OECD Studies on SMEs and Entrepreneurship

International Compendium of Entrepreneurship Policies

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BETTER POLICIES FOR BETTER LIVES

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Foreword

Entrepreneurship is a key driver of job creation, economic growth and social cohesion. However, appropriate policy interventions are required to exploit its potential; both to create the right framework conditions for new firm development and to offer direct support to help entrepreneurs and start-ups overcome specific barriers, for example in areas such as finance, innovation and skills.

The contribution of entrepreneurship to job creation and productivity growth is well documented. Entries of new firms boost job opportunities and through a process of creative destruction raise aggregate productivity. Entrepreneurship plays an important role in the development and diffusion of innovation, although innovative start-ups represent a small subset of new start-ups. New firms contribute to market dynamism, improving the breadth of choices available to consumers, and increase competition, incentivising existing businesses to improve and driving inefficient firms out.

Entrepreneurship also has the potential to create wider social benefits. One of the benefits is to offer an alternative pathway to employment to people who are disadvantaged in the labour market, who may be able to create successful businesses. Entrepreneurship can also cater to people who prefer more flexibility and autonomy in their work or to stress social objectives. Entrepreneurship can contribute to support the transition of regions in economic decline, including in the context of major firm restructuring. Entrepreneurs can also contribute to introducing innovative solutions to economic and social challenges to the market, in areas such as driving the green transition and creating services for ageing populations.

However, realising the benefits requires policy interventions that address the market, behavioural and institutional failures that hold entrepreneurship back. Entrepreneurship policy is a relatively recent but important policy area for government economy, industry and business development ministries and for small and medium-sized enterprises (SME) agencies, development banks and economic development agencies at national, regional and local levels. The policy focus on entrepreneurship has been emerging since the 1990s, following from an earlier policy focus on small business policies and evolving over the past three decades through broad support to start-ups, including start-up subsidies, to a recent leading-edge focus on holistic packages for start-ups with growth potential. Governments are paying increasing attention to entrepreneurship policies that support people to start and scale up ventures with a degree of innovation at the same time as pursuing parallel support for equal opportunities in entrepreneurship across all population groups and types of geographical area.

This report offers policy makers a brief overview of the main types of entrepreneurship policy approaches being pursued internationally and their main features and success factors. It focusses on policies and programmes that promote and support the creation of businesses which have job creation and innovation potential, yet are not likely to reach the growth levels of gazelles or unicorns. These policies span areas as varied as access to risk capital, targeted consultancy for entrepreneurs, easing regulatory barriers and developing supportive entrepreneurial ecosystems. The report also gives policy makers opportunities to draw inspiration from a small set of international policies and programmes with demonstrated results or promising prospects, and learn from their experiences, considering how other countries have addressed entrepreneurship policy challenges. The report presents key features of each case and highlights the success factors and challenges faced.

By providing a structured typology of intervention and identifying key programme characteristics and best practices, this report offers policy makers actionable tools to navigate the complex policy area of entrepreneurship support. It is hoped that the information will prove useful to policy makers when considering their choices on the mix of entrepreneurship policy measures to offer, on the design and implementation measures that they need to take into account and on the types of key performance indicators that they can track in policy monitoring and evaluation.

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Reader's guide

What will I learn from this report?

This report provides an overview of the scope of entrepreneurship policy today, discussing policy challenges and presenting the different types of instruments available to policymakers. It also provides principles and good practices to follow in designing and implementing these policies. It offers concrete policy examples to illustrate this discussion, complete with lessons learned. The compendium aims to serve as a source of inspiration for policymakers seeking to strengthen their portfolio of interventions in support of entrepreneurship in a holistic approach, and aims to encourage and facilitate peer learning across countries and territories.

How can I read this report?

While this report can be read linearly, it is designed as an interactive resource, where readers can easily identify the sections that are of most interest to them and access relevant case studies. To facilitate the navigation, the report includes various matrices, allowing readers to browse sections and policy examples along the dimensions that best match their interests.

- Interested in policies in a specific area of intervention or with a specific feature (e.g. in support of a specific target group, or in a specific country)? Chapters 1 and 2 provide an overview of policy options and Chapter 3 provides a mapping of case studies by main type of intervention and characteristics.
- Looking for inspiration on key performance indicators (KPIs) used to monitor and evaluate different types of policies and programmes? Chapter 3 provides a mapping of case studies by area of intervention and the type of KPIs used to monitor programme activities, outputs, and impacts.
- Looking for concrete policy examples illustrating the success factors highlighted in Chapters 1 and 2? Chapter 3 provides a mapping of cases by main reported success factors and Chapters 4 to 6 set out the case studies in detail.

The report is structured in two parts. Part I discusses challenges, approaches and success factors for entrepreneurship policy. Chapter 1 discusses the rationales and objectives of entrepreneurship policy and explores its regional and local dimension. It also delves into the challenges of monitoring and evaluating entrepreneurship policies and provides guidance for identifying effective KPIs to follow progress. Chapter 2 discusses policy approaches to supporting entrepreneurship, highlighting the main types of policy support available, covering creation of effective institutional and framework conditions, extending direct support to entrepreneurs and designing holistic approaches to reinforce entrepreneurial ecosystems.

Part II presents a selection of 16 short case studies describing policies and programmes illustrating these different approaches. Chapter 3 provides a mapping of the case examples by policy type, KPI used and policy success factors illustrated. Chapters 4-6 present the case examples themselves, with the case examples grouped into those that address institutional conditions, those offering support direct to

entrepreneurs, and those that build entrepreneurial ecosystems. The case studies present the objectives and rationale of each policy example discussed and offer a synthetic description of the activities, linkages to other policies, monitoring and evaluation methods and main evaluation results available. The cases also show the challenges that may be encountered in the design and implementation of initiatives and the responses that may be developed. The case studies contain key takeaways that could inform the development of similar policy initiatives in other countries.

Although the initiatives discussed generally incorporate more than one single intervention focus, Table 1 identifies a main category of policy intervention of each case study featured in this report to assist in navigating the report.

Table 1. Policy case studies by main category of intervention

Type of intervention	Focus of intervention	Policy examples
Policies for institutional conditions	Entrepreneurial culture	N.A.
	Taxation	Tax incentives for early-stage investors (Australia) *Zones Franches Urbaines – Territoires Entrepreneurs* (France)
	Competitive conditions	N.A.
	Regulatory framework	Entrepreneur's Desk (Portugal)
Direct support to entrepreneurs	Education and training	Converge Challenge (UK)
	Information, advice, coaching and mentoring	Regional Business Development Centres (Denmark) Siva partner incubators and business gardens (Norway) Growth Hubs Network (United Kingdom)
	Access to finance	Cooperative Venturing, Pacific Northwest (United States) INVEST - Grant for Venture Capital (Germany) Regional Coinvestment Funds (Sweden) Linc Scotland (United Kingdom)
	Internationalisation	Startup Global USA (United States)
	Technology and innovation	Canada Accelerator and Incubator Program (Canada)
Support to the development of entrepreneurial ecosystems	Integrated support structures, strategic planning, co-ordination agencies	Startup Delta/TechLeap.NL (Netherlands) Startup Estonia (Estonia) Dutch Centre for Entrepreneurship – DutchCE (Netherlands)

How was this report developed?

The development of the compendium started with the elaboration of an analytical framework identifying key issues in entrepreneurship policy and outlining a typology of interventions, drawing on the OECD's extensive body of work on supporting entrepreneurship and strengthening entrepreneurial ecosystems in a variety of contexts. Based on the framework, a template was prepared for the development of case studies. Relevant examples of policies and programmes illustrating different approaches to entrepreneurship policy were then identified through extensive desk research and exchanges with experts.

Among this initial collection, a sub-set of 16 cases illustrating a variety of approaches from a range of countries were selected based on a series of criteria, including consideration for the range of approaches at national and local levels such as institutional conditions, direct support to entrepreneurs and entrepreneurial ecosystem development. Specific attention was also paid to policies and programmes with robust evaluation frameworks.

Information on the selected case studies was gathered through interviews with experts and programme managers and review of programme documentation, leading to a set of draft case studies. Case studies were prepared by international experts and the OECD secretariat and benefitted from a review from national policymakers.

Executive summary

The International Compendium of Entrepreneurship Policies illustrates the main types of policy interventions available to encourage entrepreneurship and key considerations for their successful design and delivery. The report focuses on promoting productive entrepreneurship, i.e. on policies that emphasise the creation of businesses with job creation and innovation potential but including those that are unlikely to become high growth "gazelles" or "unicorns".

It identifies three main types of interventions.

1. First, policies can aim to improve institutional conditions for entrepreneurship, which includes initiatives for the development of an entrepreneurial culture, a favourable tax and regulatory framework for entrepreneurs and favourable competitive conditions.
2. Second, policies can offer direct support to entrepreneurs and start-up businesses, through training and education programmes, provision of information, advice, coaching and mentoring, facilitating access to finance for entrepreneurs and supporting entrepreneurs in specific activities that are conducive to growth, such as innovation and internationalisation.
3. Third, entrepreneurship policy can take a holistic approach and support the development of entrepreneurial ecosystems.

The report also outlines the main policy challenges that arise in designing and implementing entrepreneurship policies and monitoring and evaluation frameworks to assess their impact. It identifies a series of key considerations for designing effective entrepreneurship policies.

- Interventions should aim to focus resources on nascent entrepreneurs and new ventures with potential for growth and avoid subsidising businesses that aim to enter excess supply sectors.
- Monitoring and evaluation should be built into policies and programmes from the start, with proportionate but adequate resources allocated. Mechanisms to incorporate results into programme revision and future policy developments should be included. Key indicators of policy achievements include start-up survival, growth and employment creation. The impacts of some entrepreneurship policies occur over long timelines, calling for outputs and impacts to be assessed at different points in time.
- Policy needs to be sensitive to structural conditions in the economy, and to new economic developments such as digitalisation.
- Policy implementation is as important as policy design for effectiveness. Factors for success include choosing the appropriate delivery agency or partner and providing them with adequate resources, setting relevant targets and including processes for feedback from frontline programme workers and users.
- Since the barriers to entrepreneurship are multifaceted they require corresponding packages of support that address all the main constraints. Linkages should be fostered between different programmes and across different entrepreneurship support organisations, and as the support

needs of firms change as they progress from idea, start-up, early-growth and scale-up there should be referrals to the next source of needed support.

- Moreover, policy should not overlook institutional conditions, as they can contribute as much to supporting entrepreneurship as directly targeted programmes. These include culture, taxation, competitive conditions and the regulatory framework.

These policy discussions are illustrated by a selection of 16 international case study examples highlighting good practices in policy design and implementation. Key lessons from the policy examples include:

- **Setting clear and appropriate goals and corresponding KPIs is key to policy success.** Involving stakeholders in designing programmes can also help ensure that the issues for policy to address and the targets of policy are identified accurately and solutions are delivered in a format that matches recipient capacities and takes full advantage of existing support actors. Setting concrete objectives and measurable KPIs is important to allow delivery to match programme intentions and allow for monitoring progress.
- **Investing resources in non-core activities is pivotal to successful implementation.** This includes investing resources in awareness raising which can be crucial to promote up-take, especially among target groups who traditionally do not seek information from business support providers (e.g. angel investors). This also includes minimising the administrative burden for programme participants and allocating resources to administrative tasks, since the delivery of programmes, especially those involving screening, can create significant burden on applicant firms and programme staff. Finally, sufficient resources should be allocated to monitoring and evaluation, and programmes should consider measures to facilitate reporting (e.g. support tools) and build capacity.
- **Building on existing actors and structures fosters policy cohesion and efficient delivery.** New programmes should consider possible interactions with the existing portfolio of initiatives early in the design phase. Programmes should also be embedded in national and local entrepreneurship development strategies, to foster cohesive action and signal political support. Programmes should consider leveraging existing capacity for delivery, relying on existing ecosystem actors, building around existing structures rather than starting new structures from scratch. This also involves supporting ecosystem players of different sizes, as small scale development support providers can sometimes have advantages, especially when local knowledge is critical and when in-person interaction plays a role.
- **Including capacity building as part of policy delivery increases chances of success.** Offering training, peer learning and other capacity building support to programme managers and delivery staff is important to the effective delivery of policy. This is especially true for initiatives which involve the use of new tools or the launch of platforms.

Part I. Challenges, approaches and success factors for entrepreneurship policy

1. Objectives and challenges of entrepreneurship policy

This chapter provides an overview of key factors to consider in designing and implementing effective entrepreneurship policies. It discusses the current objectives and challenges of entrepreneurship policy. It presents good practice principles for policy design and draws lessons for successful policy development and implementation. The chapter also highlights the importance of monitoring and evaluation for impactful entrepreneurship policies and programmes.

Objectives of entrepreneurship policy

Business creation is an important driver of economic growth and job creation, generating innovations and contributing to economic efficiency through competition (OECD, 2018a; OECD, 2017). It can also create wider social benefits by contributing to local economic development, supporting industrial transitions (OECD, 2019), and offering an alternative pathway into work for those at a disadvantage in the labour market or in search of more flexibility (OECD/European Union, 2016).

However, market, institutional and behavioural failures create barriers to entrepreneurship. The obstacles include barriers to entry in markets with large incumbents, administrative costs associated with registering a business, and information imperfections in finance markets, which create liabilities of newness and smallness (Stinchcombe, 1965). The basic rationale for entrepreneurship policy stems from the need to address these types of barriers in order to secure the economic and social benefits of entrepreneurship.

The aim of entrepreneurship policy should not solely be to increase the start-up rate, but also to improve the quality of the businesses created. Overall business start-up numbers are dominated by one-person/non-employer businesses. On average solo entrepreneurs offer a modest contribution to growth and employment. Some, such as skilled independent workers and networked entrepreneurs, can be very successful and innovative. The increasing prominence of platform-based work arrangements enables individuals to pursue independent work that may in future become the basis of larger entrepreneurial endeavours. Policies seeking a greater economic and social benefit should focus resources on start-ups with potential for sustainability and growth.

On the other hand, policy should not focus solely on the most dynamic start-ups – the “gazelles” (i.e. enterprises up to 5 years old with average annualised growth greater than at least 10% per annum over a three year period) and “unicorns” (i.e. privately-held start-ups with a valuation of over USD 1 billion). These types of start-ups have disproportionate impacts on job creation and innovation diffusion but are few in number. Furthermore, it is difficult to predict which firms will grow in advance, since start-ups with growth potential come from many different sectors and operate many different kinds of business models (Mason and Brown, 2013; Brown et al, 2017).

The main focus of this report is therefore on the intermediate target of promoting productive entrepreneurship (Box 1.1). Policy for productive entrepreneurship emphasises the creation of businesses with job creation and innovation potential. It focuses on businesses with the potential to employ more than the founder but also on more ordinary businesses that are unlikely to achieve the dramatic rates of growth of gazelles and unicorns.

Box 1.1. Productive entrepreneurship

Entrepreneurship covers a wide range of activities, whose contribution to society differ widely. Not all entrepreneurship is economically or socially beneficial (Baumol, 1990). Moreover, not all businesses create jobs: non-employer firms make up more than half of all enterprises in most OECD countries (OECD, 2017).

The focus of this report is on policies to stimulate and nurture productive entrepreneurship, taking inspiration from Baumol's classification of entrepreneurship into productive (generating economic activity that contributes to growth), unproductive (generating value only for those involved) and destructive (creating wealth for its instigators but prejudice for the community) forms (Baumol, 1990).

These include entrepreneurship – or business birth rate policies – that seek to build the pipeline of new productive entrepreneurs and support them in start-up and early growth (Stevenson and Lundstrom, 2007).

The importance of regional conditions and policies

There are significant and longstanding geographical variations in entrepreneurial activity within countries (OECD, 2018b; Fritsch and Wyrwich, 2014). These regional variations are greater in the case of high growth firms than for start-ups in general (Stam, 2015; Acs and Mueller, 2008). As a result, national programmes designed without account of regional differences are likely to have geographically variable impacts.

Entrepreneurship policies will therefore often benefit from taking into account regional variations in their design. This includes both systemic interventions (e.g. economic policies, fiscal policies), which may affect different segments of the business community differently, and business support programmes (e.g. start-up grants, training programmes, export support), which often show the highest take-up rates in the most entrepreneurial regions. As an example, the United Kingdom's Loan Guarantee Scheme, which was set up in 1981 to help small firms borrow from banks, had the same requirements for all firms regardless of their location. However, there were large regional differences in the number of loans issued (standardised by the size of the region) and their value, with an over-representation of major financial centres (Cowling, 1998; Harrison and Mason, 1986). Attention to the conditions and targets of these types of programmes may help to support entrepreneurship more evenly within countries.

Incorporating a regional dimension in entrepreneurship policies can also be important to accommodate for structural differences across regions and address regional variations in the nature and intensity of barriers to entrepreneurship. Research finds that geographical variations in entrepreneurial activity can be related to various place-based structural factors. For example, in 2015, around half of firm creations in the OECD area occurred in predominantly urban regions, 36 % in intermediate regions and 13% in rural regions (OECD, 2018b). Capital cities, for example, tend to be entrepreneurship hubs: in 2015 in the OECD area, 29.5% of new firms were created in capital cities, while these cities hosted only 27.5% of existing firms and 20% of the population (OECD, 2018b). Large urban centres benefit from agglomeration effects that are conducive to business start-up. This includes large local markets, easier access to public research and education facilities, high quality of human capital and infrastructure and networking opportunities. Compensating support may be needed to promote entrepreneurship in rural and less dense regions.

The industrial and occupational structure of a city or region also affect entrepreneurial activity: employees in small firms are more likely to start their own business than those working in large businesses. Prior management experience also increases the likelihood that an individual will start their own business, as

does family history of business ownership. Wider socio-economic conditions also affect entrepreneurial activities indirectly (e.g. home ownership facilitates access to bank loans). Stronger support may therefore be required in regions with low existing entrepreneurship and small business rates to overcome these disadvantages.

Rates of productive entrepreneurship in a region are affected by a wide range of regional conditions – culture, access to finance, skills, networks and so on. Therefore one of the jobs of entrepreneurship policy is to identify the different strengths and weaknesses of regions in these conditions and developed adapted and tailored policies to overcome the key constraints manifested in each region. Key policy success factors.

Principles for successful entrepreneurship policy design

Entrepreneurship policy covers a wide range of intervention, with differentiated objectives. Several key success factors contribute to an effective policy mix in support of productive entrepreneurship:

- **Policy interventions should seek support a wide range of entrepreneurs, but focus resources on ventures with potential for growth rather than focusing exclusively on specific sectors or places**. Productive entrepreneurship is not restricted to high-tech sectors and entrepreneurial hubs.
- **Institutional conditions can contribute as much to supporting entrepreneurship as directly targeted programmes.** These include culture, taxation, competitive conditions and the regulatory framework.
- **Barriers to entrepreneurship are multifaceted and require comprehensive packages.** Interventions combining several types of support are typically more effective. Linkages should be fostered between different programmes and across support organisations in the entrepreneurial ecosystems at national, regional and local level, as the support needs of firms change as they progress from idea, start-up, early-growth and scale-up
- **Policy has to be adapted to context to be efficient.** Transplanting policies from one country or region to another is unlikely to be successful without adaptation. This includes taking into account structural conditions and sensitivity to new economic developments transforming entrepreneurship and policy delivery, such as digitalisation.
- **Entrepreneurship policies should be designed to minimise deadweight, displacement and distortion**. Poorly designed support may create a displacement effect whereby publicly-supported new firms drive out existing businesses. Deadweight is a further threat – whereby support may be provided to enterprises that do not need it or do not change their behaviour as a result of it. Policy support can also lead to market distortion away from supply and prices that match with consumer preferences. Entrepreneurship policies should seek to reduce barriers to business creation without encouraging unsuited individuals to start unsustainable businesses or subsidising start-ups which do not need it.
- **Many of the impacts of entrepreneurship policies tend to occur over long timelines.** The time needed to influence the entrepreneurial culture and the overall business birth rate of a place is likely to be much longer than the time to influence specific achievements among specific entrepreneurs, such as developing a new product of market. Therefore the judgements on whether policy is effective or not need to be made after allowing sufficient time for the policy to have an effect, and appropriately timed evaluations are needed.
- **Monitoring and evaluation should be built into policy and programmes from the start with proportionate but adequate resources allocated.** Mechanisms to incorporate results into programme revision and future policy developments should be included.

Lessons from the international policy case studies

Implementation is as important as design for policy effectiveness. Factors for success include choosing the appropriate delivery agency or partner and providing them with adequate resources, setting relevant targets and including process for feedback from frontline programme workers and users.

International experiences in entrepreneurship policy highlight effective good practices in design and implementation. Based on the selected 16 case studies presented in Part II of the present report, key lessons from these initiatives include:

1. Goal setting is an important policy step that is sometimes overlooked.

- **Involving stakeholders in identifying issues and designing programmes is a success factor reported for initiatives in all domains** (from regulatory improvements to direct support and ecosystem initiatives). This is essential in ensuring issues are identified accurately and solutions are delivered in a format that matches recipient capacities and takes full advantage of existing support actors. This is especially important when developing local level initiatives and initiatives seeking to develop ecosystems. This also includes building feedback loops so that that inputs from users and other stakeholders can be collected and analysed.
- **Setting clear goals and corresponding Key Performance Indicators is important for successful implementation.** A lack of clear objectives is a common challenge to programme implementation. It also hinders effective monitoring and evaluation, which are essential to achieving results.

2. Investing resources in non-core activities is critical to successful implementation.

- **Programmes should consider investing resources in awareness raising among entrepreneurs.** Well-designed programmes may face issues in up-take or in reaching to the appropriate entrepreneurs and enterprises if no resource is set aside for outreach. This is an especially common pitfall in schemes seeking to provide financial incentive to investors, as these usually include very diverse actors who traditionally do not seek information and advice from business support providers.
- **Programmes should seek to minimise "red tape" and allocate resources to administrative tasks.** Delivery of programmes, especially those involving screening and/or funding can create significant burden on applicant firms and programme staff. This burden should not be underestimated to ensure that programmes have sufficient capacity to run smoothly without undue barriers to uptake.
- **Sufficient resources should be allocated to monitoring and evaluation, and programmes should consider measures to facilitate reporting and build capacity.** Monitoring and evaluation are essential to achieving results, but require time and resources for the programme manager. This may be especially challenging for local providers with limited capacity. Reporting systems should be designed to minimise time involved and facilitate reporting by untrained staff. This may include the use of support tools and explicitly budgeting time and resources.

3. Many efficient and effective initiatives build on existing structures and engage existing actors.

- **Programmes should be designed to fit within the existing policy portfolio and consider possible interactions with existing programmes.** This is especially important for programmes seeking to create financial incentives (as their magnitude needs to match other incentive

programmes to have an effect). It is also important to provide appropriate cross-referrals to enable entrepreneurs to benefit from other programmes that may help them overcome other challenges, particularly as start-ups grow and face new challenges. The fact that start-ups may benefit from packages of support should also be taken into account in evaluation.

- **Policymakers should consider embedding key programmes in national and local strategies, to foster cohesive action and signal political support.** The latter is particularly important for entrepreneurial ecosystem initiatives and one-stop-shops, where strong political support may help reinforce the legitimacy of a body as a central facilitator in the system, when it may otherwise be perceived as a temporary initiative and/or another competitor in the business development support market.
- **Programmes benefit from leveraging existing capacity.** This includes relying on existing ecosystem actors (including non-governmental providers), possibly developing a certification model to better link public and private sector business development support and help entrepreneurs navigate the offer. It may also involve leveraging actors for outreach and building around existing structures rather than starting new initiatives from scratch to facilitate uptake.
- **Policies should consider supporting ecosystem actors of different sizes.** One-stop-shops and large-scale incubators and support providers have capacity to serve large numbers of firms and hold a range of capacities in-house. However, experiences from local programmes show that small scale development support providers can sometimes have advantages, especially when local knowledge is critical and when in-person interactions play a role (e.g. in incubator settings where inter-personal exchanges between entrepreneurs play as important a role as formal training)

4. Capacity building is an essential part of successful delivery

- **Providing training and capacity building to delivery staff may be needed to ensure programmes are rolled out effectively.** This is especially true when programmes involve the use of new tools or the launch of platforms.
- **Creating networks between local initiatives to facilitate peer-learning contributes to improved practices over time.** This is especially important for “one-stop-shop” initiatives embedded at the local level, as a centralised hub and spokes model may miss opportunities for learning from experience.
- **Programmes seeking to reinforce entrepreneurial ecosystems should invest in building linkages between existing programmes and actors.** Lack of linkages between ecosystem actors may affect the ability of entrepreneurs to find partners and suppliers, access resources and business support. Similarly, lack of co-ordination between support providers may undermine the efficiency of otherwise well-designed support programmes. Resources and actors in ecosystems are as important as the linkages between them.

Table 3.3 (in Chapter 3) highlights key success factors illustrated by the different case studies presented in the report.

Monitoring and evaluation

The importance of monitoring and evaluation

Monitoring and evaluation are critical in providing information to guide the effective design and implementation of policy. The monitoring of a policy or programme describes the inputs (e.g. budget, resources), record the outputs (e.g. number of participants, take-up rates), and may collect the opinions of the managers of the programme, stakeholders and participants. Evaluation, in contrast, involves the

application of sophisticated methodologies to quantitative and sometimes qualitative data, to formally measure what difference the policy or programme has made to the businesses that were assisted and to the wider economy.

Governments should monitor and evaluate policies to establish whether interventions have contributed to correcting the problems that they have set out to solve as well as to assess the economic efficiency of interventions. This is particularly important as entrepreneurship policies target complex mechanisms and are expected to create effects over long timeframes. Monitoring and evaluation are also required to improve the design and administration of interventions to increase performance and value-for-money.

Evaluation is also fundamental to public accountability. Entrepreneurship programmes involve substantial public expenditure, both direct and indirect (e.g. forgone tax revenues), creating a need for governments to demonstrate impact. As government budgets are constrained, monitoring and evaluation can help identify those interventions that lead to the most desirable outcomes and which could be expanded and those that could be contracted. As entrepreneurship policy portfolios are complex and policies interact with one another, systemic evaluation may help governments make appropriate adjustments to the entrepreneurship policy mix.

However, the cost – and therefore the sophistication – of the monitoring and evaluation methods selected should be proportionate to the cost of the assessed intervention. Interventions with smaller budgets, as is often the case for regional and local programmes, may therefore need to opt for less expensive evaluation methods.

Fundamentals of monitoring and evaluation

The OECD Framework for the Evaluation of SME and Entrepreneurship Policies and Programmes (OECD, 2008) has identified a six-step approach to monitoring and evaluation, ranging from the simplest methodology (Step I) to the most sophisticated and reliable one (Step VI) (Table 1.1).

Table 1.1. Levels of sophistication and reliability of entrepreneurship policy evaluation

Monitoring	
STEP I	Take-up of schemes
STEP II	Recipients' opinions
STEP III	Recipients' views of the differences made by the assistance on their behaviour or their business
Impact assessment and evaluation	
STEP IV	Comparison of the performance of 'assisted' with 'typical' firms
STEP V	Comparison with 'match' firms
STEP VI	Taking account of selection bias Randomised Control Trials

Note: the six steps are not sequential
Source: (OECD, 2008)

Monitoring (steps I-III) includes measuring take-up rates and recording applicants' characteristics as well as asking participants for their views on the value of the programme and the impact they believe it had on their own behaviour or on their business. The evidence collected in steps II and III is typically qualitative, self-report data derived from surveys. It can be useful for tracking programme usage, but is not reliable for establishing programme impact.

Evaluation (steps IV-VI) involves a comparison between firms that received assistance (the treatment group) and those which did not (the control group) in order to establish the counterfactual situation. This comparison is based on outcome measures of policy impact, such as sales, employment or survival. Comparing the actual changes in the assisted firms with the counterfactual is interpreted as the impact of

policy – the additionality. It can look at average firms (step IV), or, for more accuracy, compare treated firms with enterprises with similar characteristics that did not benefit from the programme. Indeed, entrepreneurship support participants may often differ from the average firm, which can lead to over- or under-estimating the impact of a programme. Step VI, which is the most complex methodology, includes methods to address selection bias. These methods are typically based on quantitative evidence (either from official data sources or collected directly from the firms themselves). Recent entrepreneurship policy evaluation has started to use Randomised Control Trials as an alternative approach to establishing impact. The higher levels of steps are likely to provide more reliable estimates of programme impacts.

Other factors that are helpful to consider while designing an evaluation framework include capturing deadweight (activity related to the intervention that would have gone ahead without even in the absence of support), displacement (when an activity subsidised or supported by the government displaces another activity) and spillover effects (when interventions to support specific firms have a positive impact on firms that are not the direct target population of the support).

Defining efficient key performance indicators

Monitoring and evaluation should be designed to assess policy against carefully defined policy objectives. To measure progress towards these goals, appropriate key performance indicators (KPIs) – quantifiable measures that can be tracked over time – should be chosen.

KPIs should be set to monitor the activity of a programme. This includes metrics related to outreach and uptake, such as the number of programme participants, metrics describing the delivery process, such as indicators of costs, and measures of satisfaction of users and stakeholders.

Programmes should also select KPIs to quantify direct outputs and impacts. These can include measures of the number of firms created after a pre-start-up programme, number of jobs created by supported firms, amount of funding secured by firms supported in accessing finance, and survival rates and economic performance of supported entrepreneurs.

Finally, KPIs aiming to capture broader impact of a policy intervention should also be defined. These can include quantitative measures (such as growth in value added) and incorporate econometric techniques to attribute effects to an interventions. Measurable indicators seeking to capture more qualitative developments can also be set (e.g. estimates of the linkages between certain types of actor through formal collaboration as a proxy to ecosystem development).

The first step of designing KPIs is identifying the objectives of an intervention. A concrete and measurable output reflecting each objective should then be identified, and a target set for it. It is important to also develop a clear understanding of how the intervention is expected to lead to the desired outcome, i.e. through which channels will the intervention affect the variable observed. This step will be important in setting efficient KPIs to monitor the implementation of a policy or programme over time and adjust course in early stages, before outputs or impact can be accurately measured.

Once KPIs have been defined, a strategy for measurement should be clearly outlined. This may involve developing measurements and gathering data in-house (e.g. counting beneficiaries, developing satisfaction surveys) or using existing data sources. The methodology should involve a timeline and method for data collection and treatment. Finally, responsibility should be assigned for achieving different KPIs and resources should be set aside for tracking progress.

KPIs are not universal. The choice of KPIs depend on a number of factors, including the type of intervention (which affects the type of outcome expected and the timeline of results), its scale, and the capacity of the programme (i.e. resources to conduct measurements or reliance on existing sources, type of evaluation foreseen).

Indeed, while entrepreneurship policies seek out similar ultimate goals, their outputs can differ widely. For example, an intervention seeking to integrate entrepreneurship education into formal education curricula is expected to affect students' mind-sets. However, it will not translate into significant changes in entrepreneurial activity for years or decades, and such changes would be extremely difficult to attribute to such an intervention. As a result, a programme of this type should set monitoring KPIs around the number of students exposed and the quality of their exposure, and set evaluation KPIs around measurements of the knowledge of students around entrepreneurship, their opinion on it, and measurable progress in concrete entrepreneurship skills rather than focus on "traditional" measures of entrepreneurship such as start-up rates.

By contrast, a programme seeking to support entrepreneurs in exporting may expect quantifiable short-term changes in participants' activities. Such a programme may choose to use KPIs measuring the number of firms that export, their export intensity, and the number of external markets they export to.

Table 3.2 (Chapter 3) presents an overview of the main types of KPIs used to assess the entrepreneurship policies presented in this report.

Challenges and principles for the entrepreneurship policy evaluation

An important challenge to the evaluation of entrepreneurship policy is the presence of unobservable selection bias: firms with growth ambitions can be expected to be more likely to apply for support. Even without support such firms would have likely outperformed the average, resulting in an over-estimation of the effects of the programme. A similar effect arises with schemes that involve a selection process, which is likely to eliminate firms that are likely to perform poorly (OECD, 2008). Conversely, schemes targeting laggard firms will have the opposite bias. Moreover, measurement of interventions that have an economy-wide impact (e.g. tax, culture) will be difficult in the absence of a natural control group.

It can also be difficult to isolate the impact of any single programme since policies in other areas also affect entrepreneurial activity. The identification of a policy effect also does not indicate the causal link between the input and the outcome – the mechanisms by which the policy inputs leads to the observed outcome. Feedback effects may also be at play.

Another challenge is selecting an appropriate timing for an evaluation, as impact may occur in a timeline ranging from months to years depending on the type of intervention and context. Moreover, some schemes will have a one-off impact whereas other programmes may have both immediate and longer-term effects.

Finally, the choice of the entity carrying out an evaluation can also be challenging, as concerns for in-depth understanding of a programme's design, which might imply involvement of the programme managers in evaluation, may not align with the goal to ensure objectivity of the assessment, suggesting an external expert. For accurate impact assessment it is preferable to use an independent evaluator.

It is also important to adequately reflect on evaluation outcomes, assessing not only the effect of the policy being evaluated but also reviewing the accuracy of the initial diagnostic, the approach taken to address the issue and the way the intervention was delivered.

Several principles can be identified for good practice evaluation of entrepreneurship policies:

- **Policy interventions should be evaluated against clearly specified objectives.** Setting clear objectives and identifying the mechanisms through which the intervention is expected to reach them is key to identifying targets or key performance indicators against which outcomes can be measured.
- **Monitoring and evaluation need to be based on appropriate data.** SME policy evaluation can take advantage of existing relevant data held in different parts of the administration (e.g. tax records, unemployment registry data). Recent efforts to broaden access to public data for research conducted in many OECD countries could facilitate this process (OECD, 2018a). The development

of “big data” also holds promise for improving evaluation. Data should be available at appropriate time intervals and levels of disaggregation and refer to an outcome indicator that is relevant for the foreseeable future. Some programmes will require dedicated data collection exercises (OECD, 2018c).

- **When possible, evaluation needs to take full advantage of the application of rigorous evaluation techniques that use appropriate counterfactuals and can correct for selection bias**. One example is Randomised Control Trials (RCT), whereby the performance of a group of eligible recipients is compared over time with those eligible recipients who were randomly excluded in order to establish a counterfactual. A number of recent RCT evaluations have been undertaken in the area of SME and entrepreneurship policy (OECD, 2018c).
- **Evaluation techniques need to accommodate the diversity of entrepreneurship programmes** – each with their own objectives, targets, instruments and impacts. This will involve different data sources and timescales, with some programmes intended to have short-term impacts (e.g. export support) whereas others will only have an impact in the longer-term (e.g. innovation support).
- **Monitoring and evaluation should take into account possible interactions between the outcomes of various entrepreneurship policies and programmes** to avoid attributing outcomes to specific programmes that arise from other interventions. The impact of other policies affecting entrepreneurship (e.g. in the areas of taxation, social security, business regulation, immigration and competition) should also be taken into account in the evaluation of entrepreneurship policies.
- **Effective monitoring and evaluation are included from the early-stage of the policy-making process.** Evaluations should be embedded in the policy cycle rather than be designed after the launch of a programme. Moreover, it is important that monitoring and evaluation evidence does not discourage or deter policy experimentation and acceptance of failure (OECD, 2018c).
- **Accurate evaluations should favour a broad focus, looking beyond outcomes to consider other factors that may impact the effectiveness of an intervention.** This may include the definition of the eligibility criteria, awareness of the programme among the target groups, and local context.

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2. Categories of policy intervention

This chapter provides an overview of the main policy approaches employed in supporting entrepreneurship. It presents three categories of intervention: policies focused on institutional and regulatory conditions, policies providing direct support to entrepreneurs and start-ups in areas such as access to resources and markets, and holistic place-based initiatives aiming to reinforce entrepreneurial ecosystems at national and regional levels. For each of these categories the chapter presents the main areas of policy intervention, describing the rationale for intervention and providing examples of instruments. It also identifies the case studies in Part II of the document that illustrate the approach.

Most OECD countries have multiple policies and programmes in place to promote productive entrepreneurship. The focus of these policies and programmes, the tools they use, and how they are delivered vary and evolve over time, reflecting changes in economic conditions (e.g. the level of unemployment) and learning from previous policy successes and failure (Greene et al, 2008).

Three broad types of interventions can be identified: policies focused on institutional conditions, policies providing direct support to entrepreneurs and start-ups and policies aiming to improve entrepreneurial ecosystems.

Policies for institutional conditions

Policies aiming to improve institutional conditions for entrepreneurship primarily focus on achieving favourable attitudes and motivations amongst potential entrepreneurs and easing administrative and regulatory barriers to entrepreneurship. This type of policy intervention includes efforts to develop an entrepreneurial culture, improve the taxation system to facilitate entrepreneurship and investment in new firms, reinforce competitive conditions and ensure the regulatory framework is conducive to business creation and growth by a range of entrepreneurs. Policies targeted at institutional conditions often have a national focus. However, there is also considerable scope for interventions to address institutional conditions at the regional and local scale, particularly where sub-national tiers of governments have tax and spending powers which may influence the costs and rewards of entrepreneurship.

Entrepreneurial culture

The shared values, beliefs and expected behaviours of a society shape collective attitudes about the desirability of entrepreneurship and, in turn, individuals' propensity to start a business. Key factors include perceived status of entrepreneurs, social attitudes to failure, and perception of the skills required for entrepreneurial success. Policies to foster an entrepreneurial culture focus on creating awareness in society at large about entrepreneurship as an option for a wide range of people and projects and encouraging positive perceptions of entrepreneurship and entrepreneurial attitudes.

Examples of intervention include awareness campaigns and events. These aim to raise awareness of the contributions of entrepreneurship to society and to increase the visibility of successful entrepreneurs of various backgrounds. They also raise awareness of the resources and support available to entrepreneurs. These activities may be carried out in collaboration with the media.[1]

Entrepreneurship competitions, prizes and awards are another approach for developing an entrepreneurial culture. They can be organised by governments, but are also often developed by entrepreneurial support organisations and large businesses (e.g. banks). The public sector can help fund these types of initiatives even when organised by third parties. Some are targeted at specific categories of entrepreneurs (e.g. youth, women, and people with disabilities), types of businesses (e.g. social enterprises, growth-oriented enterprises), or sectors (e.g. digital enterprises, technological enterprises, green enterprises). Prizes aim to create greater awareness of the role of entrepreneurs in society, identify and celebrate successes and showcase examples of best practices to inspire potential entrepreneurs. There are also direct benefits for prize-winners, notably cash prizes, in-kind support, visibility and networking opportunities.

Taxation

Taxation on personal income, business profits and capital gains influences people's decision to become a business owner or an employee, the decision whether or not to grow a business, and the decision whether to operate in the formal or the informal economy (OECD, 2007). It may also influence the legal structure chosen for a new business – self-employed, partnership, Limited Liability Company. A taxation framework supportive of entrepreneurs focuses on ensuring equal tax treatment for business owners vis-à-vis the

employed population and minimising disincentives to business creation and incentives to continued informal entrepreneurship.

Examples of interventions include assessing the impact of tax policies on entrepreneurs and different types of firms and introducing reforms to reduce unnecessary burden on new and small firms. This includes efforts to reduce the cost of tax compliance (Chittenden et al, 2005; Pope, 2008)

Another type of intervention is the introduction of temporary or permanent tax incentives to reduce costs for new firms. These can also be used to support business growth (e.g. through reductions on labour taxes for hiring a first employee). These incentives can apply to all entrepreneurs or target specific types of business (e.g. businesses started by youth and women entrepreneurs benefit from temporary tax rebates in several EU countries) (OECD/European Union, 2019). Specifications dedicated to small firms can also be introduced in existing tax incentive schemes. For example, enhanced research and development (R&D) tax credits may be introduced for small businesses together with extra provisions for new and small firms, such as carry forward of benefits to future years (designed to address the lack of profits that some innovative start-ups will face in their early years) or for R&D work provided by a third-party (designed to address lower levels of in-house R&D in small firms). The benefits of targeted incentives have to be balanced against the pitfall of increased administrative complexity (Pope, 2008).

Case 3: Zones Franches Urbaines – Territoires Entrepreneurs, France (taxation) is an example of a tax incentive to start-ups in geographical areas of economic distress. It offers temporary tax reductions to entrepreneurs setting up or relocating in disadvantaged urban areas.

Tax incentives can also be targeted to investors in new firms, in particular business angels and people ready to invest in small firm equity funds. These incentives aim to increase investment in new and small businesses. Case 2: Tax incentives for early-stage investors, Australia (taxation) offers tax offsets to investors providing funding to innovative start-ups.

Competition policy

Anti-competitive practices may restrict entrepreneurs' access to markets as well as resources, such as finance. Competition policies such as anti-trust laws and reduction of state ownership in the economy are designed to create opportunities for new firm entry. Examples of interventions also include updating licensing regulations.

Start-ups may also face difficulties accessing public procurement. Government is a major consumer of goods and services. However, the share of small firms in public contracts is much smaller than their share of private sales (Morand, 2003). This is particularly true of central government contracts.[2, 3] This is due in part to the typical larger size of contracts, as well as their low tolerance for risk, making new and small firms less attractive suppliers. Complex tendering procedures and administrative burden also create cost barriers for small firms (OECD, 2019; Storey and Greene, 2010). Longer payment delay may also affect the ability of start-ups to engage.

Examples of interventions to support new firm access to public procurement include the use of "set-asides" earmarking a proportion of public contracts to be delivered by small firms as well as efforts to break down contracts into smaller ones. Efforts to reduce the complexity of applying for public tender are another approach, including measures such as the use of framework agreements and the centralisation of information to reduce the number of times full applications have to be completed. In addition, some schemes organise competitions for new and small firms to develop innovations that will help respond to emerging government procurement needs.

As the proportion of small firms that tender for public sector contracts is very small (Loader, 2013), measures to encourage new entrepreneurs to be proactive in bidding for government contracts (e.g. 'meet the buyer' events) are an important complement to demand side interventions.

Regulatory framework

Business regulation is required to facilitate a competitive environment for entrepreneurs, protect consumers' and workers' interests as well as limit negative externalities (e.g. environmental pollution). However, it also imposes monetary costs on businesses (e.g. cost of registering a business, healthcare and pension cost of labour, costs of complying with a new standard) and administrative costs (e.g. management and staff time incurred). Evidence suggests that these costs are proportionally greater for small businesses, which may inhibit start-up activity and create incentives for informal entrepreneurship. Regulations regarding access to social and health benefit may also affect entrepreneurship. For example, abrupt ending of unemployment or welfare benefits upon starting a business may create disincentives to business creation among the unemployed.

Governments therefore have to find the right balance of regulation that neither discourages entrepreneurship or pushes it into the informal economy nor enables businesses that are exploitative, fraudulent or generate negative externalities to operate.

Regulatory improvements for entrepreneurship focus on reducing administrative burdens on start-ups. This includes improving access to information on regulations as well as reducing the costs of compliance for entrepreneurs and small firms, including registering a business, gaining regulatory permits, accessing utilities and protecting intellectual property. This can be achieved through different means, including digitalisation of procedures and greater co-ordination between government departments to reduce duplication of information provision. Stakeholder consultations ahead of the introduction of new regulations and close monitoring of their effects on entrepreneurs and small firms are also factors for success (Storey and Greene, 2010). Regulation must also adapt to technological change and market evolutions (e.g. the emergence of ride-sharing apps and residential short term rentals). Other regulatory measures may also facilitate entrepreneurial endeavours indirectly, such as the introduction of welfare bridges whereby welfare benefits progressively taper down for entrepreneurs, or measures to strengthen access to social and health security coverage for entrepreneurs. The latter measures often focus on labour market integration through self-employment rather than on productive entrepreneurship.

Case 1: Entrepreneur's Desk, Portugal (regulatory framework) provides an example of regulatory simplification. The initiative aims to simplify the regulatory process for entrepreneurs by offering them a single point of contact to obtain all the information needed regarding the development of an economic activity in Portugal, carry out administrative procedures online including payments and obtain public services online when possible. The initiative aims to reduce and simplify procedures as much as possible (e.g. reducing licensing requirements) in addition to digitising the core ones.

Programmes targeted directly at entrepreneurs

The second type of policies for productive entrepreneurship are programmes that are targeted directly at entrepreneurs. They aim to address major challenges in business creation, helping entrepreneurs acquire resources required to successfully start and grow their businesses (knowledge, finance, networks etc.). Programmes providing direct support to entrepreneurs may have a broad focus, open to all potential entrepreneurs or be tailored to the needs of specific population groups who are under-represented among entrepreneurs or encounter specific disadvantages in engaging in entrepreneurial activities (e.g. women, youth, the unemployed, and people living in rural regions). Programmes may use a wide range of interventions to support entrepreneurs and may combine more than one type of support.

Education and training

Lack of entrepreneurial skills is an important barrier to entrepreneurship (OECD/European Union, 2017). Education and training for entrepreneurship aims to foster the broad development of entrepreneurial

competences, entrepreneurial mind-sets and transversal skills through various channels including in the initial education system, life-long learning and re-training. It also includes targeted technical training offered to aspiring and active entrepreneurs.

Interventions throughout education system, from primary and secondary school to university have the potential to raise awareness of entrepreneurship and create more positive attitudes. While entrepreneurship education is being introduced in curriculums in the European Union (European Commission, 2018) and in many OECD countries, the scope of programmes varies widely.

Many universities now engage in activities to promote entrepreneurship amongst students and recent graduates (Kuratko and Morris, 2018), with universities in many countries offering a wide range of academic programmes in entrepreneurship (Morris et al., 2013; Mazzarol et al., 2016). Although the evidence on the impact of entrepreneurship courses on entrepreneurial intentions and activity is scarce, a number of studies suggest a positive impact (Halabisky, 2012). Other suggest more mixed results (Nabi et al., 2018, Bae et al., 2014).

Success factors for entrepreneurship education include the incorporation of experiential learning and practical activities (e.g. model firms, entrepreneurship clubs, business plan competitions) into theoretical teaching to enable students to generate viable business ideas and equip them with the tools for the start-up process (Morris et al., 2017). This needs to be accompanied by practically-oriented student start-up programmes that support students who wish to engage with the start-up process with training, coaching and training and access to resources.

Case 4: Converge Challenge, UK (education, training) is an innovative approach to entrepreneurship education in higher education institutions. This is a business creation competition and enterprise development programme for staff, students and recent graduates of Scottish universities and research institutes with high potential business ideas. Applicants attend a business course and a business consultation before pitching their idea at an event. Semi-finalists and finalists receive additional business training and winners receive a cash prize and in-kind business support.

Entrepreneurship education focuses on developing entrepreneurial capacities and mind-sets while training programmes tend to target aspiring entrepreneurs and aim to teach the knowledge and skills required to start and grow a business. This includes entrepreneurial skills (including recognising and exploiting economic opportunities), technical skills (specific to the area of operation of the business), managerial skills and personal skills (including self-awareness, accountability, emotional skills and creative skills).

Some training programmes focus on the start-up stage while others focus on business growth, with some programmes aimed at ambitious businesses seeking to scale-up. They are delivered in a variety of ways, including online courses, seminars and workshops, and vary in lengths from one-off trainings to long-term programmes spanning several months. Governments intervene at both the national and regional levels to provide entrepreneurs with access to training, both directly and through independent suppliers.

Information, advice, coaching and mentoring

Entrepreneurs and managers of new start-ups may face difficulties in understanding how to undertake business creation and may need personalised support to successfully transform their ideas into new ventures. Issues such as incorporation and legal establishment, access to financing, and recruitment of skilled workers are areas where entrepreneurs frequently need outside expertise. They are also unlikely to hold in-house all the necessary skills for business creation and growth. Information, advisory and mentoring programmes can support potential and new entrepreneurs and start-up management teams at various stages in the entrepreneurial process on all aspects of starting and operating a business.

The rationale for government intervention is that the use of business advice is affected by market failures that are mainly related to imperfect information. Businesses find it difficult to place a value on the benefits

of external paying assistance, particularly prior to receiving the assistance. In turn this makes businesses reluctant to pay for it and limits the incentive for private sector suppliers to provide assistance. Businesses also face difficulty assessing the competence and trustworthiness of external information or advice. This leads to the sub-optimal use of business support and reliance on the informal acquisition of advice and information.

Interventions to provide access to advice for entrepreneurs include the provision of information on entrepreneurship and sign-posting to available business support services.

Interventions also include more in-depth support such as coaching (whereby trained professionals support entrepreneurs on a specific issue) and mentoring (whereby experienced entrepreneurs transfer knowledge and provide support to potential entrepreneurs in a more organic manner over longer timeframes). Coaching is particularly helpful for businesses that have got beyond the early stage where the entrepreneur has identified a specific need that requires to be addressed to scale-up the business. First-time entrepreneurs in an early-stage start-up may benefit from the more holistic advice and guidance of a mentor. For example, evidence suggests that mentoring is an important component in student start-up programmes, guiding student entrepreneurs in acquiring relevant knowledge, providing psychological support, and helping them to form relationships with the broader business community (Ahsan et al., 2018).

Support for networks of entrepreneurs, facilitating peer-learning and access to resources, is also an important approach to capacity building for entrepreneurs, notably at the local level (Motoyama, 2019).

Information, advice, coaching and mentoring support may be delivered through public agencies or through private or not-for-profit organisations. It may be provided in generic form or on a customised basis. It can be delivered online, via telephone and/or through physical centres. It can be offered as a free service or there may be a charge to users. And it can be free-standing or integrated into other programmes. These services are often key supports provided by business incubators for example.

A common approach to information, advice, coaching and mentoring support is the development of one-stop-shops which provide a single access point to all government services and information, advice on starting and running a business, information on legal rights and responsibilities (e.g. tax, employment), links to financial and other types of support (e.g. mentors, consultants) and to public, private and not-for-profit organisations that provide specialist business support (e.g. exporting, design, innovation, intellectual property office). A national information and advice service is typically complemented by regional or local services which provide advice and links to various sources of support such as local training, workshops and events, often on a more personalised basis. A growing focus of these service is on supporting businesses to become digital.

Case 5: Growth Hubs Network, UK (information, advice, coaching and mentoring) and Case 6: Regional Business Development Centres, Denmark (information, advice, coaching and mentoring) are examples of a localised approach to business advice, providing face-to-face professional advice and signposting entrepreneurs to national and local/regional support to make it easier for them to find appropriate support to start or grow a business.

Case 7: Siva Partner Incubators and Business Gardens, Norway (information, advice, coaching and mentoring) incorporates several types of business support, including advice, access to expertise, training, networking support and peer-to-peer learning to support business development and innovation. This is delivered by co-locating firms in incubators and business gardens to provide advisory services and peer learning opportunities. It is targeted at both individuals with promising ideas and established businesses. The programme operates nationally but with a particular focus on rural areas where entrepreneurs face special challenges in accessing the resources to develop their businesses.

Access to finance

Access to finance is a major constraint on entrepreneurs, inhibiting both business start-up and growth (OECD/European Union, 2017; OECD/European Union, 2019). Loans from banks is the largest source of external finance for entrepreneurs (Facebook / OECD / The World Bank, 2018). However, new and small businesses lack a trading history and often a collateral, limiting access to bank finance.

Policy intervention may be used to facilitate access to different forms of finance for starting and developing businesses. Instruments include direct financial support (e.g. grants, loans, equity) as well as indirect support, providing incentives to the private sector to finance entrepreneurs (e.g. guarantees and risk sharing schemes) and initiatives to develop financial literacy and investment readiness. Policy intervention may also support the development of private finance through public venture capital funds and incentives to investors, particularly business angles (e.g. through tax incentives).

Direct financial support

Grants are a financial subsidy to enable entrepreneurs to undertake activities that enable them to start, expand or to enhance their business (e.g. grants for training, equipment, or consultancy). Grants may be helpful in delaying the need for (dilutive) equity financing and are effective at targeting specific investments (e.g. innovation), however, they may be inflexible as the use of funds is restricted. Voucher are similar to grants. They offer small amounts of finance to encourage entrepreneurs to access external expert advice, notably for innovation.

Indirect financial support

Through loan guarantees, governments underwrite a proportion of a bank's loan to a firm in the event that the business fails. The borrower pays a premium – a fee and/or higher interest. In most cases the banks, rather than the government, undertake the screening and the delivery of the loans. However, the cost-effectiveness of such schemes is influenced by their design. For example, excessively high guarantee levels may reduce the incentive of banks to efficiently screen loan applications, resulting in higher defaults. Mutual Guarantee Institutions which screen borrowers and pool collateral for commercial bank loans is an alternative but less common approach to extending access to bank loans to new and small firms without collateral (Columba et al., 2010; Cusmano, 2013).

Venture capital

Many early-stage fast-growing entrepreneurial businesses require equity finance as they lack access to debt financing due to their risk profile. However, access to equity finance is limited as making small investments is not efficient for venture capital funds and venture capital investments are spatially concentrated. A major focus for government entrepreneurship policy support has been initiatives to address this "equity gap". While only a small proportion of entrepreneurial businesses seek venture capital, the rationale for this form of intervention is the growth potential of these often innovative start-ups.

Some governments have established public sector venture capital funds (PSVCFs) with specific investment parameters (e.g. size of investment, sector, location). Evidence on the efficiency of PSVCFs is mixed. Some evidence suggests that they augment rather than displace private venture capital investment, but some studies also find that supported companies perform less well than those supported by private venture capital funds (Brander et al., 2010; Luukkonen, et al., 2013; Grilli and Murtinu, 2014). Indirect approaches have also emerged, with governments establishing "hybrid" funds (Murray, 2007) in which public money is used to leverage private investment into funds that are operated by private sector investment managers, reducing the risk to private investors and increasing their returns.

Co-investment funds

Another form of intervention is co-investment funds (CIFs), which invest alongside both VC funds and business angels, in deals that these investors bring to the CIF, thereby leveraging their networks and expertise and minimising the public sector's transaction costs. Some CIFs pre-approve their investment partners while others make their own decision on every investment opportunity that is brought to them. CIFs can be seen as a further development of hybrid funds. The concept is widely attributed to the creation of the Scottish Co-investment Fund, established in 2003 in response to the contraction of the VC sector.[4] In Europe, it is estimated that around 150 co-investment and related funds were operating at national and regional levels in 23 countries in 2016 (EBAN, 2016). Although evidence is limited, angel CIFs appear to have significantly increased the volume of investment activity in the early stage equity market, leveraging additional finance from private investors and enabling angels to participate in larger deals. Evaluations of the Scottish CIF have identified significant additionality and low displacement. However, like other PSVCFs, CIFs are constrained by the supply of investable businesses. They also depend on the existence of angel groups to be effective. The presence of venture capital funds providing follow-up investment is also critical to avoid funds being locked into investments.

Case 8: Regional Co-investment Funds, Sweden (access to finance) is a distinctive approach to CIFs as it operates as 11 separate regional funds rather than as a single fund, to reflect regional differences in access to finance.

Business angel investment

Governments can also stimulate business angel investment activity, which plays an important role in supporting entrepreneurial ventures. Business angels typically make small investments at an earlier stage and provide "smart" capital, contributing their knowledge and experience as hands-on investors. They are also less geographically concentrated than venture capital funds and generally invest locally.[5] Interventions include tax incentives to private individuals who invest in entrepreneurial businesses to offset the high risks of this type of investment, and support to interventions designed to improve market efficiency, such as Business Angel Networks (BANs). These organisations typically operate on a regional scale, facilitating connections between entrepreneurs and business angels. Many of these organisations also provide education and training both to prospective business angels and to entrepreneurs, helping them become "investment ready" (Mason and Kwok, 2010). Some governments also support the development of angel groups (i.e. angels who invest together) on account of their ability to make larger investments, including follow-on investments, greater professionalism and greater visibility to entrepreneurs.

Case 10: LINC Scotland, UK (access to finance) is an example of an intervention to build a regional business angel community, specifically by supporting the formation of angel groups. An alternative, and much less common, approach to supporting angel investors is Case 11: INVEST - Grant for Venture Capital, Germany (access to finance) which provides an investment grant (20% of the investment) to business angels who make investments in young and innovative companies and an exit grant equivalent to 25% of the profit made when selling the shares to compensate for tax on the capital gains.

Case 9: Cooperative Venturing, USA (access to finance), which operates in the Pacific North West of the United States, is an example of a different type of approach that concentrates on increasing the financial competencies of entrepreneurs, which aims to increase their ability to access existing sources of finance support. It is a type of investment readiness scheme that mentors entrepreneurs in their preparation to raise capital and connects them to potential business angels and banks. It is run by a regional accelerator. The programme has a particular focus on women and minority entrepreneurs.

Fintech

The development of the Fintech sector may offer new funding options for entrepreneurs. A study by the Cambridge Centre for Alternative Finance suggests the online alternative finance industry (i.e. crowdfunding) increased from EUR 1.12 billion in 2013 to EUR 10.44 billion in 2017 in Europe (Ziegler, 2019). However, evidence on its current impact on access to finance for entrepreneurs is mixed, as the development of online alternative finance varies between countries and market penetration remains limited. Some public bodies have opted to use crowd lending platforms as a low cost way of making loans. For example, the British Business Bank (the United Kingdom's economic development bank tasked with enhancing the supply and diversity of finance for small businesses) provides loan finance to UK smaller businesses via Funding Circle, a global small business loans platform. Some local government authorities in England have also lent through Funding Circle by specifying eligible post codes among other criteria.

Internationalisation

Research strongly suggests that exporting improves firms' competitiveness, financial performance and growth. Firms also derive organisational learning effects from exporting, especially firms that start exporting at an early age. Research also suggests that exporters make a disproportionate contribution to economic growth (Hessels and van Stel, 2011). However, most small businesses do not export. Entrepreneurship policy can be used to support new businesses to access global markets and encourage them to take an international orientation (Leonidou et al., 2016). Examples of intervention include exporting awareness campaigns, provision of information and advice on how to start exporting, and logistical support through trade support desks and trade trips. Governments may also offer financial support to entrepreneurs seeking to export, or offer guarantees to help them access finance for exporting or reduce the risks involved (e.g. insurance to businesses exporting to certain countries, guarantees to banks providing loans to export businesses, foreign exchange rate risk cover).

An example of intervention encouraging internationalisation in new and small firms is Case 12: Startup Global USA, USA (internationalisation). This is a collaboration between the United States Government and a not-for-profit organisation that runs seminars in various locations to provide entrepreneurs with information and networking opportunities for exporting with sources of expertise, including government officials, professionals and experienced entrepreneurs.

Technology and Innovation

Innovative start-ups (including non-technological innovators) contribute to employment and productivity growth. However, there are several particular barriers to their creation. Researchers in higher education institutions, public research institutions and existing enterprises may lack the entrepreneurial and managerial competences to successfully commercialise business ideas. Moreover, risk and uncertainty related to the results of innovation and imperfect appropriability are linked to difficulties in accessing finance for innovative start-ups.

Examples of intervention to support innovative start-ups include support of applied R&D in areas with commercialisation potential, financial support and advice for early stage firm development (e.g. proof of concept), and efforts to foster public-private knowledge flows, university spin-offs and technology diffusion.

Innovation vouchers, discussed earlier, enable technology businesses to collaborate with universities and other research organisations to access expertise that will support them in developing innovative products, processes or services. Proof-of-concept programmes typically include grant funding to support the pre-commercialisation of leading-edge technologies emerging from universities, research institutes and hospitals. The objective is to move novel technologies from the research base and closer to commercialisation by enabling them to attract follow-on investment.

Another form of support for technology entrepreneurs is business incubators – providing shared office accommodation (often subsidised) and support services (e.g. shared laboratory space), along with professional business support and advice. Other benefits include opportunities for peer learning and collaboration from networking with other businesses in development, and legitimacy from the incubator or science park brand. Case 13: Canada Accelerator and Incubator Program, Canada (technology and innovation) is an initiative of the Government of Canada that provided funding to incubators and accelerators (see above) to undertake new activities or offer increased levels of service to early stage technology firms.

Policies for entrepreneurial ecosystems

The environment in which entrepreneurship occurs affects entrepreneurial intentions, the entrepreneurial process and firm growth (Mason and Brown, 2014; Stam, 2015; Spigel, 2017; Audretsch et al., 2019). Strategic and competitive advantages are increasingly based on local resources, networks and knowledge spillovers. In recent years, many countries have introduced policies seeking to strengthen entrepreneurial ecosystems.

Policies that focus on supporting the development of entrepreneurial ecosystems aim to foster a comprehensive and integrated supportive environment for business start-ups and scale-ups. These policies often involve coordination of multiple strands of action, targeting a wide range of actors and supporting directly and indirectly other types of interventions discussed above (i.e. initiatives for institutional conditions and in support of entrepreneurs). Brown and Mason (2017) identify four key components of entrepreneurial ecosystems whose presence and linkages affect entrepreneurs: (i) entrepreneurial actors, which provide incubation, acceleration, coaching and mentoring services to entrepreneurs; (ii) entrepreneurial resource providers, which support entrepreneurship with financial resources (e.g. banks, business angels) and knowledge and opportunities for collaboration (e.g. large firms, research institutions); (ii) entrepreneurial connectors, fostering linkages in the ecosystem (e.g. professional associations, business brokers) ; and (iv) an entrepreneurial orientation, which includes an entrepreneurial culture.

Successful policies take a holistic approach and actively engage with stakeholders in a collaborative way rather than adopting a top-down structure (Autio, 2016). They should seek to support the building of networks in the ecosystem, for example by supporting forums that bring entrepreneurs together with other actors (e.g. pitching events, training, match-making) (Isenberg, 2011). Interventions should consider the needs of firms at different stages of business creation. Moreover, because of the importance of the geographical dimension of ecosystems, policy will generally need to focus at the sub-national scale (Isenberg, 2011). Dedicated independent coordinating bodies may be an option to facilitate the co-ordination of entrepreneurial ecosystems.

Examples of policy intervention include the development of integrated support structures, dedicated strategic documents (e.g. entrepreneurship strategies, action plans) and other co-ordination mechanisms.

Case 15: Startup Estonia, Estonia, for example, is a government initiative to develop Estonia's entrepreneurial ecosystem by co-ordinating and actively involving non-government actors in the start-up ecosystem through various community building activities. It also promotes the ecosystem internationally, provides training to start-ups investors and promotes start-up friendly regulation.

Case 14: Startup Delta/TechLeap.NL, the Netherlands takes a different form: set up as a public-private partnership, it brings together all of the regional entrepreneurial ecosystems in the Netherlands into a single hub to help create better linkages in the start-up ecosystem and facilitate access to key resources. It also seeks to foster supportive regulation, attract foreign entrepreneurs, and support the internationalisation of Dutch start-ups among other activities.

Case 16: Dutch Centre for Entrepreneurship – DutchCE, the Netherlands is a network of HEIs and accelerators/incubators to develop entrepreneurial competences in people. They offer entrepreneurship programmes for students and entrepreneurs, encourage research on entrepreneurship and support policy making.

Box 2.1. Monitoring and evaluation of entrepreneurial ecosystem policies

Monitoring and evaluating the impact of entrepreneurial ecosystem policies is complex. Individual components of an entrepreneurial ecosystems operate in a mutually supportive way (Stam 2018). Successful entrepreneurial ecosystems are based on positive feedback mechanisms that create a virtuous circle (Malecki, 2018), making it difficult to disentangle the impacts of specific dimensions and identify causality (Spigel and Harrison, 2017). Developing measurements to evaluate ecosystem vibrancy (e.g. entrepreneurial culture, networks, talent) could be better suited to the evaluation of ecosystem initiatives (Stam, 2018) and complement traditional indicators of entrepreneurial activity. Such metrics could help to determine the strengths and weaknesses of individual ecosystems over time and the impact of policy intervention. However, developing appropriate metrics has challenges, including defining suitable proxy measures for qualitative outcomes.

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Notes

[1] An example of this approach is Lisbon Start-Up City: https://eacea.ec.europa.eu/national-policies/en/content/youthwiki/310-promotion-entrepreneurship-culture-portugal

[2] Loader (2013) notes that in the UK local authorities engage with small suppliers much more effectively than central government, with the level of Local Authority procurement with SMEs broadly commensurate with its level of economic activity. This reflects to some extent the local nature of Local Authority services and the local dimension to small business trade.

[3] According to research by the UK Federation of Small Business (2019), only about a fifth of Scotland's GBP 12 billion procurement budget (central government, local government, National Health Service, Further and Higher Education) goes directly to small businesses, even though they account for 98 per cent of Scotland's business community.

[4] See Harrison (2018) for a review of the Scottish Co-Investment Fund.

[5] There have been several recent reviews of research on business angels: see White and Dumay (2017), Edelman and Manolova (2017), Wallmeroth et al (2018), Tenca et al (2018). See Mason and Botelho (2018) for a discussion of business angel investing.

Part II. Policy examples

3. Mapping of policy examples

This chapter provides an overview of the 16 policy examples described in Chapters 4, 5 and 6. It presents matrices mapping the features of each case study across three dimensions to allow readers to easily identify policy examples that illustrate specific approaches and issues. The first matrix provides an overview of cases by primary focus of each intervention and characteristics such as target groups and scale. The second matrix presents the main types of key performance indicators (KPIs) that have been used to monitor their activities. The third matrix presents the key policy success factors that each case study illustrates.

Mapping of cases by policy types and characteristics

The remainder of this report presents policy case studies from different countries illustrating different types of policy intervention. Table 3.1 provides a more detailed overview of the policy case studies by their main focus of intervention, intervention level, target groups, whether they have been evaluated, their size and their budget.

Table 3.1. Overview of policy examples and their main features

Type	Programme	Country	Main focus of intervention										Level			Target groups							Impact		Size	Budget
			Entrepreneurial culture	Taxation	Competitive conditions	Regulatory framework	Education and training	Info, advice, coaching & mentoring	Access to finance	Internationalisation	Technology and innovation	Holistic ecosystem approach	national	sub-national	other	potential and aspiring entrepreneurs	early stage entrepreneurs	established entrepreneurs and SMEs	investors	accelerators, incubators & providers	Students and graduates	universities and PRIs	evaluated	Not evaluated		
Policies for institutional conditions	Entrepreneur's Desk	Portugal				✓							✓			✓	✓	✓						✓	320 procedures moved online (2020)	N.A.
	Tax incentives for early-stage investors	Australia		✓									✓						✓				✓		~ EUR 388 million invested (2016-18)	N.A.
	Zones Franches Urbaines (ZFU) – Territoires Entrepreneurs	France		✓	✓								✓	✓		✓	✓	✓					✓		100 ZFUs	~ EUR 527 million (2009)
Direct support to entrepreneurs	Converge Challenge	UK, Scotland					✓							✓		✓	✓				✓	✓	✓		120 businesses created; 300 people trained	N.A.
	Growth Hubs Network	UK, England						✓						✓			✓	✓					✓		38 hubs	~EUR 71 million (2019/20)
	Regional Business Development Centres	Denmark						✓					✓	✓		✓	✓	✓					✓		6 hubs	~EUR 13.7 million (2017)
	Siva partner incubators and business gardens	Norway						✓					✓	✓		✓	✓	✓		✓			✓		34 incubators, 40 business gardens (2020), 2 081 incubated firms, 1 806 garden beneficiaries (2018)	Incubators: ~ EUR 8.9 million Gardens: ~EUR 5.3 million (2015)

	Regional Co-investment Funds	Sweden							✓				✓	✓			✓		✓				✓		~EUR 256 million invested in 207 companies (2009-13)	~EUR 256 million of which EUR 89 million of public funds
	Cooperative Venturing	United States							✓					✓	✓	✓	✓		✓		✓		✓		N.A.	Ranges from EUR 211 000 to EUR 316 000 per year
	Linc Scotland	UK, Scotland							✓					✓	✓				✓					✓	200 investors & 21 structured angel groups (2019)	~EUR 2 million
	INVEST	Germany							✓				✓				✓		✓				✓		EUR 104.3 million of investment supported	EUR 19.2 million in grants (2013-15)
	Startup Global USA	United States								✓			✓				✓	✓						✓	N.A.	N.A.
	Canada Accelerator and Incubator Programme	Canada									✓		✓						✓	✓			✓		16 incubators/ accelerators funded (2014-19)	~EUR 68 million
Policies for ecosystems	Startup Delta/ TechLeap.NL	Nether-lands										✓	✓			✓	✓	✓	✓	✓		✓	✓		N.A.	~ EUR 4.5 million (2015-19)
	Startup Estonia	Estonia										✓				✓	✓	✓	✓	✓	✓	✓		✓	N.A.	EUR 2.808 million for 2018
	DutchCE	Nether-lands										✓				✓	✓					✓		✓	20 HEIs	~EUR 600 000 (2015-17)

Note: More detailed information on the case studies, including on the size and budget of initiatives can be found in Chapters 4, 5 and 6.

Mapping of cases by type of key performance indicators used

As discussed above, the choice of targets for a policy or programme as well as the monitoring and evaluation methods used depend on a variety of factors, including the type of intervention, its scale and scope, and the resources available to measure progress. Table 3.2 presents a synthetic overview of the type of key performance indicators (KPIs) used to monitor the activity and measure the outputs and impacts of the policy examples described in this report. A list summarising the main KPIs used by each intervention is available in the description of each case study in this section.

Table 3.2. Overview of Key Performance Indicators used

			Activity					Outputs and Impact				
Type of intervention	Programme	Country	Outreach (number of users served, etc.)	User satisfaction	Process (cost, performance of delivery)	Firm creations	Job creation	Access to finance (funded firms, grant amounts)	Turnover growth	Other economic impact (e.g. value-added)	Survival rate	Other impacts (innovation, exports etc.)
Institutional conditions	Entrepreneur's Desk	Portugal	✓		✓							
	Tax incentives for early-stage investors	Australia	✓		✓		✓	✓		✓		
	Zones Franche Urbaines – Territoires Entrepreneurs	France			✓	✓	✓					✓
Direct support to entrepreneurs	Converge Challenge	UK (Scotland)	✓	✓		✓	✓		✓	✓		✓
	Growth Hubs Network	UK (England)	✓	✓								
	Regional Business Development Centres	Denmark	✓	✓			✓		✓	✓		✓
	Siva partner incubators and business gardens	Norway	✓	✓	✓				✓			✓
	Regional Co-investment Funds	Sweden	✓	✓	✓	✓	✓	✓	✓		✓	✓
	Cooperative Venturing	United States		✓	✓			✓			✓	✓
	Linc Scotland	UK (Scotland)	✓				✓	✓				✓
	INVEST	Germany						✓				
	Startup Global USA	United States	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	CAIP	Canada	✓	✓			✓	✓	v		✓	
Ecosystems	Startup Delta/TechLeap.NL	Netherlands			✓							✓
	Startup Estonia	Estonia	✓					✓				✓
	Dutch CE	Netherlands	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

Note: This table is based on the detailed lists of KPIs included in case study descriptions in part II of the present report. The mention N.A. (not applicable) refers to policies and programmes which are not evaluated or have not publicised information on their evaluation processes.

Mapping of cases by keys to success

The policy examples presented in this report provide transversal lessons that can inspire successful policies across areas of entrepreneurship policy intervention. These lessons stem both from good practices adopted by programmes and challenges encountered in design and implementation that gave rise to policy adaptations. Table 3.3 presents key factors illustrated by the cases presented.

Table 3.3. Overview of reported success factors

			Efficient goal setting		Investing resources in non-core activities			Building on existing actors and structures				Capacity building for delivery		
Type of intervention	Programme	Country	Involving stakeholders in design	Setting clear goals	Investing resources in awareness raising	Minimise red tape and allocate resources to administrative tasks	Resources for monitoring and evaluation	Designed as part of existing policy portfolio	Embedded in strategies	Leveraging existing capacity	Supporting actors of different sizes	Training delivery staff	Network of local initiatives	Linkages between actors
Institutional conditions	Entrepreneur's Desk	Portugal	✓									✓		
	Tax incentives for early-stage investors	Australia	✓											
	Zones Franches Urbaines – Territoires Entrepreneurs	France		✓					✓					
Direct support to entrepreneurs	Converge Challenge	UK (Scotland)								✓				
	Growth Hubs Network	UK(England)		✓			✓		✓	✓				✓
	Regional Business Development Centres	Denmark	✓				✓							✓
	Siva partner incubators and business gardens	Norway					✓			✓	✓	✓	✓	
	Regional Co-investment Funds	Sweden					✓	✓						
	Cooperative Venturing,	United States					✓			✓				✓
	Linc Scotland	UK (Scotland)			✓									✓
	INVEST	Germany				✓	✓							
	Startup Global USA	United States								✓				
	Canada Accelerator & Incubator Program	Canada		✓					✓					
Entrepreneurial ecosystems	Startup Delta/ TechLeap.NL	Netherlands								✓			✓	✓
	Startup Estonia	Estonia	✓	✓	✓									
	Dutch CE	Netherlands								✓	✓		✓	

Note: This table reports the main highlighted success factors identified in each policy case study. More information on challenges encountered, solutions implemented and a wider set of key takeaways for other countries can be found in individual case study in Chapters 4, 5 and 6

4. Case examples – Policies for institutional conditions

This chapter presents three policy case studies that illustrate approaches to strengthening framework conditions for entrepreneurship in the areas of institutions and regulations. It describes the Entrepreneur's Desk (Portugal), which offers entrepreneurs a digital single point of contact with government; Tax Incentives for Early-Stage Investors (Australia), which incentivises investments in innovative start-ups; and *Zones Franches Urbaines – Territoires Entrepreneurs* (France), which offers incentives to companies setting up or creating jobs in disadvantaged urban areas. For each case study, the chapter provides an information table and a description of the programme and its objectives, rationale, linkages to other initiatives, monitoring and evaluation practices and results. For each case, the chapter also discusses challenges encountered, how the initiative responded to the challenges and policy learning takeaways.

Case 1: Entrepreneur's Desk, Portugal (regulatory framework)

Basic information

Main category of initiative	Regulatory improvements
Country	Portugal
Level of intervention	National
Ministry/Agency/Department in charge of the programme and its implementation	Administrative Modernization Agency (*Agência para a Modernização Administrativa* – AMA) Collaboration with other relevant ministries (e.g. for the latest licensing simplification measure: Ministry of the Economy, Ministry of Agriculture, Forestry and Rural Development, Ministry of the Environment, Ministry of Finance and Ministry of the Sea).
Timeline of the programme	2011 – ongoing New measures added in 2017-18 in the context of the Simplex+ 2017 and Simplex+ 2018 programmes. In 2019, the Entrepreneur's Desk was merged with the Citizen Portal, into the ePortugal platform.
Target group(s)	Entrepreneurs Investors Business owners
Size and budget of the programme	Currently, there are 320 procedures dematerialised, treating 23 regulations. If informative services are considered, over 1 000 services are accessible through the Entrepreneur's Desk.
Type of policy instrument(s) involved	Administrative simplification Digitalisation of public processes

Objectives

The Entrepreneur's Desk (*Balcão do Empreendedor*) initiative aims to simplify entrepreneurship and business management by offering a digital single point of contact for entrepreneurs and business managers. It allows them to (i) obtain all information regarding the development of an economic activity in Portugal, (ii) carry out administrative procedures online, including payments and (iii) obtain public services online when possible. The initiative also aims to reduce and simplify procedures as much as possible (e.g. reducing licensing requirements) in addition to digitising core processes.

Rationale

Regulatory simplification is expected to reduce starting and operating costs for entrepreneurs and SMEs, hence facilitating business creation and boosting competitiveness: complying with regulatory requirement can be costly and time consuming for businesses, and identifying the appropriate administrative interlocutor for different procedures is complex. Licensing procedures were particularly cumbersome and hard to navigate in Portugal prior to the introduction of the Entrepreneur's Desk, as various administrative levels were involved.

Programme description

The Entrepreneur's Desk is an online platform for simplification and digitalisation of procedures regarding business creation. It acts as a single point of contact for entrepreneurs. It provides information (e.g. on legal requirements, procedures and available services) and allows entrepreneurs to carry out administrative procedures (e.g. incorporation, brand registration) and access public services online.

By mid-2016, more than one thousand procedures had been "dematerialised" (made available online), often simplified and made available to entrepreneurs through the Desk through the process of revising

163 laws and regulations. Notably, three important regulatory simplification initiatives were carried out through the Entrepreneur's Desk. First, the Zero Licensing initiative[1] eliminated the need for several licenses, replacing them by a simple communication through the Entrepreneur's Desk. It aimed to simplify the processes of installation, modification and closure of certain establishments (catering and drinking establishments, businesses dealing with trade in goods, provision of services or storage), which previously involved contacts with multiple interlocutors at local and national levels. A second measure of note is the Industrial Licensing Service available through the Entrepreneur's Desk. The service is part of the Responsible Industry System (SIR)[2] initiative, which aims to boost economic growth and employment by facilitating private investment, in particular for industrial development, develop more streamlined and transparent public services, and foster accountability. The SIR also reinforces ex-post control mechanisms, safeguarding public and environmental safety. Third, the Local Accommodation Registry simplifies and digitises the administrative procedures linked to licensing businesses that provide temporary accommodation services, and modifying or ceasing such activities.

The Simplex+ 2016 programme, a government-wide regulatory simplification and administrative modernisation initiative, included several measures to further the Entrepreneur's Desk initiative, notably the Entrepreneur's Desk+ (*Balcão do Empreendedor* +) measure, which extended the licensing procedures available online to six new sectors of activity[3]. As part of Simplex+ 2017, a Map of Trades, Services and Restaurants linked to the Entrepreneur's Desk has been developed. The map aims to create an online georeferenced database of existing commercial products and services in Portugal. This database aims to provide information to support the public administration to monitor, evaluate and design public policies for the commerce and services sector and, allow businesses to better evaluate and identify opportunities.

The Simplex+ 2018 programme merged the Entrepreneur's Desk and the Citizen's Portal (the corresponding one-stop-shop platform for citizens) into a single platform, the ePortugal portal, which aims to facilitate interaction with the State for natural persons and business entities by implementing a single platform for all documents and electronic procedures. ePortugal was launched in February 2019 and acts as the national "Single Digital Gateway".

Horizontal and vertical linkages

Portugal has a public administration digital transformation strategy, ICT 2020, which includes the principles of "digital by default" and interoperability between different systems. The European Services Directive[4] was transposed into the Portuguese legislation in 2010, establishing principles on simplifying access and exercise of economic activities, namely digitally. The Entrepreneur's Desk initiative was introduced the following year as a means to address the requirements of this Directive, and was further developed as part of a wider national effort to simplify interactions with the state and move towards more digitalised public services. These efforts are grouped under a series of umbrella initiatives, namely the Simplex programme (2006-11), with subsequent initiatives including the *Simplificar* programme in 2014 and the most recent Simplex+ 2017, Simplex+ 2018 and Simplex 2019 series of measures. The Simplex programmes involve the civil society and business associations in their development process through various meetings in different regions with representatives from the general public and different institutions to identify needs and generate suggestions for administrative simplification and digitalisation. The programme also involves public servants through the "Simplex Jam" meetings, collaborative work sessions between workers from different State services, where everyone can discuss ideas and proposals to modernise services and simplify procedures.

Monitoring and evaluation methods

The implementation of the Entrepreneur's Desk measures developed through the Simplex programmes is monitored through the Simplex platform which reports the level of implementation of all measures.

An impact assessment of 40 measures of the Simplex+ 2016 and 2017 programmes, funded by the European Commission, was released in late 2019.

Monitoring and evaluation results

Up until January 2020, a total of 320 processes were fully dematerialised, affecting 23 regulations. If information services (i.e. non-transactional) are considered, over 1 000 services are accessible through the Entrepreneur's Desk. Because the implementation of many of the Entrepreneur's Desk measures are in early stages, no impact assessment is yet available. However, the programme estimates a significant reduction of the administrative burden for entrepreneurs: an estimated 6 applications and 83 additional documents were needed to start a business before the reform, involving an average of 11 visits to four public services and assessments by a range of regulators and technicians for licenses.

By centralising the business registration and licensing process, the Entrepreneur's Desk is also expected to improve transparency and incentivise municipalities to compete in terms of improving ease of administration for entrepreneurs.

In 2011 and 2012, around 2 000 requests per year were submitted through the Entrepreneur's Desk. This number has been steadily increasing since, reaching 10 000 requests in 2014 and 80 000 in 2019. Licensing procedures accounted for nearly all requests in 2014, and around 70 000 requests in 2019. Most requests are made with the help of local services (90% over February 2014 – February 2015) and training was provided to municipalities to support adoption of the platform.

In the 2019 Impact Assessment mentioned above, the measure "Entrepreneur's Desk +, from Simplex 2016 edition, was evaluated. Findings estimate a total cost savings of EUR 1 386 039 (EUR 712 302 from savings for the Public Administration and EUR 673 737 from beneficiaries' savings), and increased Gross Value Added of EUR 1 064 215.

Challenges and responses

Challenges revolve mainly around the need to implement a Single Point of Contact with the entrepreneur, while maintaining the constitutional right of every municipality in establishing their own rules, regulations and taxes. This is also true, though to lesser extent, for each of the agencies in the central government administration. The central government involved municipalities and other relevant administrations in the development of the Entrepreneur's Desk and subsequent simplification and digitalisation initiatives conducted through the Desk.

The Simplex process involves a stakeholder consultation, which allows the programme to identify areas for further modernisation and simplification, namely regulatory. This led to further developments of the Entrepreneur's Desk, such as the inclusion of several simplified licensing procedures for specific trades and sectors and the combination of the Entrepreneur's Desk, the Business Portal and the Citizen Portal to facilitate procedures and avoid procedure and document duplication.

Takeaway for other countries

The simplification and centralisation of business procedures through the Entrepreneur's Desk is thought to have improved transparency for entrepreneurs and reduced barriers to entry, especially with regards to reduced or eliminated licensing procedures.

Key lessons to take into account for developing and implementing a similar measure in other contexts include:

- **Involvement of stakeholders was identified as a success factor for the Entrepreneur's Desk design and implementation,** namely to ensure that the system can be integrated into existing frameworks (taking into account local regulations and taxes) and is compatible with all IT systems upon its launch. The Entrepreneur's Desk programme is expanded and updated progressively through the Simplex programme and other processes, allowing for user feedback to be incorporated. The use of stakeholder consultations is also thought to have improved uptake.
- **Similar measures should consider including cost-effectiveness criteria** while digitalising entrepreneurship-related procedures. The Entrepreneur's Desk (and Simplex) programme requires that new developments keep the cost identical or lower than previous procedures for users and for the administration. Programmes should consider setting up an appropriate monitoring and evaluation methodology to allow for such cost-effectiveness assessments to be made ex-ante and impact assessments ex-post.
- **Resources should be allocated to training the staff** who will be required to use the platform with entrepreneurs as part of its introduction.

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Case 2: Tax incentives for early-stage investors, Australia (taxation)

Basic information

Main category of initiative	Tax incentives
Country	Australia
Level of intervention	National
Ministry/Agency/Department in charge of the programme and its implementation	Treasury Department
Timeline of the programme	Effective as of July 2016
Target group(s)	Investors that invest in qualifying early stage innovation companies.
Size and budget of the programme	AUD 630 million (approx. EUR 388 million) invested 2016-18.
Type of policy instrument(s) involved	Eligible investors can receive: (i) a 20% non-refundable carry-forward tax offset on amounts invested in qualifying companies, capped at AUD 200 000 per investor, per year (approx. EUR 124 300); and (ii) a 10-year exemption on capital gains tax for qualified investments held for at least 12 months.

Objectives

The tax incentives aim to increase the supply of finance available to innovative start-ups by encouraging more investors to make investments in new and existing Australian firms. This is part of a suite of tax incentives that seek to improve the alignment of the tax system with a culture of entrepreneurship and risk-taking.

Rationale

Many small firms in Australia struggle to obtain external finance between firm creation and the point where their activities generate revenue. Exit rates are often very high during this period of the business life cycle because firms are unable to generate enough revenue to cover their operating costs (Bloch and Bhattacharya, 2016). Therefore these tax measures aim to bridge the funding gap between pre-concept stage financing (often self-funding) and government incentives such as the refundable R&D tax credits and larger risk capital investments.

Programme description

The tax incentives for early stage investors were introduced in July 2016 and are contained in Division 360 of the Income Tax Assessment Act 1997. These incentives provide eligible investors with:

- a 20% non-refundable carry-forward tax offset on amounts invested in qualifying early-stage innovation companies (ESICs), with the offset capped at AUD 200 000 (approx. EUR 124 300) per investor per year (on an affiliate-inclusive basis); and
- a 10-year exemption on capital gains tax for investments held as shares in an ESIC for at least 12 months, provided that the shares held do not constitute more than a 30% interest in the ESIC.

The tax incentives are designed to connect innovative start-ups with investors that have both the requisite funds and business experience to assist entrepreneurs in developing successful innovative companies, particularly at the pre-commercialisation phase where a concept is in development but the company requires additional investment to assist with commercialisation. To qualify under these tax incentives, both the company receiving investment and the investors must be eligible.

A company will qualify as an ESIC at the time of investment if it passes the “Early-stage Test” and either the “100 Point Test” or the “Principles-based Innovation Test”. In addition, a company may seek a ruling from the Australian Taxation Office as to whether its circumstances meet the principles-based test of an innovation company.

To pass the Early-stage Test, a company must:

- have had expenditure of AUD 1 million (approx. EUR 609 000) or less in the previous tax year;
- have had assessable income of AUD 200 000 (approx. EUR 124 300) or less in the previous tax year;
- not be listed on any stock exchange;
- be incorporated in Australia in the last three years; or have an Australian Business Number in the last three years; or be incorporated in the last six years with total expenditure in the previous three tax returns not exceeding AUD 1 million (approx. EUR 609 000).

The 100 Point Test is a self-assessment test: the company must assess itself against a set of innovation criteria using independent evidence, tax records and registration documents. It must award itself between 25 and 75 points for each criterion (e.g. R&D tax expenditure, undertaking an eligible accelerator programme, has enforceable rights on an innovation) and the company is considered an ESIC if it obtains at least 100 points.

Finally, to be qualified as an ESIC under the principles-based innovation test, the company must be able to demonstrate with existing documentation (e.g. business plan, commercialisation strategy) that it meets the following five requirements:

- be focused on developing a new or significantly improved innovations for commercialisation;
- have innovation with a high growth potential;
- have the potential to successfully scale up that business;
- have the potential to address a broader than local market; and
- have the potential to have competitive advantages for that business.

The self-assessment tests were designed using a consultation process with the business community to help ensure that they reflect the different contexts for innovation. Moreover, allowing companies to self-assess against one of two tests increases the chances that a start-up will qualify to benefit from the tax measures because self-assessment makes the criteria more adaptable to different circumstances.

All types of investors can benefit from these tax measures, regardless of the method of investment[5] (i.e. directly as an individual or corporation, or through a trust or partnership). However, “widely held companies” (i.e. those whose shares are distributed over large numbers of shareholders and traded daily over the stock markets) and 100% subsidiaries of these companies are not eligible. Moreover, trusts and partnerships are not directly entitled to the tax offset. However, specific rules apply in these cases to ensure the value of these tax incentives flow through to beneficiaries and partners, where such an investment method is chosen. To support investors in making their investment decisions, the Australian Taxation Office has created an online tool[6].

Horizontal and vertical linkages

These tax incentives are part of the National Innovation and Science Agenda (NISA) that seeks to stimulate innovation. The NISA contains 24 complementary measures focused on four key pillars:

- *Taking the leap*: supporting entrepreneurs by increasing the supply of finance, embracing risk, adopting innovative ideas, and supporting the commercialisation of public research.
- *Working together*: increasing collaboration between industry and researchers to create jobs and growth.
- *Best and brightest*: developing and attracting world-class talent.
- *Leading by example*: the Australian Government will lead by example by embracing innovation and becoming more agile.

Monitoring and evaluation methods

Treasury reports on the usage of these tax provisions annually, based on administrative sources.

The tax measures have been independently assessed by several academic and tax policy specialists. These evaluation reviewed the impact of the measures in Australia and compared it against similar measures in other countries.

List of KPIs monitored regularly	List of KPIs assessed to measure impact
• Number of investments in ESICs • Value of investments in ESICs • Value of forgone tax revenue	• Estimated additional investment in ESICs • Estimated additional jobs created by ESICs • Estimated effective tax rate for investors

Monitoring and evaluation results

The tax incentives for investors in early stage innovation companies (ESICs) scheme is administered by the Australian Taxation Office. The measure commenced on 1 July 2016 and in the first two years of the scheme around AUD 630 million (approx. EUR 388 million) was invested in ESICs. Academic research on the impacts of this type of intervention typically report increases in early-stage investment, but evaluations often note that it is difficult to attribute this directly to the new tax measures. In addition, some researchers have suggested that guidance for investors could be improved (Brass and Trewhella, 2017; Bloch and Bhattacharya, 2016).

Research comparing the scheme with similar schemes in other countries using stylised scenario analysis where an investor is faced with a choice of making an investment in an early-stage company in Australia or the United Kingdom (UK)[7] finds that the effective annual return on net investment after three years is lower under the Australian scheme relative to the UK scheme (18.5% vs. 38.6%) (Deloitte, 2019). It must be noted, however, that the Australian scheme is still in its infancy whereas the UK scheme was introduced in 1994.

Challenges and responses

The main challenge faced by the tax incentive was a low level of awareness among the population of potential investors and innovative start-ups in spite of efforts to promote the measures when it was launched (Financial Review, 2017).

An ongoing challenge is that some companies have faced difficulties convincing the tax authorities that they qualify as an innovative start-up. The process of obtaining a ruling requires firms to present their intellectual property, which can act as a disincentive for seeking investment through this mechanism (Financial Review, 2017). However, the self-assessment was designed to avoid exposing intellectual property and is used far more frequently than rulings from the Australian Taxation Office.

Takeaway for other countries

Although this tax incentive is relatively new, the experience offers some lessons for other countries since it itself is modelled after tax measures from the United Kingdom. Key lessons include:

- **Learn from international good practices**. This tax incentive was modelled after the Seed Enterprise Investment Scheme in the UK, which was ranked by the European Commission as the most effective tax incentive for business angel and venture capital investment in new and small firms (European Commission, 2017). The adaptation of this successful UK scheme reduced the development time for the Australian incentive.
- **Invest in stakeholder consultation**. The tax scheme relies heavily on a self-assessment process to determine the eligibility of firms and investors. It is therefore critical to ensure that the criteria are

clearly defined, easily understood and sufficiently flexible to capture all of the targeted activities in different sectors. Defining appropriate self-assessment criteria required a strong consultation process with business and research communities to ensure that as many scenarios as possible could be considered.

- **Increase impact by putting resources into awareness raising**. The main challenge faced during the initial years was a low level of awareness among targeted firms and investors. Greater efforts in promoting the new tax measures likely would have increased take-up, and therefore the impact of the measure. At the same time, evaluations suggest that guidance materials were not always well-understood by targeted firms so even when they were aware of the tax scheme, firms did not take advantage of it because eligibility was difficult to obtain for some of the targeted firms.

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Case 3: Zones Franches Urbaines – Territoires Entrepreneurs, France (taxation)

Basic information

Main category of initiative	Tax incentives
Country	France
Level of intervention	National programme targeting areas at local level (specific neighbourhoods)
Ministry/Agency/Department in charge of the programme and its implementation	Former Office of the Commissioner General for Territorial Equality (*Commissariat Général à l'Égalité des Territoires*), now the national Agency for Territorial Cohesion, a state agency responding to the Ministry of Territorial Cohesion and Relations with Local Authorities (*Ministère de la Cohésion des Territoires et des Relations avec les Collectivités Territoriales*).
Timeline of the programme	1997-2020. The programme started in 1997. New zones were added in 2004 and 2006. The programme in its current form is in place since 2015 and applies to firms settling in Zones Franches Urbaines (ZFUs) until 2020.
Target group(s)	New and existing micro and small firms (less than 50 employees and a turnover under EUR 10 million) operating in disadvantaged urban areas.
Size and budget of the programme	There are currently 100 ZFUs. In 2018, the budget of the programme was estimated to be EUR 213 million (221 million in 2017 and 233 million in 2016). In 2009, it was estimated to be EUR 527 million (Givord and Trevien, 2012). 83 400 establishments were located in the ZFU-TE in 2016. In 2007, the cost of ZFU was estimated to be EUR 1 800 per worker and EUR 360 per resident (Lafourcade and Mayneris, 2018).
Type of policy instrument(s) involved	Tax exemption

Objectives

The objective of the *Zones Franches Urbaines – Territoires Entrepreneurs* (Urban Free Zones – Entrepreneurial Territories, ZFU-TE) is to foster economic development and job creation in urban distressed areas. The programme aims to trigger a direct reduction of local unemployment through new firm creation in the areas and the local job creation requirement of the scheme.

It also aims to generate a ripple effect of agglomeration, whereby the increased business activity incentivised by the programme would render the zones more attractive to other firms. This offers the potential to increase local economic dynamism, the availability of services and improve the environment and the quality of life of the residents (Lafourcade and Mayneris, 2018).

Rationale

Residents of disadvantaged urban neighbourhoods are often at a disadvantage when looking for employment, in part because they are isolated from the type of jobs they can access because of physical distance, transport costs, or poor connections to public transport. This spatial mismatch leads to higher unemployment than surrounding areas and is not corrected by employment incentives with no geographical sensitivity, such as blanket reductions on social contributions on labour. The ZFU-TE programme aims to reduce spatial mismatch by bringing jobs closer to job-seekers. Moreover, other factors affect the employability of people living in disadvantaged neighbourhoods, including lower educational achievements and discrimination based on names and place of residence. By conditioning tax exemptions in ZFU-TE to local employment, the programme aims to offset some of these challenges (Lafourcade and Mayneris, 2018).

Programme description

The ZFU-TE are areas covering disadvantaged neighbourhood of 10 000 or more inhabitants. They focus on areas combining several challenges such as high unemployment, high share of youth without higher education, and low tax potential[8]. Each of the 100 ZFU are related to one or more priority neighbourhoods (*quartier prioritaire de la politique de la ville – QPV*), which are neighbourhoods (of 1 000 or more inhabitants) with a high concentration of low-income households (Ministère de la Cohésion des Territoires et des Relations avec les Collectivités Territoriales, 2019; French Government, 2017). Criteria for QPVs and ZFUs have evolved over time.

Companies starting up or creating jobs in these areas benefit from temporary exemptions from taxes on profit. The exemption is total (100%) for the first five years and decreases progressively afterwards, going down to 60% for the sixth year, 40% for the seventh year and 20% for the eighth year of activity in a ZFU-TE.

The programme is open to all companies with 0 to 50 employees and a turnover under EUR 10 million, regardless of legal form. Some sectors (car manufacturing and shipbuilding, textile fibre manufacturing, steel, road freight, furniture leasing and rental of non-professional buildings, agriculture, and construction and sales) are excluded from the programme.

To be eligible, companies with two or more employees must fulfil either one of these conditions:

- Staff residing in the ZFU-TE or the corresponding QPV must make up at least 50% of staff on either permanent contracts or short-term contracts of more than 12 months, or
- Staff residing in the ZFU-TE or the corresponding QPV must make up at least 50% of all staff recruited since the move in the ZFU-TE on either permanent contracts or short-term contracts of more than 12 months.

The ZFU scheme evolved over time. It was initially started in 1996 as part of a wider set of measures aiming to foster development in deprived neighbourhoods. Initially, the scheme targeted disadvantaged neighbourhoods according to a three-tier system, the most disadvantaged tier being the ZFU. There were 44 ZFU in the first generation of the programme. Disadvantaged neighbourhoods benefited from tax breaks and social contribution exemptions whose generosity depended on the tier. A second wave of ZFU was initiated in 2004, identifying 41 additional ZFUs among neighbourhood previously covered in the second tier. An additional 15 ZFUs were added in 2006 (Briant, Lafourcade and Schmutz, 2015).

The programme was initially scheduled to run until 2001. It was later extended multiple times. The latest extension of the programme is scheduled to apply to all firms setting up in one of the ZFUs until 31 December 2020 (Commissariat général à l'égalité des territoires, 2016).

Horizontal and vertical linkages

The ZFU-TE are part of a wider Urban Policy (*Politique de la Ville*) which aims to boost the development of disadvantaged urban areas and reduce territorial inequalities through a holistic approach involving local government and relevant non-governmental stakeholders. In 2016, the ZFU scheme represented 7% of the total budget for Urban Policy (Lafourcade and Mayneris, 2018).

Monitoring and evaluation methods

The first systematic evaluation of the programme was commissioned by the government in 2009 (Briant, Lafourcade and Schmutz, 2015). Several evaluations of the ZFU programmes were conducted over the years, using KPIs measuring employment, wages and business creation. KPIs included:

List of KPIs
• Number of firms created in ZFUs as compared with control groups • Number of firms relocations • Number of jobs created • Cost of job created • Wages

In addition, the ZFU scheme was covered in several comparative studies assessing the impact of enterprise zones programmes in different countries (Chaudhary and Potter, 2019; Malgouyres and Py, 2016).

Monitoring and evaluation results

Overall the various evaluations conducted find that ZFUs were successful in attracting existing and new businesses which went on to create jobs. However, they also suggest an important displacement effect. A significant portion of firms settling in ZFUs were relocating, affecting the location of jobs but not necessarily creating new ones. Job creations were also concentrated in low-wage job categories. Some evaluations also suggest that the effect of ZFUs tapered down over time. Moreover, effects varied from one ZFU to another, with ZFUs starting off with relatively better characteristics (notably the level of connections with neighbouring areas) benefitting disproportionately from the measure (Lafourcade and Mayneris, 2018) with the exception of wage levels, which were slightly higher for more isolated ZFUs (Briant, Lafourcade and Schmutz, 2015).

Specific evaluation results include the following:

- A 2008 evaluation of 41 ZFUs found a 15% increase in employment in the zones and a 24% increase in the number of firms, among which one-third were new and two-thirds were relocated (Rathelot and Sillard, 2008). The evaluation estimated that each job created costed between EUR 11 000 and EUR 73 000 in 2019 current prices (Chaudhary and Potter, 2019). The job creation was concentrated in the first year.
- A 2013 evaluation found a 25% increase in firm births and a doubling of relocations. It also found a positive impact on the number of jobs and hours worked, but the effect was only significant in the first year (Givord, Rathelot and Sillard, 2013). A 2017 evaluation found a 27% increase in the probability that a firm will set up in the ZFU rather than the non-ZFU part of a municipality. The study also found a 24% increase in employment, with the rise being more pronounced in low-wage jobs (Mayer, Mayneris and Py, 2017).
- Givord et al. (2018) estimated that after 2002, the flow of new enterprise to first generation ZFU no longer creates net employment but only offsets establishment closures in the areas. Explanations include a possible low competitiveness of participant firms leading them to fail at the end of the exemption period. Another explanation is the raise of mainstream (i.e. not geographically limited) tax exemptions on low income jobs during the 1990s and early 2000s, undermining the attractiveness of ZFUs.

Challenges and responses

The ZFU-TE (formerly ZFU until 2015) faced a number of challenges and evolved over time. Beyond the displacement effects discussed above, challenges included avoiding a mailbox effect, whereby firms open a small office in the designated area to benefit from the tax rebates but without creating significant new activity. This was addressed through conditioning advantages to local employment clauses for firms with employees.

Another challenge for the programme was to make sure that the jobs created benefit residents of the area (Lafourcade and Mayneris, 2018). With this objective, the condition on creating local jobs was strengthened over time. In 1997, firms needed to make 20% of their new hires from local residents. In 2002, this share was brought up to 33%. It was set to 50%, the current rate, in 2012 (Givord and Trevien, 2012). Moreover, a subsidy for firms hiring workers from QPVs (*emplois francs*) was also introduced. The programme was tested as a pilot in 2018-19 and extended to all QPVs in January 2020 (French Government, 2020).

Another issue faced by the programme was the complexity of the zoning system. The Court of Audit (*Cour des Comptes*) estimated that simplifying zone definition would help target the most vulnerable areas more effectively (Cour des Comptes, 2012). This was done through a 2014 law (*Loi de programmation pour la ville et la cohésion urbaine*) (French Government, 2014). The law also reduced the scope of the tax exemptions and its duration, thereby reducing the budget for the programme (Ministère de la Cohésion des Territoires et des Relations avec les Collectivités Territoriales, 2019) but also its attractiveness (Lafourcade and Mayneris, 2018). Before 2015, new and small firms operating in a ZFU-TE benefited from longer and more generous exemptions on local business taxes, corporate income taxes and property taxes. The exemption was total for 5 years and gradually reduced to 20% in year 13 and 14. A partial exemption on social contributions on labour was also granted for five years, conditional on having one-third of staff residing in the urban development priority area (Chaudhary and Potter, 2019).

Takeaway for other countries

The ZFU-TE scheme is a long-standing programme, which is well-evaluated. Evaluations find a significant positive effect on employment and enterprise creation but limited in scope and over time. The programme is perceived as efficient by policymakers, in spite of its aforementioned limitations. Based on the evaluations of the scheme, the following lessons can be drawn for the development of similar programmes:

- **The amount of tax and social security exemptions/reductions should be determined in relation to other existing general exemptions and reductions.** One of the limitations identified by evaluations of the ZFUs is that the incentive gave a relatively modest advantage to firms settling in ZFUs when compared to place-blind incentives.
- **This type of enterprise zone policy should be combined with other interventions to improve connections to spatially isolated neighbourhood and address other challenges**, as the impacts of the programme varied for neighbourhoods with different characteristics.
- **The evaluation of enterprise zones should be designed to identify a range of mechanisms to generate impact**, as enterprise zone schemes affect the local economy in a variety of ways. Evaluations with a narrow focus may overlook some channels (Chaudhary and Potter, 2019). It is also important to design evaluation frameworks to compare treated neighbourhoods to comparable ones, as the targeted areas are traditionally at a disadvantage for firm and job creation so comparing them with national averages may lead to underestimating the impact of the programme.

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[1] www.pgdlisboa.pt/leis/lei_mostra_articulado.php?nid=1337&tabela=leis

[2] Responsible Industry System (SIR), Decree-Law n.º 169/2012

[3] (i) Activities of lenders, auctioneers and others provided for in the legal regime of activities of commerce and services and restoration; (ii) Activities related to the Sea; (iii) Livestock activities; (iv) and (v) two types of Industrial licensing; (vi) Preliminary urban planning.

[4] Directive 2006/123/EC

[5] An investor will qualify for the incentives if it is either a legal person controlled by an individual considered a sophisticated investor pursuant to subsection 708(8) of the *Corporations Act 2001*; or a non-sophisticated investor that has invested AUD 50 000 (EUR 304 000) or less in the income year.

[6]The tool is available at www.ato.gov.au/Calculators-and-tools/Host/✓anchor=ESIC&anchor=ESIC/questions#ESIC/questions

[7] i.e. Seed Enterprise Investment Scheme, which the tax incentive for early-stage investors is based on

[8] i.e. the potential tax revenue of the area if the average national tax rates were applied for all local taxes

5. Case examples – Policies targeted directly at entrepreneurs

This chapter presents ten case studies illustrating policy approaches that provide direct support to entrepreneurs. Four initiatives relate to education and training (the Converge Challenge – United Kingdom) or information, advice, coaching and mentoring (the Growth Hubs Network – United Kingdom; the Regional Business Development Centres – Denmark; and the Siva Partner Incubators and Business Gardens – Norway). Four initiatives relate to access to finance (the Regional Co-investment Funds – Sweden; Cooperative Venturing – United States; LINC Scotland – United Kingdom; and the INVEST Grant for Venture Capital – Germany). Two initiatives relate to internationalisation (Startup Global USA – United States) or technology and innovation (the Canada Accelerator and Incubator programme – Canada). For each case study, the chapter provides an information table and a brief description of the programme and its objectives, rationale, linkages to other initiatives, monitoring and evaluation practices and results. The chapter also discusses challenges encountered and responses developed and highlights takeaways for other countries.

Case 4: Converge Challenge, UK (education, training)

Basic information

Main category of initiative	Education, training
Country	United Kingdom
Level of intervention	Sub-national: Scotland
Ministry/Agency/Department in charge of the programme and its implementation	Converge Challenge is funded by The Scottish Funding Council[1], all Scottish Universities, Creative Scotland[2] and a network of commercial partners[3].
Timeline of the programme	2010 – present The Challenge was founded in 2010 as a business plan competition for students and graduates of Heriot Watt University. It has grown into a national initiative.
Target group(s)	Staff, students and recent graduates of Scottish universities and research institutions.
Size and budget of the programme	Since its inception Converge Challenge has awarded prizes with a value of GBP 663 000 (approx. EUR 748 000), with 56% awarded in cash, and 44% in in-kind support. It has led to the creation of around 120 businesses, trained around 300 people, and helped secure GBP 80 million (approx. EUR 90 million) in funding for participating businesses.
Type of policy instrument(s) involved	Competition Coaching and mentoring

Objectives

The mission of Converge Challenge is to leverage the intellectual assets and expertise emerging from Scotland's Higher Education system into the creation of sustainable, high-growth businesses. It aims to provide students, graduates and staff of Scottish universities and research institutes with the practical and commercial skills they need to successfully develop their business ideas. The long-term goal of Converge Challenge is to enable students and staff to bring new products and services to market.

Rationale

Young innovative businesses typically have the greatest economic impact, including job creation. The research and higher education sector develop knowledge and innovation that has the potential to be commercialised. It also trains talents that have the potential to be entrepreneurs. The Converge Challenge is designed to help stimulate the commercialisation of innovations in the Scottish Higher Education sector.

Programme description

Converge Challenge is a business creation competition and entrepreneurship development programme for staff, students and recent graduates (i.e. having graduated within 24 months of application date) of all Scottish universities and research institutions. The competition aims to create a new generation of entrepreneurs in Scotland. The competition is organised in four categories:

The Converge Challenge category targets new businesses that demonstrate high commercial potential and scalability. The category is for the most advanced business ideas, and is open to both product- and service-based ideas. Applicants must be able to demonstrate validation of their idea, customer engagement and a route to market. Commercialisation must be realised within 12 months of the Award.

The Creative Challenge category is aimed at innovative business ideas in creative industries, including advertising, architecture, visual arts, crafts, design, fashion and textiles, film and video, photography, music, performing arts, writing and publishing, software and computer games. It is aimed at innovative

ideas that demonstrate individual creativity, skill and craft. Businesses should have the ability to start trading with 12 months of the awards and have the potential to develop into sustainable businesses.

The Impact Challenge category is open to innovative projects with a social or environmental mission. Businesses must have the ability to start trading with 12 months of the awards and have the potential to develop into sustainable businesses.

The KickStart Challenge category targets early-stage, innovative projects that have the potential to become high-growth businesses. The KickStart category is open to both product and service-based ideas. Applicants must be able to demonstrate that their business idea is feasible, has unique selling points and that there is market demand.

Applicants are asked to attend a 2- or 3-day business course, depending on the category they enrol in, and submit a business plan (including financial forecasts and a 1-minute pitch video). Depending on the category, they may also attend a full-day business consultation, and be asked to pitch their idea at an "Elevator" event. Finalists of all categories are invited to participate in a promotional film and photoshoot and attend the awards ceremony. They may also get to attend an additional day of business training, and asked to pitch their idea to a judging panel, or to a live audience at the award ceremony (Table 5.1). Prizes vary by category (Table 5.2).

Table 5.1. Converge Challenge components

	Applicants				Finalists			
	Business course	Full-day business consultation	Pitch at "Elevator" event	Submit a business plan	Additional day of business training	Promotional film and photoshoot	Pitch to a judging panel	Attend the awards ceremony
Converge Challenge	3-day	x	x	x	x	x	x	x
Creative Challenge	3-day		x	x		x	x	x
Impact Challenge	3-day		x	x		x	x	x
KickStart Challenge	2-day	x		x			Pitch to a live audience at the award ceremony	

Table 5.2. Converge Challenge prizes

	Prizes
Converge Challenge	• First prize: GBP 71 000 (EUR 81 000) (GBP 50 000 cash and GBP 21 000 in-kind support) • Runner-up: GBP 29 000 (EUR 32 700) (GBP 20 000 cash and GBP 9 000 in-kind support) • All semi-finalists: 4 days of business training and business advice • All finalists: 12 months follow-on support from the Converge Team
Creative Challenge	• First prize: GBP 20 000 (EUR 22 500) cash (plus GBP 21 000 in-kind support) • Runner-up: GBP 10 000 (EUR 11 300) cash (plus GBP 9 000 in-kind support) • All semi-finalists: 4 days of business training and business advice
Impact Challenge	• First prize: GBP 20 000 (EUR 22 500) cash (plus GBP 9 000 in-kind support) • Runner-up: GBP 10 000 (EUR 11 300) cash (plus GBP 6 000 in-kind support) • All semi-finalists: 4 days of intensive business training and bespoke business advice
KickStart Challenge	• first prize: GBP 10 000 (EUR 11 300) cash and eligibility to be fast-tracked to the semi-final of the next Converge Challenge, Impact Challenge or Creative Challenge Programme • Runner-up: GBP 5 000 (EUR 5 600) in cash • All Successful Applicants: Two days of entrepreneurial training, pitch training and bespoke business advice.

In 2016, the Converge Challenge received funding from eight Scottish universities (GBP 20 000 – EUR 22 500 – each) and the Scottish Funding Council (GBP 282 000 – EUR 321 000).

The initiative also receives significant in-kind support. Each university provides staff to sit on judging panels and resources to promote the Challenge. In 2016, the value of this in-kind support was estimated at GBP 77 400 (approximately EUR 88 100). In addition, it also receives support from business partners that specialise in providing training and advice related to product development, recruitment, intellectual property, finances, tax, accountancy, and more. Support is also received from third sector partners, such as Entrepreneurial Scotland and Firstport, Scotland's social enterprise development agency. In 2016, it was estimated that the value of this in-kind support from the business and third sectors amounted to GBP 74 500 (about EUR 84 850).

One of the most important aspects of the Converge Challenge is the training programme. The first day of the training introduces participants to the fundamentals of business management, including business structure; how to pay yourself; employing other people; taxation; and accounting. The second day focuses on the basic corporate and commercial competencies, including quantifying commercial opportunities; estimating resources and timescales; cash flow; and building networks and teams. The third day focuses on identifying and targeting customers, market segmentation and competition.

Participants also have an opportunity to have their business plans reviewed by partners, and some participants are awarded 12 months of one-to-one mentoring.

Horizontal and vertical linkages

There are linkages between the KickStart Challenge and the three other categories of challenges. The winner of the KickStart Challenge is automatically qualified to the semi-finals of one of the other challenges.

Converge Challenge forms a pipeline of potential applications for the Royal Society of Edinburgh Enterprise Fellowship and other support schemes such as Scottish EDGE (a start-up competition) and the Engage Invest Exploit programme (an event for start-ups seeking funding ran by Informatics Ventures, a programme which supports technology entrepreneurs from Scottish universities). In addition to direct applications from Scottish universities and research institutes, Converge Challenge receives referrals from the Scottish Institute for Enterprise (which offers entrepreneurship education to students in Scotland), and Enterprise Campus (an initiative that support postgraduate students from Scottish universities in setting up businesses).

Monitoring and evaluation methods

The initiative collects key metrics annually for each award category. Evaluations are not regular, but one was conducted in 2016 with the objective of estimating the economic impact of the initiative. The evaluation used data collected by Converge Challenge, as well as surveys of participants. Key performance indicators include the following:

List of KPIs

- Number of businesses started
- Number of individuals trained
- Number of individuals mentored
- Value of prizes awarded (direct financial support and in-kind support)
- Participant satisfaction with the experience of the Converge Challenge
- Participant ratings of the value provided by different elements of the programme
- Satisfaction of the eight funding universities:
  - Number of successful spin-outs supported
  - Positive publicity for new spin-out companies
  - Enhance the profile of the university's entrepreneurship activity
  - Increase the university's capacity to provide entrepreneurship training
- Economic impact:
  - Gross Direct Impact
    - Gross Value Added
      - Turnover/GVA ratio
      - GVA/employee
    - Jobs
  - Additionality
    - Gross Value Added
      - Turnover/GVA ratio
      - GVA/employee
    - Jobs
  - Indirect impacts
    - Supplier impact
    - Income impact
  - Net Additional Impact
    - Direct effect
    - Income effect
    - Income effect
  - Multiplier effects
  - Potential future impacts, i.e. impact of future business growth
    - Gross Value Added
      - Turnover/GVA ratio
      - GVA/employee
    - Jobs

Monitoring and evaluation results

The initiative was evaluated in 2017 to estimate its impact. The key findings were:

- Between 2011 and 2016, the Converge Challenge category provided training to 180 people, of which 69 people incorporated a business.
- Of the 69 businesses created over the period 2011-16, 60 continued to operate in 2016.
- For each GBP 1 invested to date by the universities and SFC in the Converge Challenge has enabled participating businesses to leverage a further GBP 7.51 in funding.
- In 2016, the businesses that have taken part in Converge Challenge created an estimated 180 jobs in Scotland. Of these, 100 can be directly attributed to Converge Challenge.
- 97% of Converge Challenge participants reported that they were either "satisfied" or "very satisfied" with their experience.

- Overall, GBP 29.7 million (EUR 33.5 million) of follow-on funding was secured by businesses based in Scotland. Of this, GBP 12.5 million (EUR 14.1 million) can be directly attributed to the support provided through Converge Challenge.
- It is estimated that the businesses supported by the Converge Challenge generated GBP 5.2 million (EUR 5.9 million) Gross Value Added (GVA) for the Scottish economy in 2016. Of this, it was estimated that GBP 3.4 million (EUR 3.8 million) GVA can be directly attributed to the support provided by Converge Challenge.
- For each GBP 1 invested in 2016 by the universities and SFC, the Converge Challenge generated GBP 2.07 GVA for the Scottish economy.

In addition, statistics from 2019 indicate that the programme attracted 1 100 applications over 2011-18. In this period, it trained 300 entrepreneurs and supported 150 early stage ideas and social enterprises. An estimated 40% of projects incorporate and the three year survival rate is estimated to be 88%. Converge Challenge alumni had secured around GBP 80 million of funding as of September 2019.

Challenges and responses

No major challenges have been encountered to date. The initiative has grown from one award category to four in seven years. Financial and in-kind contributions from universities have increased, and the number of business and third sector partners has grown.

Takeaway for other countries

The key success factor for the Converge Challenge is the strong partnerships between the universities, business community and third sector. The initiative relies heavily on the input provided by business support staff from the individual universities that support the project, who help to support the participating businesses before, during and after the competition process. Without this support, it is likely that the benefits associated with the project would be significantly lower.

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Case 5: Growth Hubs Network, UK (information, advice, coaching and mentoring)

Basic information

Main category of intervention	Information, advice, coaching and mentoring
Country	United Kingdom (England)
Level of intervention	Subnational: England-only network of 38 local hubs in Local Enterprise Partnership areas
Ministry/Agency/Department in charge of the programme and its implementation	The Ministry of Housing, Communities and Local Government (MHCLG) has policy responsibility for the 38 English Local Enterprise Partnerships (LEPs). The Department for Business, Energy and Industrial Strategy (BEIS) is specifically responsible for Growth Hub policy.
Timeline of the programme	2014 – present The Growth Hubs were set up in 2014 in the context of the development of "Growth Deals" by Local Enterprise Partnerships. The Growth Hubs network is currently active.
Target group(s)	Start-ups Small businesses (though access is available to businesses of all sizes) Businesses with high-grow potential
Size and budget of the programme	By the end of the Financial Year 2019/20 UK Government made available GBP 62 million (EUR 71 million) to support the Growth Hubs. A further GBP 12 million (EUR 13.8 million) will be provided in the 2020/21 financial year, with funding beyond March 2021 to be agreed. Growth Hubs are also supported by a range of additional funding streams, including the European Regional Development Fund (ERDF).
Type of policy instrument(s) involved	One-stop shop for information and business advice Sign-posting to relevant services

Objectives

Growth Hubs aim to improve the coordination and delivery of business support to local companies based on local needs, with a focus on:

- improving business support for administrative procedures (e.g.: taxes, legislation, regulation, access to finance and national funding streams),
- facilitating access to specialised help by signposting businesses to appropriate existing support in the public and private sector, and
- stimulating demand for business support among smaller businesses who may lack the resources to seek out business support.

Rationale

The establishment of Growth Hubs followed the UK Government's decision to adopt a localised approach to supporting business growth. This approach is based on the idea that locally-driven and owned Growth Hubs would be more efficient than centralised programmes in identifying and responding to local needs.

The creation of the Growth Hubs also responded to a need for simplification of the business support offer: by offering a single point of contact to firms, Growth Hubs would facilitate access to business support and encourage more firms to use it.

Programme description

Each of the 38 English Local Enterprise Partnerships (LEP) has its own Growth Hub over which it has ownership and governance. LEPs are partnerships between local authorities and local private sector actors tasked with determining local economic priorities and undertaking activities to drive economic growth and

job creation, improve infrastructure and raise workforce skills within the local area. LEPs operate independently and a network (the LEP Network) was created to facilitate knowledge sharing between LEPs and dialogue with the government and other stakeholders. Each LEP developed a Strategic Economic Plan, outlining its priorities, which served as a basis to develop Growth Deals, through which government funds are awarded to LEPs for projects that benefit the local area. Growth Hubs were set up as a key element of these Growth Deals.

There are 38 Growth Hubs across England. They aim to promote, co-ordinate and deliver business support based on local needs, working primarily in partnership with the Department for Business, Energy and Industrial Strategy (BEIS), but also engaging with other key Government Departments as necessary.

Growth Hubs act as one-stop-shops, offering an entry point for all business support and information (national and local) at different stages of business development (starting a business, scaling up and creating jobs). There is strong emphasis on co-operation and communication between the Growth Hubs right across the network to foster collaboration and best practice exchange and to share awareness of events and opportunities.

In practice, a key element of the Growth Hubs' offering is the provision of face-to-face professional advice to businesses and signposting to appropriate local and national resources. At any initial meeting with each company or start-up, a Growth Hub adviser evaluates the business's growth plans and establishes a diagnostic assessing in which areas further support will be needed. Depending on the kind of assistance required (e.g. HR, marketing, sales, e-commerce, funding and finance, export, etc.), support is delivered by the Growth Hub itself or through external organisations identified by the advisor, including local and national public and private sector partners (e.g. local universities if the priorities correspond to innovation, the Department for International Trade if export support is required).

Growth Hubs have been set up independently to respond to local needs and do not follow a rigid structure. As such, they can vary in terms of capacity and support services offered. They are however required to adhere to five Principles of Funding set out by BEIS: (i) Management, governance and coordination; (ii) Data monitoring, reporting, evaluation and value for money; (iii) Strategic partnerships and business support simplification; (iv) Triage, diagnostics and signposting and (v) Supporting ambitious and high-growth businesses (scale-ups).

Horizontal and vertical linkages

As noted above Growth Hubs work in collaboration with a wide range of local and national, public and private sector partners - such as Local Authorities, Chambers of Commerce, the Federation of Small Businesses, Universities, Enterprise Zones, Business Angel Networks, Enterprise Agencies, banks and accountants – co-ordinating local business support and connecting businesses to the appropriate assistance.

With LEPs owning and governing Growth Hubs, a key vertical link at national level is the LEP Network, which was established to connect the 38 LEPs across England. The network is a not-for-profit company governed by three volunteer LEP Chairs. They are responsible for the finances and operational actions of the overall LEP Network on a day to day basis. In addition, a National LEP Network Steering Group meets throughout the year and sets the overall policy direction and strategy for LEPs. The group is open to all 38 LEP Chairs. Each LEP board is led by a business Chair and board members are local leaders of industry (including SMEs), educational institutions and the public sector.

Monitoring and evaluation methods

BEIS designed a specific monitoring and evaluation framework for Growth Hubs. The framework ensures the collection of data and information that could contribute to understanding which type of business services are helpful for local companies, how their performance can be improved to provide a higher impact

in the local and national economies and wider society. The framework constitutes a “minimum set of data to collect”. In addition, Growth Hubs are encouraged to collect any additional data they believe will help their operations. Metrics were designed in accordance with EU requirements and with the goal to reduce burden.

Growth Hubs were asked to report aggregated data (Table 5.3Table 5.3. Aggregated data to be reported by Growth Hubs).

Table 5.3. Aggregated data to be reported by Growth Hubs

Key metrics	List of activities monitored
Number of different businesses/individuals that they interacted with, split by medium, who has received triage, diagnostic and/or signposting support	• Telephone enquiries (excluding diagnostics) • Face-to-face appointments (excluding diagnostics) • Interactive business diagnostics (telephone or face-to-face) • Web-based interactions (e.g. contact form, user registration to members area, use of live chat, message through social media), with only interactive actions being counted, and not passive actions like views of a web page • Attendance of Growth Hub organised events, such as conferences or pop-ups • Other medium not listed above
Number of outbound referrals made and to which schemes, and with what take-up rate	
For “medium” and “high” intensity interventions only, tabulated responses to the satisfaction question “how satisfied or dissatisfied are you with the quality of this service?”, rated on a five-point scale	

Growth Hubs are expected to record data when they provide face-to-face support or have referred a user to a business support scheme. LEPs are expected to provide “non-aggregated” data for their Growth Hub in an accessible format (e.g. a spreadsheet with metrics as the columns and interactions as rows) at 6-monthly intervals or if specifically requested by BEIS.

As each Growth Hub operates independently, BEIS has encouraged LEPs to develop a robust evidence base for their growth hubs to ensure that they can demonstrate impact with the aim of supporting any future bids for public sector funding. This can include a LEP’s own internally agreed KPIs. LEPs are therefore responsible for both day-to-day monitoring of performance and wider strategic, process and impact evaluations of their activities – including value for money at a local intervention level.

BEIS has produced a template to help LEPs produce their individual Growth Hub Annual Reports. The Annual Reports are designed to help BEIS assess how individual Growth Hubs are performing against the five agreed principles of funding, to showcase their success stories and aid the identification of best practice and local innovations that could aid the development of the wider Network.

The key metrics reported on in an Annual Report include:

List of Key metrics
• Number of businesses supported • Number of individuals and aspiring entrepreneurs supported • Number of users referred to other services • Number of users receiving a diagnostic • Number of businesses receiving face-to-face support • Number of individuals helped to start a business • Number of mentorship and business to business relationships created • Customer satisfaction

Monitoring and evaluation results

An independent evaluation with a control group conducted in 2017 found that businesses that have been in contact with a Growth Hub are growing faster than other businesses. This was true both in terms of turnover (9.0% for Growth Hub users, 2.5% on average for other companies) and employment (8.0% for Growth Hub users vs. 0.1% for the comparison group).

Figures from October 2017 also show that overall, 582 815 businesses had engaged with Growth Hubs and/or been supported by them as well as 31 834 individuals, including entrepreneurs, pre-start-ups and start-ups. Out of these, 105 356 users received referrals to additional public/private support. Growth Hubs also helped 11 459 individuals start a business. A customer satisfaction survey of Growth Hubs support found an average satisfaction of 86.6%.

Challenges and responses

Growth Hubs are perceived as a very successful initiative in the UK as a support to local economies and the competitiveness and productivity of local business.

One of the main challenges in operating the Growth Hubs is to efficiently divide resources between different categories of businesses and the services provided, in particular, supporting very small scale ventures as well as scale-ups. This is done through specialisation at the level of the Hub by offering support focused on problems faced by small businesses, such as access to premises, skilled workers, good infrastructure and finance, while addressing the needs of scale-ups by signposting national support and enabling local networking and collaboration.

Another challenge in providing specialised services to different types of firms and business support to specific sectors of the economy is that it can lead to a complex advisory services landscape. A challenge for Growth Hubs going forward will be to address complexity and collaboration in the commercial business support market in order to better connect with it and facilitate access by smaller firms.

Takeaway for other countries

The Growth Hubs are perceived as a success, as they play a key role in strengthening local small firms and start-ups, promoting job creation and helping companies to grow and in some cases go global. The wide range of services offered contributes to reinforce the performance, efficiency and competitiveness of local businesses, while aiming to retain and create jobs.

Success factors for the Growth Hubs that may be relevant for similar policies and initiatives include:

- **Offer political support to the centres at national level.** The creation of LEPs and Growth Hubs was flagged as a national political priority by the government, under the support of the Business, Energy and Industrial Strategy Committee of the House of Commons. The strong political support was thought to contribute to better engagement among stakeholders. Defining a national strategy was an important tool to signal this commitment.
- **Develop strategic plans at the local level.** Implementation at the regional and local level requires bottom up contributions to inform the national authorities and define and achieve the most appropriate goals for the local context.
- **Involve a variety of stakeholders**. The combination of a top down with a bottom up approach, where local stakeholders are strongly involved and play a key role, allowed for a wider participation and leveraging local capacity.
- **Create of a network linking the Growth Hubs.** The development of a national network contributes to consistency between the services offered across hubs, but also gives the opportunity for organisations to learn from each other.

- **Establish a monitoring and reporting system.** After having been created, Growth Hubs require a high level of monitoring and reporting to national authorities, in order to understand if their services are corresponding to the national and regional plans or ambitions, but also to understand their impact and outcomes, as well as to allow for benchmarking opportunities.
- **Embed the Growth Hubs in new national strategies.** Involving Growth Hubs as partners in the definition and implementation of new strategies ensures the Hubs' relevance and allows for leveraging their capabilities. For example, the National Industrial Strategy uses the Growth Hubs to reach out to local stakeholders and businesses.
- **Direct sufficient and continuous funding should be provided for the structures.** Financial support is needed on a regular basis to ensure continuity of service.

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Case 6: Regional Business Development Centres, Denmark (information, advice, coaching and mentoring)

Basic information

Main category of initiative	Information, advice, coaching and mentoring
Country	Denmark
Level of intervention	National / regional National network of regional centres
Ministry/Agency/Department in charge of the programme and its implementation	The Regional Business Development Centres are managed locally. Subject to the approval of the Regional Council and the Danish Business Authority, each of Denmark's five regions established a Growth Forum, which is responsible for the development and management of the regional economic strategy of the Regional Business Development Centres. The Ministry of Business and Growth is responsible for the programme strategy and the Danish Business Authority is responsible for its implementation.
Timeline of the programme	2007-2018 A new framework was signed between Local Government Denmark (KL) and the Ministry of Business and Growth for the period 2016-20. After the formal closure of the Regional Business Development Centres, six regional Business Hubs were established on 1 January 2019.
Target group(s)	Aspiring and early-stage entrepreneurs SMEs
Size and budget of the programme	From 2007 to 2010, the Regional Business Development Centres were financed by the national budget. After 2011, they operated under the control of the municipalities of each region. They were financed by local authorities, which receive an annual grant from the Government for running the programme. The total grant amount was of DKK 105 million (EUR 13.7 million) for the five Centres in 2017. The annual budget was shared among the Centres based on the number of inhabitants in the regions. It was adjusted annually according to the Consumer Price Index. The programme was part of the Danish Operational Programmes and receives support from the European Structural and Investment Funds (ESIF).
Type of policy instrument(s) involved	Business diagnostics Connection with specialised public and private sector support providers

Objectives

The Regional Business Development Centres aimed to encourage growth among Danish entrepreneurs and small businesses by increasing their awareness of their growth potential and helping them identify and exploit growth opportunities. To do so, Regional Business Development Centres provided a range of business support services in collaboration with private and public sector providers to address identified weaknesses in the capabilities of start-ups and SMEs and facilitate future growth.

Rationale

The Regional Business Development Centres were created within the context of wider efforts to spur economic growth, research and innovation. The creation of the Regional Business Development Centres was part of a reorganisation of local governance which included a move towards a regionalised system to support business development and economic growth. They aimed to address the regional dimension of growth by responding to local and regional business needs while contributing to national growth targets. In 2007, five regions were formed. Each region established a Growth Forum with the active participation of regional stakeholders and local authorities and governments, and created a Regional Business Development Centre.

Programme description

Company managers and entrepreneurs making use of Regional Business Development Centres first met with advisors to develop a diagnosis of the company's growth potential and to identify areas of weakness. The diagnosis meetings were free of charge. Based on this diagnostic, the Regional Business Development Centre helped the entrepreneur/SME develop a growth plan.

To support the implementation of the plan (helping the firm to strengthen its management and address identified weaknesses), the Regional Business Development Centres supported companies with their own services. They also referred them to relevant private services providers (e.g. banks, accountants and lawyers), as well as to other stakeholders (e.g. knowledge and research institutions) and national public services (e.g. the Patent and Trade Mark Office or the Trade Council). The support provided covered a range of objectives such as helping them to create and strengthen supply chain or addressing knowledge or skills gaps.

Regional Business Development Centres also assisted companies with technical development, marketing, IP management, training or finances. The costs of this subsequent assistance varied depending on the nature of the services provided and where they were delivered. Some services were provided free of charge. Others, especially those provided by private consultants, could be subsidised up to 50% of their market value.

Regional Business Development Centres also provided a range of general services to the community at the regional level, such as giving economic and business information, sectorial specialized support or early warning in case of national or international business issues. Regional Business Development Centres did not have a set sectorial focus.

Each of the five Regional Business Development Centres (Central Denmark, Northern Denmark, Southern Denmark, Zealand, and Greater Copenhagen) tailored its provisions according to local needs, including the sectoral composition of each region and the funds made available locally (including EU funding). For example, the Regional Business Development Centre South Denmark offered support for general business but also had more specific tools for assisting companies with innovation, often in relation to advanced technologies and the Central Denmark Centre also offered services to foreign entrepreneurs. The North Denmark Centre offered a graduate placement scheme called Growth via knowledge and Regional Business Development Centre of Copenhagen offered a set of courses entitled Network-driven innovation leadership that encourages companies to work with others to increase their knowledge and innovation potential.

All Regional Business Development Centres offered assistance with gaining access to finance and developing better IP management and protection. Most also offer assistance to the development of new ideas. Many of the services provided involved advice from consultants. Some of the services offered were local variants of a national scheme.

Horizontal and vertical linkages

Regional Business Development Centres aimed to connect local and national priorities and to provide a single entry point for local and national level business support. They were well-connected to local ecosystems of business development service providers and were linked to both local and national level priority setting mechanisms.

The Ministry of Industry, Business, and Financial Affairs and the Local Government Denmark (KL – the association and interest organisation of the 98 Danish municipalities) were responsible for the programme strategy. The Danish Business Authority was the organisational body responsible for implementing it at the national level. Subject to the approval of the Regional Council and the Danish Business Authority, each of Denmark's five regions established a Growth Forum (made up of regional stakeholders to develop and

implement the respective regional economic development strategy), which was given responsibilities for the development and management of a regional economic strategy and a corresponding Regional Business Development Centre in 2007.

Monitoring and evaluation methods

The objectives of the centres were set in the National Agreement on Regional Business Development Centres. National targets for the Regional Business Development Centres were set annually. The evaluation of the performance of the Regional Business Development Centres took into consideration three key areas:

- Volume (a description of the extent of services provided and the number of clients involved);
- Quality (an assessment from the clients' perspective of the quality of the services provided);
- Effect (the extent to which growth among beneficiary firms can be attributed to the Regional Business Development Centres).

Nine KPIs and corresponding targets were set covering the three areas:

List of KPIs
Volume :
(1) The Regional Business Development Centres carry out 2 000 mappings and motivate another 2 000 companies for growth.
(2) At least 80% of companies are referred to other services and 70% to private services.
(3) The Regional Business Development Centres jointly develop and implement at least one collective process for a minimum of 12 companies with special development potential within digitalisation / automation.
Quality:
(4) At least 70% of companies experiencing positive effects.
(5) Minimum Net Promoter Score of 60[1].
Effect:
(6) 10% growth in employment of participating companies over comparable companies.
(7) 15% higher growth in revenue of participating companies over comparable companies.
(8) The share of Regional Business Development Centre users with foreign sales to increase by 5% compared to the previous year.
(9) The proportion of Regional Business Development Centre users lifted to the "growth layer" of Danish companies increases to 15%.

Note: The "Net Promoter Score" measures companies' willingness to recommend the Regional Business Development Centre to other business owners or other networks based on a question in the satisfaction survey or Regional Business Development Centre users. It is calculated as the difference between the percentage of users who selected 9 &10 as their likeliness to recommend the Regional Business Development Centre on a 1-10 scale and the percentage of users who selected a rating between 0 and 6.

Performance against the KPIs was assessed based on three methodologies: (i) an examination of the data collected by the Regional Business Development Centres' Client-Relations-Management systems; (ii) interviews with clients and a survey conducted by external consultants; and (iii) a statistical exercise conducted by Statistics Denmark in order to determine the impact of the Regional Business Development Centres on enterprise growth in terms of employment, turnover and exports.

No information is available on the monitoring and evaluation methods of the newly established Business Hubs, however, continuity between the two programmes suggests that some of the KPIs and methods may carry over into the evaluation process of the Business Hubs.

Monitoring and evaluation results

An evaluation undertaken in April 2013 by the Iris Group for the Danish Business Authority concluded that the five Regional Business Development Centres had different competences and priorities, but that, in general, they fulfilled their role as business advice centres for the different private and public stakeholders.

According to monitoring information, 2 146 companies undertook a "growth assessment" in 2016 (the Regional Business Development Centres' core service) and 88.2% of these were referred for further advice to private or public sector specialists. Another 3 181 enterprises were served by the Regional Business Development Centres in another manner that year. These figures represent a small increase over the previous year (0.5% increase in growth assessments conducted; 1.5% increase in referrals for further assistance; 0.3% increase in more general interactions). In 2014, the Regional Business Development Centres conducted 2 124 growth assessments nationwide, almost 6% above the target set. Another 3 385 companies participated in other Regional Business Development Centre activities, such as conferences and workshops.

A further performance assessment carried out by the Danish Business Authority (*Erhvervsstyrelsen*) found that the Business Development Centres had contributed to creating 1 305 jobs from 2013 to 2015. The evaluation estimated that the economic return on the investment made by the municipalities (DKK 98 million in 2013, approximately EUR 13 million) was DKK 5.07 for every DKK 1 invested (Danish Business Authority, 2016).

As part of this evaluation, companies were also asked to assess the assistance received from the Regional Business Development Centres. Some 93% reported that it had had a high or moderate positive effect on their firm's development. As with previous evaluations, the assessment found that companies who used the Regional Business Development Centres continued to outperform similar ones that did not. This was true for growth in employment, turnover and exports, although the differences between the Regional Business Development Centre users and the control group was narrower than the previous year for the first two variables. Some 60% of companies using the Regional Business Development Centres experienced growth in employment (10% more than in the control group), while 5% more companies than in the control group experienced turnover growth.

Challenges and responses

The alignment of the national strategy defined by the Ministry of Business and Growth with the concrete actions and business support offered by the Regional Business Development Centres at the regional level required coordination among the Danish Business Authority (in charge of the programme at the national level), local and regional government authorities (in charge of business support and promotion in their region) and Regional Business Development Centres managers. To address this challenge, a multilevel governance framework was defined and adopted for the programme, with both top down and bottom up contributions. This notably involved regular meetings bringing together the Danish Business Authority and the five Regional Business Development Centres.

In 2017, the government established the Commission on Simplification of Danish Business Promotion to revise the structure of the Danish business-support system. The Commission recommended bringing all business development support under a single umbrella to increase clarity for entrepreneurs and improve efficiency as well as further decentralising support and anchoring it at the local level. Following this consultation, business promotion efforts were reorganised in 2018 as a two level system. At the national level, the Danish Executive Board for Business Development and Growth (*Danmarks Erhvervsfremmebestyrelse*) sets national strategic objectives. At the local level, six Business Hubs (*Erhvervshuse*) were created as one-stop-shops centralising local business development support and providing an entry point to national programmes (European Commission, 2019; European Commission, 2018). Previously, there were two entry-points for local business support: basic business support was provided by municipalities while Regional Business Development Centres offered support to growth-oriented entrepreneurs. The five existing Regional Business Development Centres (*Væksthuse*) were closed. Upon the creation of the six Business Hubs (*Erhvervshuse*), some resources and staff were transferred from the defunct Regional Business Development Centres. A digital platform was also introduced as part of the reform.

Another initiative addressing co-ordination challenges for the Business Hubs is the co-operation agreement signed between nine Funen municipalities to form of a cross-municipal collaboration under the auspices of the Business Hub, bringing together all business support and simplifying the regional landscape.

Takeaway for other countries

Overall, the Regional Business Development Centre programme was successful in providing businesses to local firms and promoting job creation and supporting firm development. However, the business development service system was still deemed complex and was further simplified through the transition to the Business Hubs programme. Based on the experience of the Regional Business Development Centres, some key factors can be identified for similar programmes to be successful:

- **Initiatives seeking to implement regional one-stop-shops should seek to involve local stakeholders in the governance and strategic development of the hubs.** The local ownership of Regional Business Development Centres was positively perceived by local authorities and was thought to help adapt the offer to the local context.
- **Similar initiatives set aside resources to gather feedback on user experience in different centres** as well as monitor longer-term impact of support on firms. The use of control groups to evaluate impact on firms was a strong feature of the Regional Business Development Centres evaluation design.

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Case 7: Siva Partner Incubators and Business Gardens, Norway (information, advice, coaching and mentoring)

Basic information

Main category of initiative	Information, advice, coaching and mentoring
Country	Norway
Level of intervention	National
Ministry/Agency/Department in charge of the programme and its implementation	Industrial Development Corporation of Norway (Siva) has overall responsibility for managing the programme. The 11 counties are also involved.
Timeline of the programme	The programme is currently planned to run during 2012-22 (ongoing). The Business Garden programme started in 1998, with a second iteration in 2006-11.The Incubators programme started in 2000 working with individual incubators until 2011.
Target group(s)	Business development support providers SMEs and entrepreneurs
Size and budget of the programme	As of 1 January 2020, there were 34 incubators and 40 business gardens participating in the programme. The incubators programme went from 827 firms in incubation in 2013 to 2 081 in 2018. The budget of the incubators programme was NOK 88 million (approximately EUR 8.9 million) in 2015, up from NOK 51.4 million (EUR 5.2 million) in 2012. The business gardens programme had 1 806 beneficiary companies in 2018, up from 1 122 in 2013. The budget of the business gardens programme was NOK 52.0 million (EUR 5.3 million) in 2015, up from NOK 38.6 million (EUR 3.9 million) in 2012.
Type of policy instrument(s) involved (e.g. grant, loans, BDS, skills development, etc.)	Grants for business gardens and incubators. Capacity building for business gardens and incubators. Certification: Siva partners are granted a certification and can use an official logo to signal service quality.

Objectives

The Incubators Programme and the Business Gardens programme aim to increase value creation by supporting business development and innovation. Both programmes are complementary, they support business development services providers aimed at different profiles of firms.

The Incubators Programme aims to boost innovative entrepreneurship and support further development of existing businesses. The incubators target innovative ventures with growth potential.

The Business Gardens Programme aims to stimulate regional development by supporting business creation and boost growth of existing firms in District Areas. It also aims to reinforce the role of counties in support of regional development. The business gardens target firms in sparsely populated and remote areas, i.e. District Areas.[4]

Rationale

Both programmes co-locate start-ups and provide them with access to expertise, training and coaching services and facilitate linkages with investors. They aim to help start-ups develop their network and foster peer learning. Indeed, many innovative firms fail at early stages in spite of promising business ideas as they lack the means to develop their potential. The incubators programme aims to provide these firms with a conducive environment to grow past these challenging stages. Entrepreneurs in rural areas face specific challenges related to the lack of access to the skills networks and capital needed to develop their businesses. Business gardens aim to connect them with relevant resources locally to grow.

Programme description

The Industrial Development Corporation of Norway (Siva) aims to spur innovation capabilities and economic growth in all parts of the country with a special responsibility to promote growth in rural areas. Among its activities, Siva supports firm development through incubators and business gardens, which offer co-location services to promote growth and development and offer access to expertise and networks. Siva provides financial support to incubators and business gardens enlisted in the programme. These incubators and business gardens are referred to as “Siva partners”. The business gardens are often co-owned by Siva, counties, municipalities or private organisations. Their operating cost have to be sustainable, but they rarely generate substantial profits. Incubators are often part of and partially owned by a research facility, though some are stand-alone firms. Research facilities often have close ties to a university or college in the region, and may be (partially) owned by them. There were 34 incubators and 40 business gardens in the programme as of January 2020. On average, a business garden serves 56 firms while an incubator serves 61. Overall, Siva partners offer support to 4 000 start-ups and small businesses yearly.

Business gardens and incubators are selected on their capacity to serve their respective target entrepreneurs: business gardens must be active in providing and facilitating access to competence, networking opportunities and infrastructure for SMEs and entrepreneurs and be suitable as a knowledge-based grouping for SMEs in a small community. Incubators should be implanted in regions at a stage of development where focus on innovation is of strategic importance. They should demonstrate linkages with industry as well as with higher education and research organisations.

Siva supports Siva partners programme operators (incubators and business gardens) through expertise sharing and a network. Business gardens and incubators also receive a subsidy in support of their operations. The grants guidelines were revised in 2016. The grant volume depends on the incubator or business garden’s characteristics in terms of results, targets, objectives and potential. For 2018, there were four grant levels for incubators: NOK 1.5 million (approx. EUR 153 000), NOK 2 million (approx. EUR 200 000), NOK 3 million (approx. EUR 300 000), NOK 4 million (approx. EUR 400 000) and NOK 5 million (approx. EUR 510 000). The same year, the grant levels for business gardens were: NOK 1.4 million (approx. EUR 143 000), NOK 1.7 million (approx. EUR 173 000), NOK 2 million (approx. EUR 200 000) and 2.5 NOK million (approx. EUR 255 000).

The ownership and financing of business gardens varies. Aside from the Siva grant, they often get financing from regional governments. In addition they can collect fees from the firms they serve.

Horizontal and vertical linkages

The incubation programme is funded by the Ministry of Trade, Industry and Fisheries and the Municipal and Regional Authorities Modernization Ministry. The Business Garden Programme is financed by the Ministry of Local Government and Modernisation and the counties. They cover 75% of the programme’s operation. The business gardens received 25% co-financing from the counties until 2017.

Incubators and business gardens also receive funding from other sources (e.g. county councils, private sector, higher education and research institutions) and are active outside of the incubator/business garden programmes, which positively affects their incubation activities according to the programme evaluation.

Siva cooperates with both the Norwegian Research Council and Innovation Norway. The business gardens and Incubators organise activities in support of other national programmes, such as the Siva Catapult-scheme which supports the development of national infrastructure for SME innovation.

Monitoring and evaluation methods

A mid-term programme evaluation was conducted in 2017 by the SNF Centre for Applied Research at NHH, covering the period 2012-16. The evaluation aimed to assess (i) the programme's organisation, (ii) its impact on the firms wo use the incubation and business gardens' services as well as (iii) the role of incubators and business gardens in the regions.

The evaluation was based on a survey of incubators (37 respondents), business gardens (43) and firms enrolled in incubators (333) and in business gardens (494). Interviews with Siva representatives and programme managers were also conducted. Previously conducted satisfaction survey and operating data were also used. A range of KPIs were used to evaluate the programmes' performance:

List of KPIs
Evaluation of process:
• Assessment of role of KMD, NFD, LMD and counties (financing, targeting, goal management)
• Assessment of Siva's contribution (grants, expertise, network)
Evaluation of impact (value creation):
• Programme operators (selection of companies, quality of services, expertise, networks)
• Participating firms: characteristics, competence development, networks development, performance (profitability, turnover growth as compared with a control group)

Four incubation programmes were also evaluated in the previous iteration of the incubators programme (evaluations in 2003, 2008, 2009 and 2013).

Monitoring and evaluation results

The 2017 mid-term programme evaluation found that both programmes were serving their established target groups in terms of the service providers supported and the companies served through them. The evaluation found a positive impact of both programmes on the entrepreneurs who received support. It also recorded positive results in terms of building local capacity to facilitate entrepreneurship and business development. In particular, the evaluation found that Siva promoted learning between operators and strengthened the networks for incubators and business gardens, mostly at the national level. It also found that county councils played an important role as co-funders of business gardens and supported their development.

The evaluation showed that incubators tended to be located in central areas (74%) and serve young firms, often in knowledge intensive industries (69%). Participating firms tended to have higher growth ambitions than these in business gardens. Incubators were well linked to Innovation Norway (the national innovation agency) and business clusters but also collaborated with a wide range of actors (e.g. county councils, local businesses, HEIs). Incubator managers who responded to the survey estimated that their main contributions were strengthening participants' business knowledge and an increasing firm survival. 79% of participating companies reported being satisfied or very satisfied with their experience, especially in terms of business development support: 88% reported a positive impact of their affiliation with the incubator on their firm's development. The effect was significantly higher for firms located in the incubator's premises.

In contrast, business gardens tended to be located in peripheral municipalities (60%), and in District Areas (89%). Business gardens tended to serve more established firms and cover a wide range of sizes and industries. Business gardens primarily reported linkages with other local businesses and other innovation companies (e.g. incubators). Co-operation with counties is found to have contributed to increased linkages with research and education institutions as well as linkages with other business gardens. While companies in business gardens tended to collaborate less with research and education institutions than those in incubators, there was more collaboration among enterprises in business gardens than in incubators. Business garden operators who responded to the survey estimated that their main contribution was to improve participating entrepreneurs' business knowledge. Other cited contributions included developing networks with research and education institutions and innovation. Some 77% of participating companies

reported being satisfied or very satisfied with their experience, particularly in terms of skills development. Some 80% reported a positive impact of their affiliation with the business garden on their company's development.

Through a quantitative analysis comparing firms served by incubators/business gardens to firms that have not been affiliated with those support programmes, the evaluation estimated higher levels of value-added after 3 years.

The evaluation provided recommendations including developing stronger linkages to communities and stakeholders and developing models for more tailored follow up with former participant companies.

Challenges and responses

Incremental changes have been implemented over time to improve the efficiency of the programme. For example, Siva has introduced a tool helping incubators and business gardens to report on the use of the grant and, optionally, other sources of funding. Formalised processes were also put in place to conduct structured talks between operators and Siva using a tool called Qimono. The structured talks are held every 18 months and the process involves an extensive assessment questionnaire to identify areas for further development in a particular business garden and incubator.

Following an assessment, a further differentiation in the grant amounts paid to incubators and business gardens was introduced in 2016, in order to increase support to providers with untapped potential and downgrade support to bad performers. The new system also facilitates exit of bad performers.

Takeaway for other countries

The two programmes have demonstrated a positive impact on service providers (Siva partners) and the firms using them. In particular the programme was successful in targeting support to different profiles of firms by supporting two types of operators targeting different populations of businesses and entrepreneurs. Key lessons for the development of similar programmes include:

- **The use of non-governmental structures helps obtain a good geographic coverage.** It is crucial that similar programmes include capacity building and networking for partner organisations, to ensure good quality support is provided and help the development of strong local business support ecosystems.
- **The use of a brand to signal quality services is helpful for users to navigate the system.** The system must be designed to allow for exit of sub-par service providers to maintain service quality while helping providers with potential to improve. Programmes should set up a robust evaluation framework and sufficient resources to regularly assess impact of different delivery structures on firms.
- **Monitoring of incubators and personalised feedback for incubator staff are important for development.** Incubator programmes should set up a formalised system for incubator managers to report on their activities, communicate regularly with, and receive personalised feedback and guidance from programme managers.
- **Programmes should not overlook supporting small structures.** Evaluation suggested that smaller incubation structures showed better results than larger facilities.
- **Physical co-location of start-ups is an important part of the support offered.** The evaluation found that firms which opted for physical co-location received stronger benefits than those who received services without locating on the premises.

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Case 8: Regional Co-investment Funds, Sweden (access to finance)

Basic information

Main category of intervention	Access to finance
Country	Sweden
Level of intervention	National, with funds established for each of the eight structural fund regions (NUTS 2).
Ministry/Agency/Department in charge of the programme and its implementation	The Swedish Agency for Economic and Regional Growth (*Tillväxtverket*) is responsible for the programme. The Funds management also involved Almi Invest (independent public venture capital company), *Innovationsbron* (investment fund), *Norrlandsfonden* (trust fund) and the Sixth AP Fund (state-owned pension fund manager).
Timeline of the programme	2009-20 The project was scheduled to run until 2014. The final date for new investments was postponed from 2014 to 30 September 2015, with follow-on investments until 31 August 2020. A second round (Fund II) was launched at the end of 2015 with similar conditions.
Target group(s)	Small businesses that are investment ready and at the early stages of development.
Size and budget of the programme	Between the start of the project and June 2015 approximately SEK 3.4 billion (EUR 322 million) had been invested in 320 portfolio companies. Public funds account for approximately SEK 1.4 billion (EUR 133 million) and private funds for SEK 2 billion (EUR 189 million). The typical investment range is SEK 1–10 million (approx. EUR 95 000–950 000) per company. The total capital base of the regional funds is around SEK 1.4 billion (approx. EUR 133 million), with large variation between funds, with capital bases ranging from SEK 36 million to SEK 200 million (EUR 3.4 – 19 million).
Type of policy instrument(s) involved	Regional venture capital funds that match private sector investment.

Objectives

The overall objective of the Fund is to improve access to finance for start-ups during the early stages of development and to support their growth. In addition, the programme seeks to increase the supply of revolving capital, improve regional financing structures, develop the competences of various actors supporting entrepreneurship financing, and strengthen collaboration between funders.

Rationale

The initiative was launched to address a perceived imbalance between the existing risk capital available on the market and the demands of start-ups (Tillvaxtverket, 2014). Moreover, the funds were launched in response to the European Commission's declaration of intent to change European Union Structural Fund programmes away from direct grants to other types of instruments such as repayable loans, loan guarantee schemes and venture capital (Tillvaxtverket, 2014).

Programme description

The Regional Co-investment Fund is composed of 11 (initially 12) regional funds across Sweden, established to invest in micro-, small- and medium-sized enterprises (MSMEs) in early phases of development. The funds' individual capital bases ranged from SEK 36 million to SEK 200 million (approx. EUR 4.2 million and EUR 23.2 million). Between the start of the project and June 2015 approximately SEK 3.4 billion (EUR 322 million) had been invested in 320 portfolio companies. Public funds accounted for approximately SEK 1.4 billion (EUR 133 million) and private funds for SEK 2 billion (EUR 189 million). Approximately half of public funding was provided by the European Regional Development Fund and the

rest was covered by public regional fund providers (e.g. regional organisations, county councils, Almi Invest).

The Regional Co-investment Fund was launched on 1 January 2009 and was planned to run until 31 December 2014. In 2012, the final date for investments was postponed to 30 September 2015. Follow-on investments in existing portfolio companies may be made until 31 August 2020. All shareholdings are to be divested after this date.

The Regional Co-investment Fund is managed by the Swedish Agency for Economic and Regional Growth (*Tillväxtverket*) at the national level, within the framework of Sweden's eight regional European Union Structural Fund programmes. The Regional Co-investment Fund was initially driven by five owners, the former Innovationsbron,[5] Almi Invest,[6] Saminvest, Norrlandsfonden, and the Sixth AP Fund[7] and evolved over time.

In each investing round, the public sector invested up to 50% and private investors at least 50%. Investments typically range from SEK 1 million to SEK 10 million (approximately EUR 110 000 to EUR 1.1 million). Firms with up to 249 employees are eligible for investments. Investments were carried out in different ways. In most cases, companies in need of investors would reach out to the fund, or be contacted by the funds which would actively seek suitable investments. In a minority of cases, private sector investors approached the fund together with a potential portfolio company.

The Fund aims to have a revolving capital base so that it does not shrink in the long-term, and seeks to complement the market, i.e. not to crowd-out private investment.

Linkages to other policies and programmes

The initiative was launched following a pilot project including three regional venture capital funds, which invested between 2005 and 2008. Over this period, SEK 112 million (approximately EUR 13 million) were invested in 62 companies. This pilot initiative was based on the Scottish Co-investment Fund.

The Regional Co-investment Fund has no direct linkages with other programmes, although their objectives align with innovation and industrial policy.

Monitoring and evaluation methods

The Swedish Agency for Growth Policy Analysis (*Tillvaxtanalys*) is responsible for monitoring and evaluating the programme. An evaluation report was published in 2016. A final assessment report covering the Regional Co-investment Funds and two other Swedish risk capital initiatives was published in 2019 (Tillvaxtanalys, 2019).

The 2016 evaluation process included both quantitative and qualitative assessments, as well as the consultation of an international expert panel. The impact of the Co-investment Fund on companies was measured using a comparison with a control group of firms that did not receive investment through the Fund, matched to recipient companies according to their characteristics (sales, size, productivity, age of the company, industry, etc.).

Companies were also asked to report to what extent they used the investment received to invest in different parts of their business (e.g. skills acquisition, product development, operating expenses) and to evaluate the impact of the fund on different dimensions of their activity (expansion, future financing opportunity, staff growth, etc.). Companies were also asked to rate their needs for non-financial support and to which extent these needs were met by the fund and the private co-investors.

KPIs monitored included the following:

List of KPIs
• Portfolio company characteristics (sector, size, turnover, location, etc.) • Portfolio company allotments of venture capital investments • Portfolio company assessment of the impact of the venture capital investments on the company • Portfolio company assessments of the need for non-financial funding and the contribution from private and public investors • Survival rates by sector • Turnover compared to control group • Number of employees compared with control group

The impact of the Fund on the functionality of regional capital markets used qualitative and qualitative indicators. The logic framework for assessing the ecosystem is presented below.

Activities	Outcomes	Impacts
• Contact with & info about the fund to potential portfolio investors • Information about possible investments • Support to co-investors: contract formalities, evaluation models about businesses etc. • Contribution of funds up to 50% of the invested amount • Contact with & information to potential portfolio companies • Feedback to portfolio companies • Help with contacts to portfolio companies following refusal • Business development, portfolio companies • Help with contacts to portfolio companies • Dialogues with regional development players • Dialogues with growth players • Dialogues with potential buyers • Dialogues with co-investors • Dialogues with regional industry representatives • Dialogues with companies for regional exit opportunities	• Increased interest in investing • Increased knowledge of and experience in investing • Increased investments • Increased inflow of funds from region • Improved attitude toward equity capital • Increased knowledge and experience of equity capital investments • Increased ability to attract external capital • Increased knowledge about public & private interventions, tools, assignments • Better coordination of regional development initiatives • Increased interest from national & international industrial players • Increased interest from national & international financial players	• Development of supply side • Development of demand side • Development of regional collaboration • Development of exit opportunities

The evaluation involved around 50 interviews with portfolio companies, investors and other stakeholders.

Monitoring and evaluation results

The review of the activity of the fund found the following average characteristics for the 320 portfolio firms in the year preceding the investment date:

- Annual turnover: SEK 6.3 million (EUR 69 million)
- Number of employees: 6.8 persons
- Productivity (added value/employee): SEK 334 000 (EUR 36 740)
- Capital intensity (fixed assets/employee): SEK 801 000 (EUR 88 110)

Comparing with a control group of comparable firms supported by other funds, the firms supported by the Regional Co-investment Fund were spread among considerably more sectors.

Overall, about 80 percent of co-investors were Swedish (50% came from the same region as the fund and 30 % came from other regions in Sweden). Foreign investors accounted for about 6% of deals but they invested larger amounts, accounting for just over 10% of the total value of investments. It was not possible to determine the location of the remaining 12% of investors.

The most recent evaluation noted five key findings:

- Overall, the funds were invested in accordance with requirements. Nearly SEK 3.4 billion (approximately EUR 374 million) were invested in 320 companies since 2009. The funds have exited from 45 companies (as of 2016) and about 10% of companies had gone bankrupt.
- The initiative engaged new actors in the venture capital market. Only approximately 30% of the total number of investment decisions were made by companies whose primary objective is investing capital. Furthermore, the regional structure of the initiative allowed new segments of recipient firms to access risk capital.
- It was too early to draw conclusions about the tangible effects in investee businesses. However, an overall increase in employment was observed among investee businesses. It is not clear if this was due to widespread employment creation or job creation by a few very successful firms.
- The majority of regions experienced positive development in the capital supply structures. However, this was not uniform across and within regions. The empirical data did not allow an assessment of causality between the initiative and the structural changes in the regions.
- Two main pathways were identified in the programme, i.e. growth in the number of investee businesses and improving the regional structure for risk finance. However, there did not seem to be a priority between either. Some of the regional funds viewed themselves as regional development players, while others saw themselves as traditional venture capital investors.

The evaluation recommended:

- Reviewing and clarifying the formulation of the programme's goals, and that an intervention logic is devised.
- Streamlining the programme to:
  - Focus solely on the investee businesses' growth with no ambition in respect of structural building, or
  - Adjust the model to allow variation between a strict venture capital instrument and a broader regional development instrument, depending on regional context.
- Implement supplementary initiatives on both the supply and demand side to construct a more coherent system.
- Improve the quality of the investment data that is registered to improve monitoring and evaluations.

Challenges and responses

The main challenge in implementing the initiative was that the objectives for the making individual investments (either to support a firm with growth potential or to strengthen regional capital supply structures) were not totally clear. The initiative did not specify at the outset a logical framework on how the funds' activities were to impact the capital market and firm performance. This included a lack of a clear guidance on how the different funds were to prioritise different types of investments. This also represented a challenge for evaluating the extent to which activities met the two objectives. A logical framework was developed for assessing the impact of the programme.

Another challenge encountered by some of the funds were related to the broad variation in framework conditions across regions. The industrial structure of some regions led to more limited demand: the predominance of large firms, traditional sectors, or a lack of business competencies in firms were identified as factors limiting demand for venture capital. Some regions also had a limited pre-existing supply of venture capital, which made it more difficult for fund identify private sector co-investors.

Other challenges included the limited amount of funding allocated to administrative activities (3%), which restricted the regional funds' ability to carry out initiatives aimed and structural improvements. This

challenge affected the various regional funds differently: regions where the funds manage large portfolios with relatively small investments were more affected, as such a portfolio structure tends to be costlier. These portfolios are often found in sparsely populated regions where the need for structural development initiatives are also largest.

Takeaway for other countries

The evaluations highlight the difficulty of measuring impact from risk capital and business angel intervention because of the uncertain timeframe in which the effects appear. Nonetheless, the evaluations point to some key lessons:

- **Evaluation should be capable of measuring impact over long time periods**, **and not only the short and medium term**, as impact is expected to occur over a long timeframe, both on individual firms and ecosystems.
- **Policy needs to recognise and adapt to the growing importance of informal capital, including business angels.** They should be considered a potentially important investment source for entrepreneurship in other finance support programmes and should be targeted alongside formal investors. For example, business angels accounted for more than 40% of private investors in the regional co-investment funds.
- **Policy makers need to design venture capital and private equity development policy measures as components in a cohesive system.** Measures to strengthen the supply side should be complemented by measures that improve investor readiness. Similarly, policies that increase the supply of risk capital must also consider exit issues.
- **Policies aiming to affect individual firms and reinforce the capital market should set clear goals for different actions and assign resources accordingly.** The initial programme documentation should include an explicit logic framework for the expected mechanisms that would be involved from activities to impact. It should also include proposed KPIs for each mechanism.

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Case 9: Cooperative Venturing, USA (access to finance)

Basic information

Main category of intervention	Access to finance
Country	United States (primarily Pacific Northwest)
Level of intervention	Sub-national (non-governmental organisation): based in Utah and operating primarily the states of Utah, Idaho and contiguous states; events offered at city, state or regional level.
Ministry/Agency/Department in charge of the programme and its implementation	Led by a non-profit organisation: Venture Capital.Org (VCO), registered as a 501(c) (3) organisation.
Timeline of the programme	The programme was founded in 1983, expanded in 1986 and became a multi-state entity in 2015.
Target group(s)	Entrepreneurs Investors Potential mentors and coaches Students
Size and budget of the programme	The budget ranges from USD 250 000 to USD 375 000 (approx.. EUR 211 000 to EUR 316 000) per year. It also receives significant in-kind contributions from partners and allies. The programme has helped its alumni raise over USD 14 billion (approx.. EUR 12 billion) since 1986.
Type of policy instrument(s) involved	Coaching and mentoring Networking

Objectives

The programme aims to help early-stage ventures to successfully raise funds in the period between the beginning of operations and the revenue-generation stage (sometimes referred to as “valley of death”), fostering survival and growth of young firms. It aims to do so by helping entrepreneurs raise funding and identifying other relevant resources to successfully develop their business.

Through its activities, the programme also aims to increase connections within the entrepreneurial ecosystem as well as provide learning and networking opportunities to students through its internship programme.

Rationale

Most new ventures require investments before they are able to break even. Entrepreneurs, and especially first-time entrepreneurs, often have insufficient knowledge of the process of raising funding and are not equipped to successfully present their ventures to investors at this stage. They may also lack access to appropriate networks to find investors or otherwise fully develop their venture (e.g. finding partners, suppliers). This may lead to potentially successful ideas failing due to inability to attract and manage resources. The programme aims to bridge this gap by helping entrepreneurs connect with business angels, who tend to offer support beyond a financial contribution (Honjo and Nakamura, 2019; Edelman, Manolova and Brush, 2017).

Moreover, successful business creation requires a range of competencies spanning several areas. By connecting entrepreneurs with a diverse team of mentors, the programme aims to help them prepare for fundraising but also develop networks.

Finally, the increased interest in super-high-growth start-ups, sometimes referred to as unicorns may make it harder for new firms with a potential for moderate growth and job creation to attract investors. The programme aims to help these firms connect with business angels.

Programme description

Cooperative Venturing is a programme operated by Venture Capital.Org (VCO), a regional non-profit venture accelerator created in 1983. The programme uses a diverse team of expert mentors (alumni, entrepreneurs, attorneys, Chief Financial Officers, investors, marketing professionals, etc.) to coach entrepreneurs and support them in raising capital. The programme also hosts various events for bankers and business angels to meet potential investees. The programme also aims to support diversity in entrepreneurs and engages with low-income students. VCO has helped its alumni raise over USD 14 billion (approx. EUR 12 billion), including USD 8 billion (approx. EUR 7 billion) in equity, since 1986. Each year, 60-80% of participants raise capital within a year.

The main component of VCO's approach is "collaborative mentoring". The mentoring programme includes four main steps: (i) selection of companies with strong growth potential, (ii) mentoring by qualified volunteers, (iii) live and virtual forums for companies to pitch to potential investors, and (iv) follow-up services to help companies find resources and capital.

Four times a year, VCO hosts a Deal Forum where entrepreneurs present to a diverse an expert panel consisting of relevant funders, often experts on the entrepreneurs' target industries. The events are usually attended by mentors, entrepreneurs, and other stakeholders of the entrepreneurial ecosystem (e.g. service providers). The entrepreneurs receive feedback and can connect with investors and the broader community for expertise, potential investments or strategic partnerships.

When a venture is accepted into the Cooperative Venturing programme, it is invited to the next local Deal Forum where four ventures pitch to a panel of experts. A team of four to eight mentors helps each participant to prepare for this event and subsequently continue their search for investment. The mentors are drawn from VCO's network and are chosen to represent a variety of skillsets and experiences. For example, a given team may include an industry expert, experts in areas of particular need (e.g. Intellectual Property attorney), angel investors and an expert at pitching. Each team meets virtually for an hour or more five or six times, typically at a frequency of twice a week. While the focus is on preparing for the pitch, the discussions touch on various aspects of the business, often leading entrepreneurs to make adjustments to their business models. The mentors may introduce the entrepreneurs to their own networks. Each mentor team also includes one or more interns, called "investor liaisons". Liaisons are usually college students, often from a disadvantaged background. Liaisons support the coaching team and contribute fully to the coaching process, giving feedback to entrepreneurs.

The Deal Forum participants are eligible for participation in VCO's large annual events, the Investor Choice Conference (ICC) – where 30-40 ventures present to an audience of investors and experts, and the Women Entrepreneurs Realizing Opportunities for Capital (WeROC) event that showcases female entrepreneurs and invite female-focused investors and lenders. Overall, over 60% of Deal Forum alumni find funding, and over 70% of ICC Alumni do.

Linkages to other policies and programmes

VCO is well integrated in the entrepreneurial ecosystems in Utah and in Idaho and has linkages across the country. VCO has formal connections to other organisations. For instance, it manages the state of Utah's Economic Development Revolving Loan Fund, connecting entrepreneurs and SMEs to capital. It also has memorandums of understanding (MOUs) and contracts with critical partners. For example, VCO formed a formal partnership with the Boise State University College of Business and Economics to create the "COBE Finance Accelerator, powered by Venture Capital.Org" (COBE FA). COBE FA will permit the development of VCO offerings and an expansion of the investor liaisons programme to more students from underrepresented populations. Another important ally is Zions Bancorporation, a regional bank (VCO, 2019). VCO also sponsors and co-sponsors entrepreneurship events in the community (e.g. Startup Week).

More generally, VCO does not invest into ventures and it does not take commissions on investments made and endeavours to maintain active links to all local and regional entities and adopt a neutral position in the ecosystem. For example, VCO's partners in Idaho include local co-working spaces, the Idaho Department of Commerce, a variety of business organisations and local angel investor groups (e.g. Keiretsu Forum). It has also established ties with other entrepreneurial support organisations including the new Idaho Women's Business Centre, the Idaho Hispanic Chamber of Commerce, a support group for veteran entrepreneurs, the state's Rural Development Partnership, and the state's largest women business owner organisation.

Monitoring and evaluation methods

VCO monitors inputs, processes, and outcomes of the programme for entrepreneurs and their ventures, as well as other stakeholders (e.g. mentors and student liaisons). VCO also tracks results by demographic groups (e.g. gender). Metrics include the following key performance indicators (KPIs):

List of KPIs
Entrepreneurs / ventures
• Investment in supported ventures • Amount of funding raised • Long-term survival rates • Job creation • Community engagement
Mentors
• Hours of mentoring • Satisfaction
Investor liaisons
• Career path

To gather data about client companies' investment activity, VCO uses surveys of its former mentees and reports from other sources (such as Crunchbase, which provides information on private and public companies, including about founders and investments, and Pitchbook, which produces data on capital markets and business transactions). VCO also uses qualitative data as well as stories on supported entrepreneurs, in order to capture various dimensions of their impact (e.g. diversity). VCO monitors the number of hours of formal support provided by mentors, as well as their satisfaction. Qualitative aspects are also evaluated. For example, VCO tracks further connections made between mentors, co-mentors and mentees. VCO is considering further evaluation, notably a randomised control trial evaluation and an evaluation of the impact of participation on entrepreneurs' mind-sets (VCO, 2019).

Monitoring and evaluation results

The programme has demonstrated high rates of funding success: in 2017, 62% of participants in the ICC raised external capital for a total of USD 40 million (approx. EUR 34 million), and the total amount of funding raised by VCO participants since 1986 is evaluated at over USD 20 billion (approx. EUR 17 million), half of which in equity (Table 5.4). The survival rate of VCO participants is also very high: more than 80% of supported firms created before 2008 were still in activity in 2018.

VCO supported ventures also created jobs: an estimated 1 150 jobs were created in 2017 by ICC participants alone and over 45 000 jobs were created by supported ventures since 1986. There are currently 853 alumni ventures in activity. The programme has also proven successful in supporting a diverse range of entrepreneurs (with important shares of participants being women or minorities).

Table 5.4. Outcomes of participation in the annual Investors Choice Conference

	2015	2016	2017
Participants (over three years)	172 ventures mentored 164 investor panellists 831 mentors engaged		
Funds raised by ICC participants (USD)	40 180 362	98 411 983	40 000 000 (incomplete)
Percentage of ICC presenters who raised external capital	60%	67%	62%
Reported number of jobs created by ICC presenters	1 150	2 800	1 150

Challenges and responses

During the first two decades of its activities, an important challenge for VCO was a lack of awareness of venture investing among entrepreneurs, but also among investors. As a response, VCO started engaging in educating the entrepreneurial community about angel investing and played an active role in the now dormant National Association for Seed & Venture Funding (NASVF) that pushed the growth of angel investor groups and educated prospective investors. An ongoing challenge is the investment community's preference for funding "unicorns" rather than firms with more modest but robust growth potential.

A second ongoing challenge for the programme is the selection and maintenance of a pool of mentors. VCO finds that the cooperative mentoring methodology helps the programme weed out sub-par mentors, thanks to team dynamics. VCO mitigates the fluctuations in the pool of mentors by maintaining a group of regular mentors with longer engagement, as well as through monitoring mentor satisfaction and striving to make the mentorship experience beneficial for mentors. The team mentorship methodology offers networking opportunities for mentors while sharing the responsibility. Finally, a challenge for the programme is to differentiate itself from other actors in the ecosystems.

Takeaway for other countries

The Cooperative Venturing model has demonstrated positive results over time. Because it leverages existing ecosystem actors, it is suitable for transposition in other contexts. Success factors identified include:

- **A focus on the creation of networks** (building the personal networks of entrepreneurs, linkages between mentors and networks within the ecosystem). Identifying actors that are committed to community building would be essential in transposing the methodology.
- **The cooperative mentoring methodology, which leverages the experience of multiple experts while sharing responsibility between them, lightening the burden of participation.** Mentoring teams have been successfully used in other programmes (e.g. the Combinator and Techstars accelerators).
- **The involvement of students** in mentoring teams and programme management has also been identified as a factor for success. Other outcomes associated with the internship programme have been attachment to the community, good labour market outcomes for graduates and higher rates of self-employment.
- **The programme's pre-screening process**, which allows VCO to identify projects with growth ambitions and potential and to adapt support to the type of venture.
- **VCO's neutral role in the ecosystem is believed to facilitate linkages**. While building trust with the local ecosystem requires an investment, connections with other networks can be leveraged to build capacity. It is also important to ensure adhesion by other business support actors in the ecosystem to foster co-operation and avoid detrimental competition.
- **Monitoring and measurement has played an important role in refining VCO's methodology and in reinforcing its position in the ecosystem.** The use of measurement is also important in

developing linkages with investors to support productive entrepreneurs in a context where unicorns may attract more interest.

- **The cooperative mentoring methodology also allows for tailored support.** While most participant entrepreneurs identify funding as their principal motivation for enrolling in the programme, the cooperative mentoring approach helps entrepreneurs analyse their business model and better understand the importance of building networks in securing funding and finding partnerships. The focus on angel investors willing to share expertise also reinforces this capacity-building dimension of the programme.

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Case 10: LINC Scotland, UK (access to finance)

Basic information

Main category of intervention	Access to finance
Country	United Kingdom (Scotland)
Level of intervention	Subnational (Scotland)
Ministry/Agency/Department in charge of the programme and its implementation	LINC Scotland is a company limited by guarantee, a not for profit independent association, spun out of a matchmaking activity of Glasgow Opportunities Enterprise Trust. It works with both public agencies and private stakeholders in Scotland. It is part-funded by Scottish Enterprise through a strategic partnership.
Timeline of the programme	1993-present Started as a spin out of an activity in Glasgow Opportunities Enterprise Trust and several other Enterprise Trusts across the UK in the 1980s
Target group(s)	Businesses with growth potential Business angel investors and angel groups/syndicates in Scotland.
Size and budget of the programme	Membership in 2019 was around 200 sole investors and 21 structured angel groups comprising at least 1 300 investors. LINC is funded by membership and deal fees, sponsorship by a range of Corporate Partners, Scottish Enterprise (GBP 100 000 per annum, approx.. EUR 109 000) and the European Regional Development Fund. For the year to March 2018, turnover of LINC was GBP 1 062 386 (EUR 1 160 000), of which GBP 711 413 (EUR 177 000) was European funding, and operating costs were GBP 1 823 964 (approx. EUR 2 million) or GBP 1 216 (EUR 1330) per angel, equivalent to 3.65% of funds invested by LINC members in 2018. LINC employed seven people in 2018. LINC itself is not publicly funded but may attract public sector support for any specific economic development activities it carries out.
Type of policy instrument(s) involved	Matchmaking service for businesses with growth potential and business angels

Objectives

The overall aim of LINC Scotland is to improve the economy of Scotland by ensuring that ambitious, high-growth start-ups and small firms have access to an adequate supply of business angel capital to help them achieve their potential. LINC Scotland's purpose is to support and improve the functioning of local business angel markets across Scotland, and to act as a national association and representative body for its members.

To reach this goal, LINC has set the following strategic objectives:

- Growing the population of active business angel investors in the Scottish marketplace;
- Harnessing the supply of capital available from investors who lack traditional business angel characteristics, but are interested in investing in start-ups, notably by taking advantage of the Enterprise Investment Scheme (EIS), a UK support programme offering tax relief to investors in higher-risk companies;
- Growing the population of start-ups and scale-ups willing and equipped to benefit from angel investment;
- Influencing UK and EU governments to maintain a favourable tax and regulatory environment for business angel investment;
- Influencing the Scottish Government and Scottish Enterprise to operate and deliver supportive policies and interventions that are complementary to the development of business angel market in Scotland and support it;

- Gathering information on of the operation, trends and needs of the business angel marketplace and developing innovative measures to facilitate its operation.

Rationale

LINC Scotland addresses a problem of information asymmetry where entrepreneurs with high-potential businesses find it hard to find equity capital, and high-net-worth investors find it hard to find suitable investments. This problem can be addressed through education and training of both parties, the promotion of angel investment and representation of the interests of investors.

The rationale for the creation of LINC Scotland was threefold: (i) a network could increase the size of funding available beyond what angels would invest on an individual basis by enabling them to pool their investments into larger investments; (ii) bringing together angels with successful entrepreneurial careers with high net worth individuals without the expertise or networks to invest (so-called “smart” and “dumb” money) could offset the low number of angels in Scotland; (iii) a network could create angel groups to be partners with the co-investment fund.

Programme description

LINC Scotland[8] is the national association for business angels in Scotland. Its membership includes around 200 investors operating individually and 21 structured angel groups or syndicates, representing another 1 300 other investors. LINC is a private non-profit organisation and does not act as investment advisor but rather acts as a “soft infrastructure” supporting the development of the business angel sector.

LINC acts as a central clearing house bringing together high-potential SMEs with business angels who will share their experience, knowledge and contacts in addition to funding. LINC also operates a range of other programmes including awareness-raising and education, identifying and supporting new business angels, encouraging the creation of new groups and international networking. It also publishes Young Company Finance, a monthly magazine and website that shares information on early stage funding deals in Scotland.

LINC is a delivery partner for the Scottish Government’s ERDF-funded SME Holding Fund Strategic Initiative, which aims to provide access to financing for SMEs looking to enhance competitiveness and grow in regional, national and international markets, enable SMEs to access research and development and provide finance to innovative start-ups other lenders would consider too high-risk.

Linkages to other policies and programmes

LINC is a founder-member of Business Angels Europe and represents its members in engagements with the Scottish and UK governments and the European Commission.

LINC is well embedded in the Scottish entrepreneurial ecosystem and endeavours to connect with other representative bodies in the entrepreneurial ecosystem to promote an entrepreneurial culture.

Monitoring and evaluation methods

Several impact studies have been conducted on LINC and on LINC members (discussed in the next session).

As an ERDF-funded programme, the Scottish Angel Capital Programme managed by LINC is regularly independently assessed against targets.

List of KPIs for the Scottish Angel Capital Programme
New to Market Products
• New to market products
• Financial support – non grant
• Non-financial support
• Public investment leverage
• Private investment
• Total investment
• Increase in employment
• Innovation active SMEs
• Exporting SMEs
• Number of enterprises supported
• New angel groups
• Number of Angel Group grants
• Business Expenditure on R&D

Table 5.5 shows progress to targets set for the ERDF-funded Scottish Angel Capital Programme for the first 2.5 years of the 3.5 year programme (the latest available). The Programme had exceeded most of its targets *pro-rata*, and in one target, employment, it had achieved more than double the target.

Table 5.5. Progress against ERDF application targets

	Project Target	Pro-rata target	Achievement - Dec 17	% Target - Dec 17	% Pro-Rated Target - Dec 17
New to Market Products	80	57	51	64%	90%
Financial Support - Non Grant	215	153	113	53%	74%
Non-Financial Support	215	153	113	53%	74%
Pubic Investment Leverage	GBP 75.00	GBP 53.25	GBP 73.69	98%	138%
Private Investment No Public	GBP 11.00	GBP 7.81	GBP 10.36	94%	133%
Total Investment Leverage	GBP 86.00	GBP 61.06	GBP 84.05	98%	138%
Increase in Employment	149	106	234	157%	221%
Innovation Active SMEs	80	57	51	64%	90%
Exporting SMEs	67	48	33	49%	69%
Number of New Enterprises Supported	63	45	51	81%	114%
New Angel Groups	5	4	4	80%	100%
Number of Angel Group Grants	15	11	14	93%	131%
Business Expenditure on R&D	-	-	GBP 84.05	-	-

Source: Malcolm Watson Consulting (2019)

Monitoring and evaluation results

Monitoring results show an increase of the volume of deals facilitated by LINC over the year. In 2018, LINC members invested around GBP 50 million (approx. EUR 55 million) of private capital, representing around 80 deals in high-growth Scottish companies. This compares to an approximate GBP 40 million (approx. EUR 44 million) invested in 87 deals in 2017, and GBP 250 million (approx. EUR 270 million) committed

in the previous ten years from 2008. In 1996-97, total deal value was GBP 2.6 million (approx. EUR 2.8 million).

A recent evaluation of the Scottish Co-investment Fund (SCF) (Malcom Watson Consulting, 2017) finds that LINC played strong role in helping the Scottish Investment Bank (SIB) to further develop the equity market for growth ventures through the SCF.

The final evaluation of the July 2015 to December 2018 Scottish Angel Capital Programme concluded that over the course of the Programme, LINC members had invested a total of GBP 84.9 million (approx. EUR 92.7 million) in 144 businesses at an average level of GBP 2.0 million (EUR 2.2. million) per month; attracted matching investment of GBP 98.5 million (approx. EUR 107.5) in these businesses from other investors at an average level of GBP 2.4 million (approx. EUR 2.6) per month; and contributed to the forecast creation of 313 jobs and been the first external investor in 80 new enterprises (Malcolm Watson Consulting, 2019).

A survey of LINC members in 2019 found that almost one third (31%) stated that their syndicates would have not grown without LINC Scotland support. Over half (54%) considered that their syndicate had grown more quickly than would have been the case without LINC Scotland Support and only 15% considered that LINC Scotland support had not affected their growth. The survey report also noted that members valued not just the financial support provided by the Programme for the development and growth of angel syndicates, but the information, knowledge and peer learning provided by LINC, enabling syndicates to learn from each other, and the role played by LINC as a lobbying platform, helping to educate policymakers and the media on the role of angel investing in the economy.

Challenges and responses

The most significant challenges in the early years of LINC Scotland were education of entrepreneurs and their advisors of the benefits and process of angel investing. LINC members reported that entrepreneurs were not “investor ready” and that existing support schemes did not offer appropriate support on this issue. In response to this challenge, LINC developed a pilot “Trial Marriage” scheme in 1998/99, where investors could get up to GBP 7 500 of grant funding if they contributed at least 25% of eligible costs to address these business development issues. For example, an investor might undertake extensive market due diligence that involved travel and time spent with potential customers or suppliers. Of the six companies aided, five subsequently were invested in. the programme was supported with ERDF funding.

Building on this pilot, LINC launched the ERDF-funded Investor Ready Fund, in which companies that were near being investible by a LINC member could apply for up to GBP 15 000 (approx. EUR 16 400) of convertible grant funding to address business development issues identified as preventing investment by the investor (or LINC Scotland). Issues were typically a combination of market analysis and access issues, financial structuring and forecasting issues, technology validation issues, patent and intellectual property issues, and legal due diligence (EKOS, 2013). An important part of the scheme was ensuring that companies had the right solution provider to address these issues. Between 2000 and 2010, 62 grants were awarded under the Investor Ready Fund, of which 25 were converted into equity, 18 were repaid, and 19 were written off (EKOS, 2013). The Trial Marriage scheme was reviewed by Mason and Harrison (2001; 2004) and the Investor Ready Fund was reviewed by EKOS (2013).

A second challenge occurred in downturns after the dot com crash in the early 2000s and after the global economic recession in 2008. As venture capital companies and banks significantly reduced their investing activity in early stage companies, angel groups were left with portfolio companies that needed follow-on growth funding. As a result, the proportion of new deals declined after each downturn, only beginning to recover several years later. For example, in 2002 members of the Archangels syndicate invested only GBP 1.5 million (approx. EUR 1.6) in new companies but GBP 4.3 million (approx. EUR 4.7) in its existing portfolio (Business Insider, 2 January 2018). Mirroring this, in 2011, only 13 “new to portfolio” companies

were invested in by LINC members, compared with 65 follow-on investments. Unfortunately, research suggests strongly that returns from follow-on investments are worse than from initial investments (Wiltbank and Brooks, 2017). Despite these issues, the number of investments by LINC members rose from 2003 to 2015, though around 75% of deals were follow-on deals.

In the last two decades, the greatest challenge has been in securing exits for angels from their investments, with a recent survey of members finding that training and information on securing an exit was the most popular potentially new service that LINC could facilitate (Boag, Harris and Harrison, 2009; Malcolm Consulting, 2019).

Takeaway for other countries

LINC Scotland has successfully grown an active angel market in its region and has remained in operation through changes in government policies and economic shocks. Possible environmental supporting factors for LINC Scotland's success include the dynamism of the local ecosystem and supportive attitude of the Scottish state, the development of favourable regulatory regimes for angel investing in the UK, and innovative funding instruments such as the Scottish Co-investment Fund that facilitate risk-sharing and portfolio growth. Key lessons from evaluations of LINC Scotland include:

- **Choose an appropriate institutional form to allow for efficient use of resource.** A key success factor in the beginning was the Enterprise Trust status of LINC Scotland. This offered tax breaks to its corporate sponsors, access to European Union Structural Funds support, and an important exemption under the UK Financial Services regulations that enabled it to introduce investors to investees.
- **Include education and awareness raising.** Early work by LINC focused on education of the market on the merits and processes of business angel investment, targeting entrepreneurs, but also government officials and the media.
- **Foster partnership between angel groups and syndicates**. LINC managed relations between angel syndicates to ensure cross-learning and contribute to the development of new groups. There were 21 angel groups in Scotland in 2019, up from around 5 in 2003. The partnership approach between syndicates also helped the leaders of Scottish angel groups inform UK government initiatives to promote angel investing. By becoming a visible organised representative group through their Angel Leaders' Forum (ALF) organised by LINC, they became a natural counterpart for government officials to consult with.
- **Foster engagement with international initiatives.** LINC Scotland has been an early entrant or founder of several international representative bodies for business angels (e.g. the European Business Angel Network, the World Business Angels Association) and has close links with others. These linkages support the development of the local angel market and raise the legitimacy of the organisation, facilitating interactions with the government.

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Case 11: INVEST - Grant for Venture Capital, Germany (access to finance)

Basic information

Main category of initiative	Access to finance
Country	Germany
Level of intervention	National
Ministry/Agency/Department in charge of the programme and its implementation	Federal Ministry for Economic Affairs and Energy (BMWi) Federal Office for Economic Affairs and Export Control (BAFA), one of the six agencies of the BMWi
Timeline of the programme	2013-2020 Changes were implemented starting in January 2017.
Target group(s)	Private investors Innovative new or young firms in search of funding
Size and budget of the programme	Between its inception in 2013 and 11 November 2015, the INVEST programme disbursed EUR 19.2 million in grants, supporting about EUR 104.3 million of investment.
Type of policy instrument(s) involved	Grants for private investment in venture capital Database

Objectives

The programme aims to increase the amount of private venture capital available to start-ups by reducing risks and creating incentives to investment for business angels. This is expected to help start-ups find investors more easily.

Rationale

Many start-ups in Germany have difficulties funding their first stages of development, especially for founders with limited personal assets for collateral. The German market for venture capital is relatively young and less developed than in other countries (e.g. Anglo-Saxon countries) and business angel investment is low compared to the country's overall economic performance. By providing a financial incentive to investments, the programme aims to compensate the risk linked to market failures in markets for venture capital, notably information asymmetries. Business angels also tend to be more involved in providing non-financial assistance to funded companies than other types of investors. By targeting this class of investors, the programme aims to maximise impact (Gottschalk et al., 2016).

Programme description

The Investment Grant for Business Angels (INVEST – *Zuschuss für Wagniskapital*) offers a lump-sum participation in investments in innovative start-ups. The investment grant is not repayable if the start-up fails. The grant amounts to 20% of venture capital investments that remain for more than three years in a start-up.

Since 2017, the programme also includes an Exit Grant (*Exitzzuschuss*). The Exit Grant amounts to 25% of the profit made when selling the shares. It aims to compensate the taxes to be paid on the capital gains upon exiting.

The grant is capped at 80% of the initial purchase price: the total amount received (Investment Grant and Exit Grant combined) may thus not exceed 100% of the initial investment price. The Office for Economic Affairs and Export Control (BAFA), a federal agency in charge of export control and economic development, with a focus on SMEs, manages the implementation of the INVEST programme.

The programme supports start-ups in search of investors by offering a certification to existing young firms and new start-ups eligible for INVEST funding. The certified start-ups can register to be listed in a dedicated database to make it easier for potential investor to find them. The listing includes basic information on the firm and its business concept as well as contact information. Potential investors can search the database by multiple criteria, including sector, location, firm size and investment requirement.

The programme is organised along three steps. First, entrepreneurs apply for certification online.[9] Second, the investor applies for the Investment Grant before the investment agreement is finalised. Third, once the shares have been purchased, the investor requests the payment of the Investment Grant for a value of 20% of the investment.

Finally, investors applying for an Exit Grant can receive their non-taxable reimbursement upon presentation of proof of selling their shares after the three years holding period.

To be eligible for the programme, an investor must be a natural person or invest through a specialised small limited liability company[10]. The investment grant can be used only to acquire newly issued shares with the investor's own money or through a convertible loan. Follow-up investments after a first INVEST-supported investment are also eligible. The minimum holding period is three years and the maximum is ten. The Exit Grant is limited to natural person investors investing directly (i.e. not through a GmbH or UG).

To be eligible for INVEST certification, firms must be new or have been operating for less than seven years and have less than 50 employees. Their turnover must be under EUR 10 million and they must be present in Germany and headquartered in the European Economic Area (EEA). They should demonstrate innovativeness[11]. Finally, the firm must remain active for a year after the investment is made, or should become active no later than one year after the investment is complete for new firms.

Linkages to other policies and programmes

The Investment Grant for Business Angels is modelled on the British Enterprise Investment Scheme (EIS) (fiscal measure), which has successfully mobilised private risk capital.

The scheme complements existing instruments such as the fund "High-Tech *Gründerfonds* for start-up firms" (HTGF) in place since 2005.

Monitoring and evaluation methods

An evaluation of the programme was conducted in 2016. It involved an online survey comparing INVEST-supported investors and investors who have never participated in the INVEST programme. Interviews with experts of the German capital market were also conducted. A control group approach was used to estimate differences in investment volumes between participant and non-participant firms.

Quantitative key performance indicators (KPIs) measured included:

List of KPIs
• Grant amount
• Average equity volume by INVEST-supported investors
• Average equity volume by other investors
• Total equity volume received as compared to non-INVEST firms

Monitoring and evaluation results

The 2016 evaluation of INVEST found that the programme successfully incentivised new investors to get involved in new innovative firms. Investors who previously were not active in supporting innovative entrepreneurs invested an estimated EUR 14.3 million through the programme, representing 30% of all investors who used INVEST. Among these, 21% were altogether first-time investors. The programme also

increased investment from experienced investors. The evaluation estimates that 88% of the INVEST supported investment constituted additional capital invested in young innovative firms and that each euro invested through the programme generates another EUR 0.50 of investment.

The evaluation found that the firms that received INVEST-supported investment tended to have founders with higher qualifications and to be more growth- and innovation- oriented than those that were funded outside of the programme. However, the evaluation found that participation in the INVEST programme was initiated by firms looking for investors rather than the opposite, suggesting that these firms did not organically find investors and the programme successfully extended funding opportunities to new firms rather than those that would have been funded anyway.

The companies that received INVEST-supported investment tended to receive higher amounts of funding that those who did not. The advantage was higher for the firms with very low capital requirements: firms that received EUR 2 000 or less received on average 38% more funding if they were funded through INVEST than otherwise.

In terms of implementation, the evaluation found that both investors and companies found the process to be efficient with low red-tape. The administrative cost of the measure was estimated to be low, at 2.54% of the budget.

The evaluation found that awareness of the programme was limited outside of angel networks: 80% of the investors interviewed who did not use INVEST did not know about the programme.

Recommendations included a simplification of the application process, and of the legal examination of company contracts. The evaluation also recommended extending the programme to other legal forms and business purposes for business angels as well as extending the programme to follow-up investments. It also recommended expanding company eligibility to other sectors and increasing outreach.

Following the evaluation, changes were introduced in the programme, including:

- A doubling of the eligible investment amount to EUR 500 000 per year and an increase of the maximum subsidy an investor can receive from EUR 80 000 to EUR 100 000 per year;
- The introduction of an Exit Grant;
- The extension of eligibility to UG companies (previously only GmbHs);
- The extension of eligibility to follow-up investments;
- The extension of eligible investments to convertible loans;
- The broadening of the innovation criteria to include previously excluded sectors.

The evaluation did not assess INVEST's sustainability, given the short time elapsed since the programme's start. Similarly, the evaluation states that impact of the INVEST programme on growth and innovation could only be assessed in subsequent exercises, 8 to 10 years after the programme's inception.

Challenges and responses

No significant challenges were encountered aside from the limited awareness of the programme among business angels. However, several changes were implemented in the programme in 2017 to improve attractiveness and foster sustainable investment in successful young firms, as described above.

Takeaway for other countries

The evaluation found that the INVEST programme successfully reached the type of start-ups (innovative with growth potential but having difficulties securing funding) that it endeavoured to support without conducting any assessment of firms beyond the eligibility criteria. This was identified as a strength for the

programme as it suppresses the need to develop extensive business expertise in-house, leaving investors free to select their investments limiting disruption on the finance market.

Based on INVEST's initial evaluation, the following lessons could inform the development of similar programmes:

- **Programmes should consider setting a minimum holding period for subsidised investments.** This was identified as a success factor by the evaluation.
- **An important factor for attracting for first-time investors was the possibility to co-invest with experienced investors**, which facilitated firm selection.
- **Programmes should develop a multi-prong outreach strategy.** The evaluation of INVEST found that there was little awareness of the programme outside of angel networks, and that outreach would need to use a variety of channels as the target group (non-organised investors) is very diverse. Tax and financial advisors could be used as multipliers to raise awareness of similar schemes.
- **Programmes should endeavour to minimise red tape and simplify the application process**. This may include allowing for online applications and ensuring clear communication on eligibility criteria and limiting systematic checks as much as possible.
- **Programmes should focus on young firms**, as older firms with more extensive track record and finance history are less affected by the information asymmetry that puts younger firms at a disadvantage when seeking funding.

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Case 12: Startup Global USA, USA (internationalisation)

Basic information

Main category of initiative	Internationalisation
Country	United States
Level of intervention	National Events are organised at the local level (cities).
Ministry/Agency/Department in charge of the programme and its implementation	International Trade Administration (ITA) at the U.S. Department of Commerce in collaboration with a non-governmental organisation, the Global Innovation Forum.
Timeline of the programme	2015 – present
Target group(s)	Small and early-stage American companies looking to internationalise their activity
Size and budget of the programme	The programme is funded by the U.S. Department of Commerce but no information is available on the budget.
Type of policy instrument(s) involved	Training and networking events (workshops, webinars) Provision of information

Objectives

Start-up Global seeks to help start-ups access global markets early in their development. The programme aims to increase awareness of export opportunities among young firms, spread awareness of available government support for exporters, and help strategic co-operation between start-ups and relevant stakeholders such as investors and international partners.

The project's initial objectives included: (i) helping more companies to export, (ii) responding to the demand from start-ups for technical assistance on exporting, (iii) measuring the interest and capacity of accelerators and incubators to support internationalisation, (iv) assessing the level of government engagement needed to have a measurable impact on incubator partnership development and start-up growth, and (v) collecting data to inform the national policies to support innovators and entrepreneurs in pursuing global opportunities. However, in practice, activities have focused on increasing awareness of and providing knowledge and information on global opportunities among start-ups. The other objectives have not been translated into quantitative targets and activities.

Rationale

Start-up Global was started by the International Trade Administration (ITA) at the Department of Commerce in order to better target existing resources for exports to start-ups and young firms and make them more accessible to those firms, as export support had traditionally be focused on larger firms. Resources include advice from the Office of Intellectual Property Rights (IPR), offers of financial institutions, and services of local authorities and innovation centres. The programme was introduced as part of a wider effort to increase American exports.

Programme description

Start-up Global is a partnership between the ITA and the Global Innovation Forum (GIF), a US-based non-profit which aims to connect start-ups, policymakers and other stakeholders to foster efficient internationalisation. Start-up Global was initiated following a Design Workshop hosted by the White House Business Council in May 2014, gathering around 40 public- and private- sector stakeholders, including representatives from the start-up community. A Start-up Global pilot event was held in April 2015.

Start-up Global organises events to help small and early-stage companies in their internationalisation process. The events are free and open and usually last half a day to a full day. They are organised by the Start-up Global local branches across the country (Austin, Baltimore, Philadelphia, Tempe, Long Island, New York City, Seattle, Pittsburgh, Nashville, and Washington DC) in partnership with local partners (incubators, accelerators and universities). The location of the events is decided by the Department of Commerce and GIF taking into consideration the demands and the interest of local hosts. The events include information sharing sessions and networking opportunities, with the overarching aim to help start-ups participate effectively in global markets.

Internationalisation seminars are usually structured into four to five themes, with contributions delivered either through a panel discussion or through presentations followed by questions from the audience. The information sessions discuss the opportunities and challenges of operating globally, identifying relevant public and private sector resources to help. Topics may include developing an internationalisation strategy, protecting intellectual property, finding customers and distributors, navigating international partnerships, understanding foreign market regulations and accessing support programmes. The presentations are delivered by the ITA and partners which may include representatives from global corporations, overseas organisations, incubators, relevant federal agencies, higher education institutions, investors, chambers of commerce and successful entrepreneurs. Event contributors are often from the region where the event is held and act as advisors.

The seminars also provide networking opportunities. They are designed to help participants exchange among themselves as well as promote linkages and partnerships between early-stage companies and incubators, accelerators, private investors and the government.

Information topics covered by Start-up Global events include: Product Classification (Harmonised System) Codes, Tariffs and Taxes, Controls and Licenses, Guide to Exporting, E-commerce and Digital Marketing, Export Basics, Export Training, and Country Commercial Guides. Start-up Global shares its events' main findings online.

Local Start-up Global events are promoted via the GIF website, Export Assistance Centres across the country, universities, accelerators, local chambers of commerce, and the local stakeholders and contributors. Interested businesses register for the events via the website of the Global Innovation Forum.

The GIF releases brief annual newsletters on its activities, including Startup Global events. The U.S. Government's Startup Global webpage links to several guides, such as country commercial guides and the export guide which are part of the existing resources made available by the Government.

Linkages to other policies and programmes

Startup Global was part of the National Export Initiative NEXT (NEI/NEXT) Strategy which was initiated in 2014 by the International Trade Administration under President Obama's administration. The strategy aimed to help American companies target overseas markets. Startup Global is managed by the ITA's National Export Initiative (NEI) Office and the Trade Promotion Coordinating Committee Secretariat. The programme is operated in partnership with the GIF.

Monitoring and evaluation methods

No quantitative KPIs have been set in relations to the programme's objectives. Monitoring information is not publically available. Event participation numbers are collected, but follow up with participants is only occasional. There has not been an evaluation of the Startup Global programme.

Monitoring and evaluation results

At least ten information and networking events have been organised between April 2015 and October 2018. The number of participants for events typically ranges between 40 and 100. There is no information on the impact of the programme.

Challenges and responses

A first challenge encountered by the programme was its limited outreach: as information is dispensed solely through participation in the events, it is not readily available to other companies. In response to this, the programme has started publishing key findings of its events online and is developing informational products and recorded webinars. Other plans include increasing awareness raising and local events.

A second challenge encountered related to the selection of resource advisors. The events did not always include international businesses and tended not to include global partners. In response to the latter limitation, Start-up Global expressed intentions to organise international events. A Start-up Global event held in Austin in March 2018 included representatives from Korea, New Zealand, Singapore and the UK.

Takeaway for other countries

Potential strengths of the Startup Global programme include the involvement of multiple actors and the use of public-private partnership to leverage expertise that is not held in-house. The use of local partners for the events also has the potential to facilitate outreach to local entrepreneurs. However, in the absence of evaluation evidence, it is difficult to assess the programme's impact and to definitively identify specific strengths. Based on existing information, lessons that could be inferred from the programme include:

- **Programmes of this kind should put strong emphasis on outreach and awareness raising**.
- **As events can only serve a limited number of firms, technology can be leveraged** (online resources, webinars) **to maximise coverage**. Formal linkages to existing resources should be emphasised, with appropriate linkages to support programmes.
- **Similar initiatives should involve SMEs and entrepreneurs in the design of the events**. Regular monitoring of the business landscape, maintaining a dialogue with the business community, and formally gathering feedback and other follow up information on participants could help similar programmes to adjust events to start-up needs and increase their effectiveness.
- **Programmes inspired by Startup Global should incorporate monitoring and evaluation in their design** in order to track firms needs and satisfaction, effectiveness of outreach methods and the impact of the events.

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Case 13: Canada Accelerator and Incubator Program, Canada (technology and innovation)

Basic information:

Main category of initiative	Technology and innovation for entrepreneurship
Country	Canada
Level of intervention	National
Ministry/Agency/Department in charge of the programme and its implementation	The programme is an initiative of the Government of Canada's Venture Capital Action Plan. It was designed by the Ministry of Finance, with support from other federal ministries and agencies. It is implemented through the National Research Council of Canada Industrial Research Assistance Program (NRC IRAP).
Timeline of the programme	2014-2019 The government continued to support Business Accelerators and Incubators (BAIs) through other projects after the end of the programme.
Target group(s)	Business accelerators and incubators, and their investors.
Size and budget of the programme	The Canada Accelerator and Incubator Program (CAIP) was allocated a budget of CAD 100 million (approximately EUR 68 million) for fiscal years 2014/15 to 2018/19 (five years). Total funds committed over five years equal CAD 92.99 million (EUR 63 million). 15 organisations received funding out of approximately 100 applicants, representing 16 business incubators and accelerators. 1:1 matching contributions were required.
Type of policy instrument(s) involved	Funding to business accelerators and business incubators through contribution agreements to undertake new activities or increase levels of service to early-stage firms.

Objectives

The Canada Accelerator and Incubator Program (CAIP) aimed to establish a critical mass of high quality business accelerators and incubators across the country. The programme supported leading accelerators and incubators in expanding their activities such as mentoring and business development services for high-potential Canadian start-ups and small- and medium-sized enterprises (SMEs), including young entrepreneurs. The goal was to develop innovative scale-up companies.

Rationale

Canada continues to foster the development of a new generation of globally competitive companies. Dynamic, growth-oriented firms contribute to successful innovation systems and to stimulating employment creation and sustainable economic growth. The Government's Innovation Agenda – including CAIP – seeks to ensure that Canadian firms are able to become global leaders. Business accelerators and incubators play an important role in the development of innovative businesses by providing them with hands-on advice from experienced entrepreneurs and other resources.

Programme description

CAIP is an initiative under the Government of Canada's Venture Capital Action Plan, which provides CAD 100 million (EUR 68 million) to Canadian business incubators and accelerators to expand their support services to start-ups and SMEs. The funding is provided over five years – fiscal years 2014/15 to 2018/19. The programme provides non-repayable funding to business incubators and accelerators that can develop innovative, high-growth firms, which themselves represent high-potential early-stage investment opportunities.

The programme was designed and developed by the Ministry of Finance, with support from numerous federal ministries and agencies that have a role in supporting innovation and the businesses. The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP) was selected to deliver

the programme due to its experience in supporting organisations that support innovation and its existing relationships with some business incubators and accelerators.

Funding recipients were selected through a one-time request for proposals. The process was launched on 23 September 2013, with a submission deadline of 30 October 2013. Approximately 100 proposals were received. Proposals were first assessed by NRC-IRAP to ensure that eligibility criteria were met. Eligible proposals were then evaluated by an independent panel of five experts with experience in venture capital asset management and business development. 16 recipients were announced in June 2014.

The terms, conditions and obligations for the receipt of contribution payments were outlined in contribution agreements between NRC-IRAP and the CAIP recipients. Obligations included reporting key performance data annually. All CAIP recipients were required to demonstrate matching contributions on at least a 1:1 basis during the period for which funding was received.

The programme's non-repayable contributions were designed to support incremental activities, such as increasing the availability and quality of services offered. Eligible costs were negotiated in each contribution agreement, and covered: salary costs; overhead costs; professional fees/rates; contractor fees; travel and living expenses; operating and maintenance expenses. Capital expenditures such as the purchase of land, leasehold interest in land or the payment of property taxes were not eligible.

Linkages to other policies and programmes

CAIP is one of four key measures of the Venture Capital Action Plan (VCAP) that was announced in the Federal Budget 2013. Other measures included (i) an investment of CAD 100 million (EUR 68 million) through the Business Development Bank of Canada to invest in firms graduating from business accelerators; (ii) a new Entrepreneurship Awards programme; and (iii) an investment of CAD 18 million (EUR 12 million) over two years in the Canadian Youth Business Foundation, which helps young entrepreneurs in growing their firms. Other actions under the VCAP included the establishment of four large private sector-led funds and additional resources for developing the venture capital system.

However, evaluations of CAIP noted that the links between the programme and the VCAP were not clear. Interviewed staff did not indicate that the VCAP shaped the implementation of the CAIP. The contribution agreements did not reference the VCAP and funding recipients did not identify any linkages with other VCAP measures.

Monitoring and evaluation methods

The Government required two evaluations of CAIP – a mid-term evaluation in 2016 that focussed on the relevance and implementation of the programme and a second evaluation in 2018 that examined the extent to which objectives were achieved, delivery efficiency, and the potential for extending the programme.

The first evaluation responded to questions that were established by the Office of Audit and Evaluation of the NRC and CAIP management. The methodology included:

- A review of available programme data;
- A review of programme documentation;
- A review of literature about the performance of incubators and accelerators;
- A review of programme management processes, including 6 interviews in other departments and agencies;
- 46 interviews with programme managers and staff, funding recipients and other stakeholders.

The second evaluation also used information from multiple information sources:

- Document and data review, including a detailed analyses of incubator and accelerator performance data;
- Online survey of 549 firms supported by CAIP-assisted incubators and accelerators;
- In-depth interviews with a sample of 46 supported firms;
- In-depth interviews with 15 CAIP-assisted incubators and accelerators;
- In-depth interviews with 5 CAIP delivery staff and 5 external stakeholders;
- Cost-benefit analysis.

The second evaluation sought to assess the impact of the programme against key expected outcomes:

- Accelerators and incubators expand their range of programmes and services
- Early stage firms become investment ready
- Early stage firms benefit from innovation support resources such as expertise and networks
- Wealth creation in Canada

List of Key Performance Indicators (KPIs):
• Incremental programmes and services offered by accelerators/ incubators
• Number of incremental expertise providers (mentors)
• Number of early stage firms which receive investment
• Average investment received by early stage firms
• Number of early stage firms supported
• Number of staff at early stage firms
• Share of early stage firms satisfied with programmes and services
• Average satisfaction rating on benefits to firms from innovation networks
• Number of additional jobs created
• Share of early stage firms which generate or increase their revenue
• Early stage firm survival rate

Both evaluations identified a number of limitations, mostly related to the validity and quality of the data available for the evaluation:

- Data about performance has been self-reported by incubators and accelerators – data was incomplete and required extensive cleaning.
- Data required for the cost-benefit analysis were largely collected from incubators and accelerators, potentially limiting the accuracy and completeness of the data.
- Some incubators and accelerators were reluctant to collect all data because it was perceived as burdensome for client firms.

Monitoring and evaluation results

The most recent evaluation identified five key findings:

- CAIP is aligned with evolving government priorities related to support for innovative start-ups and scale-ups, including the priority of strengthening Canada's network of accelerators and incubators.
- Available data suggests that CAIP-funded incubators and accelerators have increased their numbers of client firms, and in many cases they evolved from small, early-stage firms to more mature firms.
- CAIP-funded incubators and accelerators have delivered new or expanded services, which was valued by client-firms, which would not have been possible without the programme.
- Available data suggests that CAIP funding and the resulting assistance provided to incubators' and accelerators' client-firms have contributed to wealth creation in Canada, notably through revenue and equity growth in client firms.

- The delivery of CAIP was challenging, notably delivery costs that were more than double the planned costs and insufficient time to understand and adjust programme delivery, and resulted in some valuable lessons learned.

Challenges and responses

Two main implementation challenges were identified. First, the delivery of CAIP was more challenging than expected due to its complexity, which may be the result of insufficient time allocated for planning. NRC-IRAP was selected as the delivery mechanism for CAIP given their experience with contribution agreements. However, the NRC-IRAP infrastructure needed substantial adaptation to meet the new parameters required by CAIP. For example, negotiating the contributions for CAIP was much more time consuming relative to other agreements negotiated by NRC-IRAP. The development of new processes and guidelines took longer than anticipated, suggesting that CAIP was under-funded during the early implementation phase.

A second challenge was the complexity of reimbursing eligible expenses incurred by business incubators and accelerators. Evaluations indicated that the incubators and accelerators found the process complex and burdensome. Programme managers recognised the need for strong oversight but also found that reviewing claims was complex and time consuming, especially when most contribution agreements involved several parties.

Takeaway for other countries

CAIP was a complex programme to deliver, but evaluations identified several positive outcomes, including enabling incubators and accelerators to grow and deliver higher quality support; enabling incubators and accelerators to reach a much larger client base; stimulating client firm growth (e.g. revenue growth, investment increase); and positive spill-over effects for the economy.

Key lessons learned for the design and implementation of similar programmes were:

- **Sufficient time for detailed planning and development of administrative requirements and processes should be allocated** prior to the launch of new programmes similar to CAIP.
- **Sufficient resources should be allocated for programme delivery** of new programmes similar to CAIP once the level of effort required is understood.
- **Reporting requirements should be clearly specified** (in accordance with a well-defined performance framework) and understood prior to signing a contribution agreement. In the years following the introduction of CAIP, a performance measurement framework for accelerators and incubators was developed and piloted to be used as a basis for reporting within the funding agreements that the Government of Canada has with business accelerators and incubators.
- For programmes such as CAIP, where beneficiaries engage through an intermediary, **programmes should consider working with other innovation and capacity support programmes** to develop a concerted approach to collecting performance data. This would ensure information is available to assess the value of government investments.

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Notes

[1] www.sfc.ac.uk

[2] www.creativescotland.com

[3] www.convergechallenge.com/category/partners/

[4] The District Policy is a measure of the Norwegian Regional Policy targeted at sparsely populated and remote areas. Districts include mostly rural areas as well as urban centres in the north.

[5] In 2013, Innovationsbron and Almi Invest merged into one organisation, Almi Invest

[6]Almi Invest is an independent public venture capital company (Almi Invest, n.d.)

[7] The Sixth AP-Fund sold their fund (Mittkapital) to the state-owned company Inlandsinnovation in 2013

[8] LINC stands for Local Investment Networking Company

[9] If the project is for an enterprise creation, the investor applies first and the company applies for certification once it is funded and registers as a company

[10] The company must be a limited liability company (*Gesellschaft mit beschränkter Haftung* GmbH) or an entrepreneurial company with limited liability (*Unternehmergesellschaft (haftungsbeschränkt)*, UG) with six or less shareholders and its purpose must include shareholding, asset management or consulting

[11] By being active in an innovative industry (based on the commercial register's classification), by having used public funding for research or innovation in the recent past or by getting assessed by an independent expert.

6. Case examples – Policies for entrepreneurial ecosystems

This chapter presents three policy case studies illustrating approaches targeted at improving place-based entrepreneurial ecosystems. The chapter describes Startup Delta/TechLeap.NL (the Netherlands), an independent public-private partnership which brings together all regional entrepreneurial ecosystems in the country; Startup Estonia (Estonia), a governmental initiative to support and develop the entrepreneurial ecosystem; and DutchCE (the Netherlands), a network of Centres for Entrepreneurship in public universities and universities of applied science in the Netherlands. For each case study, the chapter provides an information table and a description of the programme and its objectives, rationale, linkages to other initiatives, monitoring and evaluation practices and results. The chapter also discusses challenges encountered and responses developed and highlights takeaways for other countries.

Case 14: Startup Delta/TechLeap.NL, the Netherlands

Basic information

Main category of initiative	Strategies and comprehensive policy approaches
Country	The Netherlands
Level of intervention	National initiative co-ordinating regional entrepreneurial ecosystems
Ministry/Agency/Department in charge of the programme and its implementation	Ministry of Economic Affairs and Climate Policy
Timeline of the programme	2015-2023 The StartupDelta organisation was scheduled to run from 2015 to mid-2016 (StartupDelta 1.0). In 2016 it was extended with 3 more 18 month periods until 2020. After the 2nd and 3rd period (StartupDelta 2.0 & 3.0), StartupDelta was transformed into TechLeap.NL which will run until 2023 (TechLeap.NL, 2019).
Target group(s)	Start-ups and scale-ups Ecosystem actors
Size and budget of the programme	The earmarked budget for the different phases of StartupDelta is : StartupDelta 1.0: EUR 450 000 (in addition to seconded personnel from government departments) StartupDelta 2.0: EUR 725 500 StartupDelta 3.0: EUR 1 297 749 The budgets for StartupDelta 2.0 and 3.0 were subsidies from the Ministry of Economic Affairs and have been matched with equal amounts of private funding. With other related public funding, the total budget of StartupDelta 1.0, 2.0 and 3.0 has been around EUR 4.5 million. A four-year budget of EUR 35 million has been earmarked for TechLeap.NL.
Type of policy instrument(s) involved	Coordination of ecosystem approaches and diverse instruments include regulatory change, skills development and mentoring, business development services, etc.

Objectives

StartupDelta was founded with the mission to make the Netherlands "the best start-up ecosystem in Europe". To do so, it aims to support the development of the 14 regional ecosystem initiatives which support start-ups and scale-ups at the sub-national level in the Netherlands. It also seeks to create linkages between these independent regional ecosystem initiatives, break down barriers between actors within and across regional ecosystems and improve access to talent, capital, networks, knowledge and markets for entrepreneurs.

Rationale

The Netherlands aims to foster start-up creation in an effort to promote growth and innovation in response to global challenges. The rationale behind Startup Delta and TechLeap.NL is that creating linkages between the existing innovation-hubs across the country (ten at the outset) should foster national co-operation rather than competition between regional ecosystems (European Commission, 2015), thereby fostering synergies and improving the overall start-up ecosystem in the Netherlands as well as raising its international profile and promoting international linkages. This would benefit domestic entrepreneurs and attract founders of innovative start-ups and scale-ups from abroad.

Programme description

StartupDelta is an independent public-private partnership, which brings together all regional entrepreneurial ecosystems in the Netherlands[1] into one single hub. It is supported by the Ministry of

Economic Affairs and the Ministry of Education Culture and Science. StartupDelta was launched in January 2015 under the leadership of a Special Envoy. The programme has been implemented in three phases: StartupDelta 1.0 (mid-2015 – mid-2016), StartupDelta 2.0 (mid-2016 – end-2017), and StartupDelta 3.0 (January 2018 – mid-2019). In July 2019 a new phase has started with the launch of the TechLeap.NL, a four-year programme that continues and replaces StartupDelta.

The StartupDelta/TechLeap initiative includes a wide range of actions involving different actors of the entrepreneurial ecosystem and intervening at different stages of the entrepreneurship process, from building an entrepreneurial culture to supporting existing start-ups.

This includes efforts to create better linkages in the ecosystem and facilitate start-ups' access to key resources, notably through the launch of the startupdelta.org portal which maps the start-up ecosystem of the Netherlands and offers searchable databases for start-ups and knowledge providers (Startup Finder and Science Finder). Another notable initiative is the COSTA collaboration, which brings together Corporates and Start-ups on a platform called the Corporate Launchpad to create business-to-business linkages and opportunities for innovation partnerships and investment. Efforts also include linkages with knowledge providers: the TekDelta pilot programme provides start-ups with access to knowledge and laboratory space at the Netherlands Organisation for applied scientific research (TNO), Universities of Technology, the telecom provider KPN and other private companies such as Philips and NXP.

The initiative also works to facilitate interactions between entrepreneurs and public services. Together with the Chamber of Commerce it introduced Startupbox, an instrument guiding start-ups to the most suitable public policy programme. It also successfully advocated for a reduction of the application process time for R&D tax deductions for start-ups: it was reduced from 3 months to 1 month. The programme also operates the Startup Officers Network, composed of representatives of government organisations, which aims to improve access of start-ups to government organisations. It has also established a coalition of government departments and municipalities collaborating in a test lab, encouraging local governments to consider investing in start-up led solutions with the goal to foster broader access to public procurement for start-ups.

StartupDelta/TechLeap.NL seeks to attract and support foreign start-ups settling to the Netherlands together with the Netherlands Point of Entry at the Dutch Enterprise Agency. Efforts include the introduction of the Orange Carpet programme, with simplified steps for installation for foreign start-ups and a single support portal for all foreign start-up related issues. The Netherlands also introduced the Startup Visa, a temporary (one-year) residence permit for foreign start-up founders.

The programme works with the government to support the development of policies that makes it easier for start-ups to attract talent, for example by reducing tax obstacles to using "shares as wages" and to develop new rules for attracting essential personnel from outside the EU. It highlights bottlenecks encountered by start-ups and scale-ups and advocates for their inclusion in the policy agenda. Startup Delta/TechLeap.NL is also often consulted on the development of a range of government policies for issues that may be relevant for start-ups and scale-ups.

The programme supports internationalisation of Dutch start-ups through international missions for groups of Dutch start-ups. Missions are frequently organised together with the Dutch Enterprise Agency to global network events (e.g. Consumer Electronics Show, Computex, WebSummit, Slush, SouthbySouthWest, and Hannover Messe), globally known entrepreneurial ecosystems (e.g. the Silicon Valley, Seattle, Tel Aviv, Berlin, London) and promising destinations for Dutch start-ups (e.g. China and South Korea).

A recent initiative is the creation of a community of "start-up diplomats" at embassies and consulates in priority countries to raise the profile of start-up support in the embassy network of the Netherlands. The programme also manages mentor networks, including international peers (start-ups abroad) who provide advice and support to entrepreneurs seeking to expand their activities in Silicon Valley, Los Angeles, Boston, New York, Singapore, London and Berlin and Paris.

Finally, the programme aims to build capacity for innovation and entrepreneurship in society at large through programmes such as Codepact which offers software programming lessons in primary education.

Linkages to other policies and programmes

StartupDelta/TechLeap.NL is part of the national entrepreneurship policy and is one of the policy instruments in the national programme Ambitious Entrepreneurship, which targets start-ups and scale-ups. Moreover the programme links to National Innovation System Policy (which is a joint effort of the Ministry of Economic Affairs and the Ministry of Education, Culture and Science).

The programme has informal connections with a variety of actors in the entrepreneurship ecosystem, including policy makers, investors, service providers (incubators, accelerators, co-working spaces etc.), corporates, start-ups and scale-ups in the regional ecosystems. For example, the programme organises regular central meetings of the incubators and accelerators in the regions. While regional ecosystem programmes are fully independent from StartupDelta/TechLeap.NL (both in governance and in finance), StartupDelta/TechLeap.NL serves as a platform and meeting place for regional programmes to align with one another. Moreover it aims to connect different regional ecosystems within the Netherlands as well as accelerate their development and connect them to the world. Thereby StartupDelta/TechLeap.NL is used as a platform for “advertising” the regions abroad.

The initiative also has some linkages to other sub-national programmes, such as the City Deals (City Deal Warm Welkom Talent) and Region Deals. City Deals and Region Deals are local coalitions of multiple public and some private partners aiming to tackle local societal challenges innovatively, co-financed by the national government. These deals are not formally connected to StartupDelta/TechLeap, but the programme publicises them and provides a context of informal alignment and collaboration.

Monitoring and evaluation methods

The initiative aims to achieve two overarching targets. A series of sub-goals were also set.

List of key performance indicators (KPIs)
• Entering the global top 5 of start-up ecosystems in the ranking of Startup Genome in 2020 (the Netherlands was ranked 19 in 2015)
• Becoming the first start-up ecosystem of Europe, as indicated by the Startup Genome ranking
Sub-goals include:
• Establish one Single Hub
• Grow the pool of “smart funding”
• Attract top Venture Capital funds to the Netherlands
• Link Dutch start-ups to the rest of the world
• Mentor entrepreneurs for international expansion
• Attract and support foreign start-ups in the Netherlands
• Participate in and contribute to relevant international start-ups networks
• Open up public procurement to start-ups
• Connect start-ups and corporates
• Remove barriers for start-ups and increase access for start-ups to EU markets
• Address shortage in Tech talent
• Facilitate entrepreneurship in education
• Boost academic start-ups

The StartupDelta/TechLeap.NL programme is evaluated every 1.5 years for the Ministry of Economic Affairs, with informal intermediate progress reports provided in between. The evaluations are not publicly available. The targets change in each period. In the first period (StartupDelta 1.0), the focus was on increasing interest in start-ups among politicians, the ministries and the general public. During its second period (StartupDelta 2.0), StartupDelta focused more on stimulating and accelerating structural changes in national and regional policy to support start-ups. StartupDelta 3.0 had four focus areas: (i) the creation of “One Single Hub” (linking the whole Netherlands start-up and scale-up ecosystem through acting like a

network of networks) and reinforcing Dutch tech networks within and outside the Netherlands; (ii) helping start-ups scale up, notably by organising missions abroad; (iii) encouraging breakthrough technologies and academic start-ups; (iv) making the ecosystem more transparent with better (accessible) data.

Some objectives are not foreseen to be achieved in one 1.5 year period and objectives have evolved over times. Some goals have been cancelled or transferred to other governmental bodies. For example, the goal to "Remove barriers for start-ups and increase access for start-ups to EU markets" was foreseen to be achieved through the creation of sandboxes for testing of new business models. However, the programme managers judged that this could better be managed by the Ministries of Economic Affairs and Foreign Affairs, to which the responsibility for the objective was transferred.

Monitoring and evaluation results

StartupDelta/TechLeap.NL includes so-called action programmes of 1.5 years, which are evaluated. This includes self-evaluations, which are public, as well as several informal evaluations by external entities, whose reports are not public. The key conclusions of these evaluations are provided in letters to parliament. The first period (StartupDelta 1.0) was assessed favourably by the Ministry of Economy which estimated that it helped: "[put] The Netherlands […] on the map as a start-up-country" (Ministerie van Economische Zaken 2016a). The subsequent periods (StartupDelta 2.0 and StartupDelta 3.0) have been evaluated in more detail. The short term of these action programmes makes the overall programme adaptive to the needs of the players in the start-up ecosystem.

Takeaway for other countries

StartupDelta/TechLeap.NL aims to reinforce the national entrepreneurial ecosystem, understood as a national network of regional networks. It focuses on co-ordinating regional interests and aims to provide benefits for all participating regions and limit unproductive competition. In the absence of public information on the results of the evaluation of the programme, it is difficult to identify specific lessons for similar initiatives. Nonetheless, three potential success factors can be identified:

- **A potential strength of the initiative is its holistic approach:** the programme targets all actors in the ecosystem and extends support to different types of firms at various stages of development, as well as potential entrepreneurs.
- **A reported strength of the programme is its flexible short-term agendas**, allowing for rapid experimentation.
- **An initiative seeking to coordinate different regional ecosystems within a country would be particularly suited to contexts where regions have distinct sectoral specialisations.** A possible success factor for this programme is that the different Dutch regions specialise in distinctive R&D areas, which is conducive to co-operation and complementarity.

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Case 15: Startup Estonia, Estonia

Basic information

Main category of intervention	Strategies and comprehensive policy approaches
Country	Estonia
Level of intervention	National National government
Ministry/Agency/Department in charge of the programme and its implementation	Estonian Ministry of Economic Affairs and Communications in partnership with the agency Enterprise Estonia and KredEx, a government foundation
Timeline of the programme	2010-23 Continuation is foreseen after 2023.
Target group(s)	Individuals with business ideas Early stage entrepreneurs Start-up ecosystem actors (accelerators, business angels) Foreign start-ups eager to obtain e-residency or relocate
Size and budget of the programme	- EUR 2.24 million for the period 2011–2013 - EUR 2.3 million for 2014 - EUR 2.32 million for 2015 - EUR 1.183 million for 2016 - EUR 1.208 million for 2017 - EUR 2.808 million for 2018 The budget is provided by the European Regional Development Fund (ERDF).
Type of policy instrument(s) involved	Accelerator services, combined with seed- and early-stage capital Information and networking Training Incentives to foreign investors

Objectives

Startup Estonia aims to develop and strengthen the start-up ecosystem in Estonia and increase the number of active start-ups, both by incentivising local entrepreneurship and attracting non-EU entrepreneurs to start and grow their business in Estonia.

It aims to support the development of knowledge and skills within the start-up community as well as facilitate access to finance for entrepreneurs. Startup Estonia also seeks to monitor the Estonian tech start-up landscape and its development (investments, funding, and exits).

The long-term objective of the programme is for the Estonian start-up ecosystem to become self-sustaining and the role of Startup Estonia to be transitory.

Rationale

While Estonia performs well in terms of entrepreneurship development and access to finance for SMEs (second in Europe in 2018 according to the Small Business Act for Europe implementation process), Estonia is below the European Union average in skills and innovation and environment for entrepreneurs and SMEs. Moreover, Enterprise Estonia's lacked an adapted policy offer for technology-oriented start-ups. Startup Estonia aims to correct that gap by fostering the development of an internationally recognised supportive environment for start-ups which will encourage the development of local ventures and attract foreign entrepreneurs.

Programme description

Start-up Estonia is a governmental initiative currently implemented by Enterprise Estonia and KredEx. Enterprise Estonia is a government agency that promotes business and regional policy in Estonia and has a technical and administrative role in the programme. KredEx is a government foundation that provides financing to Estonian enterprises in the form of loans, state guarantees and credit insurance, and assists operations of the Startup Estonia programme.

Startup Estonia's current activities are organised around four strands of action:

- Supporting the development of the Estonian ecosystem through various community building activities and facilitating its promotion internationally through a branding strategy;
- Providing training programmes for start-ups;
- Educating local investors to promote better investments and help them attract foreign capital;
- Eliminating regulatory barriers and promoting start-up friendly regulation.

Startup Estonia's activities in support of the start-up ecosystem include monthly community meet-ups, and marketing the Estonian start-up ecosystem locally and abroad through awareness building and information sharing via social media, monthly newsletters and conferences. Startup Estonia also conducts a mapping of the Estonian ecosystem through surveys and analyses and maintains a database of Estonian start-ups.

Startup Estonia's current activities in support of entrepreneurs include administrative advice, hackathons, and business plan competitions for entrepreneurs. It also entails training programmes for start-ups in areas where they lack specific knowledge that prevents them from scaling up. This may include, for example, assistance in finding partners for sales and marketing, coaching the founders, helping with the business model and regulatory documents, and supporting product development and design. Follow-up activities for Startup Estonia after 2023 focus on further developing the start-up ecosystem and creating a long-term strategic view within the community. Moreover, the aim is to focus more on technology-intensive start-ups and scale-ups and developing their ecosystem.

In order to attract foreign entrepreneurs and investors, Startup Estonia works to reduce regulatory barriers to start-ups' operations and investment activities in Estonia. Startup Estonia played an advisory role in amending the Aliens Act and developing a Startup Visa programme to attract foreign entrepreneurs from outside the EU. The Startup Visa programme was launched in 2017 and allows third country nationals to settle in Estonia to establish a start-up. A residence permits programme for working in a start-up is also included in the Startup Visa programme to allow Estonian start-ups to recruit third country nationals with preferential terms. Estonia also has an e-residency status, allowing foreign entrepreneurs to headquarter their business in Estonia without physically relocating. Startup Estonia also worked to amend business regulations so that opening a securities account could be done without a physical presence in Estonia. Finally, Startup Estonia analyses the Estonian tax environment and reports to the Startup Europe online tool, which provides recommendations for entrepreneurship and innovation in European countries.

Startup Estonia also educates local investors to help them invest effectively and attract foreign partners to invest in Estonia. It also helps generate business accelerator funds to bring investments into the local ecosystem by seeking cooperation partners, preparing and conducting tender documents for acceleration services. It also supports business angels through skills development and organising study visits, knowledge sharing, and matchmaking in collaboration with the Estonian Business Angels Network (EstBAN). Startup Estonia also represents EstBAN in the European Business Angels Network (EBAN) and fosters linkages with business angels from other countries in the region.

Startup Estonia focuses on growth sectors (emerging sectors with above-average growth and potential to achieve competitive advantage through R&D investment) to generate activities that help their internationalisation, address sector-specific market issues, and facilitate informal business networking within their target markets.

Startup Estonia sets focus areas to connect different sectors with the start-up community. The Cleantech sector was chosen as a first focus area over 2015-17, as a pilot programme in collaboration with the Estonian Ministry of Environment. In 2017, Startup Estonia expanded the activity's focus to four areas. The current areas of focus include EdTech, Cyber Tech, Ida-Viru programme, and Accelerate Estonia:

- EdTech (Educational Technology) is a pilot programme that encourages disruptive education innovation in schools and helps EdTech start-ups in their development and growth.
- The Cyber Tech programme aims to strengthen and grow the local Cyber Tech ecosystem (i.e. ecosystem around cybersecurity processes, technologies and applications) and help Cyber Tech start-ups in their development.
- Ida-Viru is a pilot programme seeking to develop a sustainable start-up ecosystem in the Ida-Virumaa County as part of efforts to spur development in the region.
- Accelerate Estonia's focus is to explore policy areas were disruptive solutions could be brought about to solve important societal issues while creating new markets. In its pilot phase, Accelerate Estonia aims to select five promising concepts for acceleration in 2020.

Although the main aim of Startup Estonia is to develop the ecosystem spanning all sectors, the aim of the focus areas is to provide additional support to sectors where the start-up community has not been very active, in collaboration with the relevant ministries. Similarly, the Ida-Viru programme aims to develop an entrepreneurial mind-set in the local community and foster the development of new opportunities.

Linkages to other policies and programmes

Startup Estonia coordinates multiple support programmes and is actively involved with non-governmental actors in the start-up ecosystem. It also plays an advocacy role for the development of start-up friendly legislation and regularly plays an advisory role in developing legislation amendments.

Monitoring and evaluation methods

The Startup Estonia initiative has set quantitative targets based on its objectives. The key performance indicators used to monitor progress include:

List of KPIs
• Number of potential and active start-up enterprises that have benefitted from Startup Estonia (Target for 2018: 600 ; Target for 2023: 1000)
• Total number of supported enterprises (Target 2023: 156)
• Number of enterprises supported to introduce products or services new to the firm (Target for 2023: 3)
• Number of enterprises who attracted international capital of EUR 1 million within three years of receiving support (Target for 2018: 2; Target for 2023: 5)

Startup Estonia prepares quarterly interim and annual reports on its results and how there were achieved, including what activities had the most impact on achieving relevant targets. These reports are not published.

In order to better monitor the ecosystem, Startup Estonia provides statistical overviews of Estonian start-ups including statistics on taxes paid, funds raised, jobs created by start-ups, and growing industries. These statistical overviews started in 2016 and are published biannually on the Startup Estonia website.

Monitoring and evaluation results

An unpublished preliminary analysis of the ecosystem landscape was conducted in 2016. It included an assessment of Startup Estonia's activities by ecosystem actors. In 2017, Startup Estonia implemented some suggestions from this evaluation, including the renewal of the start-up database and the development of additional activities in relation to the Estonian Startup Visa programme (i.e. promotional activities in target countries) (Michelson, 2018).

The target number of potential and active start-ups that have benefitted from Startup Estonia was achieved by early 2018 with approximately 1 000 potential and current entrepreneurs participating in the training programmes. Between January 2017 (introduction of the Startup Visa programme) and January 2019, 1 108 applications (from 80 countries) were submitted for the Startup Visa programme. As a result, 281 founders received a visa or residence permit and 605 people were granted a visa or residence permit to work in Estonian start-ups. Moreover, 20 enterprises received training for international sales and marketing. The number of enterprises that attract international capital of EUR 1 million within three years of getting support will be assessed starting in 2020 as the indicator was initiated in 2017.

Startup Estonia publishes regular overviews of the Estonian start-up sector. By mid-2019, the programme estimated that 650 start-ups were in operation, among which 35 were established in the first half of 2019. These firms employed an estimated 4 848 people, up from 3 369 a year earlier.

Aside from quantitative indicators, major reported outcomes of the programmes include launching a public procurement programme to create accelerator funds for the provision of venture capital for start-ups/early stage businesses; hosting the world's largest green technology start-up contest (Climate Launchpad European Finals) for 90 start-ups from 30 countries; and creating a start-up database.

Challenges and responses

The main current challenge for Startup Estonia and participating enterprises seems to be the administrative burden arising from the European Structural and Investment Fund's (ESIF) requirements.

There is no information available on other major challenges encountered. However, Startup Estonia's activities have evolved over time:

- The programme was launched in October 2010 to improve the innovation policy and the framework conditions for private investment in R&D. It started offering financial support to start-ups in 2011 and later developed its other advice and training activities.
- Initially, The Ministry of Economic Affairs and Communications of Estonia, Estonian Development Fund, and Enterprise Estonia developed the programme with the Estonian Private Equity and Venture Capital Association being the advisory board. From 2011 to 2013, Startup Estonia was used to finance three business accelerators through Enterprise Estonia, organise a start-up conference and support trips to Silicon Valley for start-ups.
- In 2013, the Startup Estonia programme identified a need for a bigger team, leading to the Estonian Development Fund taking over as an implementing body in 2014 and the further development of the programme activities as a pilot for the current version of the programme. In 2015, the current Startup Estonia programme (2015-23) was launched and activities expanded, notably towards improving regulations affecting start-ups' operation, investments and fundraising.

Although evaluations are not published, a case study reports that evaluation results are incorporated in the programme's development as discussed above (Michelson, 2018).

Takeaway for other countries

Startup Estonia is perceived as having been successful in fostering the development of the start-up ecosystem in Estonia and in facilitating entrepreneurship and investment in the country.

The following lessons could inform the development of similar initiatives:

- **A holistic approach, targeting multiple aspects of the ecosystem simultaneously is important to foster the development of start-ups.** Start-up Estonia promoted the development of the business development service sector, with an estimated 100 active organisations in 2019.

- **A mapping of the ecosystem is particularly useful to help entrepreneurs and firms navigate the ecosystem**. It can also help identify policy intervention needs.
- **A balance should be sought between a bottom-up approach and a co-ordinated top-down approach**. Startup Estonia has succeeded in engaging with ecosystem actors in a bottom-up fashion, but better co-ordination with the main national entrepreneurial and R&D policies would be an asset.
- **Development of an initiative to strengthen an ecosystem should include mechanisms to incorporate feedback from different stakeholders.** A strong monitoring and evaluation framework should also be set up in order to regularly assess the efficiency of approaches and adapt support over time. Transparency in reporting would be an advantage for the engagement of ecosystem actors.
- **Efforts to improve the regulatory system should be included** in efforts to foster a conducive start-up ecosystem.
- **The administrative process for entrepreneurs to apply to and participate in a programme should not be too burdensome and resources should be set aside** to ensure that end-user (i.e. entrepreneurs and SMEs) requests can be dealt with in a timely and efficient manner.

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Case 16: Dutch Centre for Entrepreneurship – DutchCE, the Netherlands

Basic information

Main category of intervention	Strategies and comprehensive policy approaches
Country	Netherlands
Level of intervention	Blended: a national initiative that co-ordinates entrepreneurship centres in universities. The centres have regional outreach.
Ministry/Agency/Department in charge of the programme and its implementation	The DutchCE functions as a consortium of Dutch Universities. The programme received public subsidies in the past but is a bottom-up initiative run by its members. Its board includes two universities and a university of applied science, an entrepreneurial support organization and an entrepreneur. The board represents most of the Netherlands' regions.
Timeline of the programme	2015-20 (ongoing)
Target group(s)	Higher education institutions Aspiring entrepreneurs and early-stage entrepreneurs (pre-launch to growth)
Size and budget of the programme	Over 20 HEIs are involved in the network. Centres vary in size, e.g. ECE currently has around 150 active participants. DutchCE is financed by the Ministry of Economic Affairs and the Ministry of Education, Culture and Science. Funding for the years 2015-17 included a grant of EUR 400 000 from the Dutch government and EUR 200 000 in-kind funding from the four founding universities. The project is self-funded since 2018.
Type of policy instrument(s) involved	Network Individual Centres provide various services including acceleration, incubation, training, networking and mentoring

Objectives

The Dutch Centres for Entrepreneurship (DutchCE) aim to stimulate an entrepreneurial society. In practice, the DutchCE network aims to (i) Strengthen entrepreneurship education; (ii) Strengthen entrepreneurship research; (iii) Apply entrepreneurship education and research; (iv) Support policy making and (v) Represent and promote the Dutch ecosystem (DutchCE, n.d.).

Rationale

The DutchCE programme was created by universities as a way to facilitate co-operation on entrepreneurship education, notably in the context of the organisation of joint events such as the Global Entrepreneurship Week. Indeed, a number of entrepreneurship centres were active in the Netherlands, but they were operating on a small scale, with limited individual capacity. The rationale for DutchCE was that the creation of a network would allow centres to pool capacity to promote joint research and knowledge sharing on entrepreneurship education, at low operational costs. Public support was granted to DutchCE to further this co-operation, as part of a wider agenda to support entrepreneurship education.

Indeed, DutchCE was introduced after the end of the Education and Entrepreneurship programme *(Onderwijs en Ondernemen*) (2008-15), which supported the development of initiatives on entrepreneurship in education, including regional centres for entrepreneurship, leading to entrepreneurship becoming an important part of many higher education institution (HEI) strategies. The DutchCE programme also has some indirect linkages to the Valorisation programme (*Valorisatieprogramma*) (2010-18), which offered grants to universities for developing valorisation activities (including the creation of dedicated centres, some of which later became DutchCE centres).

The DutchCE initiative builds on these initiatives with the aim to develop national cooperation between universities' centres for entrepreneurship as a means to increase the quality of entrepreneurship education

and research, foster complementarity and increase the impact of centres by stimulating application of entrepreneurship research and informing policy making.

Programme description

Created in 2015, DutchCE is the network of Centres for Entrepreneurship in public universities and universities of applied science in the Netherlands. It was created as a bottom-up initiative and involves 20 HEIs, 6 major incubators/accelerators, and 4 key partner organisations over the country. Centres offer entrepreneurship programmes for students, staff, and local entrepreneurs. Notable university centres for entrepreneurship include the founding partners of the DutchCE network: the Amsterdam Centre for Entrepreneurship (ACE), the Erasmus Centre for Entrepreneurship (ECE), the Saxion Centre for Entrepreneurship and the Utrecht Centre for Entrepreneurship (UtrechtCE).

The DutchCE network is led by a board which includes representatives from two universities, a university of applied science, an entrepreneurial support organisation and an entrepreneur. The DutchCE network makes use of multiple coordination mechanisms. For example, the Dutch Association for Research in Entrepreneurship (DARE) is used for research co-operation on entrepreneurship. It operates a portal for academic research and education in entrepreneurship in the Netherlands and aims to improve cooperation in this area as well as provide input to long-term research programmes on entrepreneurship and to the Dutch Centres for Entrepreneurship. Several alliances are also in place for education and pedagogy.

To reach its five objectives, the DutchCE and its centres carry out different strands of activities. An important area of work for the DutchCE network is valorisation of research: the Network works to ensure the transfer of the knowledge developed in HEIs to entrepreneurs, businesses and other organisations (including the government). As such, DutchCE promotes technology transfer and commercialisation and supports Dutch entrepreneurs in expanding their exporting capacity.

In the domain of entrepreneurship education, an important activity is Dutch Students for Entrepreneurship (DutchSE), a fast-growing network affiliated with DutchCE. DutchSE is an umbrella organisation gathering major student organisations in the Netherlands to help them promote entrepreneurship and share resources and knowledge on the subjects. The network promotes and facilitates information and knowledge sharing, maps entrepreneurship events and carries out student-led but also student-designed activities.

DutchCE endeavours to effectively use academic research on entrepreneurship to support policymaking. It consults with governments at all levels, from local authorities to the EU and also proposes its advisory services to interest groups. DutchCE also plays an advocacy role to ensure that important topics related to entrepreneurship are on the policy agenda. DutchCE also develops qualitative benchmarks for policy.

Individual centres themselves carry out a range of activities. The ECE for example offers an incubator space and other entrepreneurship support services. It was developed in close collaboration with local partners including the municipality of Rotterdam, faculties from the university, other local HEIs, the Erasmus Medical Centre and Rotterdam based companies. The main goal was to facilitate learning between corporate innovators, knowledge institutions, students and entrepreneurs to stimulate entrepreneurship and innovation. ECE currently hosts about 150 companies; mostly start-ups but also supporting organisations (including an expertise centre, a business angel network, a crowdfunding company, investors and subsidy advisors).

The ECE holds around 600 events and programmes a year ranging from entrepreneurship education for students or (aspiring) entrepreneurs to innovation challenges with corporate innovators, start-ups and students. ECE runs a validation programme (Get Started), an incubation programme (Get Business), and collaborates with an accelerator (EO Accelerator NL). It also offers executive entrepreneurship education for SMEs such as the New Business Cycle programme (focused on the ability to innovate and adapt new business models in an existing business) and for larger firms through the Leading Innovation Excellence

Programme. ECE also hosts peer-to-peer learning sessions and community networking events. All programmes focus on developing entrepreneurial competences based on individual needs, using an experiential learning methodology (i.e. “learning by doing”).

Linkages to other policies and programmes

DutchCE is closely linked to the wider StartupDelta/TechLeap.NL initiative (Case 14: Startup Delta/TechLeap.NL, the Netherlands) that connects regional entrepreneurial ecosystems across the country.

DutchCE collaborates with various public and private sectors partners to further its objectives. Key domestic partners include *JongOndernehmenm,* a foundation that provides entrepreneurship education programmes and supports young entrepreneurs, the aforementioned DARE initiative, and Handelsroute*NL2, which supports entrepreneurs internationalization.

DutchCE also liaises with international partners including academic organisations (e.g. the Academy of Management, the International Council of Small Business), research organisations (e.g. Global Entrepreneurship Monitor), and entrepreneur support entities (e.g. Global Entrepreneurship Network and Global Entrepreneurship Week).

Monitoring and evaluation methods

Each Centre monitors its activities independently. No network-wide evaluation has been conducted. However, many DutchCE participants have shared reports on their activities.

Work on improving metrics and coordination is ongoing. Three of the Centres are also on the advisory board of the European Union-supported Evaluation of Entrepreneurship Education Programmes in Higher Education Institutions and Centres (EEEPHEIC) project, which is developing a toolkit to assess impact of entrepreneurship education programmes.

Monitoring and evaluation results

While there is no published evaluation of DutchCE as a whole, some centres share information on their activities and achievements. ECE for example, estimated that the 150 companies located at its campus have created 850 new jobs since its opening. Over 5 000 students have followed entrepreneurship education or participated in events at the centre. Founders and innovators from around 1 500 companies have also been supported through programmes: about 500 entrepreneurs have followed the validation and incubation programmes, and another 950 participants from SMEs and other firms have followed the New Business Cycle or another entrepreneurship education programme at the ECE.

Similarly, UtrechtCE reports 157 users over 2011-16, of which 63% successful launched a business. The centre estimates that supported firms have collectively generated EUR 84 million in revenues and created 1 125 jobs (Utrecht University, 2017).

Challenges and responses

A challenge that has been identified by DutchCE members is that entrepreneurship and entrepreneurship education is not a core mission of universities. As such, it is not embedded in university budgets, which affects long-term planning and makes it more difficult to support entrepreneurship research. In practice, some of the centres initially involved in DutchCE have been closed, and many have shifted activities to focus more on acceleration and technology transfer and less on entrepreneurship education and research activities.

Another challenge that has been identified by centres is a difficulty to select appropriate metrics for evaluating their activities. For example, identifying and assessing the development of entrepreneurship courses across institutions and over time is not straightforward, as entrepreneurship courses vary widely in content and may be given under various names.

Takeaway for other countries

The DutchCE Network creates linkages between diverse organisations and is not centrally evaluated, as drawing definitive conclusions on its design and implementation is difficult. However, the network is perceived by participants as filling a need for coordination in the ecosystem. It also has the potential to increase impacts of HEI investments in entrepreneurship teaching and start-up support by co-ordinating activities of different centres: for example, by fostering collaborative research on entrepreneurship and encouraging the development of applied research in this area. Another potential strength of the programme is the ability of local centres to develop partnerships in entrepreneurial communities, locally and at the national and international level and connecting students with the entrepreneurial ecosystem.

Potential factors for success in developing a similar initiative include the following:

- **Similar initiatives should consider setting strategic objectives and embedding them in the overall strategic objectives of universities**.
- **Setting up a network-wide monitoring and evaluation framework could help similar networks set clear objectives** for their network and monitor its progress, as well as facilitate peer learning between centres.

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Notes

[1] The Amsterdam, Rotterdam, Den Haag, Leiden, Rotterdam, Utrecht, Groningen, Friesland, Limburg, Eindhoven, Twente, Delft, Wageningen, and Arnhem/Nijmegen regions.

[2] handelsroute.nl

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