

Scale-up Companies

– is a new policy agenda needed?

Abstract

The first part of the report focuses on the productivity gap and the scale-up gap between Europe and the US. The level of productivity in Europe is only 70 % of the level in the US and the report suggests that to some extent the gap can be explained by a more dynamic economy in the US compared to Europe. The share of companies with high growth rates, as well as the share of fast shrinking companies, is much higher in the US compared to Europe. Furthermore, the age distribution among the largest companies are very different when comparing the US and Europe. The large US companies are much younger than their European counterparts.

Against that background, the second part of the report examines the possible impact of increasing the number of scale-up companies in Europe in terms of productivity and employment. Big companies tend to be more productive than small companies, and scale-up companies tend to have a higher productivity than the average company and create a lot of new jobs, which shifts employment from less productive use. Thus, increasing the number of scale-up companies will make an important contribution towards eliminating the productivity gap between Europe and the US.

The third part of the report discusses methods to increase the number of scale-up companies in Europe. One important observation is that more start-up companies do not necessarily lead to more scale-up companies. The basic framework conditions necessary for start-up companies and scale-up companies might be the same but the more targeted policies needed to stimulate more scale-ups differ immensely from the policies aimed at stimulating more start-ups. Furthermore, there does not seem to be a particular law of nature that a given percentage of

new companies become scale-up companies. The policies on start-up companies and scale-up companies should be seen as unlinked and much more attention should be given to scale-ups. Another important observation is that it is not possible to pick the winners. Scale-up companies can appear in any sector and region but the concept of entrepreneurial ecosystem seems to be central to the success of companies.

The fourth part of the report presents three concrete proposals for stimulating more scale-ups in the EU. Closing the scale-up gap requires a series of structural reforms, an even better functioning Single Market, better capital market, much more focus on second chance, higher growth ambitions as well as a more streamlined EU-regulation without any administrative and economic burdens or glass ceilings for companies' growth. The proposals in this report do not in any way attempt to cover all of these needed changes. They are aimed at being executable immediately and constitute an important start to the long process needed to close the gap.

Background

Across the EU there is an increasing focus on scale-ups. It seems to be the new word in town to put an emphasis on the importance of rapid growth of scalable companies. The Danish SME Envoy, Deputy Director General Anders Hoffmann, has been asked to be the rapporteur on policies for scale-up companies for the SME Envoy Network. This is the second version of the report and will be presented at the SME Envoy Meeting in Brussels. The final version of the report will be prepared based on the discussions at the meeting. The report does not necessarily represent the views of the Danish Government.

There has been considerable research in this field. This report therefore builds on a large selection of this research and policy reports and has benefited from inputs from several

experts.¹ Furthermore, the report has also benefited from valuable input from the Envoy Network whose members have also provided the policy examples used below.²

Purpose

The purpose of the report is to enlighten the debate on scale-up policy. Hopefully, the report will increase the attention of policy makers at all levels of government to scale-up policies and their possible potentials in terms of productivity and employment growth by increasing the number of scale-up companies.

Furthermore, the report will provide a starting point for discussing how framework conditions and policies for scale-up companies can be developed at the European, national and regional/local level in order to increase the number and growth of scale-up companies in Europe.

Definitions

This report focuses on scale-up companies, which is not a well-defined term in Eurostat's or the OECD's business demography. Other concepts used in the report like start-ups and high-growth companies follow the Eurostat definitions (see annex 1 for definitions).

All definitions are based on events that have happened, so a start-up has 'started' and a scale-up has 'scaled' and so on. It is preferable to know which companies will scale-up but it is not possible to find a definition that covers this. The word 'potential scale-up' will be used to discuss companies that might scale.

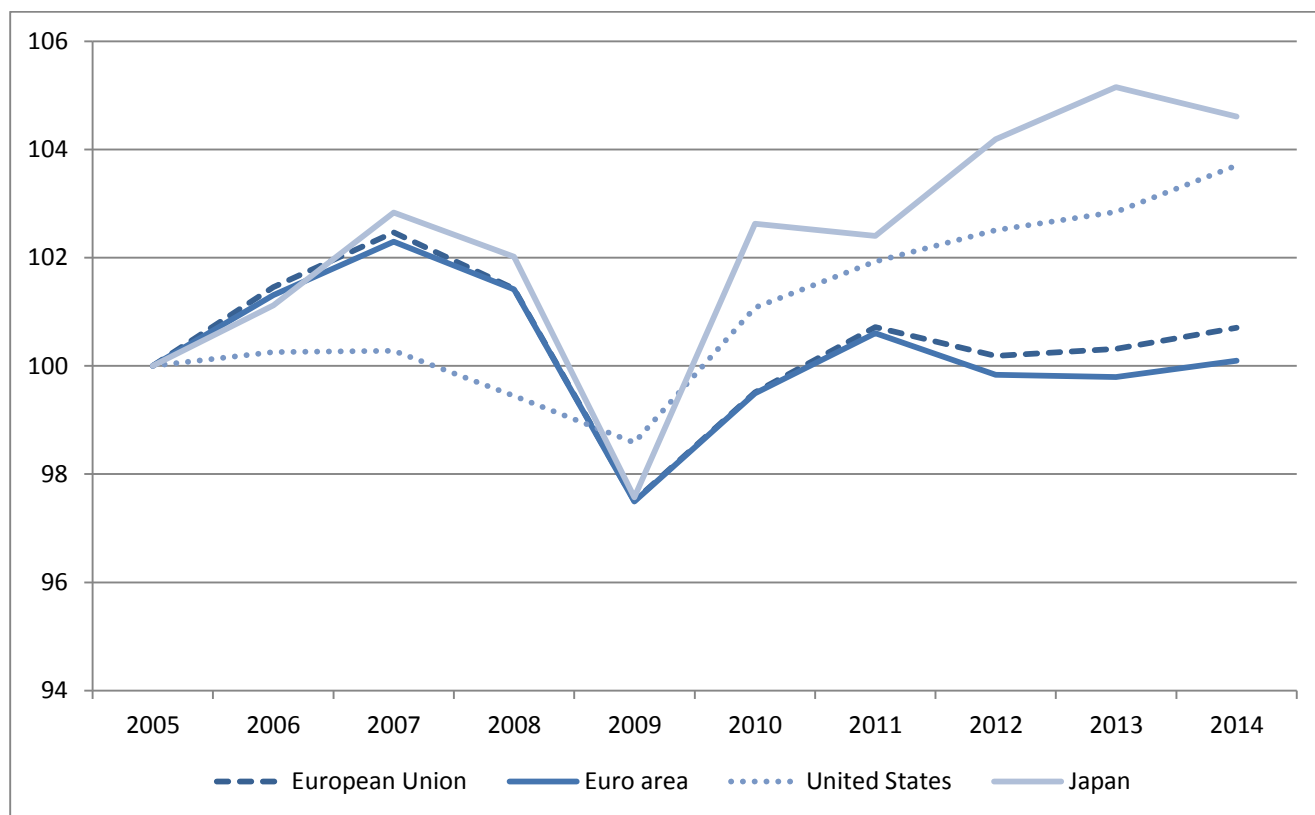
The productivity gap

¹ Professor D. Isenberg, Professor A. Erkko, Sherry Coutu, Albert Bravo Biosca, Torsten Andersen and Bent Lindhart have all provided valuable insights.

² A list of policy examples is used in sector 2 and shown in an accompanying Annex.

Promoting productivity is crucial for improving competitiveness and employment in Europe. But Europe has accumulated a considerable productivity gap compared with the US. EU labour productivity in 2014 was only 70 % of the US level. Furthermore, total factor productivity seems to have stagnated in the EU, whereas the US and Japan have seen increases.

Figure 1. The productivity gap with the US – Total Factor Productivity (2005-2014)



Source: EU Commission, Annual macro-economic database (AMECO)

Note: Index 2005 = 100

Several factors influence the development of productivity in the EU. Some of the most important are the ability to adopt new advanced technologies and digitalization, expenditures on research and development, infrastructure and network, external competitiveness and completion of the single market. The Commission's yearly growth reports highlight some of

the most important challenges for the EU³. These include, for example, rigid labour market laws in the EU which make it difficult for entrepreneurs to hire new talents and to grow and legislation that limits competition in some industries.

The EU needs higher productivity growth. Reallocation of resources among industries and among companies within industries is a well-known driver of productivity. The effect can be illustrated by recent OECD work⁴, which highlights that productivity growth of the most productive companies globally remains robust, at an average annual rate of 3.5% in the manufacturing sector during the 00s also in the EU countries, while it slowed sharply in other companies, which registered only 0.5% productivity growth over the same period. This means that the EU has a number of poorly performing companies that have a negative productivity growth, bringing down aggregate performance. This leads the OECD to conclude that, *“this points to lack of market selection in particular when these poorly-performing companies continue to exist in the market, rather than closing down”*. One solution is to have more scale-ups, which, in relatively flexible labour and financial markets, will shift resources to companies with higher productivity and thereby increase aggregated productivity.

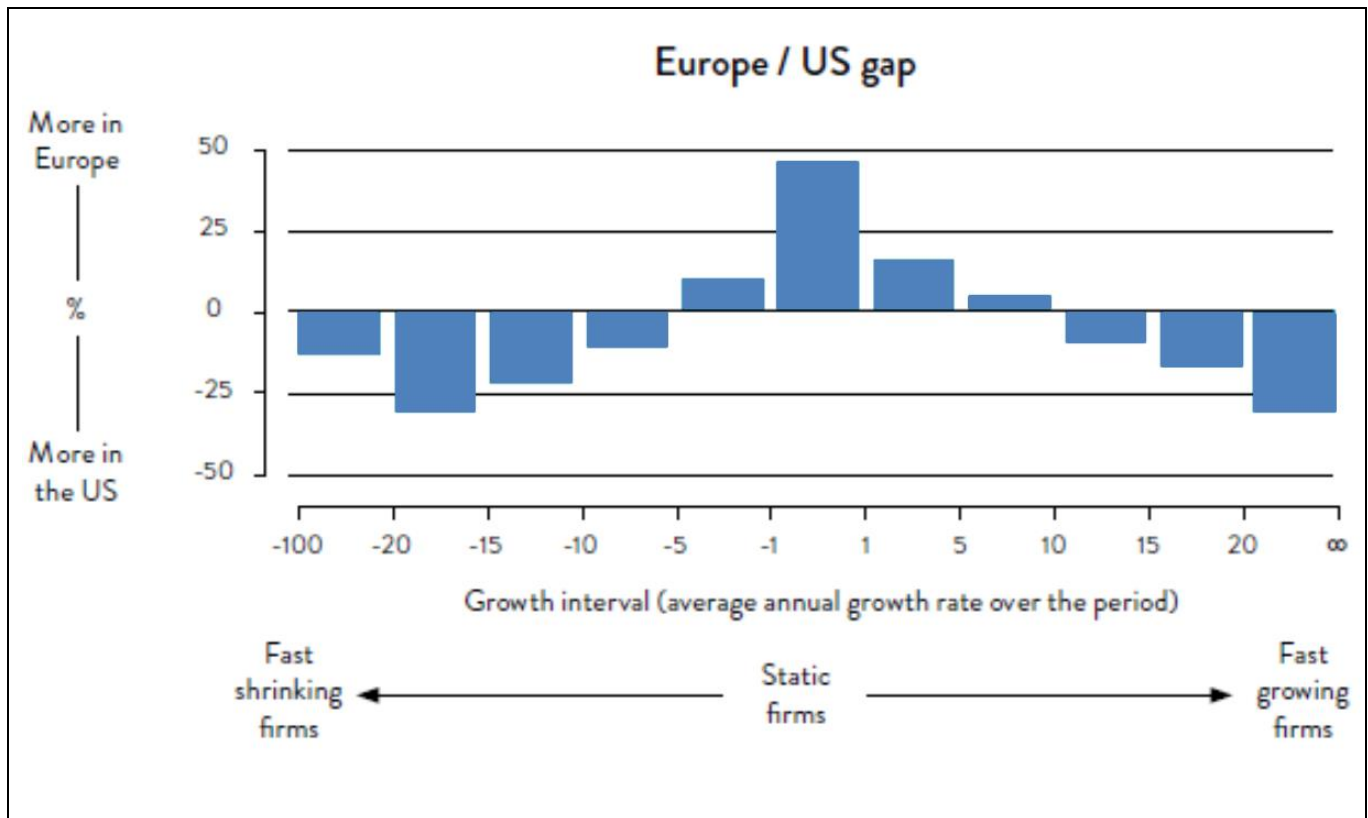
1. The scale-up gap

Several indicators suggest that the EU has a scale-up gap compared to the US. This means that a lower share of European companies become scale-up companies compared to the share of companies that scale in the US. The UK Scale-up report, for example, has a comparison between the EU and the US for average annual company growth rates for all companies. The comparison shows that the US has a considerably larger share of companies with either very high growth rates (more than 10 % annual growth) or negative growth rates (more than – 5 %). The difference is almost 50% between the EU and the US for the share of companies that either grow or shrink. (Sherry Coutu, Scale-up report, 2014).

³ http://ec.europa.eu/europe2020/pdf/csr2015/cr2015_comm_en.pdf

⁴ OECD, The Productivity Inclusiveness Nexus, 2016

Figure 2. The difference in average annual company growth rates between Europe and the US

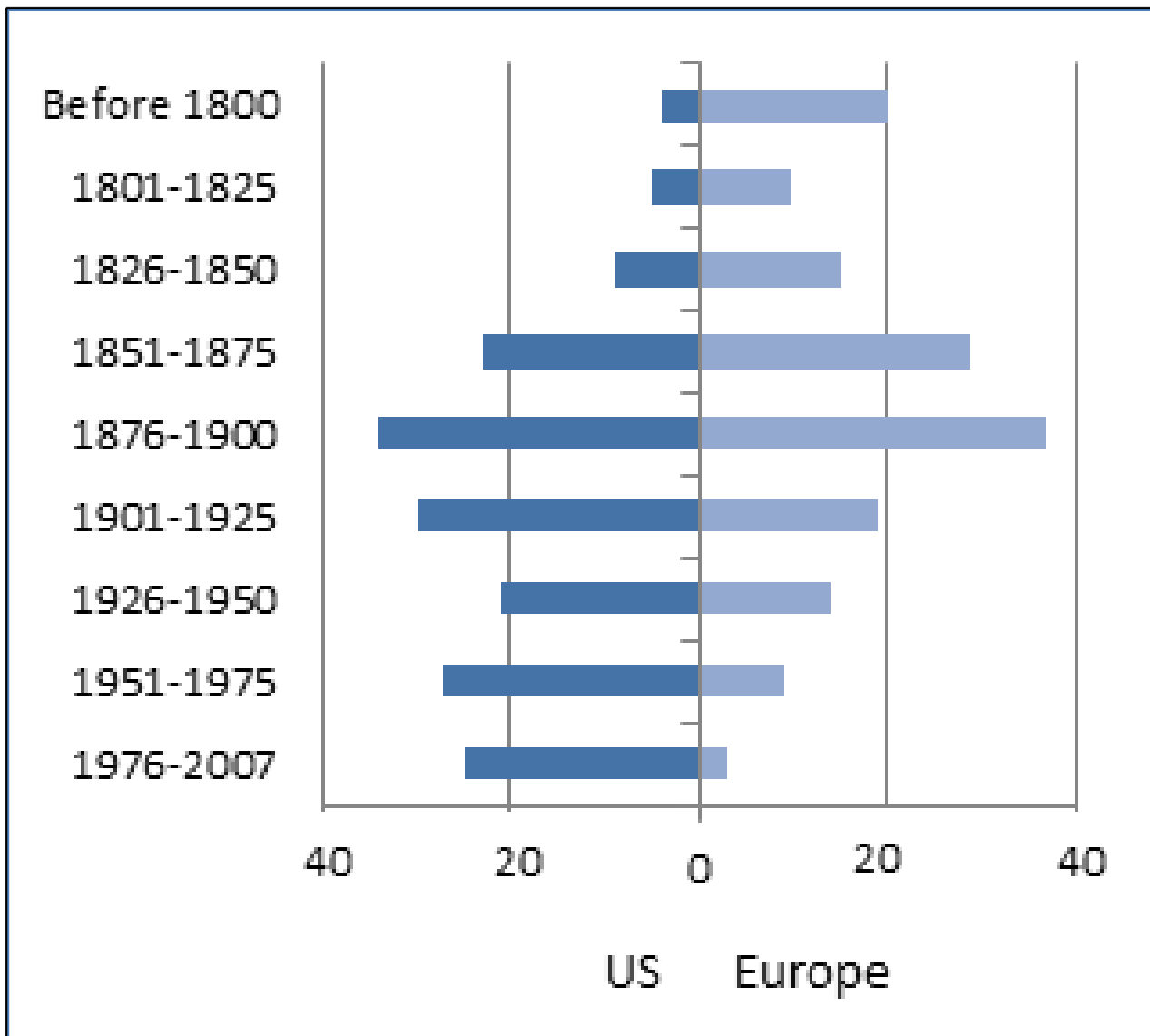


Source: The Scale Up Report on UK Economy, Scaleup.org/scaleup-report.pdf

The fact that the US has more companies with both large negative and positive growth rates illustrates a very important point. Resources are limited, so if some companies grow, others will have to shrink.

The result of this less dynamic economy was illustrated by the Economist a few years ago. They looked at the 500 biggest publicly listed companies globally. Only 3 of the listed companies that were less than 30 years old were European, while 25 of the young companies were from the US. (Economist, Jul 28th 2012).

Figure 3 Top 500 Global companies founded in Europe and the US (Economist



Source: Based on The Economist - <http://economist.com/node/21559618>

Another way to illustrate the differences is to look at Future Magazine's list of Unicorns.⁵ None of the top 10 unicorns are European. Spotify is this highest ranking EU based company (rank 15th, Oct. 2015).

⁵⁵ A Unicorn is a company less than 10 years old with a market evaluation of more than 1 billion US dollars, <http://fortune.com/unicorns/> The Unicorns should not be over emphasized as most of them are privately valued and their values might therefore be biased upward.

Scale-up companies create growth both directly and indirectly. Scale-ups create by definition many jobs *directly*. A literature review of twenty academic papers on the subject concludes that “*a few rapidly-growing companies generate a disproportionately large share of all net new jobs compared with non-high-growth companies (and) that this is a clear-cut result*” (Henrekson and Johansson, 2010). Most studies find that between 5-7% of the companies create more than 50% of all new jobs, and these are not just reallocation of jobs. Additionally, the OECD finds that high-growth companies foster employment creation beyond the jobs that they create directly (Bravo-Biosca et al., 2013).

One thing is to create jobs but it is important to look at the quality of these jobs. Solid analysis of this area is scarce. However, a recent paper looked at wage differences across size, age and growth of companies, and concluded that large and young firms pay higher wages than smaller and older firms but the “*real driver of differences in wages across firms might stem from their growth prospects rather than from their age or size*”.⁶ Scale-up companies in other words create higher paid jobs than other companies.

From a policy perspective the job creation history is interesting, but the *indirect* impact through changes in aggregated productivity might be even more important. A scale-up company needs to pull resources from other companies as well as from the market. They might hire people from other companies or from unemployment and thereby shift resources among companies and industries. Following the OECD work mentioned before, this will lead to higher aggregated productivity.

An additional productivity effect comes from the fact that big companies have a much higher level of productivity than other companies. Companies with more than 1000 employees are considerably more productive than other companies. A recent Danish analysis (Danish

⁶ https://www.gsb.stanford.edu/sites/default/files/documents/OB_04_16_Sorensen.pdf

Business Authority, 2016) showed that the level of productivity in companies with more than 1000 employees is much higher than in other companies. Analyses from other EU countries show similar results.

Part of the productivity gap between the EU and the US can therefore potentially be explained by the EU deficit of scale-up companies. Sherry Coutu has assessed the impact in the UK of closing the scale-up gap with the US in terms of net jobs and additional GVA. The impact analysis estimates that if the recommendations in her report were implemented in full it would have the potential to generate between £70 billion and £225 billion of GDP for the UK economy (in 2014 prices) between 2015 and 2034. This is consistent with an additional 45,000 to 150,000 net jobs above baseline in the UK in 2034.

The numbers are not directly transferable to the rest of the EU as the size of the scale-up gap in the rest of the EU is unknown. However, if the effects in the UK are scaled by the UK's GDP versus the rest of the EU, then the effects for closing the scale-up gap between the EU and the US could be up to one million new jobs, and up to €2,000 billion of extra GDP in the EU over the next 20 years.⁷

2. Is a new scale-up policy agenda needed?

Prominent start-up proponents and venture capitalists have argued that the number of scale-ups is what they call a 'number game' – suggesting a ratio between the number of start-ups and the number of scale-ups. The baseball metaphor is, if you keep swinging the bat you will eventually hit a homerun. This might be true in baseball, but as guide for public policy it could be a very misleading metaphor allowing too much focus to be given to the quantity of start-ups

⁷ The calculations are based on a UK GDP of €2017 billion and a EU GDP of €13821 billion see http://ec.europa.eu/eurostat/statistics-explained/index.php/File:GDP_at_current_market_prices,_2003%E2%80%932004_and_2012%E2%80%932014_YB15.png

at the expense of focusing on creating scale-ups. Several transition economies have, for example, very high start-up rates, but not necessary many scale-up companies. Therefore, you need to start companies to grow them and stimulating the quality of start-ups could lead to more scale-ups, e.g. through more focus on ambition and growth in entrepreneurship education for young people, but more start-ups do not automatically lead to more scale-up companies.⁸

However, several policies can be beneficial for both start-ups and scale-ups. The EU Commission's focus on structural reforms, as one of its three pillars of economic policy priorities, will benefit both start-ups and scale-ups. Structural reforms tackle obstacles for the fundamental drivers of growth by liberalizing labour, product and service markets, and thereby encouraging job creation as well as investment and improving productivity. They are designed to boost an economy's competitiveness, growth potential and adjustment capacity.⁹ The merits of these policies are covered in many reports and will not be discussed further in this report, but should not be forgotten, as structural policies are often critical for the success of entrepreneurs.¹⁰ A well-functioning Single Market is for example essential to scale-up companies!

Some might argue that the structural reforms are all that is needed to boost the number of scale-ups. However, the number of scale-ups varies greatly across regions/cities within countries. This suggests that scale-ups need more than structural policies that are equal within a country to succeed. Professor D. Isenberg argues in his Harvard Business Review article from 2010 for an additional set of instruments based on a notion of entrepreneurial eco-systems.¹¹

Stimulating ecosystems

⁸ <http://www.kauffman.org/blogs/policy-dialogue/2014/october/you-cant-scale-what-you-dont-start>

⁹ http://ec.europa.eu/economy_finance/publications/economic_briefs/2014/eb34_en.htm

¹⁰ The OECD Economic Policy Reforms 2016 "Going for Growth Interim Report" is a good reference for the importance of structural reforms.

¹¹ <https://hbr.org/product/how-to-start-an-entrepreneurial-revolution/an/R1006A-HCB-ENG>

The word ecosystem comes from biology, and is a community of living organisms in conjunction with the non-living components of their environment. They are defined by the network of interactions among organisms and between organisms and their environment.¹² The entrepreneurship ecosystem approach has emerged as an explanation as to why some cities/regions have considerably more start-ups and scale-ups than in another parts of the country, even though the overall regulatory framework is the same in the two places.

The entrepreneurial ecosystem has been defined and shown in many ways. Building on Isenberg, the ecosystem consists of hundreds of specific elements that, for convenience, are grouped into six general domains: a conducive culture, enabling policies and leadership, availability of appropriate finance, quality human capital, venture-friendly markets for products, and a range of institutional and infrastructural supports.

Entrepreneurial ecosystems can be viewed as resource allocation systems that drive the allocation of resources towards the most productive activities. The quality and quantity of the resources available in the system, and the quality of the allocation mechanism can vary among the ecosystems, thus producing differences in the outcome of the ecosystem, for instance, number of scale-ups. In other words, in a well-functioning ecosystem high quality firms get resources, whereas low quality firms do not get any. This implies that some firms will not get the capital they want but this does not mean that there is a market failure.

Ecosystems create additional policy possibilities that are not met by the normal approaches. A typical market failure approach works fine when, for example, focusing on asymmetric information in the capital market and externalities from R&D, which can be fixed by offering a loan guarantee and a R&D subsidy. However, the typical market failure approach cannot correct an ecosystem, as the outcome is a complex interaction among many stakeholders.

¹² <https://en.wikipedia.org/wiki/Ecosystem>

Erkko Autio provides the following summary: *“No one actually ‘owns’ the ecosystem services – and therefore, no one necessarily feels responsibility for guaranteeing the effective functioning of the ecosystem. Instead, all ecosystem stakeholders pursue their own goals in their interactions with others. At the ecosystem level, the ecosystem services are co-produced in myriad, one-to-one interactions between individual ecosystem stakeholders. The emergent, system-wide benefits of entrepreneurial ecosystems cannot be traced back to individual interactions within the system. Moreover, because of the diversity of contributions and ecosystem stakeholders involved, the ecosystem stakeholders themselves are not likely to know one another well, and only relatively few will even be likely to identify themselves as entrepreneurial ecosystem stakeholders”*.

Policies can therefore not create ecosystems by themselves or even ensure that they work satisfactorily. However, policies for stimulating the creation of more scale-up companies can have three main goals:

- 1) Stimulating growth in individual companies
- 2) Stimulating the supply/quality of resources in the ecosystem
- 3) Stimulating stronger links in the ecosystems

Each of the goals will be discussed briefly below. In all three cases any policy should build on a strong theory of change, where the inputs, activities, output, user effects and macro-economic effects are clearly specified. Furthermore, all of the implicit assumptions underlying the theory need to be understood and perhaps tested. Finally, a detailed metric for measuring results, at all steps from activities to macro-economic effects, need to be specified. The metric should be based on already available collected statistics, i.e. what is available rather than what we would like to have available. An example is included in the accompanying Annex. Policy examples for each of the goals are also provided in the Annex. These examples are gathered among the SME Envoy Network. The policy examples need not be best practice examples but rather serve the purpose of illustrating different designs.

Stimulating growth in individual companies

Policies in this category cover policies similar to accelerator programs, mentoring programs and subsidies to advice services and other programs focusing on increasing the chance of success of an individual firm. A challenge for these types of programs is that it is not possible to pick the winners. Scale-up companies can emerge from all sectors and from old or new companies. Many programs spend a lot of time screening applicants and only allow a very low share to enter their program. Two of the world's best known accelerator programs¹³ Y Combinator and Techstarts accept about 1- 2% of the applications they receive. An alternative is to use some kind of stage-gate model, where the program starts with many companies, and then as the program progresses it reduces the number of companies at each stage-gate based on the progress of the companies. This approach is also called retaining winners by Erkkö Autio and seems to be an attractive way to use direct support to create scale-up companies.¹⁴

Several Member States have policies aimed at stimulating individual companies. Many of the programmes build on accelerator type models and most of them have a specialised sector focus. *The German Accelerator* program for example offers mentoring with experienced entrepreneurs, boot camps, access to the worlds' hotspots and so on as well as technology and life sciences start-ups. *Lifetech.brussels* offers similar services but is focused on the health cluster. The program also has explicit goals to develop the eco-system by bringing the companies together. *Sirris* is focused on digital scale-ups in Flanders and builds on a funnel system - at each stage the participating companies are tested for certain criteria. Resulting from that analysis the companies can either enter the next support phase or be redirected to other service providers or programs. This funnel system is similar to Autio's retaining winners. Similar ideas are the basis of *Scale-Up Denmark* that is an ambitious training concept for

¹³ An accelerator programme typical is a limited time intervention (3-6 months), during which the accelerator's team works intensively with their participating firms to get them in best possible shape before a final pitch to investors

¹⁴ <http://www.sciencedirect.com/science/article/pii/S0048733315000992>

entrepreneurs and small enterprises. The aim is to establish an elite group of high growth companies in Denmark.

Programs that combine scale-up with regional objectives can for example be found in Sweden, where *Start-up Sweden* combines a growth focus with a regional objective. It is a boot camp for digital companies, where the start-up scene among IT companies is very strong in Stockholm, so the program aims to spread this to the rest of the country by including companies from all of Sweden and then hope that the companies taking part in the program bring their networks “home” and fertilize their own business community.

Other programs have explicitly focused on management skills. *Leadership 4 Growth* in Ireland is an exclusive programme designed to build and enhance the strategic leadership capabilities of ambitious CEOs/ Managing Directors. The program has been evaluated with very positive results.

Stimulating the supply/quality of resources in the ecosystem

A scale-up company is pulling resources toward itself as it grows. Many policies are therefore aimed at increasing the supply and quality of the resources such as capital, both fiscal and human. A large number of reports have been written on how not to stimulate the supply of fiscal capital like venture capital and loans. Josh Learner is one of the most cited.¹⁵ He explains why governments cannot dictate how venture markets evolve, but need to focus on the full process of scaling-up and not, like many policies, only focus on the initial start-up face. Second, the policies need to have a very long horizon and not only 2-4 years as often is the case. Building on Learners conclusions and the ecosystem approach, governments should understand that stimulating the supply of capital can be an important task, but their policies can often do more harm than good if they do not understand the underlying mechanisms in the

¹⁵ <http://press.princeton.edu/titles/8984.html>

ecosystem, and have either long term policies or clearly stated exit plans for their policies. One of the great successes of the Israeli Yozma program was that they managed to exit the public fund and thereby transferred the management to the private sector.

Capital is not the silver bullet of stimulating scale-ups, as many argue. Endeavor¹⁶, for example, asked 150 founders of some of the fastest growing companies in the US what was the most important for them in respect to where they started and scaled their company.¹⁷ Quality of life factors came in high, but access to talent came in above any other resource that a city could offer (like low rent, low taxes, few administrative burdens and so on). Policies aimed at stimulating capital should therefore be supplemented with a focusing on stimulating human capital. Several policies can increase the quality of the human resources in the eco-system.

First of all, the importance of high quality education from first grade all the way through PhD. to lifelong learning is important to stress. These policies can be supplemented by policies aimed at improving skills directly relating to scaling-up, such as management skills. The evidence base for links between good management practices and growth has improved substantially with the World Management Survey and benchmark management practices across the world, and has shown clear links to productivity growth.¹⁸ The policies can also focus on skills among the other actors in the ecosystem. For example, bankers can learn about scale-up and kids can be exposed to scale-up as role models and so on.

A final possibility can be to attract talent from abroad. The start-up visa movement is spreading across the Globe, established by the great exposure of Start-up Chile.¹⁹ A scale-up visa might be a possibility.

¹⁶ Endeavor is organisation aimed at stimulating high-impact entrepreneurship round the world

¹⁷ <http://www.endeavor.org/insight/endeavor-insight-report-reveals-the-top-qualities-that-entrepreneurs-look-for-in-a-city/>

¹⁸ <http://worldmanagementsurvey.org/>

¹⁹ <http://startupchile.org/>

Among Member States most policies are aimed at increasing the supply of capital. Some countries have chosen to use fiscal measures to increase access to capital. Belgium has several tax related programs aimed at stimulating growth among small firms. For example they allow small sized companies to maintain their profits after tax in separate liability accounts (called “liquidity reserves”), on payment of a 10% tax contribution. After 5 years, the withholding tax rate applied to dividends distributed from a “liquidity reserve” is 5 %, instead of 27%. Croatia provides start-ups with means for the commercialization phase of their innovative projects/ideas. This support serves as leverage in preparation for the next round of investment from private/VC or similar sources for scaling up phase. Start-ups can receive support either for testing in an operative environment and finalization of product/service prototype according to the feedback from initial customers, or for product demonstration and activities connected with the process of launching their product/service in the market.

The Netherlands provides an interesting example of a program that aims at all three objectives in their *NLgroeit*. It was launched by Queen Maxima as a platform to increase the growth potential of SMEs, ultimately creating a strong entrepreneurship ecosystem in the Netherlands. The programme is executed by the Chamber of Commerce and NLevator, a foundation of growth entrepreneurs. Furthermore, ‘NLgroeit’ is supported by the movement NL2025, which gathers 80 high-profile personalities in the Netherlands from various disciplines that are committed to create a better Netherlands.

Building stronger links in the ecosystems

A common misunderstanding of ecosystems is that entrepreneurs are the drivers.²⁰ However, as mentioned in defining the ecosystem, an ecosystem is a dynamic, self-regulating network of many different types of actors. All of these actors pursue their own goals in their interactions

²⁰ <https://hbr.org/2014/05/what-an-entrepreneurial-ecosystem-actually-is>

with others, so if the links among the actors are weak then the outcome of these interactions will have limited impact on scale-up.

Again, policies can be aimed at building stronger links, although careful implementation is needed here. Often these policies are aimed at having researchers or bankers meet entrepreneurs. These meetings will build bridges among the groups and increase the interaction among them. Unfortunately many of these policies often waste peoples' time in endless meetings and conferences. Therefore new policies need to be aimed at the incentives of the individual actors, and how it is in the interest of the actor to engage in the ecosystem.

Building links in the ecosystem are often done as part of the accelerator programs but some programs like Wallonia's *Creative Hubs* and France's *Tech Label* are more directly aimed at stimulating links in the ecosystem. The Creative Hubs are living labs, which propose innovative actions by mixing multiple profiles, competences and sectors: large companies, SMEs, start-ups, institutions, public sector representatives, teachers, students, researchers, artists, geeks, cultural and social associations, citizens, and many others. The tech label is an open and shared brand that is seen as a key success factor to bring together start-up ecosystems and accelerate growth of French start-ups.

3. Proposals for policy to increase the number of scale-up companies

Closing the scale-up gap requires a series of structural reforms, an even better functioning Single Market, better access to skills, better capital markets, much more focus on second chance, higher growth ambitions as well as a more streamlined EU-regulation without any administrative and economic burdens or glass ceilings for company growth. The functioning of the Single Market, for example, is crucial for scale-ups especially for the smaller EU-countries, as their growth depend on exports and access to foreign markets. As is noted in the Communication for digital single market "the Fragmentation and barriers that do not exist in the physical single market are holding the EU back... This needs to change – putting the single

market online”.²¹ Making both the traditional and the digital single market function seamlessly should – as it is – be a key priority for the EU Commission. Furthermore, the Commission should ensure the Single Market is up-to-date as new business models and opportunities develop like the sharing economy.

The following three proposals do not in any way attempt to cover all of these needed changes. They are aimed at being executable for DG Growth now and the start of the long process needed to close the gap. The proposals should also be accompanied by a new Scale-up narrative from the Commission, where the importance of scale-ups for growth is stressed. This narrative will provide the needed backing for the hard policy reforms that lie ahead.

- 1) A EU Scale-up Observatory
- 2) Think Scale First
- 3) A EU Experimentation Fund

A EU Scale-up Observatory

The EU Commission has previously been instrumental in the development of a policy field. In the early 00s Michael Porter developed the first cluster databases in the US, thus cluster policies became an important tool for many governments. In 2006, a grant for a cluster mapping exercise was awarded by the Commission. It covered all of EU-27 countries plus Iceland, Norway, Switzerland, Turkey and Israel. The cluster mapping part of the project was later renamed “The European Cluster Observatory”.²² Today, the work is coordinated under the EU Cluster Portal that provides tools and information on key European initiatives, actions and events for clusters and their SMEs with the aim of creating more world-class clusters across the EU.

²¹ http://ec.europa.eu/priorities/digital-single-market_en

²² <http://www.clusterobservatory.eu/index.html#!view=aboutobservatory;url=/about-observatory/>

The Commission's work on clusters has significantly increased the quality of the underlying analyses and provided policy frameworks for Member States to use. The European Cluster Excellence Initiative launched in 2009 has for example created a benchmarking methodology for cluster organizations to improve their internal management process and the way they offer services. This has had an important role in increasing the impact of the public funds spent on facilitating and improving the performance and quality of cluster initiatives.

The EU Commission can play a similar role in developing the new policy area of scale-up by creating an EU Scale-up Observatory, which could be helpful in providing a fact based analysis of this new policy area, which can be expected to be the focus of attention of Member States in the coming years.

The Scale-up Observatory should not be another new publication or another new institute but a strategy controlled by DG Growth. The strategy should have **two** goals: i) improve data on scale-ups in Europe and ii) provide a platform for the knowledge sharing on good practices programs and evaluation of scale-up programs.

Improving data

No official definition of a scale-up company exists, so the first task is to develop an official definition together with EUROSTAT and perhaps the OECD and the World Bank.²³ The definition will allow the Observatory to produce heat maps based on data on scale-ups across Europe and potentially create lists of scale-up companies, so that local public and private sector organizations can identify, target and evaluate their support to scale-up companies. This follows the first recommendation in the Scale-up UK report.²⁴ It is also important to start collecting data about the identities and characteristics of scale-up companies. These data can

²³ The definitions should cover both the number of scale-ups (ex-post) and a number for the potential scale-ups. The methods can be based on the approach in the Entrepreneurship Indicators Project, which was a joint OECD-EUROSTAT project that resulted in the current definitions of startups and high-growth firms.

²⁴ <http://www.scaleupreport.org/recommendations>

also be integrated as part of the Commission's scoreboards like the Regional Ecosystem Scoreboard. The work can be initiated with a small task force that coordinates its work with the FRIBS program – Framework Regulation Integrating Business Statistics, where Eurostat is developing a cross-cutting legal framework for the systematic collection, compilation, transmission and dissemination of statistics related to the structure, economic activity, competitiveness, global transactions and performance of the European business sector.²⁵ Finally, a more ongoing collection of data could be part of some of the COSME financed activities like the mentioned Cluster work.

Good practices

Policy makers across Europe are reinventing policies towards scale-ups every day, as they are in fashion, but no comprehensive guide exists on how to design them. Furthermore, millions are spent on developing evaluation set-ups for these programs, where a great deal of money could be saved if more common metrics for measuring success were available. The Observatory could therefore have an important role in gathering *good policy examples* and providing guidance on design and *evaluation of scale-up programs*. These policy examples could possibly be provided in a case study format, which could provide the basis for deeper learning among policy makers. Again, the set-up can be simple. The good-practices mechanism can be a COSME action, where a small consortium is assigned to facilitate the debate among Member States and develop the case studies and the metrics. This could for example be an activity under the SME Envoy Network.

Think Scale first

A high number of existing EU policies and programs have a significant impact on the number of scale-ups in the EU. Furthermore, large parts of EU directives have a great impact on business incentives and possibilities to scale.

²⁵ <http://ec.europa.eu/eurostat/about/opportunities/consultations/fribs>

However, the question is whether or not they truly support the shift to a more productive use of resources in the EU by stimulating scale-up companies, or do they merely preserve the status quo. A case in point could be the SME financing instruments in the COSME program. Are the right mechanisms in place to ensure that we focus our support on scale-up companies with a global potential and reach? Or is there a risk that we are not targeting the right group? Another example is that some directives have an exemption for SMEs, which might be a good idea but in some cases these exemptions work as barriers for companies' growth. This can in some Member States be seen as a size distribution of firms, where the share of firms just below the exemption size is much higher than it should be – for example a lot of firms have 49 employees but few firms have 51 employees.²⁶

Today the EU and the Member states perform SME tests of new regulation and the “Think Small First” principle plays an important role. However, from a growth perspective it could be more interesting to do a “think Scale First” check. It is therefore suggested that the Commission develops a new narrative around ‘think Scale First’ not as a competitor to ‘Think Small First’ but as an important supplement.

Three different actions could be taken by the Commission in order to get more focus on scale-ups. First, the current “SME test” and the Better Regulation Guidelines can be expanded with questions regarding possible barriers for scaling including discussions about possible trade-offs between SME exceptions vs. the possibility of introducing barriers for growth, box 1 provides some suggestions on what questions to include in the guidelines. Second, the Commission has great emphasis on the “Fitness Checks” of current legislation.²⁷ A “Think Scale First” could be a separate section in all of these checks or the Commission could do a separate ‘Scale-up fitness check’, where a policy area undergoes a genuine check of a company’s possibilities and

²⁶ <http://cep.lse.ac.uk/pubs/download/dp1128.pdf>

²⁷ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0215&from=EN>

the barriers for scaling up in this sector. The check could build on questions similar to the ones in the guidelines. Many of the barriers to scale ups stem from national legislation so the “Think Scale First” can in some cases also be extended to reviews of the national level policies. Third, the budget for COSME and other EU funding programmes could be more targeted towards programs and actions aimed at scale-ups.

Box 1 Possible questions for the Scale/up test

A Scale up Test can be included in the Better Regulation Guidelines in “question 5” in Chapter 3. The new section should address the intentional and unintentional effect a policy will have on the possibilities and incentives to scale a firm. This should address both barriers in the input and output markets. These include barriers to flow of resources towards scaling firms and barriers on expanding across national borders. Furthermore, the section should include a discussion of pros and cons of any exceptions or different treatment of firms based on the size, sectors, or age of the firms.

Furthermore, the SME test can be expanded. The current test is comprised of four steps. It is suggested that the test is expanded with a fifth step called **Scale up test**. The step should examine if the proposed legislation unintentionally keeps SMEs small by reducing the incentives or possibility to scale their business. Three questions can be included:

- Provide detailed discussions of the pros and cons if the reviewed policy (intentionally or unintentionally) limits the flow of resources (like labour and capital) among firms.
- Provide detailed discussions of the pros and cons if the reviewed policy includes any exceptions or different treatment of firms based on the size, sector, or age of the firms.
- Provide detailed discussions of the pros and cons if the reviewed policy limits firms ability to scale across borders inside and outside the EU countries.

An EU Experimentation Fund

As mentioned above, the field of creating scale-up companies is new. According to the UK-based think tank Nesta, European governments spend around €150 billion every year in programs to support business innovation and growth. Despite this spending there is little hard

evidence on the effectiveness of these growth policies and “innovation” in program design is often very limited.

The European Commission can again play an important role in providing resources to an EU Experimentation Fund that focuses on developing new innovative programs aimed at supporting innovation and growth, and testing their impact in order to find out what works.²⁸

Policy makers tend to be relatively conservative when designing new policies, and as a result innovation and growth oriented policies are often not very innovative.²⁹ The Fund should co-finance pilot innovative support programs in Member States but on the condition that they are evaluated rigorously.

In the same way as the European Investment Bank co-finance private and public sector actors’ investments, which might not otherwise be made, the Fund would co-finance pilot innovative support programs in Member States, nudging them towards trying out novel approaches in innovation and business growth support.

One of the rationales for EU action to co-fund pilot innovative support programs is the learning that these experimental pilots would generate. Not only would they provide direct support to entrepreneurs and businesses on the ground, but they would also build the evidence base on the impact of different programs, helping to inform the decisions on which support schemes are promising and should be scaled up throughout Europe, and which ones do not work and therefore are not a good use of public funding.

This is why it would be important that these policy experiments create rigorous evidence on their impact. Randomized trials are one of the best approaches to find this out, and they have been unjustifiably underutilized. In a randomized trial, participants satisfying the program

²⁸ The idea is inspired by the ideas and work of the Innovation Growth Lab, a global collaboration led by Nesta bringing together governments, foundations and researchers to develop and test new approaches to increase innovation, support high-growth entrepreneurship, and accelerate business growth.

²⁹ http://www.nesta.org.uk/sites/default/files/experimental_innovation_and_growth_policy_why_do_we_need_it.pdf

criteria are randomly placed in a ‘treatment’ group and a ‘control’ group, and the impact of the program is estimated comparing the behaviour and outcomes of the two. The lottery ensures an accurate estimate of the impact of the program. This differs from the evaluation of regular programs, where it is impossible to determine if the improved performance of the “treatment group” is the result of the program itself, or if it reflect some unobserved characteristics of the group like ‘smart’ firms opting to participate in the program.

Randomized trials are well-known in medicine, where it has been a standard method of testing the effects of new drugs and medical procedures. The methods have developed over many years and are documented in Consolidated Standards of Reporting Trials.³⁰ In the field of policies towards growth, the use of experimental pilots is rare except for developing economics, where the MIT Abdul Latif Jameel Poverty Action Lab (J-PAL) has run about 740 randomized trials of poverty-reduction interventions.³¹

Building on the concepts developed at J-PAL and the Innovation Growth Lab at Nesta, the EU Experimentation Fund would have the objective of providing support to policy experiments across the EU countries. The goal would be to i) build the evidence base for what works and ii) develop new innovative programs for stimulating scale-ups.

Applying some of the methodology from medicine can move the evidence base forward. However, getting money for experiments is difficult. Furthermore, the experiments are difficult to carry out. The Fund could finance new experiments, develop the tools needed to run the experiments and thereby slowly build the evidence base, leading to more effective policy interventions and faster economic growth. One option would be to ring-fence a small percentage of EU structural funds to set up this experimentation fund, which would have a lower requirement of national co-financing for innovative support programs. The advantage of

³⁰ <http://www.consort-statement.org>

³¹ <https://www.povertyactionlab.org>

using the structural funds for an experimentation fund is that they are governed by the same regulations in all Member States. Another possibility is to introduce an experimentation mechanism in COSME which could be done with a small budget to test the idea of the Fund and the idea can then later be scaled to the structural funds and other EU funding mechanisms.

Annex 1 Definitions

Start-ups

Start-ups are well-defined by EU STAT and OECD in their business demography manuals. Two measures are used to define a start-up company – enterprise birth and Employer Enterprise birth.

(http://ec.europa.eu/eurostat/cache/metadata/en/bd_esms.htm#meta_update1450348460321)

Enterprise Birth

A birth amounts to the creation of a combination of production factors with the restriction that no other enterprises are involved in the event. Births do not include entries into the population due to mergers, break-ups, split-off, restructuring of a set of enterprises or a change of activity.

Employer Enterprise Birth

Birth of an enterprise with at least one employee. This population consists of enterprise births that have at least one employee in the birth year and of enterprises that existed before the year in consideration, but were below the threshold of one employee.

In other words, "employer enterprise births" comprise all "enterprise births" of a given year *minus* the non-employer births of the same year *plus* former non-employer enterprises that have become employers in the given year. Therefore the dataset on "employer business demography" does not have any size class "0 employees" but usually has higher number of "employer births" particularly in size class "up to 4 employees".

High-Growth Enterprises (growth by 10% or more)

[Commission implementing regulation \(EU\) No 439/2014](#) set the definitions of characteristics on high-growth enterprises with at least 10 employees in the beginning of their growth and

having average annualised growth in number of employees greater than 10% per annum, over a three year period.

High-Growth Enterprises and Gazelles (growth by 20% or more)

The definitions of the concepts used in these datasets are laid down in the . All enterprises with an average annualised growth greater than 20% per annum, over a three year period should be considered as high-growth. Growth can be measured by the number of employees or by turnover. Medium growth enterprises are defined with the average annualised growth mentioned above between 10 and 20%.

In addition, data is collected on so-called 'gazelles', i.e. high-growth enterprises that are up to five years old. All enterprises up to five years old with average annualised growth greater than 20% per annum, over a three year period, should be considered **gazelles**. The medium growth enterprises which are up to five years old are called young medium growth enterprises.

As the growth factor defining high growth does not depend on the size of the enterprise, a meaningful threshold has to be set. Otherwise, for instance, a small enterprise growing from 1 to 2 employees over three years would already be considered as a 'high growth enterprise'. Thus, a threshold of 10 employees (up to the reference year 2006) / 5 or 10 employees (the reference year 2007 onwards) is applied, i.e. only those enterprises that had at least 5 or 10 employees at the beginning of the three-year observation period are covered.

The challenge with this high-growth definition is that a company can be a high-growth company and still end with 18 employees after the 3 year growth period. This is impressive but still not what this paper focuses on. The company is still so small that it can be managed by one person. We are looking for the shift between - an entrepreneur that manages his/her company compared to a company that can scale regardless of the entrepreneurs. This is where the scale-up definition comes in.

Scale-up companies

Many use the venture capital based definition to define a scale-up, where a scale-up is less than 10 years old and have received more than \$1 million in investment. This definition is somewhat limiting as many companies can have organic growth and still scale. Age is also a bit strange to include as many older companies can also scale. In this report a scale-up is loosely defined as a subset of high-growth companies that have had a real impact on the economy, and have, for example, scaled to more than 100 employees or have a large paying customer base.