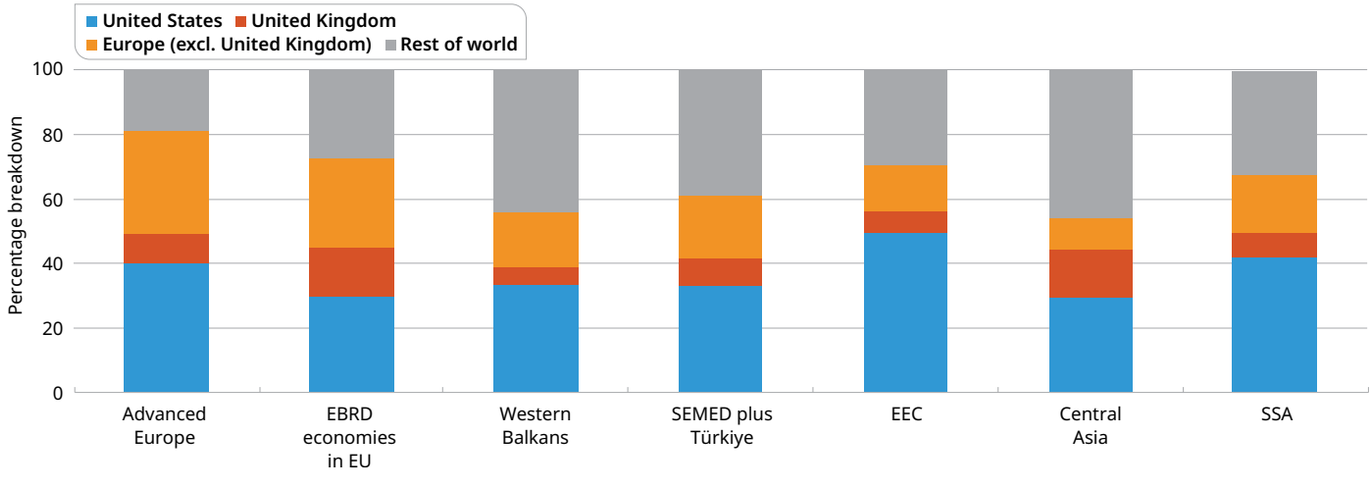
[23] See Colonnelli et al. (2026).

and the narrow set of fund managers with which most institutions deal. One option is to set a floor, in addition to a ceiling, on pension funds' allocations to private equity and venture capital, the asset class that funds later rounds. Where prudential rules have traditionally capped allocations to risky, illiquid assets in order to protect beneficiaries, a floor puts the same institutional capital to developmental use. In May 2025, for example, Ghana's National Pensions Regulatory Authority directed pension funds and insurers to allocate at least 5 per cent to private equity and venture capital by 2026. The success of minimum-allocation requirements generally depends on sequencing and safeguards: local fund-management capacity and a credible deal pipeline need to be in place, with requirements phased in alongside limits on individual-fund concentration, since a mandated inflow into a thin market risks chasing too few deals.

Frictions in access to foreign capital, in turn, are shaped by policy as well. Restrictions on foreign ownership work against the channel that supplies most startup finance at scale: in Tunisia, foreign equity of more than 49 per cent in most onshore non-industrial companies requires government authorisation, a constraint the 2019 Startup Act aims to circumvent (see Box 4.3).

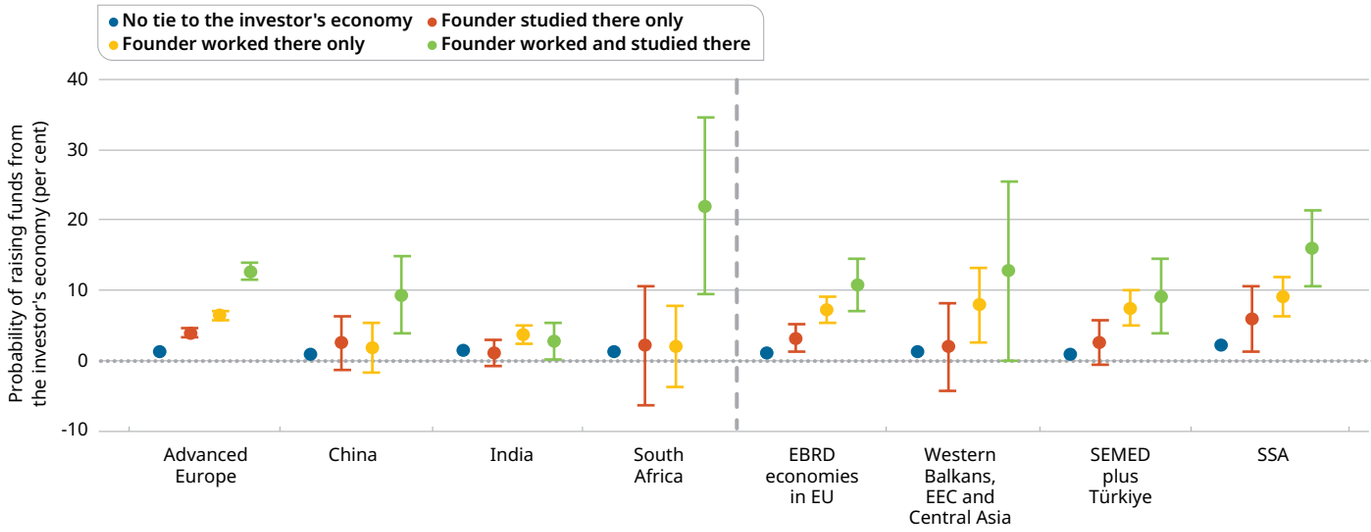
As with international experience, most foreign venture capital originates in the United States, the United Kingdom and Europe (see Chart 4.16). The United Kingdom plays a smaller role as a source of finance than as a source of founders' experience. EBRD economies in the EU are similar to advanced Europe in terms of the distribution of foreign-investor participation, but with a larger share coming from the United Kingdom. Other EBRD regions are less similar: the Western Balkans and Central Asia draw close to half of their venture capital from outside this concentrated set of countries, while SSA and EEC depend heavily on the United States, in particular.

CHART 4.16 The overwhelming majority of foreign venture capital comes from the United States, the United Kingdom and Europe



SOURCE: Dealroom (n.d.) and authors' calculations.
NOTE: The founding economy is taken from Dealroom, where available, and is otherwise the current location of the firm's headquarters. Only foreign capital is shown, meaning capital from investors headquartered outside the firm's founding economy, and the bars show the composition of foreign-investor participation, with each foreign investor in a round counted once. Here, "advanced Europe" comprises the EU-15 plus Norway and Switzerland, and excludes the United Kingdom, so it is a broader group than the "advanced Europe" comparator defined in the notes on the previous chart.

CHART 4.17 Founders are more likely to raise funds from economies where they have studied and/or worked



SOURCE: CEPII Gravity Database (Conte, Cotterlaz and Mayer, 2022), Dealroom (n.d.), Revelio Labs (n.d.) and authors' calculations.
NOTE: Points show the estimated probability that a founder's startup raised funding in a staged venture-capital round, from pre-seed to Series D and above, from an investor headquartered in a given economy, by EBRD region of the startup's current listed headquarters. A founder studied or worked in an economy if any university attended or any job held before founding was located there. The four rows per region are the mutually exclusive combinations of the founder's ties to that economy, from a single regression interacting one tie with the other. Each observation pairs a founder with one of the 94 investor economies backing at least five staged deals in EBRD economies, excluding the startup's own economy. The sample comprises 27,959 startups and 64,867 Revelio-matched founders. See Box 4.4 for the specification. "Advanced Europe" comprises France, Germany, Italy, Portugal, Spain, Sweden and the United Kingdom.

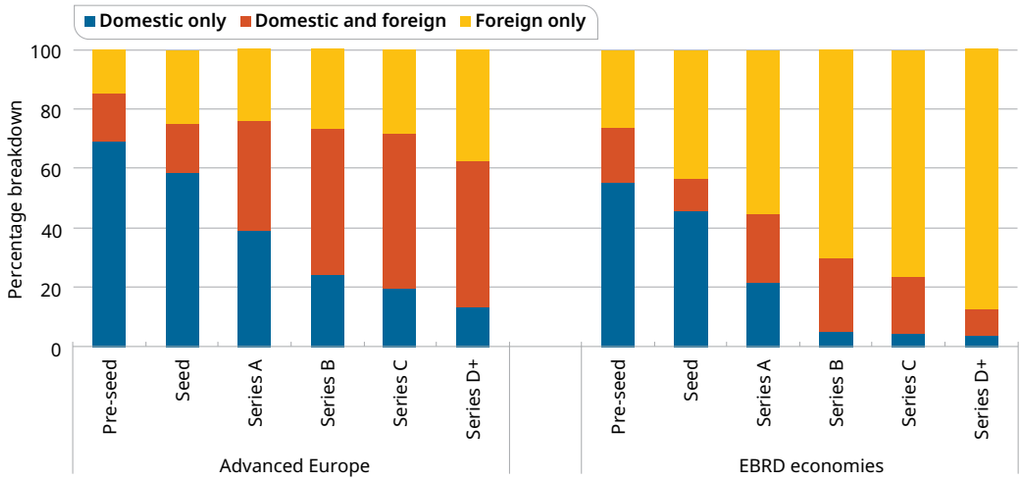
FOUNDERS' TIES SHAPE CAPITAL FLOWS

Relationships matter when it comes to the question of how venture capital is allocated. Better-networked venture-capital firms see better fund performance and their companies are more likely to survive to later financing rounds.[24] Chart 4.17 shows how this plays out in the EBRD economies. The markers correspond to estimates of the probability that a firm will raise capital from a given investor economy, conditional on whether its founder studied or worked there, controlling for distance, deal year, and investor and firm characteristics (see Box 4.4). Probabilities are estimated for each EBRD region and comparator in four cases: no tie to the investor's economy, study only, work only, and both study and work.

Having studied and/or worked in the investor's economy raises the probability of investment across almost the entire sample, with India the sole exception. This effect is larger in the EBRD regions than in South Africa, India or China, and larger still for advanced European comparators. In an advanced European economy, having both studied and worked there doubles the probability of raising capital from that economy relative to work experience alone and triples it relative to study alone.

[24] See Hochberg, Ljungqvist and Lu (2007).

CHART 4.18 Founders in the EBRD regions lean more on foreign capital than those in advanced Europe, especially at the scaleup stage



SOURCE: Dealroom (n.d.) and authors' calculations.
NOTE: Bars show percentage breakdowns of venture-capital funding rounds by investor composition across funding stages for firms founded in the EBRD regions, compared with advanced European comparators, using the full Dealroom sample. Funding is classified as "domestic only", "domestic and foreign" (a mixed syndicate) or "foreign only" based on investors' origin relative to the founding economy. The founding economy is taken from Dealroom, where available, and is otherwise the current location of the firm's headquarters. Non-venture growth rounds and rounds with no classifiable investor location are excluded. "Advanced Europe" comprises France, Germany, Italy, Portugal, Spain, Sweden and the United Kingdom.

Reliance on foreign capital is most pronounced at later funding stages, where the sums required are largest. Chart 4.18 shows the percentages of startups that are funded by three investor groups: domestic investors only, a combination of domestic and foreign investors, and foreign investors only. At pre-seed and seed stage, the distribution in EBRD economies is broadly comparable to that in advanced Europe. After that, the two diverge. Startups in EBRD economies draw increasingly on foreign capital as they mature, and by the pre-scale stage (Series D and above), they rely on it almost exclusively. Reliance also rises across stages in advanced Europe, but the share funded entirely from abroad remains lower and relatively stable until the latest stages.

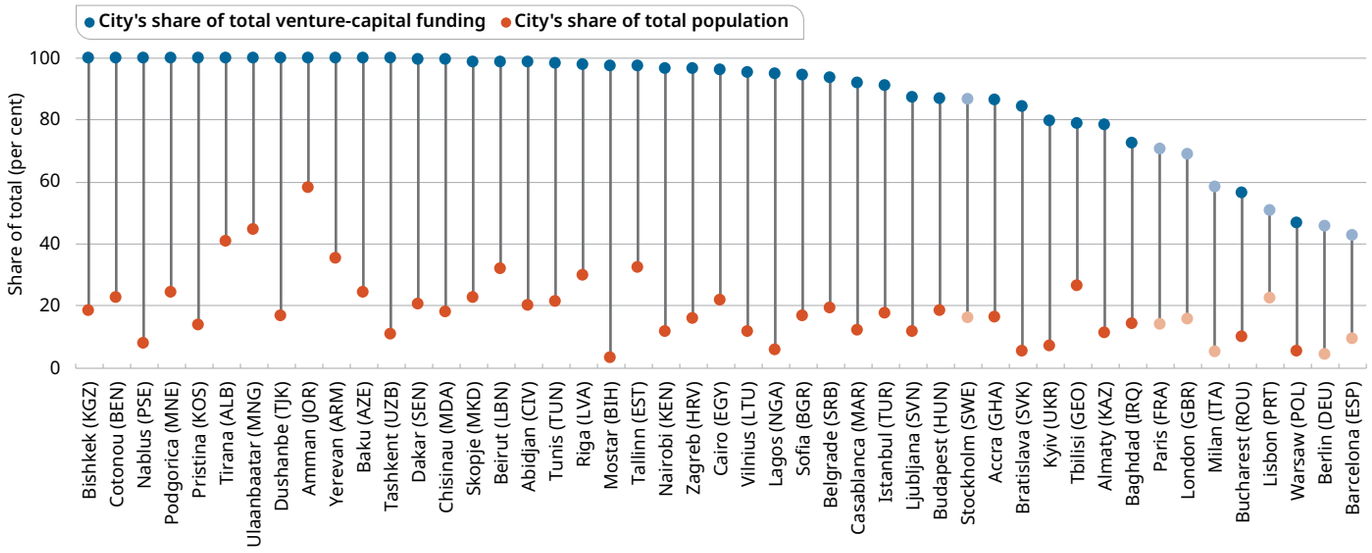
Venture capital in the EBRD regions is concentrated not only by sector and source, but also geographically within economies. Much of what makes an entrepreneurial ecosystem work is set at the national level: the depth of capital markets, financial regulation, the rule of law and the funding of universities. What startups draw on from day to day is more local. Founders have a disproportionate tendency to come from firms that are already operating in the same city, hiring is dependent on a deep local market for a narrow set of skills, and investors monitor and advise companies they can reach easily.[25] Venture activity, therefore, clusters more tightly than population does – a pattern documented in both advanced and emerging market economies.[26]

In most EBRD economies, this clustering is close to absolute (see Chart 4.19). In 14 of the economies shown, the leading metropolitan area accounts for 99 per cent or more of recorded venture funding, with those cities including Amman, Baku, Bishkek, Dushanbe, Podgorica, Pristina, Tashkent, Tirana, Ulaanbaatar and Yerevan. While this is not a problem in small economies, such

In 14 EBRD economies, a single city accounts for **99% OR MORE** of all recorded venture-capital funding

[25] See Gompers, Lerner and Scharfstein (2005).
[26] See Chen et al. (2010).

CHART 4.19 In most EBRD economies, venture capital is concentrated in one city, with the city's share of capital far exceeding its share of the population



SOURCE: Dealroom (n.d.), GeoNames (2026), United Nations (2025), World Development Indicators (World Bank, n.d.) and authors' calculations.
NOTE: This chart shows the key metropolitan areas for venture-capital funding in each economy, indicating the city's share of the economy's disclosed venture-capital funding and its share of the economy's population. Lighter markers denote cities in advanced European comparators. Firms are assigned to metropolitan areas based on the location of their headquarters, with GeoNames places of at least 15,000 inhabitants merged within 40 km. The city's share of the total population is the mid-2025 population of United Nations urban centres within the same radius, a tighter delineation than administrative city limits, relative to population data for the entire economy from the World Bank. Economies with fewer than 10 geocoded firms have been omitted.

concentration is not limited to economies of that size. Tunis soaks up 98 per cent of Tunisia's venture funding but houses only 21 per cent of its population; Nairobi absorbs 97 per cent of funding but is home to just 12 per cent of inhabitants; and Istanbul receives 91 per cent of venture funding, even though just 18 per cent of the population live there. The advanced European comparators are markedly less concentrated. Only two EBRD economies are similar to the average for those comparators in terms of concentration: Poland, where Warsaw takes 47 per cent of venture funding, and Romania, where Bucharest takes 57 per cent. Both countries are among the region's larger economies, with several sizeable university cities, which is consistent with more than one place being able to sustain a venture ecosystem.

Concentration of this kind is not, in itself, a problem. Clusters exist because proximity to investors, skilled workers and other founders raises the odds of a venture succeeding. When a country's entire venture market exists in one metropolitan area, founders elsewhere are potentially separated from it by distance rather than by the quality of what they build.

CONCLUSIONS AND POLICY IMPLICATIONS

The binding constraint in the EBRD regions is company growth, not company creation. Nothing in the evidence points to a shortage of founders or startups. There are several EBRD economies where growth-oriented startups are at least as prevalent as in advanced Europe, but they remain smaller than their advanced European counterparts at every stage and the gap widens rather than closes over the firm's lifecycle. In EBRD economies in the EU, the share of young firms achieving rapid growth has fallen steadily over the past two decades, even as productivity has continued to converge towards the frontier across the distribution. Whether that convergence continues or stalls will depend on firms' ability to make the transition from startup to scaleup.

Founders bring a wide range of experience to that transition. In most EBRD regions, more than half of all growth-oriented founders studied and/or worked abroad before launching their firm, drawing on a mix of global hubs and regional links. Serial founders are roughly as common in the EBRD regions as they are

in advanced Europe, and what carries value from one venture to the next is prior success rather than prior experience. At the same time, entrepreneurial careers in EBRD regions are more likely to be cross-border than they are in comparator countries, with second ventures far more likely to be founded in a different economy to first ventures.

The finance available to those founders, in contrast, is thin, narrow and concentrated. Startups in every EBRD region raise less venture capital per firm than those in middle-income comparators, and what they do raise goes overwhelmingly to services, pooling in a small number of categories, with relatively little reaching advanced manufacturing. Reliance on investors abroad (primarily in the United States, the United Kingdom and advanced Europe) rises with each funding stage, so that by the scaleup round, most capital comes from outside the founding economy.

Together, these findings set the terms for policy. Founder and firm characteristics shift the odds that a venture will scale up, but they leave most of the outcome unexplained, so schemes that stake public resources on picking individual winners in advance face long odds. What policy can shape instead is the environment in which many ventures attempt to grow: the depth of domestic finance, the stock of experienced founders, the use made of cross-border ties, and the geographic reach of investment.

On finance, foreign capital will remain important, but it cannot replace the development of domestic capital markets. Pension funds and insurers have a promising pool of long-horizon domestic savings, large enough for this asset class, yet where prudential rules already permit allocations to private equity and venture capital, those allowances often go unused. Some regulators have responded by setting minimum allocations in addition to ceilings, although such mandates carry risks: pension assets are held on behalf of beneficiaries and, in a thin market, a floor may bid up the price of the few later-stage deals available rather than increase the number of firms that reach them. Publicly backed funds of funds are another option, as they can help build the track record that domestic institutions need before they are prepared to take these risks on their own account. Which instrument is right depends on the constraint: where long-horizon domestic savings are scarce, pension and insurance reform comes first; where funds already exist but have too few firms to back, the problem lies further upstream.

The stock of experienced founders is a second asset that policy can build on. Because every venture that comes to an end returns an experienced founder to the ecosystem, the treatment of business failure matters as much as the treatment of business formation. Insolvency regimes that discharge honest failure quickly, without criminal or reputational consequences being carried over into the founder's next attempt, keep that stock in circulation. Similarly, the tax treatment of employee share options can determine whether the employees of a successful firm accumulate the capital and appetite that are required to found their own company.

Lastly, the region's cross-border founder base is an advantage that its market size would not otherwise deliver, and the task for policymakers is to make those connections worth deploying at home. Diaspora investment vehicles, workable foreign-currency and cross-border payment arrangements for early-stage firms, and tax treatment that does not penalise reinvestment from abroad all lower the cost of routing capital and expertise back through founders who have already raised, hired and sold in more than one market.

BOX 4.1 THE SCALEUP LEGACY OF SKYPE

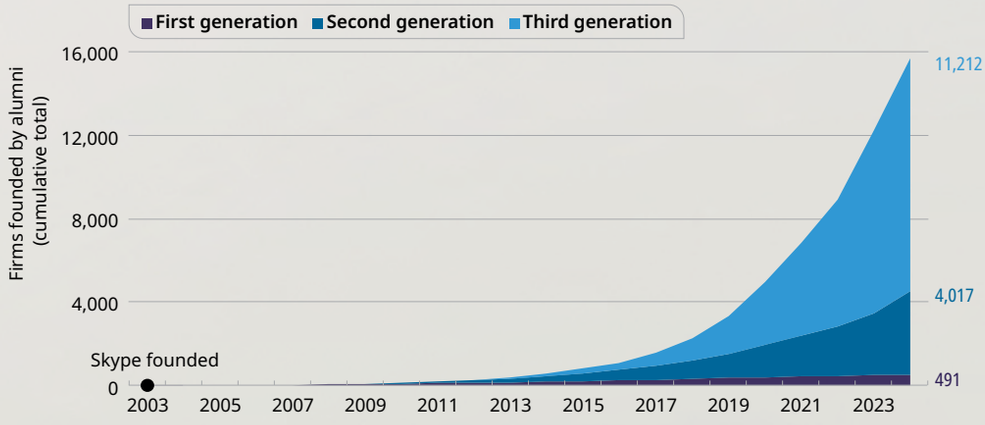
Successful scaleups may contribute to entrepreneurial ecosystems beyond the employment, output and innovation they generate directly, when their employees go on to establish ventures of their own. This box looks at such "entrepreneurial spawning" by examining the entrepreneurial footprint associated with Skype, an internet telephone and video-calling company that was acquired by Microsoft in 2011 and retired as a service in 2025. Skype was one of the first tech companies originating in Estonia to become a global household name. Using employment histories from Revelio Labs,[27] this box identifies all employees recorded as having worked at Skype since its founding in 2003 and looks at whether they subsequently founded firms themselves.

After joining Skype, 9.4 per cent of its employees went on to found a firm, compared with just 2.6 per cent of workers who began a job at a different company in the same economy in the same year. This differential remains when Skype alumni are compared with workers entering at similar levels of seniority. By 2024, Skype alumni had (co-)founded 491 first-generation companies, including Bolt (which developed a ride hailing app), Wise (a fintech company) and Pipedrive (which provides customer relations management software).

The firms founded by Skype alumni, in turn, became the origins of founders themselves. Employees of those 491 firms founded 4,017 second-generation firms, while employees of the second generation founded a further 11,212 third-generation firms. In total, more than 15,700 companies worldwide are connected to Skype through successive employment-to-founding links (see Chart 4.1.1). Of the 2,092 companies that have originated in Estonia since 1995, Skype ranks first in terms of the number of firms that its alumni have gone on to found. Moreover, this activity is highly concentrated: the top 1 per cent of those 2,092 companies are linked to 38 per cent of all alumni-founded firms, and Skype alone is linked to 1 in 12.[28]

CONTINUED

CHART 4.1.1 More than 15,700 firms worldwide can be traced back to Skype through chains of employment



SOURCE: Revelio Labs (n.d.) and authors' calculations.
NOTE: This chart traces the cumulative genealogy of firms worldwide that are connected to Skype through employment-to-founding links over the 2003-24 period. First-generation firms are founded by Skype alumni; later generations are founded by alumni of the preceding generation.

[27] See Revelio Labs (n.d.).

[28] Companies are counted as having originated in Estonia if at least one-fifth of their workforce was located there in their first five years.

BOX 4.1 CONTINUED

9.4%
of Skype's former employees went on to start a firm, seeding more than
15,700
companies over three generations

The data also reveal ongoing professional and financial relationships between some of the connected firms and Skype alumni. In total, 36 firms were co-founded by multiple alumni, while 278 alumni later joined firms founded by former Skype colleagues. With 87 of Skype's former employees later taking up investor roles, 22.7 per cent of first-generation firms with investors in Dealroom received funding from at least one other former employee, while 8 per cent of those firms share at least one investor with Skype itself.

Lastly, compared with the median firm founded in the same economy in the same year with no links to Skype, the median first-generation firm raises roughly 1.8 times the amount of first-round funding, reaches that first round about five months sooner and accumulates 2.4 times as much disclosed equity within three years of its first round.[29]

This analysis cannot establish why Skype sits at the root of such a large and interconnected lineage; its high rate of entrepreneurship may reflect worker selection, the experience and networks acquired at the firm, exposure to entrepreneurial peers, or some combination of these factors. What it does illustrate is that the return on a single successful scaleup extends well beyond the employment, output and innovation it generates directly. A firm that achieves global scale can become part of the entrepreneurial infrastructure of its economy: a recurring source of founders, experienced employees and, as the reappearance of alumni as investors shows, risk capital that stems from earlier success. Seen this way, the contributions of a small number of firms that make the transition from entry to scale may compound over time in a manner that standard, contemporaneous measures of firm performance do not capture. That potential strengthens the case for policies that ease the scaleup constraints identified in this chapter and keep open the channels through which talent and capital circulate (including across borders).

[29] Based on equity rounds for venture-tracked firms in Dealroom (n.d.).



BOX 4.2 MEASURING THE RETURNS ON PRIOR FOUNDING EXPERIENCE

Regardless of whether an earlier venture succeeded, founding a company generates know-how and network connections that a founder can draw on in the future. At the same time, however, investors, employees and commercial partners may be discouraged by a track record of failure if an earlier venture did not succeed.

The analysis reported in Chart 4.10 follows research from the United States and applies the same design to ventures headquartered in the EBRD regions.[30] In this probit regression framework, the probability of a venture achieving a given outcome is linked to a dummy variable for founders with an earlier venture, a separate dummy variable for an earlier venture that succeeded before the current one was founded, company age at the time of the first funding round, and the experience of the venture-capital firms participating in that round, as well as fixed effects for sector, headquarters economy, founding cohort and entry stage.

Four outcomes are examined: reaching a Series A round or later; reaching a Series B round or later; realising an exit through an initial public offering or acquisition; and the founder subsequently becoming an angel investor in another firm. The first three are venture-level outcomes. The fourth is a founder-level outcome and is estimated without the control for venture-capital firm experience. A prior realised exit is the benchmark for the exit outcome; a prior Series A round is the benchmark for the other three outcomes.

The Dealroom data on ventures in the EBRD regions cover ventures that were founded between 2010 and 2024 and raised at least one round of venture capital.[31] For the exit outcome, the sample is restricted to cohorts founded in or before 2020. Each venture enters the data at the time of its first funding round, which removes any differences arising from where firms are in their lifecycle; a founder may appear in several ventures, and a venture with several founders will appear once per founder. Standard errors are two-way clustered, by company and by founder, to account for this.

The predicted funding rate for previously successful founders is obtained by switching on both dummy variables for every venture in the sample, holding its other characteristics fixed and averaging the predicted probabilities, while the coefficient for prior success captures the difference in outcomes between serial founders who succeeded previously and those who failed.

[30] See Gompers et al. (2010).

[31] See Dealroom (n.d.).

BOX 4.3 TUNISIA'S STARTUP ACT AND ITS IMPACT ON FIRM SURVIVAL AND JOB CREATION

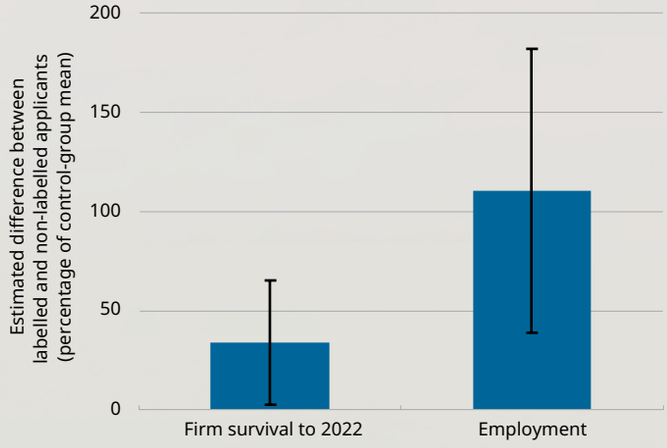
As young firms account for a disproportionate share of job creation and productivity growth, governments in both advanced and developing economies are introducing targeted measures to encourage their creation and growth.[32] These policies typically seek to ease the financial and administrative constraints faced by young and small firms through instruments such as grants and other forms of capital support, or employment and wage subsidies.[33] Rigorous assessments of the effectiveness of these programmes are scarce, particularly in developing economies. The evaluation of Tunisia's Startup Act in Ali, Calì and Rijkers (2025) provides quasi-experimental evidence on this question.

In an effort to support innovative firms, the Startup Act, adopted in Tunisia in 2019, introduced the "Startup Label", a merit-based designation that gives selected firms access to a range of financial and regulatory benefits. Once it has been labelled in this way, a firm receives benefits including full social security coverage, corporate tax exemptions, access to foreign-currency bank accounts, easier customs procedures (based on "Authorised Economic Operator" status) and, in certain cases, a founder stipend and a technology card (a prepaid international payment card that enables resident firms to pay for digital services from abroad in a foreign currency). The label is awarded following a multi-stage voting process by a nine-member expert committee. Firms with at least five affirmative or five negative votes are accepted or rejected immediately. Firms on which the committee is undecided are sent to a "pitch stage". These marginal cases are arguably highly comparable, reducing concerns about selection bias when comparing the performance of label recipients with that of other firms.

Linking the programme's voting records to the Répertoire National des Entreprises, an administrative register of firms' tax, social security and customs records, Ali, Calì and Rijkers (2025) follow the 466 firms that applied between 2019 and 2021 through to the end of 2022. In particular, they track the performance of the 118 marginal pitch-stage firms and compare the outcomes for the accepted and rejected applicants using a difference-in-differences design that accounts for the staggered timing of labelling.

By the end of 2022, labelled firms were 18 percentage points more likely to remain active than the rejected firms (for which the survival rate was 53 per cent; see Chart 4.3.1). Similarly, labelled firms increased their staff by an extra 110 per cent (two full-time workers) on average, in addition to increasing their annual wage bill. These gains were driven primarily by growth within surviving firms, rather than reductions in firm exits. Further analysis suggests that these gains were primarily enabled by preferential customs treatment and access to foreign exchange afforded by the programme.

CHART 4.3.1 Tunisian firms awarded the Startup Label are more likely to survive and add employment



SOURCE: Ali, Calì and Rijkers (2025).
NOTE: Estimates are taken from published tables. Effects are expressed as a percentage of the control-group mean; 90 per cent confidence intervals are shown.

[32] See Juhász, Lane and Rodrik (2024).
[33] See Betcherman, Daysal and Pagés (2010).



The programme is estimated to have generated TND 2.7 (€0.81) in benefits for every TND 1 (€0.30) of public expenditure, taking into account stipend payments, administrative expenses and forgone tax and social-security revenues. The implied public cost per additional full-time job created was approximately TND 14,606 (€4,400).

While the Startup Act has improved firm survival and employment and generated positive returns on public spending, its impact remains modest relative to the programme's stated ambitions. At the time the paper was published, only 17.4 per cent of labelled firms had achieved the programme's target of having 10 or more waged employees in total within three years of receiving the label, and the programme was not on track to achieve its goal of generating 10,000 jobs by 2025.

BOX 4.4 FOUNDER-INVESTOR CONNECTIONS SHAPE CAPITAL FLOWS

This box explains the estimates presented in Chart 4.17, demonstrating that founders who worked and/or studied in a particular economy before launching their venture have a higher probability of raising venture-capital funding from that economy. The estimates are based on a linear probability model, which links a dummy variable capturing whether a founder obtained venture-capital funding from a particular economy to variables capturing their experience of studying there and working there.[34] Specifications include an interaction term capturing instances in which a founder both studied and worked in the economy in question, as well as control variables, including the distance between the economy where the recipient firm's headquarters are currently located and the investing economy, firm-economy and deal-year fixed effects, and fixed effects for each economy of education and work experience. These effects absorb differences in access to funding across economies and over time.

The analysis uses Revelio Labs data on founders and their past experience and Dealroom data on venture-capital funding for founders' companies.[35] The combined dataset contains 27,959 startups and 64,867 founders. Each observation is a combination of a founder and one of the 94 investor economies, focusing only on economies that have backed at least five staged deals in the EBRD regions (excluding the founder's own economy).

The estimated effects are likely to be conservative. While funding location is determined by the firm's current headquarters, some firms may have raised funding before moving their headquarters to the current location – instances that are not observed in the data. This may result in experience matches being undercounted in the analysis.

[34] See Colonnelli et al. (2026).

[35] See Revelio Labs (n.d.) and Dealroom (n.d.).

REFERENCES

N. Ali, M. Calì and B. Rijkers (2025)
"Promoting Innovative Startups: Quasi-Experimental Evidence from Tunisia", *Journal of Development Economics*, 177: 103539. Available at: https://doi.org/10.1016/j.jdeveco.2025.103539.

G. Betcherman, N.M. Daysal and C. Pagés (2010)
"Do Employment Subsidies Work? Evidence from Regionally Targeted Subsidies in Turkey", *Labour Economics*, 17(4): 710-722. Available at: https://doi.org/10.1016/j.labeco.2009.12.002.

M. Biesinger, Ç. Bircan and A. Ljungqvist (2020)
"Value Creation in Private Equity", EBRD Working Paper No. 242, London, EBRD. Available at: https://www.ebrd.com/home/news-and-events/publications/economics/working-papers/value-creation-in-private-equity.html.

F. Biondi, S. Inferrera, M. Mertens and J. Miranda (2025)
Declining Job Reallocation in Europe: The Role of Shocks, Market Power, and Technology, Jena Economics Research Paper No. 2025-004, Jena, Germany, Friedrich Schiller University Jena. Available at: https://www.econstor.eu/bitstream/10419/324214/1/1928122396.pdf.

T.L. Botelho, D.C. Fehder and Y.V. Hochberg (2026)
"Innovation-Driven Entrepreneurship", *Journal of Economic Literature*, 64(1): 89-140. Available at: https://www.aeaweb.org/articles?id=10.1257/jel.20251484.

L. Brandt, R. Dai, G. Kambourov, K. Storesletten and X. Zhang (forthcoming)
"Serial Entrepreneurship in China", *American Economic Journal: Macroeconomics*. Available at: https://www.aeaweb.org/articles?id=10.1257/mac.20240030.

H. Chen, P. Gompers, A. Kovner and J. Lerner (2010)
"Buy Local? The Geography of Venture Capital", *Journal of Urban Economics*, 67(1): 90-102. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0094119009000801.

E. Colonnelli, M. Cruz, M. Pereira-López, T. Porzio and C. Zhao (2026)
Startups in Africa, CEPR Discussion Paper No. 21579, Paris and London, Centre for Economic Policy Research. Available at: https://cepr.org/publications/dp21579.

M. Conte, P. Cotterlaz and T. Mayer (2022)
"The CEPII Gravity Database", CEPII Working Paper No. 2022-05, Paris, Centre d'Études Prospectives et d'Informations Internationales. Available at: https://cepii.fr/CEPII/en/publications/wp/abstract.asp?NoDoc=13432.

C. Criscuolo, P.N. Gal and C. Menon (2014)
The Dynamics of Employment Growth: New Evidence from 18 Countries, OECD Science, Technology and Industry Policy Paper No. 14, Paris, Organisation for Economic Co-operation and Development. Available at: https://doi.org/10.1787/5jz417hj6hg6-en.

Dealroom (n.d.)
"Dealroom.co", Amsterdam. Available at: https://dealroom.co (accessed July 2026).

R.A. Decker, J. Haltiwanger, R.S. Jarmin and J. Miranda (2016)
"Where Has All the Skewness Gone? The Decline in High-Growth (Young) Firms in the U.S.", *European Economic Review*, 86: 4-23. Available at: https://doi.org/10.1016/j.euroecorev.2015.12.013.

EBRD (2025)
Transition Report 2024-25: Navigating industrial policy, London. Available at: https://www.ebrd.com/home/news-and-events/publications/economics/transition-reports/transition-report-2024-25.html.

G. Gaulier and S. Zignago (2010)
BACI: International Trade Database at the Product-Level. The 1994-2007 Version, CEPII Working Paper No. 2010-23, Paris, Centre d'Études Prospectives et d'Informations Internationales. Available at: https://cepii.fr/PDF_PUB/wp/2010/wp2010-23.pdf.

GeoNames (2026)
"GeoNames geographical database: cities15000", Zürich, Switzerland. Available at: https://www.geonames.org (accessed 14 July 2026).

P. Gompers, A. Kovner, J. Lerner and D. Scharfstein (2010)
"Performance Persistence in Entrepreneurship", *Journal of Financial Economics*, 96(1): 18-32. Available at: https://doi.org/10.1016/j.jfineco.2009.11.001.

P. Gompers, J. Lerner and D. Scharfstein (2005)
"Entrepreneurial Spawning: Public Corporations and the Genesis of New Ventures, 1986 to 1999", *The Journal of Finance*, 60(2): 577-614. Available at: https://www.jstor.org/stable/3694761.

J. Haltiwanger, R.S. Jarmin, R. Kulick and J. Miranda (2016)
"High Growth Young Firms: Contribution to Job, Output, and Productivity Growth", in J. Haltiwanger, E. Hurst, J. Miranda and A. Schoar (eds.), *Measuring Entrepreneurial Businesses: Current Knowledge and Challenges*, Chicago, University of Chicago Press. Available at: https://www.nber.org/books-and-chapters/measuring-entrepreneurial-businesses-current-knowledge-and-challenges/high-growth-young-firms-contribution-job-output-and-productivity-growth.

Y.V. Hochberg, A. Ljungqvist and Y. Lu (2007)
"Whom You Know Matters: Venture Capital Networks and Investment Performance", *The Journal of Finance*, 62(1): 251-301. Available at: https://doi.org/10.1111/j.1540-6261.2007.01207.x.



IWH (n.d.)
"The CompNet Competitiveness Database", 10th vintage, Halle, Germany, Halle Institute for Economic Research. Available at: https://www.iwh-halle.de/en/about-the-iwh/research-centres/research-data-centre/compnet-database.

W. Jack and T. Suri (2014)
"Risk Sharing and Transactions Costs: Evidence from Kenya's Mobile Money Revolution", *American Economic Review*, 104(1): 183-223. Available at: https://www.aeaweb.org/articles?id=10.1257/aer.104.1.183.

R. Juhász, N.J. Lane and D. Rodrik (2024)
"The New Economics of Industrial Policy", *Annual Review of Economics*, 16: 213-242. Available at: https://doi.org/10.1146/annurev-economics-081023-024638.

F. Lafontaine and K. Shaw (2016)
"Serial Entrepreneurship: Learning by Doing?", *Journal of Labor Economics*, 34(S2): S217-S254. Available at: https://www.jstor.org/stable/26553245.

J. Lerner and R. Nanda (2020)
"Venture Capital's Role in Financing Innovation: What We Know and How Much We Still Need to Learn", *Journal of Economic Perspectives*, 34(3): 237-261. Available at: https://www.aeaweb.org/articles?id=10.1257/jep.34.3.237.

J. Lerner, A. Schoar, S. Sokolinski and K. Wilson (2018)
"The globalization of angel investments: Evidence across countries", *Journal of Financial Economics*, 127(1): 1-20. Available at: https://doi.org/10.1016/j.jfineco.2017.05.012.

R. Nanda and T. Khanna (2010)
"Diasporas and Domestic Entrepreneurs: Evidence from the Indian Software Industry", *Journal of Economics & Management Strategy*, 19(4): 991-1012. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1530-9134.2010.00275.x?msockid=2f4db1eec9d8671d3283a649c80266d8.

Revelio Labs (n.d.)
"Revelio Labs", New York. Available at: https://www.reveliolabs.com (accessed July 2026).

V. Sterk, P. Sedláček and B. Pugsley (2021)
"The Nature of Firm Growth", *American Economic Review*, 111(2): 547-579. Available at: https://www.jstor.org/stable/27027696.

United Nations (2025)
World Urbanization Prospects 2025: Summary of Results, New York. Available at: https://desapublications.un.org/publications/world-urbanization-prospects-2025-summary-results.

World Bank (n.d.)
World Development Indicators database, Washington, DC. Available at: https://datatopics.worldbank.org/world-development-indicators.