







The views expressed in this report are those of the authors and do not necessarily reflect the views and policies of the Government of Australia, or of the Asian Development Bank (ADB) and its Board of Governors and the governments represented by ADB.

ADB and the Government of Australia do not guarantee the accuracy of the data in this report and accept no responsibility for any consequence of their use. The mention of specific companies or products of manufacturers does not imply that they are endorsed or recommended by ADB or the Government of Australia in preference to others of a similar nature that are not mentioned.

By making any designation of, or reference to, a particular territory or geographic area, or by using the term "country" in this document, ADB and the Government of Australia do not intend to make any judgments about the legal or other status of any territory or area.

The report is produced by 4FRONT FREDRIKINKATU 51-53 B • FI-00100 HELSINKI www.4front.fi

This paper has been prepared by Kimmo Halme and Vesa Salminen of 4FRONT for the purposes of Mekong Business Initiative, a joint advisory facility of the Asian Development Bank and the Government of Australia. The authors are solely responsible for the correctness and interpretation of data and information used in this report, as well as the of objectiveness of any statements made on their bases.





# **Table of Contents**

<u>1.</u>	INTRODUCTION4		
1.1.	BACKGROUND AND OBJECTIVE4		
1.2.	STRUCTURE5		
<u>2.</u>	WHAT IS GOOD BUSINESS SUPPORT?6		
2.1.	RATIONALE OF BUSINESS SUPPORT6		
2.2.	MAKING BUSINESS ENVIRONEMNTS MORE DYNAMIC8		
<u>3.</u>	TYPICAL BUSINESS SUPPORT INSTRUMENTS		
3.1.	CLUSTER PROGRAMMES14		
3.2.	TECHNOLOGY AND INNOVATION PROGRAMMES18		
3.3.	GOVERNMENT GRANTS21		
3.4.	DEBT AND RISK SHARING INSTRUMENTS23		
3.5.	<b>VOUCHERS</b>		
3.6.	SEED AND VENTURE FUNDING30		
3.7.	ALTERNATIVE SOURCES OF FINANCE34		
3.8.	PUBLIC PROCUREMENT37		
3.9.	TAX INCENTIVES41		
<u>4.</u>	INTERNATIONAL BENCHMARKS47		
4.1.	SINGAPORE47		
4.1.1	GENERAL CONDITIONS FOR BUSINESS AND ENTREPRENEURSHIP		
4.1.2	KEY POLICIES FOR BUSINESS SUPPORT		
4.1.3	ORGANISATION AND INSTRUMENTS FOR BUSINESS SUPPORT		
4.1.4	KEY TAKEAWAYS		
4.2.	THE NETHERLANDS55		





4.2.1	GENERAL CONDITIONS FOR BUSINESS AND ENTREPRENEURSHIP	55
4.2.2	KEY POLICIES FOR BUSINESS SUPPORT	57
4.2.3	ORGANISATION AND INSTRUMENTS FOR BUSINESS SUPPORT	58
4.2.4	KEY TAKEAWAYS	61
4.3.	FINLAND	62
4.3.1	GENERAL CONDITIONS FOR BUSINESS AND ENTREPRENEURSHIP	62
4.3.2	KEY POLICIES FOR BUSINESS SUPPORT	63
4.3.3	ORGANISATION AND INSTRUMENTS FOR BUSINESS SUPPORT	64
4.3.4	KEY TAKEAWAYS	68
<u>5.</u>	CONCLUSIONS AND RECOMMENDATIONS	69
5.1.	Conclusions	69
5.2.	RECOMMENDATIONS FOR VIETNAM	73
SOURC	ES AND LITERATURE	78





### 1. INTRODUCTION

## I.I. Background and objective

Mekong Business Initiative (MBI) is supporting Vietnamese Ministry of Planning and Investment (MPI), the Government of Da Nang and the Government of Ho Chi Minh City to design better business and innovation support services to support entrepreneurship and increase productivity. MBI is an advisory facility that promotes private sector development in Cambodia, the Lao People's Democratic Republic (Lao PDR), Myanmar, and Vietnam. MBI fosters development of the innovation ecosystem by supporting business advocacy, alternative finance and innovation. It is supported by the Government of Australia and the Asian Development Bank.

Both MPI and the local governments have had many support programmes but most of them are mainly supply-driven and do not meet the need of the private sector. The aim of this paper is to support MPI, Da Nang and Ho Chi Minh City authorities to learn from international best practices in business and innovation support measures.

This paper has been prepared in parallel to another paper, which is focusing on international best practices for the startup ecosystems. The two papers are mutually complementary. For the sake of clarity and division of work, descriptions of collective business support approaches, networks, infrastructues and programmes, such business incubators, accelerators, innovation centers as well as co-working spaces and living labs, are covered by the other paper. This paper focuses on targeted business support measure and instruments.





The paper includes descriptions about successful models or approaches for business support policies and instruments from Singapore, the Netherlands and Finland. The lessons and learnings from designing and implementing business support is discussed at the end of the paper, with the aim to provided useful suggestions for Vietnam.

#### 1.2. Structure

The paper is structured into three parts. *The first part* explains the general rationales, trends and policy approaches for supporting businesses across countries. It also highlights some general good practices at a more general level. The comparison at the policy level is often feasible to be done at a country or region level, where the observation is done about the system functioning as a whole. This part also serves as a background explaining why certain benchmarks may have been chosen for a more detailed analysis and comparison.

The second part of the paper presents some typical business support instruments with a number of international benchmark instruments. The second part also includes three benchmarked countries, namely Singapore, the Netherlands and Finland, for which an overview of all business support policies and instruments has been presented.

The third part of the paper synthesises the findings from these comparisons and discusses how the results, findings and lessons could be utilised when designing business support policies. This part is written with a particular emphasis of Vietnamese policy planning and the new SME law under preparation.





# 2. WHAT IS GOOD BUSINESS SUPPORT?

## 2.1. Rationale of Business Support

In a very rough categorisation, government support to businesses follows two central policy rationales. *First*, its aim is to ensure that private markets exist and function properly. This means that there are enough private enterprises providing necessary products and services, and that the market functions so that conditions to enter, compete and operate in the market are reasonable and fair for everyone. Ultimately, the market as a whole should perform. Business support policies typically aim at *correcting market failures* that negatively affect the performance of businesses.





The *second* logic is related to market growth, improvement and dynamism. Ideally, competition in the market should encourage companies to seek for growth and prosperity through improvements in efficiency, quality and functions of their products and services – hence *innovation*. Obviously, such improvements require competence and resources, as well as willingness to take risk. Such risks are typically relatively higher for young and small companies, and the government policies are often aiming to lower or share that risk.

Lately a lot of emphasis has been put on supporting new startups and high-growth enterprises. This is mainly due to their large contribution to economic growth and jobs. Startups and high growth enterprises also support the market dynamism in other ways; enable the commercialisation of knowledge created by large firms, universities and research organisations, which would otherwise remain unused. New and small firms are also key players not just as knowledge exploiters but also as knowledge sources, often playing a fundamental role in breakthrough innovations.

A key justification for government support to businesses and innovation is that the market would otherwise invest in entrepreneurial and innovative activities at less than the socially desirable level.<sup>1</sup> The reasons for this can be in:

• Imperfect appropriability of knowledge creation i.e. knowledge can be easily shared and 'spilled over', so that its benefits do not come only

<sup>1</sup> Nelson, 1959; Arrow, 1962





to the innovators. As a result, there is not enough incentives to invest in innovation.

- Informational imperfections i.e. not all enterprises have access to similar information, which may discourage market transactions.
- Other market imperfections, such as lack of access to finance, lack of support infrastructure, etc. The costs required to address these shortcomings might not be affordable for small enterprises.

Government actions and public policies supporting businesses are equally subject to failures (Government failure i.e. inability of the government to fullfill its responsibilities efficiently). Other rationales include *System failures* (i.e. inability of the business and innovation system to function efficiently). These system failures are often related to

- Networking failures (e.g. weak links and lock-ins, resulting in an inability of the system to adjust to changes)
- Institutional failures (e.g. inability of institutions, such as universities and research institutions to function efficiently)
- Framework failures (e.g. deficiencies in regulatory frameworks and background conditions)

# 2.2. Making business environemnts more dynamic

As explained above, in principle business support policies are aimed at fixing various failures in the markets and operating conditions of the companies. However, in practice the rationales and objectives may be much broader and more strategic. An important part of business support policies is often aimed at attracting and maintaining international businesses and their foreign investments. Regardless of the ultimate aims, the means for developing dynamic business conditions are largely similar. For the purpose of this report,





we have divided the business environment – and related policy measures – into the following four general categories.

- 1. Conditions related to the regulatory framework of business, such as
  - Intellectual property rights for innovative entrepreneurship
  - Bankruptcy regulation
  - Product market regulation
  - Administrative framework for business entry and growth
  - Contract enforcement
  - Corporate and personal income taxation

Framework failures, including deficiencies in regulatory frameworks (e.g. administrative framework for entry and growth, heavy taxation regime), can have a negative effect on the operating conditions of businesses. For instance, unbalanced taxes on company profits and losses, and high average tax rates on SMEs relative to large firms, can diminish SME and entrepreneurship activity.<sup>2</sup>

- 2. Conditions related to markets and competition, such as
  - Size, growth and nature of markets and competition
  - Market access and innovation
  - Functioning of financial markets
  - Role of public procurement
  - Technical standards

Business support policies, which aim at improving market conditions and the demand for new, better products and services are often called *demand-side policies* (as a distinction from supply-side policies providing support directly to the companies). Demand-side policies can utilise for example public

<sup>2</sup> OECD, 2009





procurement or the setting of standards and regulations, which drive the market development to the direction polic-makers wish. These aims are typically linked to areas where societal needs are pressing (e.g. health, environment) and where government action can complement market mechanisms.

- 3. Conditions related to SME access to labour, knowledge and finance, such as
  - Access to skilled labour, including migration and the costs of hiring and firing
  - Support to R&D and other investments
  - Access to technologies, such as ICT
  - Collaboration with universities, public research institutes and firms
  - Access to foreign and domestic financial markets
  - Provision of grants, debt financing, VC and other
  - Enhancement of private funding

A lack of skilled labour or a mismatch in supply and demand for skills can hinder entrepreneurship. Related business support policies can aim to enlargen the size of the skilled workforce, facilitate its mobility, etc. Sufficient knowledge exchange between business and research is an important factor for generating new spin offs and high growth firms. Related policies include conducive regulations for technology transfer, flexibility for university workforce, as well as various networking and co-working activities (e.g. Technology parks) among others.





The majority of business support policies are aimed at 'fixing the market failure' of SMEs with regard to their access either to research and development (R&D), or to finance. Small and new companies have a particularly important role in the market to introduce new products and services, while due to their smaller size, have less capability (compared to large enterprises) to invest in the needed development and commercialisation. For this reason, government support to SME R&D is often considered amongst the 'acceptable subsidies' – i.e. having little negative effects on the markets and competition.

Public policies support SME access to finance with a wide range of instruments. However, these instruments need to be well synchronised with and complementary to the instruments offered by the private financial market. If public support becomes too generous in its terms, or overlaps with the private financial market (e.g. offering similar financial products with better conditions) it can generate a 'crowd ing-out effect' where private operators withdraw from the market.

- 4. Conditions related to entrepreneurial and innovation culture, such as
  - Availability of business support infrastructures and services
  - Attitudes towards entrepreneurship
  - Business and entrepreneurship skills and experience

A lack of entrepreneurial skills and a negative attitude towards entrepreneurial activity within a society (e.g. when an entrepreneur's failure is seen as critical and something to fear) can affect the creation and success of innovative new ventures. In the same manner, a positive attitude towards entrepreneurship can be an important motivator for young people in establishing new startups.





The general attitude towards entrepreneurship is often assessed in international rankings.<sup>3</sup>

Government policies address these often with appropriate education and training, support to business advice and often also with different kinds of general campaigns and public entrepreneurship events.<sup>4</sup>

<sup>3</sup> Such as Global Entrepreneurship Monitor, GEM

<sup>4</sup> See for examle www.slush.fi.





# 3. TYPICAL BUSINESS SUPPORT INSTRUMENTS

Governments compete among each other in terms of setting up and developing better conditions and support measures for businesses to grow and succeed, in order to reap the economic and social benefits generated by incumbent as well as potential entrant foreign companies. In fact, well-functioning business conditions and dynamic business ecosystems can play major roles in attracting foreign companies, investments and skilled labour. This is indeed one of the key objectives for many governments.

This section provides examples and descriptions of most well known and proven business support instruments which are typically provided as a service by governments. According to common understanding of the rationales and justification of public policy market interventions, these instruments are mainly targeted at entrepreneurs and small and medium-sized companies, whether individuals, groups or communities. The variety and forms of business support among developed market economies is massive and increasing, and this selection of examples represents some of the most typical forms of services currently available. Besides general descriptions, we have also identified some international examples of each service type.

Although the described services are all different in terms of their objectives and implementation, they are all designed to add value to entrepreneurs and SMEs at their different phases. They may also have some overlaps and, in fact, many services typically combine different types of services.





Table 1. Summary of Business Support Instruments. Source: Authors.

		helps SMEs to ge		
Instruments type	Financial capital (funding)	Physical capital (infrastructure, facilities, office space)	Human capital (new talent, skills)	Social capital (networks, contacts)
Cluster Programmes	Sometimes	Sometimes	Sometimes	Yes
Technology and Innovation Programmes	Yes	No	Sometimes	Yes
Government Grants	Yes	No	No	No
Debt and Risk Sharing Instruments	Yes	No	No	No
Vouchers	Yes	No	Sometimes	Sometimes
Seed and Venture Funding	Yes	No	Sometimes	Yes
Alternative Sources of Funding	Yes	Sometimes	Sometimes	Yes
Public Procurement	Yes	No	No	Sometimes
Tax incentives	Yes	No	No	No

# 3.1. Cluster Programmes

Clusters are usually understood as geographic concentrations of firms, higher education and research institutions and other public and private organisations, which follow common strategic ambitions. The objective and function of the cluster is to facilitate collaboration across complementary economic activities among the organisations involved in it.<sup>5</sup>

 $<sup>5 \</sup> See \ for \ example \ http://www.oecd.org/innovation/policyplatform/48137710.pdf$ 





Cluster policies became very popular in the early 1990's, after the publication of M. Porter's 'The Competitive Advantage of Nations'6, which essentially introduced the rationale and functioning of industrial cluster policies to the wider public. First policies focused on the identification/mapping and understanding of clusters, while more elaborated policies focused more on their advancement (e.g. cluster management). Porterian type of cluster analyses and policies have ever since been implemented around the world, and the typologies, instruments and general understanding of the functioning of industrial and knowledge clusters has progressed significantly. Today, cluster policies and mostly adopted at regional and provincial levels where economic/industrial concentration is often more easy to distinct. Many countries have combined cluster policies with specialisation strategies in order to be able to gain competitive advantage in the chosen focus areas internationally.

The purpose of regionally based cluster policies is broadly to strengthen a particular regional economy. Public cluster policies and programmes try to enhance the knowledge spillover among cluster actors and thus the generation of a collective pool of knowledge through infrastructure and knowledge-based investments, networking activities and training in order to achieve higher productivity, more innovation and and an increase in the competitiveness of the firms in the cluster.

<sup>6</sup> Porter, M.E. (1990). The Competitive Advantage of Nations. New York: The Free Press.





Cluster programmes are a way to optimise all available and relevant business support instruments for the purpose and benefit of each cluster. In that sense, it is not a business support instrument per se, but rather a series of instruments. In that sense, a number of instruments can be adopted for implementing cluster policies, depending on the type and objectives of clusters. For *emerging clusters*<sup>7</sup>, government can conduct mapping studies, host and sponsor awareness raising and networking events, identify collaboration opportunities for firms and universities, use brokers to facilitate collaboration, etc. Instruments to improving capacity and development of skills include, for example, support to SME business development, specialised trainings, dissemination of labour market information, support to partnerships between business and education institutes, etc. Cluster instruments often include those aimed at supporting the joint strategy process of the cluster, as well as the setting up of joint R&D programmes for the cluster. Other measures can include work on cluster specific standars, regulation, coordinated spin off activities, as well as provision of Venture Capital and the networking of relevant business angels.8

Table 2. Cluster Programmes

Cluster Programmes		
Description &	Cluster programmes are typically publicly funded programmes aiming	
objectives	to promote, activate and faciliate collaboration amongst different	
	actors (small and large companies, research institutes, universitiers,	
	etc) inside a cluster.	
Organisation	Cluster programmes can be organised in different ways depending on	
	the level of formality desired, policy tools and instruments chosen and	
	the resources available. Organised efforts to support the development	
	of the cluster are typically managed through a cluster initiative (or	

<sup>7</sup> Clusters at their early stage of life-cycle, which have not yet organised themselves.

<sup>8</sup> http://www.oecd.org/innovation/policyplatform/48137710.pdf





	cluster organisation) with a person, organisation or consortium leading
	the cluster policy actions.
Funding	Clusters (formed organically) don't need any external funding per se,
sources and	but cluster initiatives and programmes led by the government need
business	to be included in the national and/or regional budget. Public funding
model	of cluster initiatives can be seen as an investment in the competitive
	capacity and specialisation of the regional and national economy. The
	return of investment can be measured in increased employment,
	productivity, growth and innovation activities inside the cluster, as well
	as in the (international) competitive advantage of the region.9
Resources	Resources needed for the cluster initiatives and programmes are
	mainly monetary funding of the programmes as well as the human
	resources needed to carry out the chosen cluster support measures
	and initiatives.
Prerequisites	Cluster policies are often promoted by several different policy streams,
for law &	including regional economic development policy, science/
regulation	technology/innovation policy, industrial/enterprise policy, and even
	higher education policy. A cluster policy may be at the intersection of
	more than one policy stream given their increasingly shared goals.
	Thus, cluster policies should be taken into account when defining the
	legislation of above mentioned policy streams in general.
Other	Instead of trying to create clusters from scratch, government and/or
prerequisites	public authorities should facilitate the growth of clusters by building
	upon existing strengths (i.e. implementing evidence-based policy by
	building upon a comparative analysis of regional strengths and
	'entrepreneurial discovery'). It is also important to speficy a
	national/regional smart specialisation strategy and fund only a few
	strategically important cluster initiatives instead of funding large
	numbers of widely varied clusters. <sup>10</sup>
Role of	Government is responsible for creating a national smart specialisation
government	strategy, which the cluster policies and programmes can be built upon.
	It is also responsible for making sure that the various laws and policies
	related to cluster policies are in line with the chosen cluster strategy.

 $<sup>9\</sup> http://ec.europa.eu/DocsRoom/documents/16903/attachments/1/translations/en/renditions/native\\10\ http://ec.europa.eu/DocsRoom/documents/16903/attachments/1/translations/en/renditions/native\\$ 





International best practices

The key sectors in the Netherlands<sup>11</sup> Les Po^les de Compe□titivite□ in France<sup>12</sup> Industrial Clusters, Japan<sup>13</sup> European Cluster Observatory, EC14

# 3.2. Technology and Innovation **Programmes**

During the last decade, by far the most used business innovation policy measures within Europe have been a) grants and loans for RDI<sup>15</sup>, and b) collaborative RDI programmes. Most notably have increased the volume of programme-based research and innovation measures. Awareness-raising measures, support services for innovation, skill development, cluster programmes and support to networks carry much less financial weight in programme-based policy budgets.<sup>16</sup>

A programme is usually understood as a specific policy measure, which is an open or semi-open platform or a joint plan for collaboration, typically among research, business and government. Most programmes are limited in time, having a clear start and end date, as well as a budget. The length and size of programmes vary considerably. Common programme types are technology R&D programmes, commercialisation and business programmes, thematic mission-, challenge or strategy-driven programmes (e.g. cleantech), cluster programmes, as well as national and regional

<sup>11</sup> https://www.hollandtradeandinvest.com/key-sectors

<sup>12</sup> http://competitivite.gouv.fr/

<sup>13</sup> https://www.jetro.go.jp/en/invest/region/icinfo.html

<sup>14</sup> http://www.clusterobservatory.eu/index.html

<sup>15</sup> RDI = Research, Development and Innovation

<sup>16</sup> EC 2013





innovation programmes. The typologies are flexible and we describe here technology and innovation programmes primarily.

It is common for programmes to have an overall, pre-defined *strategic objective* (i.e. to increase the competitive advantage of some specific industrial sector), with a clear rationale behind. For example, the main function of a programme is to generate research and innovation projects and collaboration in identified priority areas, with available government funding instruments (grants, loans, equity, etc.).

Programmes usually include *a set of actions*, such as work components and research and innovation projects that are implemented to reach the strategic objectives. The actions of the programme are intended to have *synergies* and mutual complementarities. There are also often joint activities. In most cases the programme activities are coordinated and managed.

Box 2. Technology and Innovation Programmes			
Description &	Technology and innovation programmes are policy tools that typically		
objectives	aim to increase the level of R&D and innovation, enhance the transfer		
	of knowledge between public and private sector and develop key		
	strategic areas of research for economic and societal goals. The		
	programmes are often focused around a certain topic, such as agro-		
	technologies and food, information and communication technologies,		
	sustainable development, transportation, energy or health. Lately, also		
	cross-border programmes interconnecting different focus areas have		
	been trending.		
Organisation	Technology and innovation programmes are in most cases		
	implemented either directly by responsible ministries, by specific		
	implementing agencies, or in some cases the implementation is		
	procured from the business sector.		





	The programmes usually have a duration of 3-5 years, but may be extended or followed-up with another programme. They are usually governed by a Programme Board (or Steering Group) and have a designated Programme Manager or a Management Team.  Depending on the purpose, programmes may consist of various kinds of activities, such as promotion campaings, funding calls, projects, advisory services, etc.
Funding	Programmes are usually fully, or largely funded by the government.
sources and	However, various activities conduced under the programmes, and
business model	particularly business-driven RDI projects are often co-funded by
	programme respective participants. Hence, the overall funding is often
	a combination from public and private sources. Programmes are seldom
	financially self-sustained, but may aim to do so towards the end of the
	programme period.
	As in the case of cluster programmes, resources needed for the technology and innovation programmes are mainly monetary funding of the programs as well as the organisations or persons needed to administer the programmes. Programme volumes vary significantly, ranging from few millions to hunderds of millions of USD.
Prerequisites	Programmes as such do not usually require separate legislation, but it
for law &	is rather the activities, which are carried out under the programme (e.g.
regulation	subsidised projects).
Other	Programme design and implementation requires experience in terms of
prerequisites	topic substance, funding administration and general management /
	coordination. Monitoring and evaluation of programme success is an
	important learning mechanism.
Role of	Programmes are typically public-private partnerships, where the
government	government has an essential role to play throughout the process: as a facilitator, leader, coordinator and funder.
International	Tekes innovation programmes, Finland <sup>17</sup>
best practices	National High Tech Programme 863, China <sup>18</sup>

<sup>17</sup> http://www.tekes.fi/en/programmes-and-services/tekes-programmes/

<sup>18</sup> http://www.most.gov.cn/eng/programmes1/





#### 3.3. Government Grants

Governments have long used direct funding as a means to stimulate companies into desired activities (investments, R&D, growth, export) with related instruments, such as matching grants, subsidised loans or venture capital. These and many other instruments are typically offered in combinations. Direct government funding to companies aimes to achieve three types of additionality at companies:

- Input additionality (e.g. increase the amount of expenditure)
- Output additionality (e.g. increase the quantity and quality of results)
- Behavioural additionality (e.g. change the way companies operate).

Grants offered by the government are often the most attractive forms of direct funding instruments, as by the definition grants do not require pay back and provide a well appreciated liquidity for companies. Governments, on the other hand, see grants often as the most generous of all instruments and the one, which may the easiest also distort competition. For this reason, government grants are often targeted to specific needs of the very smallest, youngest and the most fragile ones of companies. Hence, effective utilisation of government grants requires good understanding of market failure, well-targeted funding and competent assessment and selection process for grantees.

Box 3. Government Grants				
Description	&	Government grants are publicly funded business support		
objectives		instruments usually aiming at encouraging the birth of new		
		businesses or their very early phases. Grants can be either fully paid		
		by the government without further requirements regarding the		
		investment of the entrepreneurs themselves, or they can be match-		
		based support meaning that government will match any funds		
		raised from other investors with a previously agreed factor.		





by he
he
ng
ole
are
of
ies
ney
tax
he
nal
on
ally
ant
ırs.
to
ed
les
he
nd
out
ess
ng
ti ti ti ti a

\_

http://www.spring.gov.sg/Nurturing-Startups/Pages/ACE-startups-grant.aspx

<sup>19</sup> The purpose of Finnish startup grants is to encourage new businesses and promote employment. The grant provides an entrepreneur with a secure income during the time that getting the business up and running is estimated to take – however for no more than 18 months. http://www.te-

services.fi/te/en/employers/for\_entrepreneurs/services\_new\_entrepreneurs/startup\_grant/index.html
20 The ACE Startups Grant provides funding support to entrepreneurial Singaporeans who want to take their first step in starting up differentiated businesses. Applications will be shortlisted on a competitive basis based on the 4 key evaluation criteria of differentiation, business model feasibility, potential market opportunity and management team.
SPRING will match S\$7 to every S\$3 raised by the entrepreneur for up to S\$50,000, i.e. For you to receive a grant of \$50,000, you will need to raise \$21,429 for co-matching upon acceptance of the Letter of Offer.

http://www.guidemesingapore.com/doing-business/finances/singapore-government-schemes-for-startups







Tekes Startup and RDI Grants.21

## Debt and Risk Sharing Instruments

Debt and risk sharing instruments aim at bridging the "financial gap" by facilitating access to external finance for businesses that might otherwise have difficulties in getting sufficient financing. Such businesses include typically startups and other SMEs, and in particular those wishing to invest in innovation and internationalisation. Debt and risk sharing instruments include government-subsidised loans and credit guarantees.<sup>22</sup>

Government-subsidised loans (or soft loans) are typically loans that have a lower than market interest, or not interest at all, as the interest is paid by the government. Other forms of subsidised loans include, for example unsecured loans, in which the lending party (government) does not require full or any guarantees for the loan. In more extreme cases, the loan subsidy means that there is only limited or *no penalty for default*. For example in case of *R&D* loan by Finnish Tekes, if the R&D project fails, the company may be given more time to repay the loan, or in extreme cases the unpaid loan and interest may be partly or totally waived.<sup>23</sup> Subsidised loans are typically targeted to specific needs, such as working capital, certain economic priority sectors or for example for the purchase of a company's shares. Governments can also provide equity loans, which are targeted to co-fund the shareholders of companies.24

<sup>21</sup> http://www.tekes.fi/en/funding/

<sup>22</sup> http://www.oecd.org/globalrelations/45324327.pdf

<sup>23</sup> https://www.tekes.fi/globalassets/global/rahoitus/en\_\_tietoa\_avustuksesta\_ja\_lainasta.pdf

<sup>24</sup> See for example: https://www.finnvera.fi/eng/Products/Loans/Entrepreneur-Loan





Public policy can also support debt financing by providing direct lending provision through a government-owned banks.

Credit guarantee schemes are a mechanism of risk transfer and diversification. By government covering part of the default risk, a lender's risk is lowered – guarantees secure repayment of all or part of the loan in case of default. This is why credit guarantee schemes can facilitate access to finance for firms with a higher risk profile by limiting the loss that a bank faces if the firm defaults. They can help address lack of access to finance for young innovative firms that lack collateral and/or are unable to provide information on their creditworthiness to gain access to capital. Governments typically partially insure banks losses on the loans covered by the credit guarantee, but leave it to banks to decide which loans to give, taking, thereby, advantage of their credit assessment expertise.

Generally, there are four major types of guarantee funds:

- Public Guarantee Schemes are established by public policy. They
  usually involve state subsidies, especially initially. Typically, they are
  managed by a private or governmental organisation. Public guarantee
  schemes are highly credible within the banking sector, since the
  guarantee is paid out directly from the state budget.
- Corporate Guarantee Schemes are generally funded and operated by the private sector, e.g. banks and chambers of commerce. Corporate guarantee schemes have the advantage of being managed by experienced corporate leaders, and generally benefit from the direct involvement of the banking sector.





- International Guarantee Schemes are typically bilateral or multilateral government or NGO initiatives, e.g. the ILO, UNIDO or the European Investment Fund. Often, international schemes combine both a guarantee fund with technical assistance to firms.
- Mutual Guarantee Schemes are private and independent organisations formed and managed by borrowers with limited access to bank loans.
   Although they are largely funded from membership fees, etc., in many instances, they operate with some form of government support.

Credit guarantees are aimed at high-risk companies with high growth potential, but governments sometimes have little control on whether the "wrong type" of risky companies is being selected (i.e., low productivity firms close to bankruptcy rather than risky innovative firms). Studies also suggest that credit guarantee schemes have higher impact when used in combination with other financing instruments.

Box 4. Debt an	d Risk Sharing Instruments
Description & objectives	Debt and risk sharing instruments, such as government-subsidised loans and credit guarantee schemes, are business support measures that help SME's to access debt financing with less adequate collaterals or creditworthiness.
Organisation	Government subsidised loans are normally given out by ministries or their agencies, with specific task and a set of other support instruments. The organisation of the credit guarantee funds varies depending on the type of scheme in question. According to a World Bank study (2008), mutual guarantee funds tend to operate in high-income countries where as most middle and low-income countries have publicly operated funds.
Funding sources and business model	Subsidised loans require government funding for the loans, interests and defaults, as well as for their selection, processing and financial administration.  Credit guarantee schemes can be either publicly or privately funded.  Typically government subsidises the scheme in the beginning, but most





	schemes aim to become self-sustaining over time. Usually CGS's collect
	fees from the companies they guarantee to cover their operating costs
	and financial risk.
Resources	All debt and risk sharing instruments require professional financial
	planning, management and financial resources from the government
	side.
Prerequisites	The functioning of financing institutions, and often also their specific
for law &	financing instruments, are typically defined in laws and regulations. They
regulation	also require financial monitoring and regular effectiveness and impact
	evaluation.
Other	Credit guarantee schemes need careful design in order to minimise the
prerequisites	potential misalignments of incentives. Although a successful scheme
	needs to provide riskier SME's financing they would not otherwise be
	eligible for, it should not incentivise banks to be less careful when
	selecting the companies they choose to fund.
Role of	The government has an important role in terms of defining where
government	financial market failures are, as well as in designing, managing, funding
	and monitoring the functioning of the subsidised instruments.
International	Tekes R&D loans (Finland) <sup>25</sup>
best practices	Finnvera loans and bridge funding for entrepreneurs (Finland) <sup>26</sup>
	Slovenian Enterprise Fund <sup>27</sup>

### 3.5. Vouchers

Vouchers are government issued small-scale funding instruments that enable the recipient organisations (typically SMEs or entrepreneurs-to-be) to purchase some special, pre-defined business or research services with a certain amount of money that will be either fully paid or (in some cases partially) matched by the government. In the past years, different governments all over the world (e.g. in UK, Netherlands, Ireland, USA, Australia, Singapore, Hong Kong, Finland, etc.) have launched SME vouchers (also referred to as

<sup>25</sup> https://www.tekes.fi/globalassets/global/rahoitus/en\_\_tietoa\_avustuksesta\_ja\_lainasta.pdf

<sup>26</sup> https://www.finnvera.fi/eng/Products/Loans

<sup>27</sup> http://aecm.eu/sef-slovene-enterprise-fund/





innovation or growth vouchers). Vouchers are small-scale funging instruments with a value typically of € 5-10 000 (although also bigger vouchers do exist).<sup>28</sup>

The essential elements of vouchers as financing instruments are that they

- Small in value (i.e. no big selection processes or detailed planning)
- Light administration (e.g. no application, no reporting)
- Given directly to the beneficiary, who can choose how and where to use it

Vouchers are designed to lower the access for SMEs in purchasing certain kind of services, such as professional services for research, product design, etc. They aim aim to assist SMEs to explore new business opportunities, seek strategic advice or solve technical problems with a registered knowledge or service provider. In addition to governments, also a number of universities offer similar types of innovation vouchers for SME's. With university vouchers, firms can typically purchase consulting, research and development services only provided by universities and research institutions.

Evaluations have typically found vouchers being amongst the most costefficient and effective support instruments, which is why they have become popular in many countries. However, not all voucher schemes have been successful.<sup>29</sup> The benefits of vouchers include their easy administration also on the government side, and they have been particuylarly successfully applied

 $wales/files/documents/WG\%20Business\%20Funding\%20Programmes\%20March\%202013/WG16912\_Innovation\%20Vouchers.pdf$ 

<sup>28</sup> https://businesswales.gov.wales/sites/business-wales/files/documents/WG%20Business%20Funding%20Programmes%20March%2020

<sup>29</sup> For example in UK (2014) and in Finland (2008) voucher schemes were evaluated to be less successful, largely due to complexity and weak marketing of vouchers.





to step up collaboration between SMEs and universities and public research institutes.<sup>30</sup>

Box 5. Vouchers	
Description & objectives	Vouchers typically aim to encourage SMEs to use research, consultancy or other business services provided by the public or private sector organisations (depending on the purpose and preconditions of the vouchers) in order to support the growth and enhance the innovation capabilities of the SME's receiving the vouchers.
Organisation	1) Government typically advertise the availability of the vouchers to the SME's widely e.g. through press and the internet. Representative associations, trade bodies and chambers of commerce can be actively involved in the promotion of the instrument by asking them to inform their members about the existence of the policy tool.  2) SME's are typically requested to submit an application (preferably electronically) containing eligibility criteria and a description of the problem/business opportunity they would like to address with the voucher. From the implementation point of view, it is very important that the government sets simple and straightforward eligibility criteria that the firms should meet when applying for the vouchers.  3) Vouchers are awarded by the government agency delivering the programme. Specific selection criteria should be set out beforehand in case the number of applications is higher than that of vouchers available. A simple lottery can also be used to determine the winners of the voucher.
	4) Once the SME has been allocated an innovation voucher, it commissions a government acknowledged service provider through the voucher. Some governments (e.g. Ireland) have restricted the use of vouchers to public knowledge providers (such as universities or state research organisations) only, where as others support also the use of private sector organisations as the service provider.  5) There is generally a time limit (6-12 months) by which a voucher must be used. When the assignment is completed the service

 $<sup>30\</sup> http://www.cpb.nl/en/publication/do-innovation-vouchers-help-smes-cross-bridge-towards-science$ 





	provider receives the voucher by the firm and redeems it at the
	delivery agency.
	6) Reporting requirements by the SME and the service provider
	about the use and impact of the voucher can be set, but they should
	be kept minimal considering the small scale of the funding. <sup>31</sup>
Funding sources	Vouchers are awarded and funded by the government. Government
and business	can offer either vouchers, that provide 100% government funding
model	without further requirements regarding the companies' own
	investments, or vouchers that match the companies' own
	investments (e.g. 50% SME investment – 50% government funding).
	Especially vouchers offered by universities require typically matching
	funding from the company purchasing its services.
Resources	Lauching vouchers require not only funds to be allocated to the
nessun ees	vouchers, but also sufficient marketing efforts are needed in order
	for the vouchers to be acknowledged and actually utilised by the
	SME's.
Prerequisites for	National laws and regulations must allow public small-scale funding
law & regulation	of private companies in order for a country to be able to offer
iaw a regulation	vouchers to SME's.
Other	The government agency awarding the vouchers must have enough
prerequisites	resources to launch and market the vouchers properly as well as
prerequisites	handle the voucher application, allocation, redemption and
	reporting processes.
Role of	The role of government is essential, as basically all vouchers are
government	issued by public authorities (either by a government agency or a
government	university). Thus, government is responsible for organizing all the
	activities and processes related to the funding, awarding and
	redemption of the vouchers.
International best	·
practices	Wales Innovation Vouchers <sup>32</sup>
practices	Dutch Innovation Vouchers <sup>33</sup>
	Singapore Innovation and Capacity Vouchers <sup>34</sup>

\_

<sup>31</sup> http://www.oecd.org/innovation/policyplatform/48135973.pdf

 $<sup>32</sup> https://businesswales.gov.wales/sites/businesswales/files/documents/WG\%20 Business\%20 Funding\%20 Programmes\%20 March\%202013/WG16912\_Innovation\%20 Vouchers.pdf$ 

<sup>33</sup> The Dutch innovation vouchers are a good example of stimulating the interaction between small and medium-sized enterprises (SMEs) and public research institutes through a voucher programme. Dutch innovation vouchers are valued at  $\in$  7 500. http://www.cpb.nl/en/publication/do-innovation-vouchers-help-smes-cross-bridge-towards-science

<sup>34</sup> Singapore Innovation & Capability Voucher (ICV) is a simple to apply, easy-to-use voucher valued at \$5,000, to encourage SMEs to develop their business capabilities. http://www.spring.gov.sg/Growing-Business/Voucher/Pages/innovation-capability-voucher.aspx







Hong Kong SME Vouchers<sup>35</sup>

### Seed and Venture Funding

Venture capital (VC) funding is a form of private equity financing that is typically provided to SMEs and particularly to startups with high growth potential or which have already demonstrated a high growth. Venture funding includes a high risk, and because of this the investors usually get a high equity share and/or a lot of power to influence the decisions of the company. Venture capitalists typically offer companies not only investment money but also strategic advice.<sup>36</sup>

Venture capital investments are often divided into different types or categories according to the stage of investee company's life-cycle or purpose of funding, such as: Seed, Startup, Second, Thrid and Bridge or Pre-IPO Stages. Seed funding is a special case of venture funding related to the very initial stage of the company. It is meant to provide the company with sufficient equity until it can generate cash flow on its own, or until it is ready for other investments (such as other types venture funding).

Because of the early stage of investment, seed funding involves even a higher risk than normal venture funding and the investments are typically lower than in other venture funding cases (usually € 10 000 – 100 000). For this reason

<sup>35</sup> Hong Kong SME Vouchers are aimed to benefit 2,500 companies. The HK Government will offer up to \$200,000 to help an SME adopt tech solutions and services. The three-year pilot programme will offer \$2 for every dollar spent by an SME on such services.

<sup>36</sup> http://www.investopedia.com/terms/v/venturecapital.asp





most private venture capital companies do not offer seed funding, but prefer later stages. Hence, it is therefore often seen as the role of government to provide or incentivice the provision of seed funding for startups. Seed funding can also be raised from angel investors, friends or family, or through crowdfunding platforms.

Business angels and *angel Investments* provide in interesting and growingly important source of venture funding for startups in most countries. Business Angels are affluent individuals, who provide capital for companies usually in exchange for equity. Business angels often have an entrepreneurial or executive background, and can provide valuable management advise and important contacts and act as mentors and advisors as well as investors for the companies they invest in. The role of angel investors has become even more significant for startups in the recent years, since the global financial crisis has further tightened the conditions of getting traditional bank loans, and startups have been forced to seek alternative funding sources.

Although venture capital funding is mainly carried out by private investors, also governments are launching VC programmes to fill "funding gaps" that prevent small businesses from getting the capital they need to grow.<sup>37</sup> Government venture capital schemes are usually justified by their intention to capture public benefits in terms of increased innovation, growth and job creation.<sup>38</sup>

<sup>37</sup> http://www.oecd.org/sti/inno/2093654.pdf 38 http://www.nber.org/papers/w16521.pdf





Government support for venture capital takes different forms. One is direct provision of venture capital through government-owned venture capital funds. Another is investment in independently managed venture capital funds that also rely on private investors. This is very typical in most countries and regions. A third and an increasingly common way is to provide subsidies or tax exemptions to venture capitalists or VC investments.<sup>39</sup>

Box 6. Seed and Venture Funding		
Description & objectives	Seed and venture funds are financing instruments that offer venture capital usually along with advisory services for the most promising startups in exchange for equity in the company.  Venture funds are typically trying to find and support early-stage businesses that have the potential for high growth and international success.	
Organisation	Seed and accelerator funds are typically organisations owned by investor groups, and some seed and venture funds also work side-by-side with an accelerator programme (e.g. Techstar Ventures).  Governments can get directly involved in venture funding either by founding their own venture funds or by participating in an existing fund as investors. Organising indirect governmental participation (subsidies, tax submissions) on the other hand requires legislative and regulative measures.	
Funding sources and business model	Seed and accelerator funds are usually for-profit organisations funded by private investors or investor organisations, but also governments can get involved in funding.  Seed and venture funding is considered a high-risk/high-reward type of business, mainly because the companies receiving funding are typically in the early stage of their lifecycle. The business model of a seed or venture fund is based on getting an equity share of the funded companies in return for the investment and advisory services provided for them.	

 $39\ http://www3.weforum.org/docs/WEF\_IV\_PrivateEquity\_Report\_2010.pdf$ 





	Venture capital funds typically have a wide portfolio of investments. This means that the fund makes small bets on a large set of startups believing that at least one of them will reach their growth potential and become successful rewarding the fund with a relatively large payout at the end. This diversification of investments allows the fund to mitigate the risk that not all investments will be successful.
Resources	The most important resource for a seed / accelerator fund is (private) venture capital.
Prerequisites for law & regulation	Seed and venture funding does not differ greatly from other private investment activity from the legislative point of view. However, direct involvement of government in venture funds requires the law to allow governmental investments in private companies. Indirect venture fund support policies, such as tax submissions or other subsidies, on the other hand need to be taken into consideration when enacting laws regarding taxation, governmental subsidies and businesses in general.
Other prerequisites	In order to attract venture capital, the startup ecosystem in the region must be vibrant and active. Promising startups and active startup ecosystems attract private investors and venture capital, not the other way round.
Role of government	Role of government depends on the type of venture funding support that the government is providing. in government-owned venture capital funds the role of government is to finance and orchestrate the venture funding process. In independently managed VC funds the role of government is merely the same as of any investor. The third possible way of supporting venture funding — providing subsidies or tax consessions to venture capitalists — requires actions regarding law and regulation in order for this type of support to be possible.
International best practices	Techstars Ventures <sup>40</sup> Singapore <sup>41</sup> New York <sup>42</sup>

<sup>40</sup> http://www.techstars.com/venture-capital-fund/

 $<sup>41\</sup> http://www.guidemesingapore.com/doing-business/finances/singapore-government-schemes-for-startups$ 

<sup>42</sup> http://esd.ny.gov/innovateny.html

http://esd.ny.gov/Business Programs/NYSInnovation Venture Capital Fund.html

http://www.nycseed.com





#### 3.7. Alternative Sources of Finance

Commercial bank lending is a traditional and the most common source of external finance for SMEs, but it has its limitations particularly for young, innovative and fast growing companies that often have higher risk-return profiles and a lack of tangible guarantees. Other sources, such as Venture Capital or public offerings are often very selective and provide financing solutions to only a very limited number of companies.

After the 2008 global financial crisis, general financing opportunities for SMEs and startups all over the world have narrowed significantly. Less money has been available from the traditional sources and if it was, the conditions and requirements for collaterals were not attractive or not possible for most small companies. Listings in stock exchange have become rare even for successful growth companies, which has closed one important business avenue from venture capital funds. As a consequence, new forms of financing have been sought and developed, or existing ones re-invented, to fill in the gaps and failures in the financial market.<sup>43</sup> These forms include, among others, the following:

Invoice factoring, where businesses sell their sales invoices to a third
party in exchange for a pre-agreed lump sum, in order to finance their
investments, growth plans or to improve cash flow. Businesses may
also benefit by not being responsible for processing invoices. Similar
to invoice factoring, in invoice discounting another organisation gives
the business a lump sum based on the value of its unpaid invoices,
but the business retains full responsibility for chasing debt and

<sup>43</sup> http://dx.doi.org/10.1787/9789264240957-5-en





processing invoice payments. In *spot factoring* the company raises finance against a single invoice, or bundle of invoices, on a one-off-basis in order to raise cash.

- Smart leases. Leasing fixed assets conserves cash for working capital (to cover inventory), which is generally tougher to finance, especially for an unproven business.
- Credit unions are financial co-operatives that rely more on a borrower's business model or track record and less on credit worthiness. Credit unions typically grant smaller loans than traditional banks, but they're less stringent with their conditions.
- A number of banks have established dedicated funds to provide community business loans to finance to social entrepreneurs and community-based businesses.
- In USA, according to the government ERISA law, people can *invest* their retirement funds to the purchase of a business without taking
   an early distribution and incurring penalties. It is also possible to
   combine money from the retirement fund with loans and other
   funding methods for greater flexibility.<sup>44</sup>
- *Crowdfunding* is becoming a very popular form of fundin and can take several forms. *Donation (or reward) crowdfunding* is when people invest for purely benevolent reasons. Sometimes rewards are offered to donors, such as tickets to an event. In *debt crowdfunding (or peer-to-peer lending networks)* lenders expect to receive their money back with interest, but sometimes they can bring their own expertise or market knowledge to support the business.<sup>45</sup> *Equity crowdfunding* is when individuals invest in a business in exchange for shares or equity in the company. Taking this approach, the investor is sharing in the success or failure of the venture.

<sup>44</sup> https://www.dol.gov/general/topic/health-plans/erisa

<sup>45</sup> For a platform, see for example VirginMoney.com which allows to manage the process of borrowing and to ensure all parties involved are comfortable with the deal and confident that all loans will be paid back on time.





- *Community share* issue is a way for communities to come together to use a crowdfunding platform to raise finance for something that will benefit them.
- Also angel investors (see section 3.6) can be seen as alternative sources of finance especially in case of high risk-reward profile businesses. Angel investors typically make an investment in return for an equity share in the (startup) company.

Box 7. Alterr	native Sources of Finance
Description	Traditional sources of funding are not always accessible for startups and
& objectives	young SME's with high risk-reward profile and high growth potential.
	Therefore, alternative sources of finance have started to play a more
	signicant role for SMEs. They typically include arrangements, such as
	crowdfunding, factoring, credit unions, etc. in which other than
	professional financiers are involved.
Organisation	The organisation of the alternative sources of finance varies greatly
	depending on the actual alternative finance instruments on offer.
	Crowdfunding is typically organised via online portals, while smart leases
	and invoice factoring etc. occur via private companies, where as credit
	unions are locally formed by their members and community business loans
	are organised through banks.
Funding	As is the case with organisation, there are basically as many different
sources and	funding sources and business models as there are alternative sources of
business	finance. Typically the alternative sources of finance are private equity
model	funded, which means that either individuals or private companies make
	the investments in the companies. The return of investment can occur via
	paid interest rate or in equity shares of the company, but some sources
	of finance (e.g. cause-oriented crowdfunding) can even be donation-
	based, where investors don't expect a return for their investment.
Resources	A common denominator for most alternative sources of funding is the
	availability of private or social interest and wealth (i.e beyond commercial
	and government interests).





Prerequisites	Law and regulations regarding private investment should be flexible	
for law &	enough to allow new and alternative sources of funding and forms of	
regulation	investment. Also laws regarding taxation of these alternative investments	
	should be revisited in order to make sure that all investment forms are	
	taken into consideration and that law does not create excessive barriers	
	to alterative sources of finance. (See for example Section 4.3: Finnish	
	Crowdfunding law 2016)	
Other	The development of alternative funding normally requires an active social	
prerequisites	and entrepreneurial culture, in which it is seen positive to invest in young	
	companies or their new products.	
Role of	Government does not necessarily play a significant role in alternative	
government	sources of funding, except for the extent that it must ensure that these	
	sources are permissible from the legitimate point of view. Governments	
	can also activate and facilitate these funding mechanisms, for example by	
	organising actor networs, platforms and events. In some arrangements,	
	government may be a co-investor.	
International	US Navy Credit Union <sup>46</sup>	
best	Paragon Invoice Factoring <sup>47</sup>	
practices	Experiment Crowdfunding <sup>48</sup>	
	Fundanything Crowdfunding <sup>49</sup>	
	Kickstarter Crowdfunding <sup>50</sup>	
	Rockethub Crowdfunding <sup>51</sup>	

### 3.8. Public Procurement

Public procurement refers to the purchase of goods and services or commissions of work made by governments, state-owned enterprises and other public authorities. The public procurement process is the sequence of activities starting with the assessment of needs through awards to contract management and final payment.<sup>52</sup>

<sup>46</sup> https://www.navyfederal.org/

<sup>47</sup> https://www.paragonfinancial.net/how-it-works/invoice-factoring

<sup>48</sup> https://experiment.com/

<sup>49</sup> https://fundanything.com/en

<sup>50</sup> https://www.kickstarter.com/

<sup>51</sup> https://www.rockethub.com/

<sup>52</sup> http://www.oecd.org/gov/ethics/public-procurement.htm





Public procurement as such takes place in all countries, since all governments need different goods and services in order to be able to function. However, if used purposefully, public procurement and related policies can be used as an instrument to support research and development and innovation of new products and services.

Special cases of public procurement are public procurement of innovation (PPI) and pre-commercial procurement (PCP). PPI occurs when public authorities act as launch customers for an innovative service or product that is not yet widely commercially available. PCP is a part of PPI and refers scecifically to the procurement of R&D services rather than actual goods or services.<sup>53</sup>

Public procurement has been increasingly used as an innovation policy tool especially in the Europe, where the European Union (EU) has put in place a series of policies and initiatives to support the public demand of innovation and make innovation a cornerstone of European public procurement across its member countries.<sup>54</sup>

KOV	XL		-170		ement
DUA	U. I	UDIIL		<b>JULIU</b>	

### Description & objectives

Public procurement is a governmental procedure for public puchases. Public procurement and related policies can be used as an instrument to support research & development and innovation of new products and services (especially through PPI and PCP).

54 http://www.innovation-procurement.org/about-ppi/.

<sup>53</sup> http://www.innovation-procurement.org/about-ppi/





Organisation	Public procurement and especially PPI can be organised and promoted in various ways. Adequate laws and regulations can promote public procurement of innovation, but government can also support the deployment of innovative solutions by introducing public funding
	programmes targeted on both PPI and PCP. The barriers of bringing new innovative products or services onto the market can be lowered with the help of policy instruments dealing with regulation, public procurement, standardisation and supporting activities. <sup>55</sup>
Funding	Public procurement (as well as PPI and PCP) is by definition funded by
sources and	the public sector.
business	
model	
Resources	PPI and PCP do not require any special resources compared to other public procurements.
Prerequisites	Legislation and regulation around public procurement should be flexible
for law &	and simple enough to allow public authorities and institutions to procure
regulation	also more innovative services and goods than before. PPI and PCP should also be enabled through adequate legislation.
Other prerequisites	Competitive tendering and especially the evaluation of alternative solutions should take innovative solutions better into account. This can be done e.g. by considering the full life-cycle costs of products instead of only the purchase price, using non-financial award criteria (such as energy efficiency, CO2 emissions, etc.) intelligently or by making tenders SME-friendly by splitting big tenders into smaller sub-parts and/or allowing consortia building in order to encourage smaller businesses to bid. <sup>56</sup>
Role of government	All in all, government plays a vital role in encouraging and supporting the use of innovative products and services through public procurement laws, regulations and policies. Through PPI and PCP, government can act as the early adopter of new innovative solutions and act as an important first reference in order to enable the market penetration of new products and services. The adequate use of public procurement is an opportunity for the public buyers to influence the market towards innovative solutions.

.

<sup>55</sup> http://www.innovation-procurement.org/about-ppi/policy-support/ 56 http://www.innovation-procurement.org/about-ppi/implementing-ppi/





### International best practices

The European Union (EU) has put in place a series of policies and initiatives to support the public demand of innovation and make innovation a cornerstone of European public procurement across its member countries.<sup>57</sup>

In 2014, EU adopted new public procurement directives, and it required all of its member states to transpose these directives into national laws by 2016 to support the uptake of PPI across all EU countries.<sup>59</sup> EU Lead Market Initiative (LMI)<sup>60</sup>

<sup>57</sup> http://www.innovation-procurement.org/about-ppi/.

<sup>58</sup> http://www.innovation-procurement.org/award/

<sup>59</sup> http://www.innovation-procurement.org/about-ppi/legal-framework/

<sup>60</sup> http://ec.europa.eu/DocsRoom/documents/15522/attachments/1/translations/en/renditions/native,





### 3.9. Tax Incentives

Over the recent years, tax incentives have become increasingly popular support measures for SMEs. There are a few reasons that may explain the trend. Firstly, tax incentives do not require direct government expenditure. Second, they are often light in terms of public administration, as they normally do not require specific management staff at the government side (not at least comparable to other support measures). Thirdly, if offered to all SMEs, they can be very equal and transparent. But the main reason behind their popularity is most likely the international tax competition over attracting (large) companies and their investments. Most countries do not wish their neighbours to have a clear advantage over them in terms of providing a more lucrative environment for companies to operate.

Given the important contribution of research and development (R&D) to productivity growth, economic performance and the achievement of social objectives, it is generally agreed that governments have a role in encouraging appropriate R&D levels and expenditures. With regard to business R&D, national factors largely determine whether countries prefer tax incentives, subsidies, patent rights or other instruments to increase research investments. The choice of R&D tax incentives will depend on country-level variables, such as overall innovation performance, perceived market failures, industrial structure, size of firms and the nature of corporate tax systems.<sup>61</sup>

According to OECD, the number of countries providing indirect support for business spending on R&D through tax incentives is rising. As of 2011, 27 of

.

<sup>61</sup> OECD, 2002





the OECD's 34 members provided tax incentives to support business R&D – more than double the number in 1995. Many non-OECD countries, such as Brazil, China, India, Singapore and South Africa, also offer a generous tax environment for investment in R&D. By 2011, over a third of all public support for business R&D in OECD countries came through tax incentives.

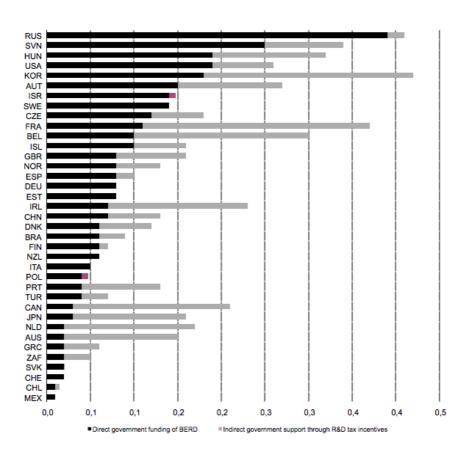


Figure 1. Direct and indirect (i.e. tax incentives) government funding of business R&D as percentage of GDP, 2013. OECD

R&D tax incentives have proven popular largely because exemptions from international agreements (e.g. in the WTO, EU) make R&D subsidies one of the few ways that governments can help domestic firms improve competitiveness without direct state aid. Governments also support R&D to





achieve specific R&D/GDP intensity targets, to stimulate productivity growth and offset the decline in R&D associated with the economic crisis, as well as to encourage firms that perform R&D to locate domestically with a view to encouraging knowledge spill overs.

These potential benefits have led many governments to increase the generosity of R&D tax incentives in recent years. Over the period 2006-2011, about half of the 23 countries for which complete data are available increased their generosity; with R&D tax support rising by almost 25% in some countries. This may underestimate the increasing generosity of R&D tax incentives.

The details of tax incentives are highly dependent on their national tax systems and often evolving, but typical incentives may include the following types:<sup>62</sup>

- Tax holidays are temporary exemptions of a new firm or investment from certain specified taxes, such as corporate income tax. Sometimes administrative requirements are also waived, notably the need to file tax returns.
- Special zones are geographical locations (such as dedicated technonolgy parks) where qualified firms can locate and benefit from exemption of varying scope of taxes or administrative requirements.
   These zones are often aimed at foreign companies and exporters.
- *Investment tax credit*s are deductions for certain types of investment from their tax liability.
- *Investment allowances are d*eductions for certain types of investments taxable profits (in addition to depreciation).

<sup>62</sup> Klemm, 2009





- Accelerated depreciation is a depreciation of the value at a faster schedule than available for the rest of the companies. This can be implemented in different ways, including a higher first year depreciation allowances, or increased depreciation rates.
- Reduced tax rates typically of the corporate income tax rate or VAT<sup>63</sup>.
- Exemptions from various taxes, such as tariffs or VAT of imported inputs.
- *Financing incentives* can be generated with reductions in tax rates applying to providers of funds, e.g., reduced withholding taxes on dividends.

Many studies have been carried out assessing the functioning, performance and overall impact of tax incentives and their results vary. In general, introduction of tax incentives generally produces immediate results, while the question is whether these results are produced more efficiently than with other measures, and if they are the kind of results anticipated (e.g. sustainable, benefitting SMEs etc).

The literature has explored the specific effect of R&D tax incentives and found that they had a significant effect. Bloom and others (2002) find that \$1 tax expenditure leads to \$1 increase in R&D in the long run, with a much smaller short-run impact. Econometric evidence also suggests that tax incentives may have boosted FDI, but with no effect on total investment.

There is however few studies specifically addressing tax incentives for general investment, particularly in developing countries.

<sup>63</sup> VAT = Value Added Tax





Box 9. Tax incentives			
Description &	Tax incentives are one of the few ways that governments can help		
objectives	domestic firms improve competitiveness without direct state aid. Thus,		
	tax incentives are often referred to as indirect business support		
	measure. It provides the governments a way to encourage companies		
2 : "	especially to invest in research and development.		
Organisation	Tax incentive types and their use vary greatly across countries from tax		
	holidays to reduced tax rates and exemptions from certain taxes.		
	However, the common denominator for the organisation of tax		
	incentives is that the exact conditions for the incentives offered for the		
F . P	companies are determined by the legislation.		
Funding	Tax incentives don't require direct funding, but government must take		
sources and	their consequences into account when forming the state budget. The		
business model	indirect effect on the budget is the lost tax revenue that results from		
modei	the tax reliefs of different kind.		
	From the business model perspective, tax incentives are expected to		
	raise the amount of investments to research and development activities		
	and to facilitate the growth of small startups/companies into profitable		
	businesses. This in turn has been seen as a prerequisite for growing the		
	productivity and economic performance (GDP), achieving social		
	objectives and increasing the competitiveness of the country.		
Resources	Tax incentives don't require special resources after the preparation of		
	the related legislation has been completed. However, even though		
	direct support is not given out, the indirect monetary (i.e. tax revenue)		
	losses must be taken into account in the state economy.		
Prerequisites	Tax incentives need to be carefully designed for each national tax		
for law &	system. Some general concepts can be adapted from other countries,		
regulation	but each national tax system and legislation is a unique one, and often		
	a complicated one, too. There may also be a number of international		
	tax agreements, trade agreements or federal regulations which may		
	limit the use of such incentives, or at least need to be taken into		
	account.		
Other	The consequences of tax revenue losses to the state economy must be		
prerequisites	taken into account when determining the extent and types of the		
	incentives. The full cost of tax incentives is difficult to assess, as tax		
	incentives are not accounted for as a direct expenditure in the budget.		





	When assessing the design of such measures, it is important that an objective assessment of all costs and benefits be taken into account.  Tax incentives are often targeted to attracting foreign companies too, and therefore the planning needs to take into account what kind of incentives are available elsewhere.
Role of government	The government plays a key role regarding this, as it determines the extent and types of tax incentives as a whole. Regional governments and municipalities, if they have right to tax, may equally play a role.
International best practices	Thailand <sup>64</sup> Malaysia <sup>65</sup> The Netherlands South Africa Singapore

.

<sup>64</sup> http://www.pkfthailand.asia/news/news/2-year-tax-breaks-for-smes-in-thailand-what-you-need-to-know/65 http://www.intuit.com.my/r/finance/3-must-know-tax-benefits-for-smes-in-malaysia/





### 4. INTERNATIONAL BENCHMARKS

The following chapter shortly describes business support policies, structures and instruments of three very different countries; namely Singapore, The Netherlands and Finland. Each of these countries has been referred as international benchmark for business environment, while each of them employ very different approaches to business support. Singapore is a very dynamic and advanced Asian tiger, often leading international competitiveness rankings and offering an attractive gateway to Asia. The Netherlands is perhaps the European counterpart for Singapore. It also smartly and effectively utilises its strategic location as a gateway. Besides effective tax incentives (like Singapore), the Netherlands is also actively employing national cluster strategies. Finland, on the other hand, has taken a different approach to business promotion. Its strengths are in a very comprehensive and well-coordinated business service offering, but does not emply much tax incentives. All three countries are also determined to invest in education, high quality infrastructure and attractive business environment.

### 4.1. Singapore

## 4.1.1 General conditions for business and entrepreneurship

Singapore has a population of 5,5 million and a land area of only 718 km<sup>2</sup>. Because of its small population, the internal market for growth companies is very small, and the country has adopted a strategy to become a hub in the global trade and a gateway to South-East Asian and Pacific markets. Singapore is determined to invest in good operating conditions of business to attract





foreign companies and investors, for which the country is now a well-known benchmark.<sup>66</sup>

In fact, in the World Bank's 2016 *Ease of Doing Business* -ranking Singapore is the leading country globally in dealing with construction permits, protecting minority Investors and enforcing contracts. It is also among global top-10 in Starting a Business, Getting Electricity and Paying Taxes and among top-20 in Registering Property and Getting Credit. Singapores relative disadvantages are Trading across borders (rank 41) and Resolving Insolvency (rank 27).<sup>67</sup>

Research and Development (R&D) is considered an important component of Singapore's policy of productivity-driven economic growth. In the last two years, the government has brought local SMEs into R&D with cash incentives to help them develop innovation. Combined public and private R&D expenditure has put Singapore among the most R&D-intensive countries. Nevertheless, it lags behind in private R&D spending. Government policy aims to make up the gap by increasing expenditure to levels similar to 3,5% of gross expenditure.<sup>68</sup>

Singapore is particularly strong in providing financing for startups and growth businesses. Investment in Singapore-based startups represents around 19% of VC funding in Asia, putting Singapore ahead of Japan, South Korea and Hong Kong. The island also led the way in VC deals done in Southeast Asia, comprising 40% of all deals made in this market of more than 600 million

68 OECD 2013

<sup>66</sup> http://techsg.io/upload/files/research/1453173164742.pdf 67 http://www.doingbusiness.org/rankings





consumers. Recently a Singapore-based VC investor and accelerator Venturecraft launched a new S\$50 million (US\$37 million) investment fund aimed at early and growth stage medical technology (medtech) and internet start-ups in Asia.<sup>69</sup>

While Singapore's economic development in the early days often bore the strategic imprint of the government, this next stage will see private entrepreneurship come to the fore, with the solutions and economic growth of tomorrow coming through the diversity of entrepreneurship. It is innovation that will provide solutions to issues in healthcare, urban planning and mobility, security, living environments and citizen- centric services. Startups will be able to flourish in this environment of experimentation and test-bedding.<sup>70</sup> The government initiatives have also been highly appreciated by the actors in the startup ecosystem.<sup>71</sup>

### 4.1.2 Key policies for business support

Singapore has traditionally relied *on multinational corporations (MNCs)* and *large government-linked companies (GLCs)* as the main drivers for economic growth. Most economic policy measures in the past were geared towards facilitating the operations of the MNCs and the GLCs, especially those of the former. In contrast, much less attention was given to promoting the growth of SMEs. As a result, SMEs in Singapore have not been able to play as significant a role in innovation and productivity growth as their counterparts in other countries.

69 Asian Venture Capital Journal: http://www.avcj.com/avcj/news/3001731/singapores-venturecraft-

launches-usd37m-tech-fund 70 http://www.infocomminvestments.com/docs/SG%20Startup%20Ecosystem%202015%20(IIPL).pdf 71 http://techsg.io/upload/files/research/1453173164742.pdf





However, the focus has since then changed from large companies to SMEs in Singapore as well. SME contribution to total enterprise value was 58% in 2010 according to OECD (2013). SME employment as a share of total employment was 67% in 2010. *In 2010 the Economic Strategies Committee (ESC)* recommended that skills, innovation and productivity should be the basis for Singapores sustainable development as apart of globalised economy.<sup>72</sup>

The focus is on commercialisation of research and startups, especially in the field of technology. Singapore startups have reached success in e.g. health technology, e-commerce and office productivity.<sup>73</sup>

Singapore uses actively both indirect and direct business support measures. There is a wide variety of tax exemptions, especially for R&D, as well as business support programmes and schemes that are coupled with grants for businesses in different phases of development.

The general corporate tax rate in Singapore is 17%, but there are tax deductions and exemptions for businessess with under S\$ 300,000 of revenues as well as for businesses for the first 5 years of operation. For R&D activities companies in Singapore can get:<sup>74</sup>

• A base deduction up to 100% of R&D expenses, including wages and salaries, materials and utilities incurred directly for R&D activities.

03%20Startup%20Ecosystem%20in%20Singapore.pdf

<sup>72</sup> http://www.mof.gov.sg/Resources/Economic-Strategies-Committee-ESC-Recommendations

<sup>73</sup> http://www.rvo.nl/sites/default/files/2015/03/2015-

<sup>74</sup> Deloitte 2015: 2015 Global Survey of R&D Incentives. October 2015.





- An additional deduction up to 50% of qualifying expenditure incurred by R&D conducted in Singapore (staff costs and consumables).
- Enhanced deduction of 250 / 300% of qualifying R&D expenditure on R&D carried out in Singapore or abroad under the Productivity and Innovation scheme (PIC) between years 2011-18.
- An additional super deduction for R&D projects carried out in Singapore and approved by the Singapore Economic Development board.

In addition to enhancing Innovation and R&D activities in companies through tax incentives, Singapore has laid focus on catalysing corporate financing and supporting internationalisation of businesses. This is done through programmes and grants as well as tax deductions.

# 4.1.3 Organisation and instruments for business support

There are two major actors active in direct support for businesses in Singapore, namely the *National Research Foundation (NRF)* and *SPRING*. NRF is a department within the Singapore Prime Minister's Office. It sets the national direction for research and development by developing policies, plans and strategies for research, innovation and enterprise. It also funds strategic initiatives and builds up R&D capabilities by nurturing research talent.

National Framework for Innovation and Enterprise (NFIE) is a national programme to boost innovation and growth in Singapore administered by NRF. The programme was found in 2008 after Singapore's National Research





Foundation undertook a study that identified weaknesses and gaps in the entrepreneurial ecosystem. The programme has two goals:

- i) It seeks to commercialise cutting-edge technologies developed out of R&D labs through the formation of startup companies.
- ii) It aims to encourage universities and polytechnics to pursue academic entrepreneurship and turn their R&D results into commercial products for the market. It also helps entrepreneurs to set up technology-based companies.<sup>75</sup>

NFIE has the following four instruments

Table 2. NFIE instruments

Instrument	Focus
Early Stage Venture Fund (ESVF)	The NRF invests S\$ 10 million on a 1:1 matching basis, to seed several venture capital (VC) funds that invest in Singapore-based early stage high-tech companies.
Proof-Of-Concept Grants (POC)	This grant of up to S\$ 250,000 is for technology proof-of-concept projects. NRF administers the scheme for university and polytechnic researchers while SPRING Singapore (the government agency responsible for small businesses) runs a parallel scheme for companies.
Technology Incubation Scheme (TIS)	TIS can co-invests up to 85% (max. S\$ 500,000) in Singapore-based startup companies that work with technology incubators.
Innovation Cluster Programme	Programme aims for technology organisations and economic agencies to work with industry and form innovation clusters. It seeks to strengthen partnerships across companies, universities, research institutes and government to bring ideas quickly to market, raise productivity, create jobs and grow the sector.

<sup>75</sup> For more information: http://www.nrf.gov.sg/innovation-enterprise/national-framework-for-research-innovation-and-enterprise#sthash.38AZcWGp.dpuf





SRING is a government agency under Singapore Ministry of Trade and Industry. SPRING defines its mission as *helping enterprises in Singapore grow* and build trust in Singapore products and services. In 2014 SPRING's support to SME's focused on four areas: Building capabilities and improving productivity, finding growth opportunities, enhancing accessibility and increasing outreach and nurturing innovative startups. SPRING has committed more than 5 000 SME loans with a total value exceeding S\$ 1,3 billion. These projects have helped to upgrade than 11 000 companies, added value of more than S\$ 8 billion, and created 22 000 new jobs.

SPRING has four different programmes aimed for building business capabilities.

Table 3. SPRING instruments<sup>76</sup>

Instrument	Focus
Capability Development Grant (CDG)	The grant covers up to 70% of qualifying project costs e.g. consultancy, training, certification and equipment costs. Possible areas are e.g. increasing productivity, process improvement, product development and market access.
The Productivity and Innovation Credit (PIC)	Tax deductions for investments in innovation and productivity improvements. The activities covered under PIC include:  R&D, Registration of intellectual property rights (IPRs), Acquisition and in-licensing of IPRs, Acquisition or leasing of prescribed automation equipment, Training of employees, Approved design projects
Government-backed SME loans	Government backed financing for SME's for working capital, investment or trade financing needs.
Innovation & Capability Voucher	The S\$5,000 voucher can be used to upgrade and strengthen core business operations through consultancy in the areas of innovation, productivity, human resources

76 http://www.spring.gov.sg/Growing-Business/Pages/growing-business-overview.aspx





and financial management. ICV also supports SMEs in the adoption and implementation of pre-scoped Integrated Solutions to improve business efficiency and productivity. SME is entitled to a max. 8 vouchers.

For startups and investors SPRING offers the following five instruments.

Table 4. SPRING instruments for startups and investors<sup>77</sup>

Instrument	Focus
Business Angel Scheme (BAS)	Startups that obtain investment from business angel investors can apply for matching investment from SPRING SEEDS Capital. SPRING may match the investment dollar-for-dollar for up to S\$2 million. Both SPRING SEEDS Capital and the business angel investors will take equity stakes in the company in proportion to their investments.
Sector Specific Accelerator (SSA) Programme	As part of the Research, Innovation and Enterprise (RIE) 2015 plan, the Singapore government established Sector Specific Accelerators (SSA) to identify, invest and grow startups in strategic but nascent sectors, such as medical and clean technology.  A total of \$70 million has been committed under the Sector Specific Accelerator (SSA) Programme to boost the formation and growth of startups in medical technology.
Technology Enterprise Commercialisation Scheme (TECS)	TECS provides early-stage funding to early stage Proof-Of-Concept and Proof-Of-Value projects for new and innovative products and technologies.
Startup Enterprise	Co-financing for innovative businesses that have been
Development Scheme	registered for less than 5 years and have a high business and growth potential. Financing is equity based and core functions should be carried out in Singapore.
Angel Investor Tax	Angel investors who can commit a minimum of \$100,000
<b>Deduction Scheme (AITD)</b>	in a qualifying startup. Approved angel investors have a tax

<sup>77</sup> http://www.spring.gov.sg/Nurturing-Startups/Pages/nurturing-startups-overview.aspx)





deduction of 50% of investment at the end of a two-year holding period. Maximum tax deduction is \$250,000.

### 4.1.4 Key takeaways

Singapore is a relatively small country, which has in a relatively short time developed into an extremely dynamic business environment that is able to attract foreign investments and multinational corporations. Lately it has been able to turn its business support policies from favouring mainly large corporations to actively support SMEs and startups. This is a result of smart policies, which include determined investments into high level infrastructures, systematic skills development and attractive business support measures. Singapore actively utilises both indirect business support (tax incentives) and a variety of direct measures.

### 4.2. The Netherlands

### 4.2.1 General conditions for business and entrepreneurship

The Netherlands is a small but a relatively densely populated country with its almost 17 million inhabitants and 42 500 km² land area. The country is located in the central Europe on the shore of the Atlantic Ocean providing the Dutch companies excellent possibilities for international business and trade. It is sixth largest economy in the EU and economically doing well: in 2014, the Dutch GDP per capita was € 39 300, where as the EU28 average was € 27 300. There were around 870 000 enterprises in the Netherlands, of which 99,8% were





SMEs and 94% micro enterprises (i.e. employing less than 10 persons full time).<sup>78</sup>

Like many other developed countries, the Netherlands is focusing heavily on creating the best possible conditions for entrepreneurship by offering various business support measures and activities. The country has set itself goals to become one of the top 5 countries in the world regarding competitiveness as well as to raise the portion of R&D funding to 2,5% of GDP by 2020. Indeed, the Netherlands is often ranked among the world leaders when it comes to favourable business environment. The country is an attractive location for companies seeking a European base and for those wishing to invest. Its strengths include an open and international outlook, good logistical location, well-educated workforce and a top-level infrastructure, among others.



Figure 2. The Netherlands as one of the most advanced ICT economies (Network Readiness Index), WEF 2015.

<sup>78</sup> European Commission, 2014





#### 4.2.2 Key policies for business support

The Netherlands is an active user of indirect business support, namely *tax incentives* for companies. Corporate income tax rate is well below the EU national average.<sup>79</sup> Companies can benefit from an effective tax rate of only 5% for R&D income from patents and other intangible assets (WBSO). The country also has a wide tax treaty network which states that all benefits related to a qualifying shareholding are exempt from Dutch corporate income tax. There is a 30% tax-break for highly qualified foreign employees.

The other thing the Dutch business support is well known, is for its comprehensive national cluster policy called *Top Sector Alliance for Knowledge and Innovation (TKI)*. The TKI – policy means in practice that the government, private sector, universities and research centres are working together to make top sectors even stronger. There are currently nine sectors<sup>80</sup> selected, based on their standing in markets, competence-base, collaboration with research and societal relevance, among others.

The Dutch government has introduced an *Ambitious Entrepreneurship Action Plan* in order to provide entrepreneurs with various business support measures. The idea is to provide better access to capital, knowledge, innovation and the global market (see below).

<sup>79 20%</sup> on the first 200,000 euros and 25% for taxable profits exceeding 200,000 euros 80 These sectors are: Agriculture & Food, Chemical, Creative Industries, Energy, High Tech, Horticulture, Life Sciences and Health, Logistics, and Water,







Figure 3. Focus dimensions of Ambitious Entrepreneurship.81

The Dutch government has set aside € 75 million, which will be used to provide early-stage finance for entrepreneurs, support the *Startup Delta initiative*, fund the innovative technology development projects (Eurostars) and attract foreign businesses and entrepreneurs to the Netherlands. The action plan addresses several inter-related fields regarding business support, such as legislation and regulation, access to capital and taxation, innovation support and access to knowledge.

### 4.2.3 Organisation and instruments for business support

The overall responsibility of business support is with the *Dutch Ministry of Economic Affairs*, which promotes the Netherlands as a country of enterprise. The Ministry is committed to excellent entrepreneurial business climate, by creating the right conditions and giving entrepreneurs room to innovate and grow.

<sup>81</sup> Letter to Parliament about ambitious entrepreneurship - Government.nl





The key implementing operator under the ministry is the *Netherlands Enterprise Agency (RVO)*. This new agency was established in 2014 as a result of a merger between NL Agency and the Dienst Regelingen. RVO provides services to entrepreneurs and operates both domestically and abroad with governments, knowledge centres, international organisations and other partners. RVO runs a number of targeted programmes and provides subsidies for companies.<sup>82</sup>

The Dutch government supports for SMEs through tax benefits, innovation loans and grants with the following set of instruments: 83

Table 5. Dutch business support instruments

Instrument	Focus	
R&D tax credits (RDA and WBSO)	Research and development (R&D) tax credits for companies to reduce the SME salary costs related to R&D. $^{84}$	
Tax relief for innovation (the innovation box)	Allows SMEs to profit from patents or activities that fall under the R&D Act (WBSO).	
Stimulatingcross-regionalCentral and regional authorities support cross-regionSME innovation (MIT)innovation in the Netherlands' top economic sectors with the € 50 million MIT scheme.		
Innovation Fund for SMEs (MKB+)	Helps SMEs transform their ideas into profitable new products, services and processes.  The <i>Seed Capital, Fund-of-Funds</i> and <i>Innovation Loans</i> programmes are part of the Innovation Fund for SMEs.	

<sup>82</sup> http://english.rvo.nl/subsidies-programmes

<sup>83</sup> https://www.government.nl/topics/enterprise-and-innovation/contents/support-for-small-and-medium-sized-enterprises-smes

<sup>84</sup> http://english.rvo.nl/subsidies-programmes/wbso





Government guarantee for	The central government may act as guarantor for part of
SME loans	the loan.
<b>Business Finance Guarantee</b>	For medium-sized or large businesses that want to take
Scheme	out a loan.
<b>Growth Facility</b>	A credit guarantee scheme for bankers and investors,
	enabling them to lend venture capital to entrepreneurs.
Micrcredit loans	Up to € 50 000 for startups and other small businesses. <sup>85</sup>
Qredits microfinance	Making investment in SMEs more attractive to financiers
	by guaranteeing an additional € 100 million in loans. This
	provides scope for 1,200 SMEs to borrow up to € 250,000
	and for 5,300 SMEs to access microcredit of up to €
	50,000. Qredits also provides recipients with coaching
	and online resources, like a guide to drawing up a
	business plan. In January 2016 the Ministry of Economic
	Affairs announced 6 500 additional loans for SMEs.
Small Business Innovation	A competition for companies that want to develop new
Research (SBIR) programme.	products in a short amount of time and bring them onto
Research (SBIR) programme.	·
	the market. The government asks companies with the
	best bids to carry out a feasibility study. The companies
	with the most feasible plans are awarded a contract to
	develop their product further, so that the government
	may be able to buy these new products in the future
Finance for International	Support for SMEs that want to do business abroad.
Business (FIB)	
Grant scheme for	This scheme is open to SMEs operating in the 66
demonstration projects,	countries of the Dutch Good Growth Fund.
feasibility studies and	
knowledge acquisition (DHK).	
knowledge dequisition (DTIK).	

The Dutch government is taking further steps to promote finance for SMEs. The aim is to generate around € 2,5 billion in new finance for SMEs. This is outlined in the *Additional SME Finance Action Plan*. The details will be worked

<sup>85</sup> http://english.rvo.nl/topics/international/private-sector-development/developing-your-business/economic/technical/microfinance-gateway





out in 2016. From 2017 an extra € 50 million will be made available to encourage startups and SMEs. This money is included in the Ministry of Economic Affairs' 2016 budget.

### 4.2.4 Key takeaways

The Netherlands is a prime example of a country that is an open and agile economy, very international. It is systematically investing in education, good infrastructure and the development of dynamic business environment, including efficient government. This is seen both at national and a city levels (e.g. Creative Amsterdam).

The Netherlands is smartly utilising its geographical location to support business policies (as an access point to Europe and hub for logistics) and has developed specific policies to attract foreign investments, international corporate locations and skilled labour.

The country is however particularly well known for its comprehensive *Top Sector* –cluster policies, through which the government is systematically enhancing research and business conditions in nine key sectors. The Top Sector –policy is often considered a typical example of strategic (top-down) business policy.

Instead of many direct support instruments, the Netherlands is very actively utilising indirect business support instruments – smart regulation (in connection with Top Sectors), public procurement and in particular tax





incentives. These form an attractive combination for both small and large companies to operate and invest in the country.

#### 4.3. Finland

### 4.3.1 General conditions for business and entrepreneurship

Finland is a country with a large surface area but small population. Being the eighth largest country in Europe with a land area of 338,424 km², but inhabited by only 5,5 million people, it is the most sparsely populated country in the European Union. Its population is heavily concentrated on the southern region and the coastal areas of the Baltic Sea. For the past few years, Finland's economy has been facing recession, but it is still doing relatively well on the European standard: in 2014, the Finnish GDP per capita was around € 38 800, the EU28 average being € 27 300. On the same year, there were around 360 000 enterprises in Finland.<sup>86</sup> According to OECD,<sup>87</sup> in 2012 99,4% of all firms in Finland were SME's and 79,3% of the SME's were micro-enterprises.

Finland, like many other developed countries, has introduced a variety of measures to support entrepreneurship and create the best possible environment for new businesses. The efforts seem to have paid off, since Finland has been ranked among the top countries in the world regarding its business environment; according to The Economist's Business Environment Rankings (BER), Finland ranks on place 9 (out of 82)<sup>88</sup>, and by the World Bank's

86 http://tilastokeskus.fi/tup/suoluk/suoluk\_yritykset\_en.html

<sup>87 &</sup>quot;Financing SMEs and Entrepreneurs 2016 An OECD Scoreboard: An OECD Scoreboard". OECD Publishing, 2016.

<sup>88</sup>http://pages.eiu.com/rs/eiu2/images/BER\_2014.pdf?mkt\_tok=3RkMMJWWfF9wsRogsqrBZKXonjHpfsX 67eosWKexIMI%252F0ER3fOvrPUfGjI4ES8pmI%252BSLDwEYGJIv6SgFTbjGMbht2bgMUhU%253D





Ease of Doing Business Index, Finland ranks as number 10 (out of 189 countries).<sup>89</sup> Its strengths include an advanced education system producing skilled workforce, companies with high-tech expertise, reliable government and a highly developed infrastructure.<sup>90</sup>

### 4.3.2 Key policies for business support

When it comes to business support measures, Finland has concentrated mainly on the direct support policy instruments, such as government *grants* and *loans*, *business support programmes* and different types of *subsidies*. A tax incentive related to the R&D activities was introduced in 2013-2015, but generally speaking Finland is not relying on indirect business support tools in its business support policy.

The wide scattering and heavy localisation of the business support measures is characteristic for Finland. Although there are many business support instruments on the national level (e.g. business support programmes, financial support, etc.), locally scattered public organisations (TE Offices, ELY Centres) are offering and managing especially business advisory and consulting services all over the vast country.

+Finland+fact+book

<sup>89</sup> http://www.doingbusiness.org/rankings; http://data.worldbank.org/indicator/IC.BUS.EASE.XQ 90 http://team.finland.fi/documents/1521018/1647270/Field+for+growth+and+success+-





### 4.3.3 Organisation and instruments for business support

For a few years now, the Finnish government's services for business support have been grouped and coordinated under a common framework of the Prime Minister's Office in a network called *Team Finland*. The Team Finland is a virtual platform mainly for inward investments of foreign companies and export & internationalisation support for the Finnish companies.<sup>91</sup>

Aside from business support in internationalisation, the responsibility for business support in Finland is with the *Ministry of Economic Affairs and Employment (MEAE)*,<sup>92</sup> which aims to create a solid basis for industrial and other business activities in order to strengthen competitiveness and employment. MEAE is responsible for the operating environment underpinning entrepreneurship and innovation, securing the functioning of the labour market and workers' employability, as well as for regional development.<sup>93</sup> Basically all key business support organisations in Finland operate under the MEAE Group, which comprises of the following organisations:<sup>94</sup>

- Seven government agencies 95
- Fifteen Centres for Economic Development, Transport and the Environment (ELY)
- Fifteen Employment and Economic Development Offices (TE)

<sup>91</sup> http://team.finland.fi/en/frontpage

<sup>92</sup> The former name of the ministry (2015) was Ministry of Employment and the Economy (MEE)

<sup>93</sup> http://tem.fi/en/responsibilities

<sup>94</sup> http://tem.fi/en/government-agencies-and-companies-of-mee-group

<sup>95</sup> Energy authority, Finnish Competition and Consumer Authority, Finnish Patent and Registration Office, Geological Survey of Finland, National Emergency Supply Center, Tekes - The Finnish Funding Agency for Innovation, and The Finnish Safety and Chemicald Agency (Tukes).





- Six government owned companies96
- Three government funds97

In Finland, policy-making has usually been separated from policy implementation. The latter function has been given to implementation agencies, with sufficient professional experience and a set of instruments. A clear distinction between roles and responsibilities has proven to be an effective way to implement policy and ensure that all aspects and policy objectives are pursued.<sup>98</sup>

The most important government agency related to business support is *Tekes* – *The Finnish Funding Agency for Innovation*. It offers businesses a wide range of services, including business support programmes, information and advisory services as well as access to finance in the form of loans and grants.<sup>99</sup>

The *Centres for Economic Development, Transport and the Environment (ELY Centres)* are governmental organisations responsible for the regional implementation and development tasks of the central government, including promoting regional competitiveness. The ELY Centres offer businesses regionally a variety of services, such as different types of grants (e.g. investment, development and internationalisation support) as well as advisory, evaluation, consultation and educational services.<sup>100</sup>

<sup>96</sup> Baltic Connector Ltd, Finnvera Plc, Finpro Ltd, Industry Investment Ltd, Terrafame Group Ltd, and VTT Technical Research Centre of Finland Ltd.

<sup>97</sup> Nuclear Waste Management Fund, Security of Supply Fund, and State Guarantee Fund

<sup>98</sup> Halme, et al. Finland as a Knowledge Economy 2.0, World Bank, 2014. p15.

<sup>99</sup> http://www.tekes.fi/en/tekes/

<sup>100</sup> http://www.ely-keskus.fi/en/web/ely-en/





The ELY Centres also steer and supervise the activities of the *Employment and Economic Development Offices (TE Offices), which are regionally responsible for organising public employment and business se*rvices. The TE offices offer services for employers as well as entrepreneurs and unemployed citizens. Its main business services are (financial) support for recruitment, education and the startup grant for new entrepreneurs.<sup>101</sup>

One of the most important state-owned companies regarding business support services is *Finpro*, which is concentrating mainly on business support programmes. Finpro helps Finnish SMEs go international and encourages foreign direct investments in Finland through its Export Finland and Invest in Finland initiatives, which offer businesses different types of advisory, assessment and networking services.<sup>102</sup> Finpro manages around 40 Growth Programmes in the *Team Finland network*, which aims at promoting the internationalisation of Finnish companies, attracting foreign investments to Finland, and to promoting Finland's country brand.<sup>103</sup>

There are two state-owned financing companies, *Finnvera* and *Finnish Industry Investment Ltd.* Finnvera aims to strengthen the competitiveness of Finnish businesses especially in the start, growth and internationalisation phases by offering loans, domestic guarantees, venture capital investments, export credit guarantees and other services related to the financing of exports.<sup>104</sup> Finnish Industry Investment Ltd is an investment company focusing on venture capital, growth and industrial investments. It aims to develop Finland's private equity

<sup>101</sup> http://www.te-services.fi/te/en/index.html

<sup>102</sup> http://www.finpro.fi/web/finpro-eng/finpro

<sup>103</sup> http://team.finland.fi/en/frontpage

<sup>104</sup> https://www.finnvera.fi/eng/Finnvera/Finnvera-in-brief/Finnvera-Introduction





and venture capital sector as well as increase the average size of Finnish funds.<sup>105</sup>

The Finnish government supports SME's mainly through direct business support policies and tools. All public business support services can be found in the web portal.<sup>106</sup> The most important ones are listed below. A comprehensive description and analysis of the Finnish system is available at EU Research and Innovation Observatory.<sup>107</sup>

Table 6. Most important Finnish business support instruments

Instrument	Focus
Startup grants	For new entrepreneurs who are becoming full-time entrepreneurs provided by the TE Offices. The grant provides entrepreneurs with a secure income for up to 18 months until the business is up and running. <sup>108</sup>
Subsidies for employment	Granted by TE Offices for companies recruiting long-term unemployed, disabled or young persons in the form of pay subsidies or financial EURES job support.
Educational services	Such as training for new entrepreneurs, apprenticeship training and labour market training is offered by the TE offices, ELY Centres and many other educational institutions. <sup>1</sup>
Venture Capital	There is an active private VC industry in Finland. Public venture capital investments for startups are provided by the state-owned financing companies Finnvera, Finnish Industry Investment Ltd and by Tekes VC.
Crowdfunding	A new law to facilitate crowdfunding took force in Sept 2016. The law clarifies the role of different authorities and protects the rights of individual investors. The law will only

<sup>105</sup> http://www.industryinvestment.com/about-us/

<sup>106</sup> www.yrityssuomi.fi

<sup>107</sup> https://rio.jrc.ec.europa.eu/en/library/rio-country-report-finland-2015

<sup>108</sup> http://www.te-

services.fi/te/en/employers/for\_entrepreneurs/services\_new\_entrepreneurs/startup\_grant/index.html





	affect debt and equity type of crowdfunding for companies,	
	not for example trading of crowdfunding.	
Growth and	Growth and internationalisation investments are offered by	
internationalisation	the state-owned financing company Finnish Industry	
investments	Investment Ltd.	
Export credit guarantees	Export credit guarantees are offered by Finnvera against political and commercial risks associated with the financing of exports.	
RDI funding	Research, development and innovation funding provided by Tekes is targeted to projects that create in the long- term the greatest benefits for the economy and society.	
Public procurement for	The Finnish Government has set a target to increase the	
innovation	share of innovative public procurement up to 5% and to boost piloting and experimentation. This s the highest in the world. Major cities have strong incentives to boost innovative procurements and support schemes have been established.	
Advisory services	Consultancy, advisory, assessment and networking services are provided by several organisations, such as, Tekes, Finpro, ELY Centres and TE Offices.	
Business support programmes	Several business support programmes are provided mainly by Tekes and Finpro. Finpro's Team Finland growth programmes are mainly focused on growth through internationalisation. Tekes programmes on the other hand concentrate on selected focus areas (e.g. resource efficiency, digitalisation, wellbeing and health) and they offer businesses opportunities to develop know-how, build networks and have an impact on the development of their field.	

### 4.3.4 Key takeaways

Finland is one benchmark for a small country, which has systematically invested in skills development and a well-functioning society (i.e. Nordic welfare model). As a business environment, Finland has been best known for





its strong ICT –sector and heavy investments into knowledge and R&D. Much of the country's business support has been tuned to that direction as well.

As a scarcely populated country, the efficient provision and coordination of government support has been an important objective for Finnish government. In deed, the Finnish business support system is a very broad one (in terms of services and instruments available), well covered all over the country (regional offices) and coordinated. The latest example is the national *Team Finland* - network and its joint approach to businesses as its 'clients'.

Finnish organisation of business support is built on a very strong ministry and strong government agencies (Tekes, ELY / TE centres, Finnvera, etc), which provide a broad set of grants, loans and other risk sharing instruments. Many of these instruments are very advanced and often referred as good practices themselves. However, unlike Singapore and the Netherlans, the long-term policy of Finland has been not to largely utilise tax incentives for business support.

# 5. CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Conclusions





Almost all countries are setting up government measures to ensure markets are functioning well and that small, innovative businesses have suitable conditions for growth. This is particularly important and popular for emerging economies, where a big part of the domestic economic activity is typically generated by very small companies.

This paper has discussed some typical approaches to business support policies and presented the most used government support instruments for those.

The document also presents some international benchmarks, both as references for individual instruments, and as cases of business support policies in three countries. These can provide some ideas and insights, and deepen the understanding how or why certain instruments operate as they do, or what exactly makes them successful. Instead of benchmarking individual instruments, it is often more practical to benchmark the policies behind them, i.e. how different countries are addressing certain challenges with a combination of instruments and how they are implemented in practice. For this reason we have explained the approaches of Singapore, the Netherlands and Finland. All highly ranked and often referred cases of successful business ecosystems and innovation leaders. None of these cases are however in the economic situation of Vietnam, nor can provide a direct peer-to-peer comparison, but should be able to provide some useful policy insights.

Besided the general trend that there are an increasing number of business support instruments, the instruments and policies are also becoming increasingly elaborated and specified. Althought the majority of business





support remains in traditional grants, loans and programmes, as well as tax excemptions, particularly the changes in the financing markets have triggered many new types of instruments. For the policy-maker, this urges the need to ensure that legal and regulatory frameworks are sufficiently open, flexible and forward-looking for the new approaches as well.

For the past decade or two, government support to business innovation has become an essential part of general business services. This is particularly true for SMEs and high-growth startups. Research and innovation is not anymore the task of governments and large corporations, but equally of small companies and particularly startups. In fact, the trend in business support policies in many developed economies has clearly shifted towards supporting high growth innovative startups, as these are known to generate relatively more growth and employment impact to the economy. Startups and innovative SMEs are also seen instrumental in facilitating industrial renewal and boosting market dynamics, which are much needed in many countries.

Since late 90's business support has mostly been approached systemically. The functioning and performance of support policies, government agencies and their instruments have been considered as whole (i.e. how effectively they work together) instead of each policy or instrument separately. This has been a major shift in policy approaches and it has drawn attention on how well the instruments and organisations complement each other and 'play together'. Although systemic thinking and policies have in principle existed for long, their adoption has required 'mindset shift' in the governance structures, which has taken a rather long time in governments. The trend continues however,





which is clearly seen in the increase of systemic cluster and ecosystem policies, for example in each of the three case countries presented here.

It is a continuous discussion how far governments should go in supporting private businesses and interviening markets. A genuine and well-working public-private partnership is still the backbone of all business support. There is a growing trend to design business support policies more on needs bases; to support those sectors, areas or initiatives in which businesses themselves are committed to invest and to lead. This approach puts businesses in the 'driver's seat' for the direction of policy. Examples of such have been, for example the Finnish SHOK – programmes. Governments seldom have the necessary business expertise to guide companies into right decisions, but rather are ready to share their risks with certain conditions. It is also a normal practice that governments rely on the private sector service providers to deliver those parts of publicly funded business support services (i.e procure the services) which relate to business advice and substance expertise of sectors.

Increased attention in facilitating (or even requiring) the collaboration between businesses, research actors, government agencies and the civil society at large is a direct consequence of systemic business support policies. The rationale is that at the system level, learning and innovation (and their wider impacts) are generated through networking and collaboration, which should therefore be an essential requirement for government support.





There has also been an increasing trend of support to internationalisation of SMEs. Earlier this used to mean support to export, but today it is often much more advanced and thematically focused support to international business. Many of today's most growth potential SMEs are so-called 'born globals', meaning they internationalise their business from the very start. This is typical to digital businesses particularly.

Today, majority of the government business support is still of financial type, helping SMEs access finance. Loan guarantees remain the most popular policy instrument. Many governments have introduced policies to promote alternative sources of finance and these are indeed becoming more popular, but they still represent a small proportion of all finance. For young, high growth companies, business angel investments provide an important source of funding and professional advice. To encourage this, governments have introduced many co-investment schemes, tax incentives, support to business angel networks, etc.

#### 5.2. Recommendations for Vietnam

The intention here is to point out, building on the experience and trends in other countries, a few aspects and lessons that would be important for Vietnam to address when stepping up its business support services.

First of all, we recommend to proceed systematically and in phases with regard to developing business support. Most advanced economies have systematically developed their business support for decades and carry enormous amount of tacit knowledge on what works and how. So even if





Vietnam would utilise the best experts to design a perfect business support structure, it will take time before the practice and profession is fully built. Furthermore, all countries are unique and Vietnam will need to design policies and instruments that best suit for its own context and culture.

Many advanced economies have a full variety of elaborate and sometimes very targeted business support instruments to address specific challenges of SMEs. Finland is a typical example of such. This should not be the immediate aim of Vietnam, but rather to build a sound and a balanced basis for business support (i.e. law and national strategy) and to establish the key executing agencies to implement policies and to accumulate competence. At later stages more layers, details and instruments can be added to the system. The table below highlights some key issues to be considered at the different levels of designing business support in Vietnam.

Table 7. Examples of business support issues to address at various levels

Level	Topics	Issues to address
Policy rationale	National strategy National policy papers National statistics Policy analysis and advice	Sufficient information, analytics and understanding of the SME situation, its trends and future needs in Vietnam  Focus, rationale and objective of anticipated policy interventions  Long-term vision for Vietnamese business support
Framework conditions	SME law Related laws (eg. IPR, taxation, public procurement)	Coverage, nature and enforcement of law Functioning of markets Public-private partnership Encouragement of private & foreign investments Technology & knowledge diffusion





		Anticipated implementation mechanisms
Resourcing	Budget allocations	General level anticipated for business support  Balancing direct / indirect (tax) measures  Balancing across different sectors, stages etc  Basic vs competitive funding
Organisation	Executive agencies Provincial representation	Focus and mandate of the agencies  Sectoral or other coverage of agencies  Collaboration and cross-working  Provincial coverage and mandate
Instruments	Set / types of instruments to be provided	Access to / availability of instruments  Complemetarities / systemic effect  Funding / advice balance
Execution	Good and efficient administration	Service competence of agencies: technolocial & business substance, fund administration, management of calls and selections, etc Setting up databases, tools and templates Sharing of best practices & learning Collaboration & linkages across agencies

Not only what services are available matters, but equally importantly also *how* they are designed and implemented. Small details of the services can matter a lot and can make a distinction whether some service is interesting and encouraging for SMEs, or not.

The *competence of business support* service providers cannot be emphasised too much. This competence is needed when designing and targeting services, when selecting to whom they are offered and with what kind of conditions, and particularly when advice is given to SMEs. Experience is needed in general





business understanding, project administration (funding instruments), technical / topic-related substance areas.

*Systemic impact* means the measures and instruments work as a whole, not only individually. Attention on their interconnectivity, complementarity. Special attention on should be put on connectivity instruments, which aim for building and enhancing the ecosystems.

*Monitoring and evaluation* is an important part of the business service provision, and should be planned and organised at the start.

In many countries increasing attention has been paid to the *demand or 'client'* approach of business services – ensuring smooth access to services, providing assistance for and along the instruments, bridging between one instrument to another and ensuring proper follow-up.

Still one must remember that even excellent business support services cannot make up for *a well functioning and dynamic market* with good framework conditions. Business support policies merely aim to compelement and support the functioning of markets.









### **Sources and literature**

- Arnold, E. (2004) "Evaluating research and innovation policy: A systems world needs systems evaluations", Research Evaluation, Vol. 13, No. 1, pp. 3-17.
- Arrow K. (1962). Economic Implications of Learning by Doing Review of Economic Studies 29, pp 155–73
- Arrow, K.J. (1962), "Economic welfare and the allocation of resources for innovation", in Nelson, R. (ed.), The Rate and Direction of Inventive Activity: Economic and Social Factors, Princeton University Press, Princeton, pp. 609-625.
- Auerswald P. (2007), "The simple economics of technology entrepreneurship: Market failure reconsidered", in D. Audretsch, I. Grilo, R. Thurik, Handbook of Research on Entrepreneurship Policy, Edward Elgar, Cheltenham, UK.
- Brander et al., The Effects of Government-Sponsored Venture Capital: International Evidence, National Bureau of Economic Research, Working Paper, 2010
- Cunningham, P., Gök, A., Laredo, P. (2012), "The impact of direct support to R&D and innovation in firms", Compendium of Evidence on the Effectiveness of Innovation Policy Intervention, Manchester Institute of Innovation Research
- Deloitte (2015): 2015 Global Survey of R&D Incentives.
- Dixit, A.K. (1996), The Making of Economic Policy, A Transaction-Cost Perspective, MIT Press, Cambridge, MA.
- Edler, J., Georghiou, L.; "Public procurement and innovation—Resurrecting the demand side", Research Policy 36 (2007) 949–963
- Edquist, C. (ed.) (1997), Systems of Innovation, Technologies, Institutions and Organisations, Pinter, London.
- European Commission (2016), Joint Research Center JRC, Research and Innovation Observatory (RIO), Country report for Finland, 2015





- European Commission (2016), Joint Research Center JRC, Research and Innovation Observatory (RIO), Country report for the Netherlands, 2015
- Faber A., R. Kemp and G. van der Veen (2008), Innovation policy for the environment in the Netherlands and the EU, in C. Nauwelaers and R. Wintjes (eds.), Innovation Policy in Europe. Measurement and Strategy, Cheltenham, pp. 171-202.
- Guellec, D., van Pottelsberghe de la Potterie, B. (2000), The impact of public R&D expenditure on business R&D, OECD Science, Technology and Industry Working Papers, 2000/04, OECD
- Halme, K. et al. Finland as a Knowledge Economy 2.0, World Bank, 2014. p15.
- Jaumotte, F. and N. Pain (2005), An overview of public policies to support innovation, OECD Economics Department Working Papers, No. 456, OECD Publishing, Paris. http://dx.doi.org/10.1787/707375561288
- Klein Woolthuis, R., Lankhuizen, M., Gilsing, V., (2005), A system failure framework for innovation policy design, Technovation, Volume 25, Issue 6, pp. 609-619.
- Klemm, A.: Causes, Benefits and Risks of Business Tax Incentives, IMF Working Paper, 2009
- Lach, S. (2002), Do R&D Subsidies Stimulate or Displace Private R&D?
   Evidence from Israel. The Journal of Industrial Economics
- Lessons from a Decade of Innovation Policy what can be learnt from the INNO Policy TrendChart and The Innovation Union Scoreboard, Final Report, European Commission 2013
- Nelson R. (1959). The Economics of Invention: A Survey of the Literature, The Journal of Business, University of Chicago Press, vol. 32, pages 101.
- Nelson, R.R. (1959), The simple economics of basic research, Journal of Political Economy, Vol. 62, No. 3, pp. 297-306.
- OECD (1997). Government Venture Capital for Technology-based Companies.





- OECD (2007), Survey on the taxation of small and medium-sized enterprises.
- OECD (2009), Cluster, Innovation and Entrepreneurship, OECD, Paris.
- OECD (2009), Taxation of SMEs: Key issues and policy considerations, OECD Tax Policy Studies, No. 18, OECD Publishing, Paris.
- OECD (2009). Facilitating access to finance. Discussion paper on Credit Guarantee Schemes.
- OECD (2010), Knowledge Networks and Markets: Markets: A Typology of Markets in Explicit Knowledge, DSTI/IND/STP/ICCP(2010)3
- OECD (2010), OECD Science, Technology and Industry Outlook, OECD Publishing, Paris.
- OECD (2010), Science, Technology and Industry Outlook 2010, OECD,
   Paris, www.oecd.org/sti/outlook.
- OECD (2010a), The OECD Innovation Strategy: Getting a Head Start on Tomorrow, OECD Publishing, Paris.
- OECD (2010b), SMEs, Entrepreneurship and Innovation, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris.
- OECD (2011), Business Innovation Policies: Selected Country Comparisons,
   OECD Publishing, Paris.
- OECD (2011), Financing High-Growth Firms: The Role of Angel Investors, OECD Publishing, Paris.
- OECD (2012), Financing business R&D and innovation, in OECD Science,
   Technology and Industry Outlook 2012, OECD Publishing, Paris.
- OECD (2012), OECD Science, Technology and Industry Outlook 2012, OECD Publishing, Paris.
- OECD (2012), Science, Technology and Industry Outlook 2012, OECD, Paris.
- OECD (2015): New Approaches to SME and Entrepreneurship Financing.
- OECD (2016) Financing SMEs and Entrepreneurs. An OECD Scoreboard





- OECD. (2015). Traditional debt finance and alternative financing instruments for SMEs", in OECD., New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments, OECD Publishing, Paris
- Porter, M.E. (1990). The Competitive Advantage of Nations. New York: The Free Press.
- Potter, J. (2005), Local innovation systems and SME innovation policy, in OECD
   SME and Entrepreneurship Outlook, OECD Publishing, Paris, pp. 127-142.
- Steen, J. V. (2012), Modes of public funding of research and development: Towards internationally comparable indicators, OECD Science, Technology and Industry Working Papers, 2012/04, OECD Publishing, Paris.
- Stiglitz, J.E. (1994), Whither Socialism?, MIT Press, Cambridge, MA.
- Teece, D.J. (1986), Profiting from technological innovation: Implications for integration, collaboration, licensing, and public policy, Research Policy, Volume 15, Issue 6, December 1986, pp. 285–305.
- WEF Private Equity Report (2010): Globalisation of Alternative Investments.
- WEF Private Equity Report (2010): Governments as Venture Capitalists. Striking the right balance.
- World Bank (2016): Doing Business 2016, World Bank Group