ZEW policy brief

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European Entrepreneurship: Trends in Start-ups and Scale-ups in France, Germany and the UK

This policy brief examines entrepreneurial ecosystems in France, Germany, and the United Kingdom using data on more than nine million firm births between 2009 and 2023. The study aims to assess both the quantity of start-ups and their quality, measured by their potential to become scale-ups. By analyzing regional patterns of entrepreneurship, the research provides new insights into Europe's competitiveness and the factors that influence entrepreneurial success. A key finding is that all three countries display considerable unrealized scale-up potential. While many firms exhibit characteristics associated with future growth, the number that achieve large-scale expansion falls short of expectations. This suggests that barriers to growth have become increasingly important in recent years. The study also highlights remarkable regional differences. Entrepreneurial activity in France is concentrated in major metropolitan areas such as Paris, Lyon, and Marseille. In the United Kingdom, London ranks first in terms of start-up quantity, while Cambridge and Oxford stand out for their high entrepreneurial quality. Germany presents a more decentralized pattern, with Munich emerging as a leading hub, but also research-intensive regions such as Heidelberg and Bonn showing strong performance. Unlike in the United States, where the relationship between the number of start-ups and the quality of entrepreneurship is relatively weak, European regions that generate more start-ups also tend to produce more high-quality firms. This suggests that policies encouraging entrepreneurial entry can simultaneously improve growth outcomes.

KEY MESSAGES

- Europe's entrepreneurial performance differs strongly across countries and regions, with significant variation in start-up activity.
- France has seen an increase in entrepreneurial high-growth potential, unlike Germany and the UK.
- High-growth-potential entrepreneurship is concentrated in a limited number of hubs, including major cities and smaller research-intensive regions.
- In contrast to the United States, European regions that generate more start-ups also tend to produce higher-quality firms.
- Strengthening Europe's competitiveness requires policies that not only foster start-up formation but also address barriers to scaling, including access to finance, talent, and integrated markets.

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EUROPE'S COMPETITIVENESS CHALLENGE AND NEW EVIDENCE ON EUROPEAN ENTREPRENEURSHIP

Long-term European economic performance requires more entrepreneurial quality as reflected in scale-up successes

With Europe struggling to maintain its competitive position in the global economy, policymakers are increasingly focused on revitalising business dynamism. Weak productivity growth, slower innovation and limited scale-up success challenge Europe's long-term economic performance (European Commission (2020). However, setting strategic priorities and designing effective policies based on broader strategies such as the European Startup and Scaleup Strategy requires a clear understanding of how entrepreneurial ecosystems function within Europe. New empirical evidence provides important insights into where Europe stands and which policy levers matter most (Colombo et al., 2025).

Translating start-up potential into scale-ups in France, the UK and Germany

In a recent study based on more than 9 million firm births across France, Germany and the United Kingdom between 2009 and 2023[1], we show that entrepreneurial ecosystems in Europe differ substantially in both the number of start-ups and their scale-up potential. Using information available soon after market entry, we predict scale-up events building on the methodology of the US Start-up Cartography Project proposed by Guzman and Stern (2020) and Andrews et al. (2022). The goal is to better understand regional entrepreneurial ecosystem performance as reflected in the relationship between start-up activity and scale-up potential.

In this study, we focus on four key measures[2] all constructed at the level of local administrative units:

1) The number of start-ups (N)[3] reflecting the count of new businesses in a region.
2) An entrepreneurial quality index (EQI) reflecting the expected share of scale-ups in all start-ups in a region.
3) A quality-adjusted quantity index (Regional Entrepreneurship Cohort Potential Index, RECPI) reflecting the expected absolute number of scale-ups.
4) A Regional Entrepreneurial Acceleration Index (REAI) reflecting the relation between realised scale-ups and expected number of scale-ups.[4]

The average expected share of scale-ups (EQI) in a region for the entire period is highest in Germany, followed by the UK and France. When calculating the expected number of scale-ups normalised by GDP (RECPI), which increased by a factor of about three between 2009 and 2023, we see that over the course of time France experienced a strong and steady increase. For Germany, the RECPI/GDP[5] decreased continuously over the course of time, albeit starting from higher levels[6]. For the UK, we observe an increase until 2017 and a steady decline in the RECPI since then. The UK started at higher values (0.0009), peaking at 0.0015, and 2020 values were again at levels around the starting point.

The observed rise in high-quality start-ups in France is likely not coincidental but rather attributable to the implementation of several policy programmes, such as the *Jeune Entreprise innovante initiative* (2004), the initiation of Bpifrance (2012), the introduction of the French Tech Mission

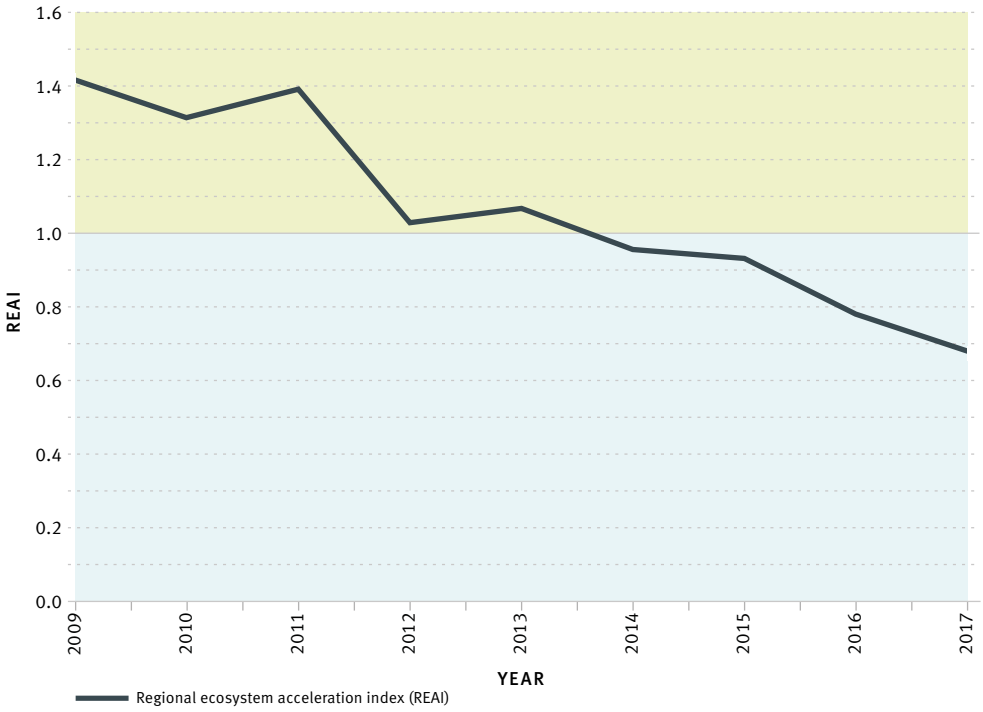
1 For the UK, our time series ends in 2020.
2 See Colombo et al. (2025) for a description of the types of firms included in the count and also for a detailed description of the construction of these indices.
3 The number of startups (N) included in the study differs between countries, as a result of the focus on limited liability companies, with 1.99 million in France, 4.91 million in the UK and 1.54 million in Germany. This reflects the distinct systems of legal structures that have historically developed.
4 A positive number implies that the number of realised growth events is larger than the prediction based on firm characteristics.
5 GDP measured in million.
6 0.00032 in Germany in 2009 versus 0.0002 in France in 2009.

(2013), Station F – a large start-up campus (2017), stock option reforms (BSPCE stock options for start-up employees), and simplified start-up registration and legal structures. Germany has so far focused its policy initiatives on improving conditions for seed funding, for example by introducing the Hightechgründerfonds (2005) and Coparion Fonds (2016) and the INVEST business angel tax credit (2013), and by supporting science-based entrepreneurship through the EXIST programme (2010). More recently, the German Future Financing Act (Zukunftsfinanzierungsgesetz), which came into force in 2023, has implemented several changes and amendments to existing regulations to improve access to capital and make employee ownership more attractive. The effects of these more recent policy programmes are, naturally, not yet reflected in the observed time trends. As we are ultimately interested in the realisation of scale-up potential, we need to better understand the circumstances and differences in regional entrepreneurial ecosystems that contribute to scale-up success. We illustrate the extent to which an entrepreneurial ecosystem successfully translates potential into realised scale-up performance, using REAI in Figure 1. Values bigger than one can be interpreted as an overperformance compared to the predicted scale-up performance. An REAI below one indicates that the realisation of scale-up events is below the expected values.

For France, the REAI was above one until 2013, indicating that France had more realised scale-up events than predicted by our model. For Germany, the REAI was below one in the late 2000s and reached a peak in 2015. Like France, the UK had a high REAI until 2011 which declined in subsequent years.

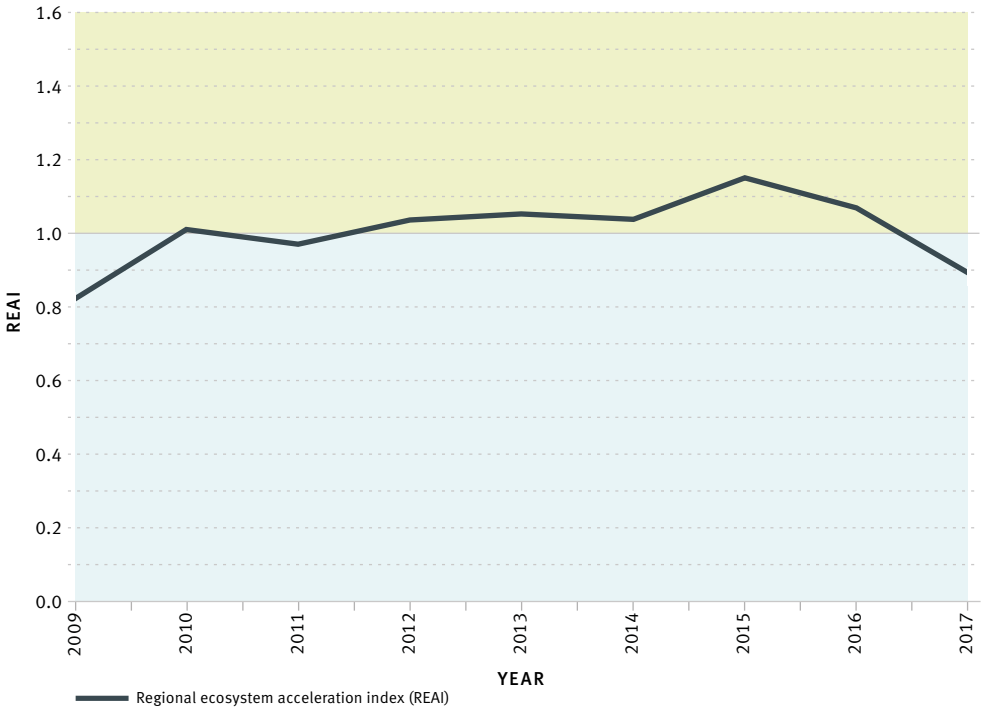
The declining trends indicate that there is unrealised scale-up potential in all three countries.

FIGURE 1: EXPECTED VS. REALIZED SCALE-UP EVENTS IN FRANCE



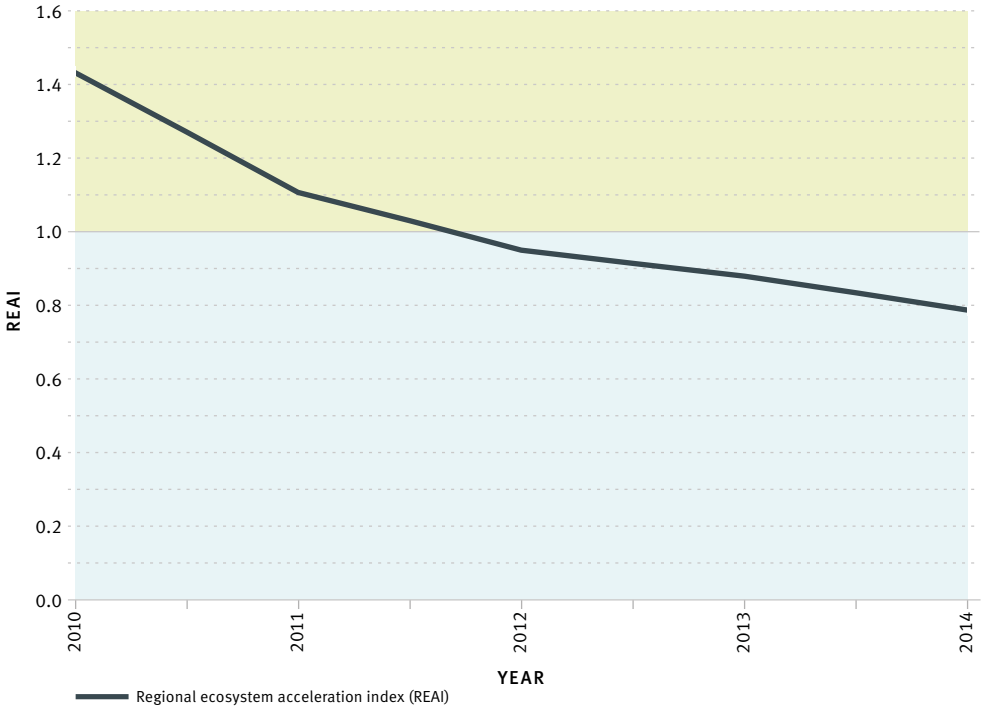
Source: SIRENE and BODACC dataset Colombo et al., 2025
Note: Figure 1 shows the Regional Entrepreneurship Cohort Potential Index in France between 2009 to 2017.

FIGURE 2: EXPECTED VS. REALIZED SCALE-UP EVENTS IN GERMANY



Source: Mannhei Enterprise Panel, Colombo et al., 2025
Note: Figure 2 shows the Regional Entrepreneurship Cohort Potential Index in Germany between 2009 to 2017.

FIGURE 3: EXPECTED VS. REALIZED SCALE-UP EVENTS IN THE UK



Source: Company House dataset Colombo et al., 2025
Note Figure 3 shows the Regional Entrepreneurship Cohort Potential Index in UK between 2010 to 2014.

WHAT CAN WE LEARN FROM THE DISTRIBUTION OF SCALE-UPS WITHIN COUNTRIES?

Regional concentration of start-ups and scale-ups differs across countries

The analyses also reveal that entrepreneurial activity in Europe is concentrated in a number of regional hubs (although much less concentrated than in the US, see Andrewes et al., 2022), with metropolitan areas and research-intensive regions both playing a central role. Figure 4–6 illustrates the regional quality–quantity maps for the three countries.

In France, both the quantity and quality of start-ups are concentrated in metropolitan areas such as Paris, Marseille, and Lyon.

As in France, the UK historically exhibited the highest levels of entrepreneurial activity in its largest metropolitan area, London. Additionally, the UK's homes of historic research institutions, Cambridge and Oxford, show exceptionally high entrepreneurial quality.

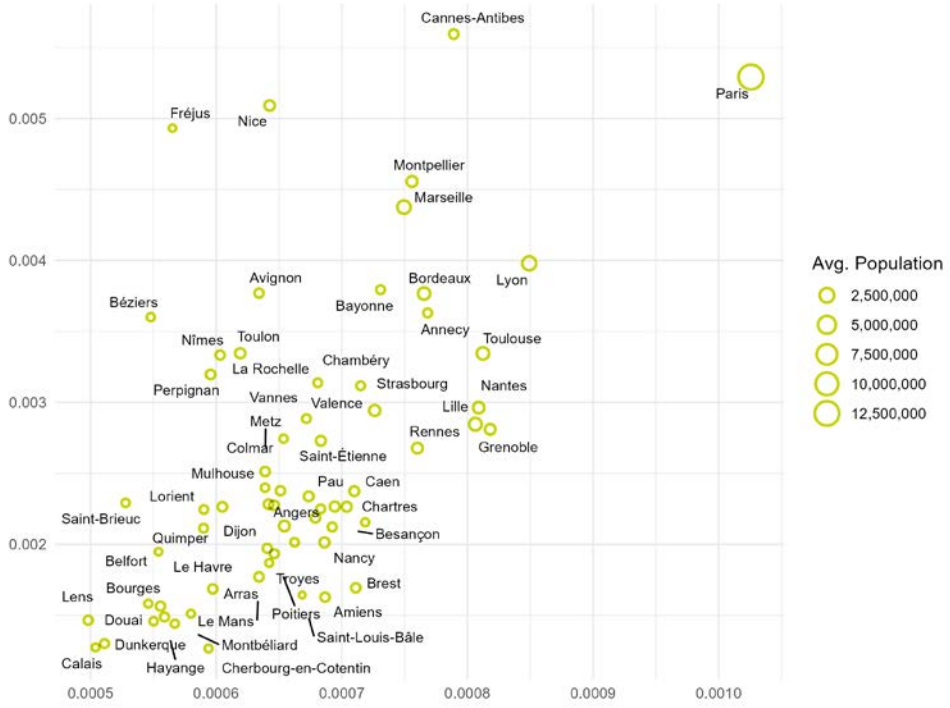
In Germany, entrepreneurial activity is more decentralised but also closely linked to research and knowledge hubs, with the Munich area as the ecosystem with exceptionally high quantity and quality. With a similar start-up quantity–quality link as in France, the quality of entrepreneurship is strong in non-metropolitan regions with dense research infrastructure, such as Bonn, Heidelberg and Jena. Germany stands out with the capital city Berlin, the large metropolitan cities Hamburg, Frankfurt and Düsseldorf, showing a high quantity while exhibiting mid-range quality.

In Europe, scale-ups emerge where entrepreneurial entry occurs – knowledge hubs matter

These patterns show that Europe's entrepreneurship landscape is highly diverse, featuring a range of ecosystem types influenced by national research institutions. Additionally, they emphasise the importance of human capital and science-driven entrepreneurship across the region. The combined findings reveal important differences between Europe and the United States, where the relationship between the number of start-ups in a given location and the number of scale-ups appears comparatively weak (Andrews et al., 2022). Within Europe, the United Kingdom exhibits the weakest correlation between the quantity and quality of entrepreneurial activity, with this pattern being more similar to the United States (Andrews et al., 2022). Germany stands out insofar as high-quality entrepreneurship is less concentrated overall (with the notable exception of Munich) and less focused on the capital city and a few metropolitan areas.

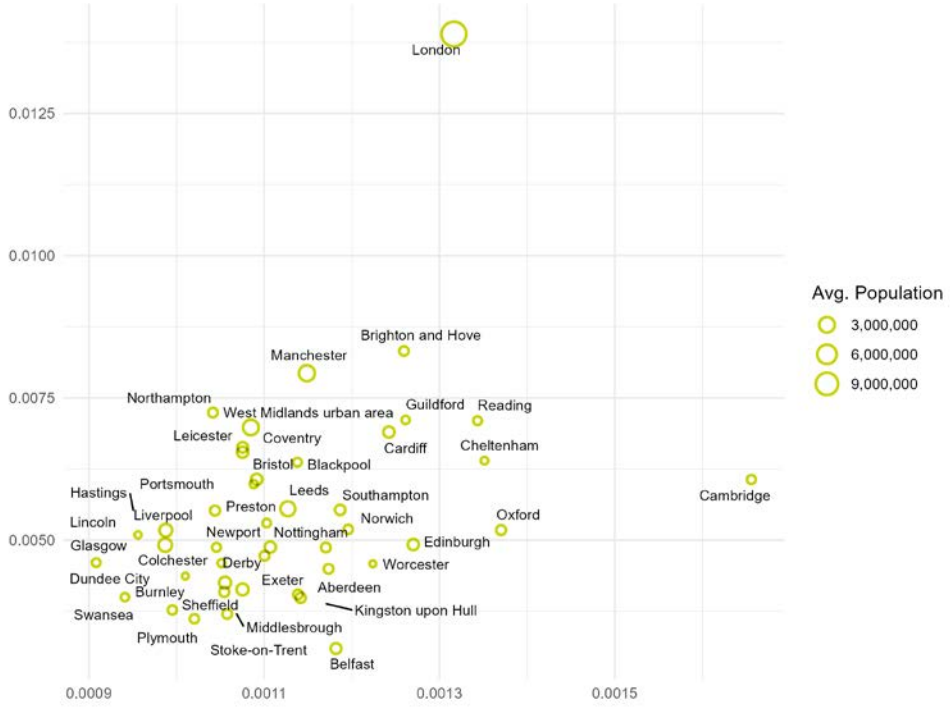
Overall, the evidence suggests that the quantity and quality of entrepreneurship are positively correlated in Europe, which indicates that ecosystems generating a higher number of new firms tend to provide more favourable conditions for firm growth.

FIGURE 4: QUANTITY-QUALITY VARIATION OF FUNCTIONAL URBAN AREAS IN FRANCE



Source: SIRENE and BODACC dataset Colombo et al., 2025
Note: Figure 4 shows the number of firms normalized by population) on the y-axis and the entrepreneurial quality index on the x-axis for France.

FIGURE 5: QUANTITY-QUALITY VARIATION OF FUNCTIONAL URBAN AREAS IN THE UK



Source: Company House dataset Colombo et al., 2025
Note: Figure 5 shows the number of firms normalized by population) on the y-axis and the entrepreneurial quality index on the x-axis for UK.

FIGURE 6: QUANTITY-QUALITY VARIATION OF FUNCTIONAL URBAN AREASIN GERMANY

Source: Mannhei Enterprise Panel Colombo et al., 2025
Note: Figure 6 shows the number of firms normalized by population) on the y-axis and the entrepreneurial quality index on the x-axis for Germany.

CONCLUSION

Unlocked potential for entrepreneurial high-growth events in Europe

The findings presented here illustrate the unrealised scale-up potential for all three countries, especially in the last years covered by our data. In light of these findings, it seems crucial to note that barriers limiting the scale-up potential may have become more relevant over time.

Improving conditions for scale-ups through policies that reduce barriers to growth

Unlike in the US, we see a positive quantity–quality link in Europe. This means that regional ecosystems that produce more start-ups are also those that produce a higher number of high-quality scale-ups. Thus, overall policy measures that reduce barriers to entrepreneurial entry more generally may increase the number of start-ups and scale-ups alike.
Importantly, policy measures should focus on the entire range of barriers leading to the gap in the realised potential of scale-ups. Well-known growth barriers are the fragmented nature of the Single Market, financial market regulations that limit the market's attractiveness for venture capital investors, and the bureaucratic burden linked to permits, reporting, and labour market laws. The EU Startup and Scaleup Strategy proposes several important suggestions that are worth pursuing in an effort to close the expectation–performance gap.

The strategy envisages several fundamental reforms and actions that have the potential to address the scale-up gap. It seems, however, crucial to implement not only individual elements of this plan but to push for a major reform in several areas that fundamentally alter conditions for innovative start-ups in Europe.

The first set of actions focuses on creating a more coherent and start-up-friendly regulatory environment. The "28th regime" plays an important role as it simplifies procedures related to company formation, taxation and insolvency. As a stand-alone measure, however, this is likely to be insufficient. Improving access to finance, particularly for companies in later growth stages, is essential. A dedicated Scaleup Europe Fund and the expansion of funding instruments under the European Innovation Council are ways of directing funding to the most innovative ventures. In addition, broader financial reforms like the Savings and Investments Union, will be crucial to achieve fundamental changes in scale-up conditions.

Improving start-ups' access to national and EU-wide public procurement could facilitate early revenue opportunities and validation for emerging companies. Support for scale-ups can be significantly improved through initiatives that connect research institutions, start-ups and investors more effectively.

In addition, the attraction and retention of talent is crucial. Simplifying visa processes and reducing barriers to mobility for international talent, while also strengthening education and skills development, will remain a key driver of scalable innovation.

Finally, and perhaps most importantly, measures should be designed with a focus on innovation, ecosystems and infrastructure. As previous research illustrates, start-ups do not grow in isolation – they depend on networks of universities, investors, corporations and support organisations (Plummer and Acs, 2014; Stam and van de Ven, 2019). Only when the elements of the strategy are thought, designed and implemented together, can the individual policy instruments effectively reduce the scale-up gap.

REFERENCES

Andrews, R., C. Fazio, J. Guzman, Y. Liu, and S. Stern (2022). The Startup Cartography Project: Measuring and mapping entrepreneurial ecosystems. Research Policy 51(2), 104437.

Colombo, M. G., Füner, L., Guerini, M., Hottenrott, H., & Souza, D. (2025). The state of European entrepreneurship: Trends in quantity and quality in France, Germany, and the UK (2009–2023) (No. 25-052). ZEW Discussion Papers.

European Commission, Brussels (2020). Flash Eurobarometer 486 (SMEs, Start-ups, Scale-ups and Entrepreneurship) (ZA7637; Version 2.0.0) [Data set]. GESIS, Cologne. https://doi.org/10.4232/1.13639

Guzman, J. and S. Stern (2020). The State of American Entrepreneurship: New Estimates of the Quantity and Quality of Entrepreneurship for 32 US States, 1988–2014. American Economic Journal: Economic Policy 12(4), 212–243.

Plummer, L. A., Acs, Z. J., (2014) Localized competition in the knowledge spillover theory of entrepreneurship. Journal of Business Venturing, 29, 121–136. https://doi.org/10.1016/j.jbusvent.2012.10.003

Stam, E., van de Ven, A., (2021) Entrepreneurial ecosystem elements. Small Business Economics 56 809-832. https://doi.org/10.1007/s11187-019-00270-6

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