



Business Angel, Co-investment Funds and Policy Portfolios

The present report is Growth Analysis' third interim report linked to the Swedish regional co-investment fund policy instrument. The main theme of the report is to describe and learn from different policy interventions aimed at promoting business angels' investments. Experience has been gathered from France, Belgium (Flanders), Wales and Denmark.

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Foreword

The Swedish Agency for Growth Policy Analysis (Growth Analysis)¹ was commissioned in its 2009 Letter of Regulation from the Swedish Government to evaluate the “regional co-investments funds”. These funds are a policy measure taken to increase the regional supply of risk capital (equity capital) between 2009 and 2014 within the framework of the eight regional structural fund programmes. The commission will be reported in the form of three interim reports and a final report. Two interim reports have already been published. The first, *Staten och riskkapitalet*, [*The State and Risk Capital*], was submitted to the government on 15 March 2010 and the second, *Kompetent kapital?*, [*Competent Capital?*] on 14 November 2011. The present report, *Affärsänglar, riskkapitalfonder och policyportföljer*, thus constitutes the third interim report. This is the English version of the report, titled *Business Angels, Co-investment Funds and Policy Portfolios*.

The main theme of the report is the government’s policy interventions aimed at promoting business angels’ investments. Experience has been gathered from France, Belgium (Flanders), Wales and Denmark. The report also contains short retrospectives from the two previous interim reports and also touches briefly upon Sweden’s ongoing regional co-investment funds initiative from a business angel perspective. Some examples of Swedish policy work in this area together with some policy reflections are also given.

The international study (chapters 3–9) was made by associate professor Jesper Lindgaard Christensen of the Department of Business and Management at Aalborg University in Denmark on behalf of Growth Analysis and was submitted to the agency on June 3rd 2013. A few updates have been included since then.

Other contributors include analyst Jörgen Lithander (project manager, Growth Analysis), Ulf Tynelius (Growth Analysis) and Sofia Avdeitchikova (Growth Analysis). Details of policy measures taken by the governmental agencies Nutek and Tillväxtverket (the Swedish Agency for Economic and Regional Growth) in the field were provided by Caroline Murray and Andreas Ek (both Tillväxtverket).²

An early version of the international study was presented at a seminar arranged by Growth Analysis on 14 May 2013, at which Professor Roger Sørheim of the Norwegian University of Science and Technology also participated.

Professor Colin Mason of Glasgow City University and Professor Hans Landström of Lund University provided much appreciated comments on the country studies chosen, the interview form and early drafts of the report. We would also like to thank Marija Rakas of Aalborg University for her valuable assistance during the final compilation of the international study.

The Swedish version of the report was submitted to the government on 13 December 2013.

Östersund, January 2014

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¹ In Swedish: *Myndigheten för tillväxtpolitiska utvärderingar och analyser (Tillväxtanalys)*.

² *Nutek* (the National Board for Industrial and Technological Development) was disbanded on 31 March 2009 and a new agency, *Tillväxtverket* (the Swedish Agency for Economic and Regional Growth), took over most of its tasks.

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Summary

The summary is structured according to the report's four main sections:

I: *Introduction*, II: *A retrospect, previous studies and business angels in the co-investment funds*, III: *Business angel policy in Europe* and IV: *A Swedish policy for business angels? – a concluding policy reflection*.

I. Introduction

Growth Analysis' commission

The Swedish Agency for Growth Policy Analysis (Growth Analysis)³ was originally commissioned by the government in its 2009 letter of appropriation⁴ to evaluate a capital supply intervention with regional co-investment funds within the framework of Sweden's eight regional structural fund programmes. Reports should be submitted in the form of three interim reports in 2010, 2011 and 2013 and a final report in 2015. The commission states that the evaluation is to act as a basis for learning in preparation for possible future interventions of a similar nature. The emphasis is to be on experiences from international research and empirics.

The present report is thus the third interim report and deals primarily with the public sector's efforts to promote business angels in four European countries (France, Wales, Belgium (Flanders) and Denmark).

Structure

Section I (chapter 1) consists of an introduction with a description of the assignment and the structure of the report. *Section II* (chapter 2) briefly describes the on-going efforts with regional co-investment funds (the venture capital project) together with a retrospect of previous interim reports on the assignment. The section ends with a very general introduction to the Swedish business angel market and touches briefly upon the venture capital project where the business angels' participation is described. *Section III* (chapter 3–9) is the central part of the report and contains an empirical study of business angel policy in four European countries. The concluding section, *Section IV* (chapter 10), contains both a brief survey of recent years' policy activities in the area in Sweden and Growth Analysis' policy reflections where observations from the country study are linked to the venture capital project. The report has one appendix: a list of people interviewed in the international study.⁵

³ In Swedish: *Myndigheten för tillväxtpolitiska utvärderingar och analyser (Tillväxtanalys)*.

⁴ Government directive putting an appropriation at the disposal of the spending authority and specifying the allocation of the appropriated funds.

⁵ In the Swedish version of the report there is also an appendix including a list of examples of ongoing, governmental financed, policy measures towards BA/BAN in Sweden. This appendix is excluded in the English version.

II. A retrospect, previous studies and business angels in the venture capital project

The regional co-investment funds

The present report is Growth Analysis' third interim report linked to Swedish policy instrument with regional co-investment funds. The project, which runs from 2009 until 2014, is a project within the European Regional Development Fund (ERDF). Twelve⁶ regional co-investment funds covering the whole of Sweden have been established. The project is estimated to bring approximately 2.4 billion SEK (c. 279 million euro) to the market.⁷ The funds always invest jointly with private players and on equal terms (*pari passu*) with them. At least half the amount must come from private venture capital players while the remainder is shared equally between funds from the ERDF and regional public co-financing.

The project is to be market-complementary and revolving. The former means that it must not crowd out existing private investments and the latter that the capital base must not shrink in the long term.

The capital supply initiative will be followed up and evaluated in various ways, partly by Tillväxtverket⁸ (by means of on-going evaluation) and partly by Growth Analysis. The emphasis in Growth Analysis' commission is on experiences of international research and empirics. Reports will be submitted in the form of three interim reports and a final report. Two interim reports have been published earlier. The first, *Staten och riskkapitalet [The State and Risk Capital]*, was presented in 2010 and the second, *Kompetent kapital? [Competent Capital?]*, in 2011.

The latter report paints a picture of business angels as an important group, particularly in terms of early stages and geographic presence. Unfortunately, this also coincides with an unclear statistical situation. Growth Analysis therefore noted a need for an in-depth international study where experiences of promotional measures aimed at this group are studied more closely. The present report, *Affärsänglar, riskkapitalfonder och policyportföljer [Business angels, co-investment funds and policy portfolios]* contains such a study.

Business angels in Sweden

Little is known about business angels and their investments. One explanation might be the existence of a large "invisible" market without public registers, another imprecise definitions. As regards the latter, it is for example relevant to talk about a narrow and a broad definition. Factors that are considered then include for example the investor's independence of the company (e.g. whether investments in family members' companies are to be included or not), expected gains, the size of the investment and the degree of active owner involvement.

⁶ Originally twelve, but today only eleven after two funds (SEF II and SED III) were merged.

⁷ Exchange rate Swedish kronor (SEK) → euro as at June 2013 (throughout the report). Half public funds and half private funds. It is worth noting that the alternative use of the private capital is not known. It is conceivable that some of it would in a contra factual situation also have been used for venture capital investment.

⁸ In English: The Swedish Agency for Economic and Regional Growth. Due to the somewhat cumbersome English denomination, the Swedish name "Tillväxtverket" will sometimes be used. The "ongoing evaluation" is done through procurement of Ramböll, a private consulting firm.

In Sweden, much of our knowledge is based on two studies conducted between 2004 and 2006. According to these studies, the business angels' investment patterns depend on the definition that is used. On the basis of a broad definition, the investments' volume can be estimated to be between 3.5 and 4 billion SEK (c. 407–465 million euro), spread over 30,000 investments in unlisted companies. According to the narrow definition, business angels number about one tenth of this figure but account for approximately half the investment volume.

Just like the institutional venture capital, the informal venture capital is concentrated geographically. Between 2002 and 2004, approximately 70 percent was invested in metropolitan regions and a further 25 percent in major regional centers.

The diffuse knowledge situation makes it difficult to assess how the market has developed. An estimate is nonetheless that its size has increased over the past decade.

Business angels in the regional co-investment funds

In the Swedish venture capital project, a total of approximately 2.2 billion SEK (c. 256 million euro) has been invested in 207 portfolio companies over the period from 2009 (project start-up) until the second quarter of 2013. Private co-financing amounts to approximately 65 percent, i.e. a “rate increase” of 1.87 of the public funds. In the funds' reports, the private investors are divided into three categories; organised capital, private companies and private individuals. The last group might be able to be called “business angels” according to a broad definition.

It is clear that the proportion of business angels is considerable at roughly 40 percent of the private, unique, investor group. As regards volume, the business angels invest approximately 20 percent of the private funds. Just over half of the business angels have their home in the same region as the co-investing fund. More than one in four business angels has his/her home outside the region but inside the country. It is also worth noting that there are large variations between the regional funds.

III. Business angel policy in Europe – an empirical study

The international study was made by associate professor Jesper Lindgaard Christensen of the Department of Business and Management at Aalborg University in Denmark on behalf of Growth Analysis.

Method

The survey has the ambition to generate knowledge of the role that business angels (BA)⁹ play in the capital market and how well various promotional measures function (or do not function) in this market. An estimate is also made of existing statistical information concerning BAs' investments. The estimate is based on studies of selected European countries that try in different ways to stimulate investment by BAs.

The study is based on a combination of “desk studies” of existing reports, statistics and evaluations of interventions in the selected countries and personal interviews with key people with in-depth knowledge of policies to increase BAs' willingness to invest. The countries were selected on the basis of experience of these countries probably being of

⁹ The term business angel(s) and the abbreviation BA are used interchangeably in the report.

benefit to other countries. The following countries/regions were selected: Belgium (Flanders), Wales, France and Denmark.¹⁰

Information and statistics on business angels

Information and evidence about the area are generally sparse. National statistical offices lack information and alternative sources of data are few and often inadequate. In addition to problems in measuring, the lack of clear, common definitions mean that the picture is diffuse and comparisons of data are difficult to make. The quality, comparability and scope/coverage of existing data therefore need to be improved. In the present analysis, the shortcomings in the data mean that there is a limit to how far we can go as regards quantitative data. In many cases, the knowledge obtained is based on a combination of scanty statistical facts, information obtained through interviews, existing literature and personal judgment.

Business angels and promotional policy

In many countries, policies for enhancing investments by business angels have been seen as a subordinate policy area, but there is reason to be aware of their potential. Business angels play an important role in the financial ecosystem since they provide support in companies' early growth phases. Business angels not only contribute financial capital but also have an important function as mentors for the companies they are financing. There are indications that this importance has not diminished but rather increased in recent years, since the equity gap for growth-oriented companies in their early stages seems to have widened.

In the literature Lerner (2010), has argued that the public sector's efforts to support the venture capital markets have long lead-times. One of the most common causes of such initiatives failing is impatience, inability to see the broader context and trusting all too narrow evaluation indicators. The findings of the present study largely confirm these observations. Countries and regions support BAs' investments through support for business angel networks (BAN)¹¹, tax incentives, investor training programmes, matching events and co-investment schemes.

One topic under debate is whether the state should support the informal venture capital market in order to alleviate informational constraints and other "market failures". Some of the arguments in favour of public intervention can be attributed to the characteristic qualities of BAs' investments that are said to: *(i)* have a different cost structure than institutional venture capital, which permits smaller investments; *(ii)* have a greater geographically spread, which means that they contribute to reduce regional financing gaps, and *(iii)* in addition to providing money also provide management with practical help.

In addition to these factors, the report's field work also showed that business angels can be mobilised for several other, complementary, purposes. These broader functions of BAs open up the range of policies that could be pursued in this area.

¹⁰ Denmark currently has no explicit promotional policy for BAs. Selection criteria for choice of countries and regions are elaborated in section 3.2.2.

¹¹ The term business angel network and the abbreviation BAN are used interchangeably in the report.

Policy efforts

The study found great differences in attitude towards promotional measures in the countries studied, from countries with active interventions on a broad front to Denmark, where no explicit policy within the area is currently applied. In most cases, the measures are relatively new ones.

It should also be remembered that policies to promote BAs are a long-term process that requires continuous work and patience. In the country studies, we have seen that the intensity of policies for stimulating BAs has varied considerably, even over relatively short periods. For example, a decline in the active policy applied in France and almost a discontinuation of the interventions in Denmark, which is an obvious indication that Lerner's warning not to underestimate the time it takes for policy measures to have any effect has gone unheeded. We have emphasised the importance of continuity of policies in the area since a long-term approach is important for the users and the organisations that conduct the programmes.

There are also great differences between the countries as regards where the financing gap actually is. In reality the gap is not something that just *is*, objectively speaking. It can be influenced by policy measures and acts as a screening mechanism and is subject to policy-related considerations.

France's business angel policies

The individual countries differed and also gave different types of insights. France has had a tradition of public intervention in capital markets and has applied different instruments such as loan guarantees and tax relief for the smallest companies. One lesson learned from the French example is that the government has supported the establishment of a sense of community concerning BANs and has thus facilitated the organisation and professionalization of the BA market by expanding the role of the federal organisation FranceAngel (an association that numbers most of France's business angels among its members). Together with the information from the use of tax schemes, this has meant that the "visible" part of the market is relatively large, which in turn is positive from the point of view of the business angels' visibility and to increase awareness of them.

It is probable that the former active tax policies, that were advantageous for a broad spectrum of individuals – including some who did not exactly fit the "traditional" description of business angels – contributed to create a "equity culture", or at least greater awareness of the business angels' investments. This may have contributed strongly to maintaining equity investments during the latest setbacks for the framework conditions that influence business angels' investments.

Flanders' business angel policies

One of the most important lessons from the Flanders field study is that the continuous involvement of the state has been of the utmost importance. Historically, support for BANs has varied but there has generally been a long period characterised by active policies. The recommendation based on the Flanders experience on a general level is that government should not think in a short-term perspective and should be prepared to implement its interventions all the way. This is particularly obvious as regards support for BANs. Mutual trust between funding organisations and operative organisations is also of the utmost importance for policy creation and a long-term approach to implementation of the schemes. Finally, there is a wide range of instruments available to support companies in

the seed segment, which has meant that the financing gap is on relatively large amounts rather than in the seed segment.

Wales' business angel policies

Wales' financial ecosystem is characterised overall by a relatively well functioning inter-play between the players in the capital market for seed and start-up and between private players and public policy. In general it is believed that the financial system and related funding mechanisms and policy measures act as a "funding escalator" and that the system works well in that regard.

A shift is currently going on in policy circles and Finance Wales¹² from a "softish" to a more commercial view of money. Another general element of importance is trust between the government and intermediaries. The principal players in the Welsh capital market emphasise the advantages of strong linkages between different players such as Finance Wales, Xénos, banks, other organisations in the public sector and other private players. Finally, this study also showed that it is important to take the target group's adsorption capability into account when drawing up policies.

Denmark's business angel policies

In Denmark, little importance is attached to policies stimulating business angels as a possible source of financing for small and medium-sized enterprises (SMEs). The Ministry is generally reluctant to take initiatives in this area. One important reason is the negative experience from two major policy initiatives: the PartnerKapital co-financing programme and the support for the Danish Business Angel Network.

No formal evaluations have been made of the policies concerning business angels in Denmark. It was clear, however, that one lesson from the country study is that patience and broad evaluation criteria are important since policies for business angels have a number of indirect effects.

Targets for policies

Desk studies and experiences from field work give a mixed picture as a basis for policy recommendations concerning what specific interventions should be implemented. Positive assessments of co-investment programmes and tax incentives can be found in several cases, while in other cases not.

It should also be noted that business angel policies focus on very heterogeneous groups and this applies to business angels, entrepreneurs and small companies. This means great challenges as regards drawing up policy. It is difficult to reach two (or more) heterogeneous groups with a few instruments and with instruments that are too "broad" or general. Another challenge is to create greater awareness in the target group of the possibilities.

Most of the policy creation in question and the knowledge of the policy programmes are limited to the (small) portion of the market that we call the "visible" part. Tax incentives are probably the tool that would also have the greatest impact on the "invisible" part of the market. There is a general need to develop the policy process and targets to also include this "invisible" part of the market.

¹² A wholly owned subsidiary of the Welsh Government that provides commercial financing for growth-oriented SMEs in Wales.

Interrelated policies

The study indicates that some policy measures are interrelated. The efficiency of one policy may in certain cases be dependent on another policy. This leads us to the question of whether these policies would in fact benefit from being implemented in a sequence since a policy instrument may build on the results of the previous instrument. This important question was discussed during the interviews and the debate has also begun to attract attention in academic- and policy circles, even it is still taking place on a very small scale. It is, however, still a fact that policy schemes appear to be being implemented and evaluated in isolation. Interest is nonetheless growing in a policy and evaluation approach that to a greater extent takes into account a portfolio of policies and their mutual dependencies instead of only isolated effects.

Implications for evaluation

The study's findings indicate that it is inherently difficult to evaluate policies for business angels because of the uncertain time perspective wherein the effects appear. The evaluations are also hampered by the fact that some of the effects are characterised as indirect and immeasurable. The interdependencies between different types of policy bring with them further complications since other methods of evaluation are needed than the traditional focus on measuring parameters for an individual scheme at a specific point in time.

IV. A Swedish policy for business angels? – a concluding policy reflection

The final chapter begins with a brief overview of Tillväxtverket's activities in the area between 1995 and 2013. The remainder of the chapter contains Growth Analysis' reflections linked to Sweden's regional co-investment funds (the venture capital project). The starting point for these reflections is pragmatic: *Can the prerequisites for an existing scheme be improved?* The Swedish venture capital project is fully operational and will by all accounts continue over the next structural fund period (2014–2020). Given the existing project, conceivable possibilities to improve the prerequisites for its activities by means of complementary policy measures are commented on – if there is such a political ambition.

The reflective discussion has six main sub-headings: *Invisibility and evaluations*, *A long-term approach*, *The growing importance of angel investments*, *Tax incentives*, *Policy portfolio* and *Conceivable reinforcing policy initiatives*.

The first, "Invisibility and evaluations", takes up, among other things, the visible and the invisible parts of the business angel market. The latter is considerably larger but both knowledge and policy measures are focused on the former. Taken all together, this means that knowledge is limited. The same applies to the occurrence of systematic evaluations, both in the countries studied and, as far as can be ascertained, in Sweden.

The next sub-section, "A long-term approach", discusses the need for a long-term perspective regarding policy measures. The market needs a long-term perspective and predictability to be able to work well. There is much to indicate that the venture capital project will continue during the next programme period (2014–2020), which gives added possibilities for both a clear market "offering" and consideration of complementary policy initiatives.

The third sub-section, "The growing importance of angel investments", points to a decline in the presence of formal venture capital in early growth phases, which leads to a greater relative importance for informal capital. In the on-going venture capital project, business

angels constitute more than 40 percent of the private investors but with substantial variations between the funds. The importance of a functioning exit market is also emphasised.

The fourth sub-section, “Tax incentives”, comments on the investor’s deductions introduced in Sweden on 1 December 2013. Referring to Prof. Christensen’s country study it is expected to more favour new, potential, angels’ entry into the market than the activities of established, serial, angels. On the other hand, a hard to grasp regulatory framework may reduce the degree of utilisation. Growth Analysis’ opinion is that it is important that the investor’s deduction be evaluated as regards both effects and transparency and adsorption capability on the part of the intended target group. A fundamental prerequisite for this to be implemented is that data on investors and investment objects are able to be made fully accessible to future evaluators.

The fifth sub-section, “Policy portfolio”, begins by linking back to Prof. Christensen’s argument in the country study concerning the need to take policy measures into account as components in a cohesive system (the policy portfolio). The implication is both the reciprocity between different interventions and the importance of the order in which they are implemented. An individual measure may also lead to external effects that can influence the effects of another measure, even if the former viewed in isolation does not show any direct effects. In comparison with the pre-2009 period, the contents of Sweden’s policy portfolio have changed, which – following Prof. Christensen’s line of reasoning – has also impacted on the prerequisites for the policy tools.

The final sub-section, “Conceivable reinforcing policy initiatives”, emphasises the importance of the policy measures that are implemented following the same line and acting to attain a clearly defined goal – a governmental policy/strategy. Possibilities for improvement are judged to exist in this regard. Potential business angels (virgin investors) or entrepreneurs may be hampered by shortcomings as regards knowledge and information. This may lead to a greater need for coordinated policy measures in the investor/investment readiness categories and BAN activities. Exit issues are predicted to grow in importance in the venture capital project and promotional measures might be considered, e.g. stimulate learning between the funds.

Growth Analysis concludes by observing that while a number of policy measures are assuredly being implemented in the area, it is doubtful where the impression is one of a cohesive policy portfolio.

I Introduction

1 The commission and the structure of the report

Section I gives a brief introduction to the report. The (interim) report is written as part of an evaluation of a financial policy intervention. The evaluator is the Swedish Agency for Growth Policy Analysis (Growth Analysis).¹³ Growth Analysis' commission and the policy intervention are therefore by way of introduction briefly described.¹⁴ The section concludes by describing the structure of the report.

1.1 The policy initiative

A capital supply initiative with regional co-investment funds is being implemented between 2009 and 2014 within the framework of Sweden's eight structural fund programmes with the aim of increasing the regional supply of equity capital for micro, small and medium-size enterprises (SMEs). The investments will primarily concern early phases. This is the first time that structural funds in Sweden have been used in a broad venture capital context. Twelve¹⁵ regional funds (fund projects) have been formed in different constellations. The players behind the funds are Almi Invest, Innovationsbron, Norrlandsfonden and the Sixth AP Fund. The initiative comprises a total of approximately SEK 2.4 billion (c. 279 million euro).¹⁶ At least half the amount must come from private venture capital players while the remainder is shared equally between funds from the European Regional Development Fund (ERDF) and regional public co-financing.

The project is to be market-complementary and revolving. The former means that it must not force out (crowding out) existing private investments and the latter that the capital base must not shrink in the long term. Investments are always made together with a private player and on the same terms as this player.

The venture capital project will be followed up and evaluated in various ways, partly by Tillväxtverket (the Swedish Agency for Economic and Regional Growth)¹⁷ by means of on-going evaluation¹⁸ and partly by Growth Analysis as described below.

1.2 Growth Analysis' commission

Growth Analysis' original commission was stated by the government in its 2009 appropriation directions for the agency and has since then also been touched upon in later appropriation directions. The commission is to be reported in the form of three interim reports (2010, 2011 and 2013) and a final report in 2015. The commission states that the evaluation is to act as a basis for learning in preparation for possible future interventions of

¹³ In Swedish: Myndigheten för tillväxtpolitiska utvärderingar och analyser (Tillväxtanalys).

¹⁴ A more detailed description of the venture capital intervention can also be found in the following chapter 2.

¹⁵ Following the amalgamation of SEF II and SEF III, the regional funds are now reduced to eleven.

¹⁶ Exchange rate Swedish kronor (SEK) → euro as at June 2013 (throughout the report).

¹⁷ Due to the somewhat cumbersome English denomination, the Swedish name "Tillväxtverket" will sometimes be used in the report.

¹⁸ The assignment has been procured and will be carried out by a private consulting firm (Ramböll).

a similar nature. The emphasis is to be on experiences from international research and empirics.

The present interim report, *Business Angels, Co-investment Funds and Policy Portfolios*, is Growth Analysis' third within this commission. As stated in the agency's 2011 appropriation directions, the emphasis is on in-depth case studies of international initiatives with relevance to Swedish policy.

“Growth Analysis shall gather and compile international empirical research with a focus on investigating the effects of similar initiatives. General conclusions that can be drawn from these studies shall be highlighted. International initiatives that in this respect are judged to be of particular interest from a Swedish policy perspective shall, if the agency considers it to be relevant, be studied in greater detail in the form of one or several in-depth case studies.”

This report satisfies the directives stated in the second paragraph and contains descriptions and experiences of government policy measures concerning business angels (BA)¹⁹ in four counties.

The *aim* is to contribute to a knowledge base for political considerations in the area of entrepreneurial financing. International experience of how business angels' investments can be promoted in various ways and what lessons can be generated from the design of instruments, implementation and effects are of interest in this respect from a Swedish policy perspective.

The assignment is to result in a report to the Government Offices (Ministry of Enterprise, Energy and Communications) no later than 15 December 2013.²⁰

1.3 Report structure

The main body of the report consists of a *study* of government policy initiatives aimed at business angels in four countries. The study was made by associate professor Jesper Lindgaard Christensen of the Department of Business and Management at Aalborg University in Denmark on behalf of Growth Analysis. The study is presented in seven of the report's chapters (3–9). Growth Analysis has also written two introductory chapters (1–2) and a concluding policy discussion (10).

The report thus consists of *ten chapters*, divided into *four main sections* to make it easier for the reader to get a general overview.

I: Introduction

Chapter 1. The section can be seen as a brief introduction intended to guide the reader with a general description of the evaluation assignment and the policy initiative itself and how the report is structured.

II: A retrospect, previous studies and business angels in venture capital funds

Chapter 2. The section begins with a description of the on-going initiative with regional co-investment funds (the venture capital initiative) followed by a retrospect of previous

¹⁹ The term business angel(s) and the abbreviation BA are used interchangeably in the report. The same applies as regards business angels network(s) and BAN.

²⁰ The Swedish version of this report "Affärsänglar, riskkapitalfonder och policyportföljer" was submitted to the Government on 13 December 2013.

interim reports relating to Growth Analysis' evaluation assignment. The section ends with a very general introduction to the Swedish business angel market and touches briefly upon the ongoing venture capital project where the business angels' participation is described.

III. Business angel policy in Europe

Chapter 3 introduces the international study carried out by associate professor Jesper Lindgaard Christensen on behalf of Growth Analysis. The chapter introduces the study with a discussion and presentation of: the method used, the choice of countries, business angels in theory and figures, policy instruments, reasons for government intervention and trends in the area.

Chapter 4–7 presents the “field work” carried out in the form of country studies. Chapter 4 is devoted to France, chapter 5 to Belgium (Flanders), chapter 6 to Wales and chapter 7 to Denmark.

Chapter 8 contains a discussion and policy lessons.

Chapter 9 concludes the international study and takes up aspects of the evaluation based on the country studies presented.

IV A Swedish policy for business angels? – a concluding policy reflection

The last chapter of the report, *chapter 10*, begins with a brief overview of policy instruments focused on business angels carried out by the governmental agencies *Nutek* and *Tillväxtverket* in recent years.²¹ The chapter concludes with some reflections where Growth Analysis discusses different policy aspects related to the ongoing venture capital project.

The report has one *appendix*, a list of the people interviewed in the international study.²²

²¹ Nutek (the National Board for Industrial and Technological Development) was disbanded on 31 March 2009 and a new agency, Tillväxtverket (the Swedish Agency for Economic and Regional Growth), took over most of its tasks.

²² In the Swedish version of the report, there is also an Appendix 2 containing a collection of examples of ongoing publicly funded policy measures aimed at BA/BAN in Sweden.

II A retrospect, previous studies and business angels in the venture capital project

2 Background

Section II begins with a general description of the regional co-investment fund intervention with regard to growth, funds and objectives. This is followed by a look back at the agency's two previous reports relating to the assignment. The section continues by approaching the group of private investors called "business angels". This is done partly by very briefly describing Sweden's business angel market and partly by highlighting business angels in Sweden's regional co-investment funds. In the latter description, some indication is given of the current investment picture in the project by showing the number of investment objects (portfolio companies) for each fund and the size of the investments by type of capital and fund. The private individuals (business angels) category is then broken out of the private investors group and considered on the basis of number, amount invested and geographical residence.

2.1 The regional co-investment funds

2.1.1 Why this policy intervention?

The establishment of the intervention can be attributed to a combination of discussions about a shortage of entrepreneurial capital and the European Commission's new view of company-focused measures within the structural fund programmes.

Start-ups and expansion of small and medium size enterprises (SMEs) are an important component in economic growth. A situation where investment ready companies with substantial growth potential fail to find financing is obviously a problem. Such an imbalance between existing market supply and the companies' demand is often discussed in Sweden (and in most other countries) in terms of a "financing gap".²³

In the late 1990s, the ERDF's funding measures aimed at companies changed and in most European countries the proportion of direct project contributions decreased. For the 2000–2006 programme period, the European Commission advised the member states to shift the funds in the structural fund programmes from direct contributions (e.g. grants) to other forms of funding such as loan, guarantee and venture capital, with the aim, among other things, of reducing skewed competition and – through "revolving funds" – create a reflux of capital and open up a larger scope for guarantees.

²³ For a problematising discussion around this, see for example Tillväxtanalys, (2010), "Staten och riskkapitalet" [Growth Analysis, (2010), "The State and Risk Capital"], sections 3.6.1; 4.1 and. 4.2.

Against this background, the government and parliament took decisions in 2004 and 2005 that made it possible to make such interventions also in Sweden.²⁴ A pilot intervention with three regional venture capital funds was then initiated in 2005, clearly influenced by the Scottish Co-investment Fund (SCF). The three funds invested actively between 2005 and 2008. During that period a total of SEK 112 million (c. 13 million euro) was invested in 62 portfolio companies. Management and realisation of investments made are permitted to continue up to and including 31 December 2015.²⁵

Prerequisites and the need for further interventions were investigated further.

To begin with, possibilities to form one or more national JEREMIE holding funds were examined.²⁶ Despite considerable efforts, legal difficulties (structural fund regulations and procurement rules) meant that this alternative had to be abandoned. Instead, a regionally based model was chosen with venture capital funds in the country's eight structural fund regions (NUTS 2).²⁷ The applications received resulted in twelve funds. The players behind the funds are, in various constellations: Almi Invest, Almi Företagspartner Mitt AB, Norrlandsfonden, the Sixth AP Fund and Innovationsbron.

2.1.2 Capital, method and objectives

The twelve funds' capital bases vary between SEK 36 and 200 million (c. 4.2–23.2 million euro), making a total of SEK 1.4 billion (c. 163 million euro). Half the capital comes from the ERDF and the other half from the Swedish public sector, i.e. regional councils, county administrative boards, regional Almi Företagspartner offices, etc. At least as much (50 percent) is also expected from private co-financing.

The project is to be market-complementary and revolving. The former means that it must not force out (crowding out) existing private investments and the latter that the capital base must not shrink in the long term. Investments are always made together with a private player²⁸ and on the same terms as this player. The private player must invest at least the same amount as the regional, public, venture capital fund.

The target group is micro, small and medium-sized enterprises (SMEs) and the investments are to primarily be made in early phases.²⁹ Investments are normally between SEK 1 million and 10 million (c. 116,000–1.16 million euro).

²⁴ The Capital Procurement Ordinance (1996:1188) [Kapitalförsörjningsförordningen] requires the government and parliament to give their approval before agencies/authorities can use state funds or other assets as equity capital in companies. See for example Government Bill 2004/05:1, the Committee on Industry and Trade's report, 2004/05:NU02 (written communication from parliament to the government) 2004/05:96.

²⁵ The three projects were Regioninvest Gotland AB, AB Vestra Partnerinvest (which later changed its name to Partnerinvest i Mellansverige AB) and Saminvest Mitt AB. For an evaluation of the pilot intervention, see: Ramböll, (2011), "Utvärdering: Pilotsatsning på regionala investeringsfonder" ["Pilot intervention concerning regional investment funds"].

²⁶ JEREMIE is an acronym for Joint European Resources for Micro to Medium Enterprises, a joint initiative between the European Commission and the European Investment Fund to promote the use of funding instruments in order to increase SMEs' access to funding through structural fund measures. See: http://ec.europa.eu/regional_policy/the_funds/instruments/jeremie_sv.cfm#1

²⁷ Each region has drawn up its own structural fund programme for regional competitiveness and employment funded by the ERDF and Swedish public funds. Each region also has a structural fund partnership whose main task is to prioritise between applications for project support.

²⁸ Without any previous links to the portfolio company. A venture capital company, a business angel or some other company will normally invest the equity capital.

²⁹ Over the project period, the "early-criterion" has been widened somewhat and the target group is now defined as SMEs in seed, start-up and expansion phases.

The intervention's objective, i.e. the funds' actual assignment, is not totally clear. The overarching aim is to improve SMEs' financing possibilities in early phases and contribute to growth in the portfolio companies. Further objectives formulated include revolving capital, a better regional financing structure, competence development of various funding players, better collaboration between funding players, horizontal demands (environment, equality and integration), etc. A relatively exhaustive goal discussion was carried on during the first year of the intervention to determine the expectations and restrictions that the fund projects will encounter in the intervention.³⁰

The project began on 1 January 2009 and will run until 31 December 2014. Recent figures show that between the start of the project and June 2013 approx. SEK 2.2 billion (c. 256 million euro) had been invested in 207 portfolio companies.³¹ Of the total investments, public funds account for approx. SEK 767 million (c. 89 million euro) and private funds for approx. SEK 1.4 billion (c. 163 million euro).³²

2.2 Previous interim reports from Growth Analysis relating to the assignment

2.2.1 Interim report 1

Growth Analysis' first report on the Swedish intervention with regional co-investment funds, *Staten och riskkapitalet*, was submitted to the government on 15 March 2010.³³ The report contained a *method description*, a *survey of international research* and a concluding *policy discussion*. Below follows a short summary of the three parts of the report.

Method discussion

The method discussion briefly described how Growth Analysis intended to proceed in order to fulfil the commission in its entirety. After a theoretical survey, it was clear that the commission generates questions that require two kinds of evaluation: an evaluation of the implementation and an *ex post* evaluation. To the first category belong the international experiences from research and evaluation to be collected, compiled and put in relation to the Swedish risk capital intervention and the analysis based on experience of the process from the intervention. An *ex post* evaluation is also to be made in the form of an impact assessment when the intervention is concluded (2015 at the earliest) and will look for any causal relationships between the policy measure and the performance of the portfolio companies.

Research overview

On the basis of the report's overview of international research, a detailed study was made of fourteen different state venture capital programmes in eight countries that had been evaluated in various ways. This review was summarised in a number of general observations:

³⁰ See for example Tillväxtanalys, (2010), "Staten och riskkapitalet" [Growth Analysis, (2010), "The State and Risk Capital"]; Ramböll, (2010), "Start av regionala riskkapitalfonder – uppdrag och lärdomar" ["Start of regional venture capital funds – assignment and lessons"] and Ramböll, (2011), "Halvtidsutvärdering av regionala riskkapitalfonder – implementering och lärdomar" ["Half-time evaluation of regional venture capital funds – implementation and lessons"].

³¹ The figures refer to amounts that are *both* decided and paid out.

³² Figures from Tillväxtverket, (2013), "Kvartalsuppföljning, Q2 2013 i 'Fondprojekten'" [Swedish Agency for Economic and Regional Growth, (2013), "Quarterly follow-up, Q2 2013 in 'The Fund Projects'"].

³³ Tillväxtanalys, (2010), "Staten och riskkapitalet" [Growth Analysis, (2010), "The State and Risk Capital"].

- The hypothesis of market failure is given limited support in research. It is rather a matter of rationally acting players in small or undeveloped markets.
- Public interventions must complement the private sector and not compete or force it out. It is clear that this is easier said than done. State Venture Capital (VC) programmes often become caught between the additionality requirement on the one hand and the requirement to act on equal terms with the private market on the other, which entails a risk of competing with it.
- The context that a VC programme has to operate in is often an explanatory factor behind a programme's success or failure.
- Many public VC programmes have ambitions founded in regional politics, where the hope is that venture capital will create growth in lagging behind regions. This will often lead to problems. Venture capital is attracted to growth regions, but does not create them.
- Incentive structures that stimulate co-investment from private players are important for a VC programme's ability to succeed.

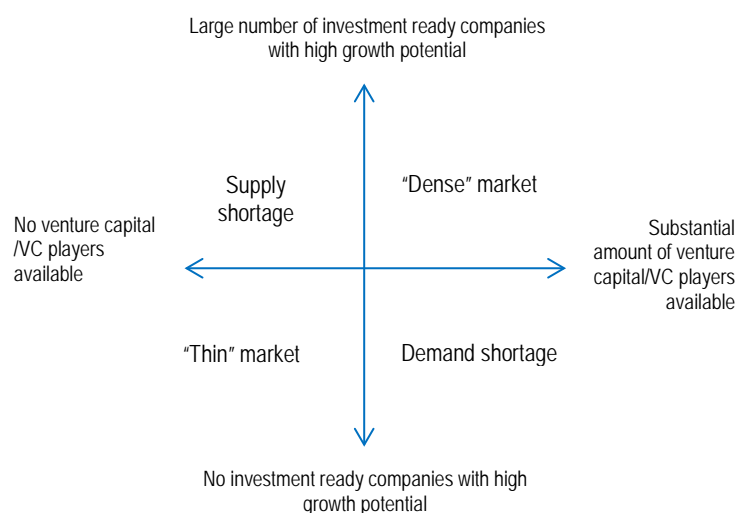
Policy discussion

In the earlier reflection on policy, it was observed that the intervention has both possibilities and challenges. Realistic expectations must be made of venture capital. As well as being an extremely powerful funding instrument with a well-documented ability to create growth, there are nonetheless qualifications that need to be made. Venture capital is a form of funding for a limited number of companies with very high growth potential. A small number of successful investments may give an exceptional return at exit, but most investments in early stages fail or give only a modest return. Venture capital is not the solution for the majority of companies that are in need of funding, Venture capital cannot in itself turn around economic development in a region where trade and industry is weak.

The starting points for the intervention such as *financing gap*, *market failure* and *inadequate supply* were discussed and problematised in the report. Regardless of whether market failure or market rationality exists, a financing gap can be considered to be a *problem* for the economy insofar as new start-ups with growth potential are disadvantaged.

Rather than merely a supply problem, the *venture capital market's viscosity* (a sliding scale between "thin" and "dense" was discussed. Figure 1 below gives a summarising illustration of the discussion in the form of a four-field matrix. The vertical axis shows the number of investment ready companies with high growth potential while the horizontal axis symbolises the amount of venture capital available.

Figure 1: Schematic capital supply structure



This gives four schematic situations in the matrix: “Dense market”, “Demand shortage”, “Thin market” and “Supply shortage”. The preferred situation is of course the “Dense” market. International experiences state that government interventions to give growth companies better access to capital focus heavily on *supply-side* measures, i.e. are based on an implicit assumption that financing problems (financing gaps) are rooted in the supply side (supply shortage). The more of the “thin” market a country or region has, the clearer it becomes that effective policy measures must contain more than an increased supply of venture capital.

One conclusion is that it is important to view the intervention in its context. A policy intervention *may have varying degrees of success depending on regional conditions*. An alternative to a uniform intervention is then to adapt the tools to the specific regional conditions. Competence-raising initiatives, demand-side interventions and financial instruments other than venture capital might then be able to be discussed.

In the intervention, the private players’ return targets come up against several political goals and restrictions. One of the major challenges is also the tightrope walk between *political and commercial goals*.

Clear rules of play are always important. Growth Analysis observed that a clearer and more distinct goal structure would definitely have made it easier for the funds, clarified the expectations made of them and reduced the need for complicated reconciliations. It is very important that the goal structure in future be discussed and clarified as far as possible. In the meetings that have hitherto been held between the funds, Growth Analysis and Ramböll³⁴, such discussions have now begun, which Growth Analysis regards as positive and productive.

Possibilities to learn are also judged to be good. Good collaboration had begun both between agencies/authorities and with the co-investment funds.

³⁴ The procured private consultant firm that are performing the “ongoing evaluation”.

2.2.2 Interim report 2

Growth Analysis' second report, *Kompetent kapital? – Tre länder, tre försök* was submitted to the government on 14 November 2011.³⁵ The report presented experiences from three countries (Norway, Finland and Scotland) where the state had tried in various ways to involve private capital in funding interventions aimed at SMEs. Below follows a brief summary of the country studies and the policy discussion.

The country studies

In *Scotland*, the Scottish Co-Investment Fund (SCF) has been in existence since 2003. The intervention means that certified private parties (as a rule networks of investors and VC funds) identify investment objects, assess them and negotiate agreements. The SCF then goes in and provides 50 percent co-financing on exactly the same terms. Important external factors to consider include both an on-going intervention to promote business angel networks and substantial tax incentives for investments.

In *Finland*, the VIGO programme began in 2009 inspired by Israel's Yozma initiative. The latter has attracted a great deal of international interest. The aim with the Finnish initiative was to create a "fast track" to funding for companies in a very early phase. Experienced business developers, competence and international networks are important features. At the time of the study, after tender competition there were six, specialised, investment environments called "VIGO networks". The intervention had succeeded in attracting international capital but has encountered difficulties in respect of coordinating *due diligence* activities between the individual VIGO network and funding providers Tekes and Seed Vera Venture.

Norway has worked with seed initiatives where the state provides loan capital in the form of "commitment loans" (50 percent) and private investors provide equity capital in a seed fund. A risk relief element exists in the form of a reserve fund ("loss fund"). Part of the risk is thus transferred from private investors to the state. "Såkorn 1" (1998) had one national and five small regional funds. Results were considered poor, the reasons given including, among other things, lack of management skill and exit competence, inadequate risk relief, too small funds and too expensive commitment loans. In "Såkorn 2", which was set up between 2005 and 2008, four national and five regional funds were formed. Compared to "Såkorn 1", the funds are larger and more emphasis has been given to competent management. The system of commitment loans remains in place.

Policy discussion

Comments on the country studies were made in five sub-areas: Evaluation, long-term approach, context, design and geography.

It is important to build up an institutional structure that favours learning. It is therefore somewhat remarkable that so few *evaluations* could be found despite the number of ongoing interventions. As regards those that were nonetheless identified, the general impression was more of individual studies than components in a cohesive system of evaluation. This might partly be explained by the fact that the interventions are relatively "young". On the other hand, evaluations can be prepared and included already at the design stage of the policy initiative. Nor do all evaluations need to be made *ex-post*. The

³⁵ Tillväxtanalys, (2011), "Kompetent kapital? – Tre länder, tre försök" [Growth Analysis, (2011), "Competent Capital? – Three countries, three attempts"].

time-lag (the so-called J-curve), however, make it necessary to wait up to 10–15 years after the first investment before making an impact assessment to be sure of capturing all subsequent effects.

The market needs a *long-term perspective* and predictability to be able to work well. State interventions at irregular intervals, uncertainty as to whether ongoing interventions will be extended or not, changes in terms and conditions, etc. risk both influencing the private players' willingness to invest and making it difficult to build up necessary competence milieus where it is needed. Examples of such reactions can be found in both Scotland and Norway. However, the area is not without its complications. At the same time as stable rules of play reduce players' uncertainty, to be effective they must show flexibility and an ability to adapt to changes in the world around. One lesson that can be learned might be to shift the efforts from short, direct policy measures to more long-term, indirect and system-impacting venture capital strategies, such as incentive structures and regulatory changes.

The rational will to learn from experience, including from other countries, requires an alertness to *contextual* conditions. In what context have such interventions developed? Even though challenges and goals might be as good as identical between regions and countries, factors such as industry structure, political systems, rules, tax systems, history, geography, etc. are of great importance when it comes to policy learning. In Scotland, for example, existing policy measures like supporting business angels and tax incentives seem to have played a great part in the success of co-investment funds (SCF). In Finland, the ambition to establish a fast track has been slowed by the players' history – the difficulty of introducing ways of working that are not the same as before. How players in the venture capital system can be promoted by effective policy interventions is a question where Sweden can probably learn a great deal from other countries. But such learning requires more than a simple copy-and-paste attitude.

The *design* of a policy intervention is naturally important, for example how competence can be brought into the financial intervention in all process stages, incentive structure, simplicity and transparency, etc. In Norway, experience from “Såkorn 1” indicated inadequacies in administration and exit competence. In “Såkorn 2”, this has been addressed alongside better collaboration between the funds. Finland's ambition is to bring in competence in the form of established VC players with serial entrepreneurs and professional business developers. As always in such a setting-up process, a goal discussion is highly relevant as the starting point. On a general level, it can be asked what the actual goal of a state intervention is. Or, in other words, what is the “public undertaking”? Is there for example a long-term ambition to develop the entrepreneurial financing market as far as possible as regards diversity, functions and quality so the need for state intervention and selective measures are more and more reduced over time? Or is the goal more short-term? Is it the promotion of a small number of growth companies in specific interventions that is in focus? Interviews from Scotland indicate that a better functioning market is the primary objective for them, even if the businesses are their beneficiaries.

The *geographical dimension* involves trying to strike a delicate balance in this respect. On the one hand, regional political ambitions can lead to geographically delimited funds, which risks limiting the number of suitable investment objects. On the other hand, research suggests that investors (and in particular business angels) want to invest locally, which may favour a regional presence. Here again, it is important to define goals very clearly and consider what policy instruments are best suited to each individual goal. An alternative is to work with national funds and geographical dispersed *investor/investment readiness-*

programmes. This will secure a national deal flow and reasonably increase the likelihood of business angels and investment ready companies coming into contact with each other.

The policy discussion concluded with a discussion of *the importance of informal investors – business angels*. Based on the knowledge gained from the country studies, the linkage between co-investment programmes and business angels stood out as being no less important. In spite of this, knowledge of business angels continues to be very limited. In another of Growth Analysis' reports, current knowledge of informal investors had been described as a "*particularly serious deficiency*".³⁶ A study of the topic was therefore announced.

2.3 Description of the Swedish business angel market

2.3.1 Fragmentary state of knowledge

There are few reliable sources of data for business angels' investments. This is because the market is by nature "invisible", i.e. there are no public registers of business angels or their investments. The knowledge that exists is often based on a small part of the market – business angels registered in networks – a proportion that according to Mason and Harrison is believed to cover between 5 and 20 percent of all business angels.³⁷ Another aspect that has been a limiting factor as regards building up knowledge in the area is that it is difficult to define business angels and differentiate them from other kinds of investors. Different definitions have been seen in the literature – ranging from a very broad definition that also includes investments made in family members' companies (e.g. the GEM study)³⁸ to a narrow definition where among other things demands are made that the investor must be independent of the company and primarily invest for profit, and that the investment be of a certain minimum amount, and that the investor also contribute to the company's development through active involvement as an owner.³⁹

Knowledge status in *Sweden* is somewhat better than in other countries, thanks mainly to two extensive studies made between 2004 and 2006 (funded by Nutek and FSF), one of which (carried out by Nils Månsson) focuses on narrowly defined business angels, while the other (carried out by Sofia Avdeitchikova) focuses on a broader definition – informal investors – but excludes investments within the family.⁴⁰ Most of section 2.3 is based on the findings from these two studies.

³⁶ Tillväxtanalys, (2011), "Kapitalförsörjningen i små och medelstora företag" [Growth Analysis, (2011), "Capital procurement in SMEs"].

³⁷ Mason C M & Harrison R T, (2000), "The Size of the Informal Venture Capital Market in the United Kingdom".

³⁸ Global Entrepreneurship Monitor/Entreprenörskapsforum, (2012), "Entreprenörskap i Sverige – Nationell rapport 2012". [Entrepreneurship in Sweden – a national report 2012].

³⁹ See for example Mason C M & Harrison R T, (2000), "The Size of the informal venture capital market in the United Kingdom" and Avdeitchikova S, (2008), *Close-ups from afar: the nature of the informal venture capital market in a spatial context*.

⁴⁰ Nutek (the National Board for Industrial and Technological Development) was disbanded on 31 March 2009 and a new agency, Tillväxtverket (the Swedish Agency for Economic and Regional Growth), took over most of its tasks. FSF (Swedish foundation for small business research) changed its name to Entreprenörskapsforum (Swedish Entrepreneurship Forum) in 2009. The findings from the studies have for example been published in Avdeitchikova S et al., (2006). "Den informella riskkapitalmarknadens betydelse för nyföretagandet" [The informal venture capital market's importance for new enterprise]; Månsson & Landström H, (2006), "Business Angels in a Changing Economy: The Case of Sweden" and Avdeitchikova S, (2008), *Close-ups from afar: the nature of the informal venture capital market in a spatial context*.

2.3.2 Business angels' defining characteristics

Looking at business angels according to the *narrow definition*, Swedish research has shown that between 2002 and 2004, 96 percent of the investors were men and had an average age of 58. Only six percent of the business angels were younger than 40. The business angels invested in one or two companies a year, had an average of 4.4 companies in their portfolios and every second investment was made in companies in the seed or start-up phase. Regarding sector preferences, most investments were made in the IT/data/telecom sector (23 percent), electronics (23 percent), real estate (14 percent) and medical technology (9 percent).

If we look instead at the *broader market* for informal venture capital, which also includes small and one-off investors, investors who only contribute capital and those who primarily contribute competence (and very little capital) the picture is somewhat different. Among other things, these investors seem to be younger and there are more women among them (approx. 20 percent). These investors also have a somewhat different industry profile, with a greater interest in consumer goods and the retail trade (15 percent) and media (11 percent).

2.3.3 The size of the market

Over the 2002–2004 period, there were approximately 3,000–5,000 business angels in Sweden who together invested approximately SEK 2 billion (c. 232 million euro) annually in unlisted companies. In addition there were also a large number of other informal investors, approximately 10 times more, who in turn invested approximately SEK 1.5–2 billion (c. 174–232 million euro). All in all, private investors in Sweden made slightly more than 30,000 investments in unlisted companies totalling an estimated SEK 3.4–4 billion (c. 395–465 million euro). Putting this in relation to GDP, in Sweden this type of investment constituted approx. 1 per mil (‰) of GDP, to be compared with estimates of between 3 and 5 per mil in the USA.

2.3.4 The market's geography

Just like the institutional venture capital investments, the informal venture capital shows a high degree of geographical concentration. Between 2002 and 2004 approximately 70 percent of the informal venture capital (i.e. SEK 2.5–3 billion or c. 290–348 million euro annually) was invested in metropolitan regions and another 25 percent (slightly less than SEK 1 billion (c. 116 million euro) annually) in major regional centres. Putting the number of investments in different regions in relation to the number of companies, the probability of obtaining co-financing from an informal venture capital investor was around 10 times greater in Sweden's major cities than for example in the inland areas of the northern part of Sweden (*Norrland*).

2.3.5 Development over the past decade

Very little is known about how the business angel market in Sweden has developed over the past ten years. There are, however, several good reasons to believe that it has expanded. First, the previous estimate is from 2004–2006 (and mainly covered 2002–2004), which means that the substantial decline in the wake of the so-called dot-com crash⁴¹ in the

⁴¹ The dot-com crash began at the beginning of the year 2000 and led to sharply falling stock indexes for the next two years. It had been preceded by the so-called dot-com bubble, a phenomenon of unrealistically high share prices in internet companies.

early 2000s probably influenced the responses. Second, several policy interventions have been implemented to promote business angel investments in Sweden over the course of the decade, which can be expected to have had a positive impact on their activity. And third, the GEM reports show an almost fourfold increase in investment activity in Sweden over the past ten years.⁴² Despite the fact that the figures to a great extent also include family-related investments, it can nonetheless be assumed that some of the increase is attributable to the increase in the number of business angels.

This section presented a general picture of the Swedish business angel market, while the next section focuses on a sub-market, i.e. the ongoing intervention with regional co-investment funds.

2.4 Business angels in the regional co-investment funds

2.4.1 Investment status

In the present report, the focus is on international experiences. We might, however, be justified in beginning by taking a look at the Swedish intervention with regional co-investment funds to try to form a picture of business angels' involvement in them. Before we do so, we can also say something about the funds' current status.

According to the latest annual report (up until Q4 2012) from those conducting the ongoing evaluation, the intervention is largely proceeding as expected.⁴³ The funds are finding relevant investment objects and private co-financers. Overall, the investments are being made according to the investment plan. Dividing the investments into public and private however reveals that paying out of public capital is somewhat less than planned. Should this trend continue, there may remain some unused public funds when the intervention is wound up.⁴⁴ Such a scenario does not need to be a problem from an economic (cost-benefit) perspective – where the funds' market-complementary role is considered to be of considerably greater interest than the number of investments *per se*. But it *might*, as the evaluators point out, lead to increased pressure on the funds to invest and such pressure might indirectly also increase the funds' propensity to invest in objects that lie in the borderland between “of interest” and “doubtful”.

Another important issue for the future is that of exit. Is there any interest from the market? What are the most effective strategies for handling it? The process has not yet really begun. The annual report, however, indicates that there is a relatively broad span among the fund's exit strategies. We will return to this question at relevant points in the report, e.g. in the country studies and in the sections 3.3.3, 8.6 and 10.2.

⁴² Global Entrepreneurship Monitor/Entreprenörskapsforum, (2012), ”Entreprenörskap i Sverige – Nationell rapport 2012” [Entrepreneurship in Sweden – National Report 2012].

⁴³ The “ongoing evaluation” is being made by the consulting firm Ramböll on behalf of Tillväxtverket (the Swedish Agency for Economic and Regional Growth). See the report: Tillväxtverket, (2013), ”Följeforskning 2012: Regionala riskkapitalfonder” [Swedish Agency for Economic and Regional Growth, (2013), “Ongoing evaluations: Regional venture capital funds”].

⁴⁴ Public funding consists of a domestic component and a European Union component. Any EU funds not invested (at least once) in portfolio companies as of 31 December 2014 must be repaid to the European Commission.

207 portfolio companies and 2.2 billion Swedish kronor

Table 1 and Table 2 below show the funds' investment status by means of the number of investment objects (portfolio companies) and the amounts invested.⁴⁵ Recent figures show that from the start of the project (2009) until Q2 2013 approx. SEK 2.2 billion (c. 256 million euro) had been invested in 207 portfolio companies. The funds "Partnerinvest i Norr", "Saminvest" and "Almi invest Småland och Öarna" had most portfolio companies and "Almi invest Värmland" and "Mittkapital" the smallest number.

Table 1: Number of portfolio companies, by fund (2009–Q2 2013)

Fund	Number of portfolio companies	Proportion of portfolio companies of all funds (%)
Sydsvensk entreprenörskapsfond I	20	9.7
Sydsvensk entreprenörskapsfond II	15	7.2
Almi invest Småland och Öarna	25	12.1
Almi invest Västsverige	22	10.6
Almi invest Värmland	7	3.4
Almi invest Stockholm	18	8.7
Almi invest Östra Mellansverige	21	10.1
Almi invest Norra Mellansverige	17	8.2
Saminvest AB	26	12.6
Mittkapital	10	4.8
Partnerinvest i Norr	26	12.6
<i>Total</i>	<i>207</i>	<i>100</i>

Source: Ramböll Management Consulting/Fondprojekten, Webbportal (2013-09-17)

Table 2 shows the size of the investments made, by fund and the ratio private/public capital. Approx. SEK 2.2 billion (c. 256 million euro) has so far been invested (and paid out) in the funds' portfolio companies. Private capital makes up almost two thirds (65.2 percent) of the total. The largest investments have been made in "Stockholm", "Partnerinvest i Norr" and "Mittkapital", while the smallest have been made in "Almi invest Värmland".

The intervention is designed such that at least half the sum invested must be provided by private players. As can be seen from Table 2, this has clearly been the case. The highest private to public ratio has been achieved by "Sydsvensk entreprenörskapsfond I" with 2.48 and the lowest by "Almi invest Norra Mellansverige" with 1.2. It should, however, be observed that the ratio can be interpreted in a number of ways. A high ratio means a high leverage, i.e. small proportion of public capital in relation to the private component. Where additionality is present, this means on the one hand that the market has received relatively large total investments in relation to the public stake. On the other hand, significant interest from the market might raise the question of whether these investments, or parts of them, would have been made anyway without public co-financing (implying a deadweight loss).

⁴⁵ In this section, investment numbers and amounts refer to investments that are *both* decided and paid-out. The number of decided investments is naturally larger, but at the same time is subject to a degree of uncertainty.

Table 2: Size of investments paid out (SEK millions), by type of capital and by fund. Ratio of private to public investments. (2009–Q2 2013).

Fund	Amounts invested			Ratio of private to public capital
	Public capital	Private capital	Total investment ⁴⁶	
Sydsvensk entreprenörskapsfond I	31.94	79.35	111.28	2.48
Sydsvensk entreprenörskapsfond II	75.29	154.51	229.80	2.05
Almi invest Småland och Öarna	63.35	115.77	179.12	1.83
Almi invest Västsverige	92.69	161.56	254.25	1.74
Almi invest Värmland	21.00	36.95	57.96	1.76
Almi invest Stockholm	87.41	186.38	273.79	2.13
Almi invest Östra Mellansverige	70.89	128.67	199.56	1.81
Almi invest Norra Mellansverige	55.77	66.98	122.75	1.20
Saminvest AB	75.86	160.13	235.99	2.11
Mittkapital	95.38	170.60	265.98	1.79
Partnerinvest i Norr	97.10	172.96	270.06	1.78
<i>Total⁴⁶</i>	<i>766.69</i>	<i>1,433.86</i>	<i>2,200.54</i>	<i>1.87</i>

Remark: SEK 1 million \approx 116,000 euro (June 2013)

Source: Ramböll Management Consulting/Fondprojekten, Webbportal (2013-09-17) [Ramböll Management Consulting / The Fund Projects, Web portal (17 September 2013)]

2.4.2 Business angels: activity and geographical distribution

In Sweden's regional co-investment fund intervention both public and private capital co-invest and on equal terms. In the fund projects' figures, the private capital providers are divided into three categories: *organised capital* (OC), *private companies* (PC) and *private individuals* (PI).

OC refers to companies whose primary task is to invest capital (institutional VC), PC to investments by companies whose primary task is not investments (Corporate VC) and PI private individuals, generally active or former entrepreneurs who invest part of their wealth in the development of new companies (informal VC). The last group would therefore be able to be termed "business angels" according to the above definition. The term "business angels" will therefore henceforth be used to denote the funds' PIs.

After processing the data received, Growth Analysis is able in the tables below to give an overall picture of activity and geographical distribution among Sweden's business angels in the project.⁴⁷ This is only a first picture; there may be reason to return to these questions in subsequent reports where in-depth analyses can be made.

The first step was to exclude public capital and then separate out the group of "unique" private investors, i.e. avoid counting an investor who had made several investments in the same fund more than once.⁴⁸

⁴⁶ Due to rounding-off, minor discrepancies may occur in the totals.

⁴⁷ The figures in tables 3–5 are based on extracts from Ramböll Management Consulting/Fondprojekten, Webbportal (2013-09-17) [Ramböll Management Consulting / The Fund Projects, Web portal (17 September 2013)]. The extracts refer to the period from project start (2009) until Q2 2013.

⁴⁸ The possibility of an investor having invested in more than one fund remains, but should be of negligible importance. For a small number of investors, the quality of the available data does not allow the question of

Table 3: Number and proportion of unique, private, investors, by funds (2009–Q2 2013)

Fund	Investor category (private)				
	<i>Organised capital n (%)</i>	<i>Private companies n (%)</i>	<i>Private individuals n (%)</i>	<i>Unknown n (%)</i>	<i>Total n (%)</i>
Sydsvensk entreprenörskapsfond I	3 (6%)	12 (25%)	31 (65%)	2 (4%)	48 (100)
Sydsvensk entreprenörskapsfond II	11 (15%)	18 (24%)	42 (57%)	3 (4%)	74 (100)
Almi invest Småland och Öarna	20 (26%)	25 (32%)	31 (40%)	2 (3%)	78 (100)
Almi invest Västsverige	29 (25%)	51 (44%)	35 (30%)	0 (0%)	115 (100)
Almi invest Värmland	3 (11%)	11 (39%)	12 (43%)	2 (7%)	28 (100)
Almi invest Stockholm	24 (16%)	43 (28%)	80 (53%)	4 (3%)	151 (100)
Almi invest Östra Mellansverige	26 (19%)	49 (35%)	62 (45%)	2 (1%)	139 (100)
Almi invest Norra Mellansverige	8 (13%)	31 (49%)	24 (38%)	0 (0%)	63 (100)
Saminvest AB	23 (34%)	32 (47%)	13 (19%)	0 (0%)	68 (100)
Mittkapital	4 (14%)	12 (43%)	12 (43%)	0 (0%)	28 (100)
Partnerinvest i Norr	29 (32%)	29 (32%)	27 (29%)	7 (8%)	92 (100)
<i>Total</i>	<i>180 (20%)</i>	<i>313 (35 %)</i>	<i>369 (42%)</i>	<i>22 (2%)</i>	<i>884 (100)</i>

As can be seen from Table 3, private individuals (business angels) constitute approximately 40 percent of the private investors, which is a fairly high figure. However, the funds are not homogeneous in this respect. The extremes are “Sydsvensk entreprenörskapsfond I”, where almost two out of three private investors are business angels, and “Saminvest”, where the proportion is only one third the size and constitutes slightly less than two out of ten. Possible explanations for this spread might lie in differences in the type of investment (e.g. sector or phase), the size of the investments or the actual supply of business angels in the region. Other differences between the funds are also shown in Table 3.

whether the investment was made once or several times to be assessed. These have been omitted in the table but are judge to constitute only a small percentage and thus have only a marginal impact on the total picture.

Table 4: Size of investment (SEK millions), by investment category and fund (2009–Q2 2013)

Fund	Investor category (private)				Total ⁴⁹ n (100%)
	Organised capital n (%)	Private companies n (%)	Private individuals n (%)	Unknown n (%)	
Sydsvensk entrepr. fond I	3.32 (4%)	18.32 (23%)	55.15 (70%)	2.55 (3%)	79.35
Sydsvensk entrepr. fond II & III	57.86 (37%)	26.88 (17%)	56.2 (36%)	13.55 (9%)	154.51
Almi invest Småland och Öarna	35.55 (31%)	53.54 (46%)	22.28 (19%)	4.40 (4%)	115.77
Almi invest Västsverige	62.65 (39%)	85.44 (53%)	11.47 (7%)	2.00 (1%)	161.56
Almi invest Värmland	6.00 (16%)	20.22 (55%)	10.05 (27%)	0.68 (2%)	36.95
Almi invest Stockholm	101.84 (55%)	48.75 (26%)	33.88 (18%)	1.91 (1%)	186.38
Almi invest Östra Mellansverige	60.84 (47%)	45.07 (35%)	22.06 (17%)	0.70 (1%)	128.67
Almi invest Norra Mellansverige	21.03 (31%)	36.80 (55%)	9.15 (14%)	0 (0%)	66.98
Saminvest AB	83.51 (52%)	40.27 (25%)	36.34 (23%)	0 (0%)	160.13
Mittkapital	87.76 (51%)	68.70 (40%)	11.81 (7%)	2.34 (1%)	170.60
Partnerinvest i Norr	103.62 (60%)	42.34 (24%)	4.98 (3%)	22.02 (13%)	172.96
Total ⁴⁹	623.97 (44%)	486.33 (34%)	273.39 (19%)	50.16 (3%)	1,433.85

Remark: SEK 1 million \approx 116,000 euro (June 2013)

Table 4 shows the proportion of invested SEK by category of private investor and fund. As expected, the proportion of business angels is smaller than when we focused on the number and proportion of each investor category in Table 3. Even if their importance in this context has thus decreased, two out of ten invested private Swedish kronor nonetheless come from business angels. The spread between the funds here is even larger than in Table 3. The both “Sydsvenska entreprenörskap funds”, and in particular “fund I”, are different in that they have a high share of business angel financing, while “Partnerinvest i Norr” has the least. It is clear that organised capital has on average invested larger sums than their current number indicates, while the opposite is true of the business angels. The private companies group has roughly the same share of financing amounts as the share of private investors.

Table 3 showed the group of “unique” private investors.⁵⁰ By removing the “private individuals” category (business angels) and adding a geographical dimension we can get an idea of where these investors come from.

⁴⁹ Due to rounding-off, minor discrepancies may occur in the totals.

⁵⁰ Note that a small number of investors have been omitted, since the quality of the data available for them does not permit their uniqueness to be assessed, i.e. whether the investment was made once or several times.

Table 5: Number (share) of investors in the category "private individuals" by fund and geographical residence (2009–Q2 2013)

Fund	Geographical residence					
	<i>In the region n (%)</i>	<i>Outside the region, in Sweden n (%)</i>	<i>Outside Sweden, in the Nordic region/EU n (%)</i>	<i>Outside the Nordic region & EU n (%)</i>	<i>Unknown n (%)</i>	<i>Total n</i>
Sydsvensk Entrepr. fond I	26 (84%)	1 (3%)	3 (10%)	1 (3%)	0	31
Sydsvensk Entrepr. fond II	36 (86%)	2 (5%)	2 (5%)	2 (5%)	0	42
Almi inv. Småland & Öarna	8 (26%)	23 (74%)	0	0	0	31
Almi inv. Västsverige	30 (86%)	4 (11%)	1 (3%)	0	0	35
Almi inv. Värmland	3 (25%)	6 (50%)	3 (25%)	0	0	12
Almi inv. Stockholm	46 (58%)	13 (16%)	12 (15%)	4 (5%)	5 (6%)	80
Almi inv. Östra Mellansverige	32 (52%)	19 (31%)	3 (5%)	0	8 (13%)	62
Almi inv. Norra Mellansverige	3 (13%)	17 (71%)	2 (8%)	1 (4%)	1 (4%)	24
Saminvest AB	8 (62%)	2 (15%)	2 (15%)	1 (8%)	0	13
Mittkapital	6 (50%)	6 (50%)	0	0	0	12
Partnerinvest i Norr	8 (30 %)	8 (30 %)	0	1 (4 %)	10 (37%)	27
<i>Total</i>	<i>206 (56%)</i>	<i>101 (27%)</i>	<i>28 (8%)</i>	<i>10 (3%)</i>	<i>24 (7 %)</i>	<i>369 (100%)</i>

It can be seen from Table 5 that just over half of the business angels who have invested in portfolio companies live in the same region as the co-investing fund. More than one in four are located outside the region but inside Sweden. At over 80 percent the domestic share of business angels is thus clearly predominant. Broken down on fund level, there are relatively few observations and interpretations should therefore be made with caution. A few comments can nonetheless be made: for example, the share of regional business angels appears to be particularly small in "Almi invest Norra Mellansverige" (13 percent) and large in the both "Sydsvenska entreprenörskap funds" (84 percent and 86 percent, respectively) and in "Almi invest Västsverige" (86 percent).

In summary, business angels can be said to be important players in the intervention. They make up about 40 percent of the private co-financers and invest approx. 20 percent of the private capital. Just over half reside in the same region as the co-financing fund and more than one in four live outside the region, although still in Sweden. There are relatively substantial variations between the funds.

We will leave Sweden's regional co-investment funds at this point. In the next section we switch to the main focus of the report – the business angels' role in in the financial system

and how the public sector can increase their investments. The latter is illustrated by means of four international country studies.

III Business angel policy in Europe –an empirical study

3 Business angel policy in Europe – the basis for the study

This chapter is the first in *section III* that concerns the international study of business angels. The chapter contains among other things background and structure, a discussion and presentation of the method used, the choice of country studies, business angels in theory and statistics, policy instruments, reasons for government intervention and trends in the area.

3.1 Background and structure

3.1.1 Limited knowledge of business angels – despite their great importance

Growth Analysis' second interim report within the commission to evaluate Sweden's regional co-investment funds focused on the role of the state in increasing the supply of capital through co-investment programmes.⁵¹ One of the conclusions from the report was that the linkage between co-investment programmes and business angels is very important. In spite of this, knowledge of business angels continues to be very limited. A study of the topic was therefore announced.

The findings can be found in this third interim report. The study, which is the focal point of the report, centres on policy measures from the public sector that aim to promote business angels and on the statistical information that exists concerning these investors. While the second report focused on a specific type of policy, the present report thus focuses on a specific type of investor but covers all kinds of policy interventions. In this respect, it has a broader scope than the second report.

The study was conducted by associate professor Jesper Lindgaard Christensen of Aalborg University in Denmark.

3.1.2 Business angels' role and policy instruments

The study has the ambition to generate knowledge of the role that business angels (BA) play in the capital market and how well various policy instruments function (or do not function) in this market. Knowledge of the informal venture capital market and the policy programmes in four selected countries is transferred and used as a basis for possible future initiatives to promote the Swedish business angel market, taking the Swedish context into account. Countries and regions that are active in this policy area generally support business

⁵¹ Tillväxtanalys, (2011), "Kompetent kapital? – Tre länder, tre försök" [Growth Analysis, (2011), "Competent Capital? – Three countries, three attempts"].

angel investments by supporting business angel networks and through tax incentives, investor readiness/investment readiness programmes or co-investment programmes.

In other words, the questions to be answered are:

- What role do business angels play in corporate financing?
- What statistical information do we have about them and how good is the data in the area?
- Can any lessons be learned from selective European examples of policy measures to increase business angels' investments?
- Can these potential lessons be applied in the Swedish context?

More specifically, the business angels' role in the financial system is examined together with how they can be defined and measured. It is also of interest to know what policy instruments are available to increase business angels' investments. The policy toolbox should naturally not be used as a standard solution. Therefore, a theoretically based and critical discussion of the basis for government interventions is a highly relevant part of the introduction to the study.

Regarding the studies of business angel policy in individual countries there are several goals: both describe the design and implementation and (in particular) gather knowledge from the programmes. What goals and considerations preceded their introduction? What lessons can be learned? Ideally this is based on evaluations of the outcomes of the programmes. One obstacle in this endeavour is the fact that most BA policies are relatively new. Consequently, it is difficult to base assessments only on statistical "hard facts" about their effects, volumes, etc. In the vast majority of cases, the information sought is quite simply not available. In the same way, interviews have been an important source of further information. In many cases, however, it proved impossible to find goals and aims for introducing specific policies. Despite these difficulties, a concluding and important part of the work is to apply the main discussions in combination with the country studies as a starting point for a policy discussion that takes a critical stance towards the policy initiatives examined and the main possibilities for the policy area.

3.1.3 The study's three main parts

The international study (section III) covers seven of the report's ten chapters (3–9) and consist of three main parts.

The first part (chapter 3) introduces the study, describes the methods used, the choice of country studies, the role that business angels play in financing, statistical information about business angels on a general level, what policy instruments are used/available, why the public sector should or should not intervene in the market and finally the trends in financial markets that are of relevance to business angels and policy intervention.

The second part (chapters 4–7) consists of the country studies. These are structured in the same way but have different emphasis in different aspects depending on country. Each section begins with a description of the most important contextual factors in the country studied. This is followed by an analysis of the statistical foundation for knowledge of business angels in the individual country. Policy initiatives are described on the basis of design, background and goals as far as the information available permits. To the extent that

evaluations of their impact have been done, these are analysed. Finally, learning points are summarised.

The third part (chapters 8–9) consists of a critical policy discussion that points to recommendations and lessons for evaluation practices. For obvious reasons, this broad approach does not pave the way for an evaluation in the traditional sense, but is rather an expedient method of generating learning. A general discussion of relevant evaluation criteria when assessing informal capital markets has been included at the end of the report.

As emphasised later in the study, the informal capital market is an area where there is very little statistical knowledge. Although the interviews indeed provided complementary information, they also had their limitations in the form of what information actually surfaced. As a consequence, the scope, comparability and depth of the information upon which the analyses are based are limited. Despite the prerequisites for the analysis being limited, our aim has been to identify lessons from the country studies, put general analysis of the market in relation to issues of relevance for policy, and to carry on a detailed policy discussion that both links back to the country studies and puts these in relation to more general questions and trends.

3.2 Analysis of government intervention – methodological approach and choice of case studies

3.2.1 Foundation for the analysis

The study is based on a combination of desk studies of existing reports, statistics and evaluations of interventions in the selected countries and personal interviews with key people with in-depth knowledge of policies to increase business angels' willingness to invest.

The *literature* that exists consists of previous reports from Growth Analysis (see section 2.2), academic papers, evaluation reports, information brochures and descriptions on the internet. In many cases, in particular as regards evaluations, the written documentation was very sparse. Many of the programmes implemented have not been in operation long enough to be subject to a meaningful evaluation.

Statistics were obtained from, among other sources, EBAN (the European Business Angel Network), the European Commission and EVCA (the European Private Equity and Venture Capital Association) and interviews with authorities and agencies running programmes in individual country studies. The assessment and presentation of the basic statistical material available had three primary sources: central statistical offices and government authorities in the four countries, the interviewees and a consultation with the EBAN, the OECD (the Organisation for Economic Co-operation and Development) and the EVCA. A general discussion of indicators and challenges in the measurement area can be found in chapter 3.3. It became clear at an early stage that national statistical offices do not as a rule have any relevant information about this market, which is in itself remarkable. They were therefore not included in the interview process.

The participants in the *interviews* were academic experts and policy evaluators who were well acquainted with the policies and capital markets in question. Business angels were also interviewed. Since the emphasis in the study is on the policy design process, only a relatively small number of business angels were interviewed. For purposes other than those of the present report, a more balanced selection might have been of use and would perhaps

have resulted in other kinds of insights. The interviewees were selected on the basis of internet searches, information provided by professors Colin Mason of Glasgow City University and Hans Landström of Lund University, earlier studies, and finally a question where the respondents were asked to list the people they considered to be the most important to talk to. This acted as insurance that relevant people were selected and sometimes extended the original list of interviewees.

The interviews were recorded if the interviewee agreed (which in general was the case) and if it did not constitute an obstacle to obtaining all the necessary information. Each interview lasted an average of one and a half hours and was complemented in some cases by further contact by phone or email. Notes of around 1,000 words were made immediately after the interviews. The interview guides were semi-structured and designed for the specific type of interviewee. A specific guide was thus used for interviews with general organisations (EBAN, EVCA and OECD) and another for country studies. Since the individual countries are of interest for different reasons, the emphasis was laid on different aspects in each of the country interviews. The interview guides were adjusted continuously according to the specific interview situation and according to experience from earlier interviews.

The study and the interviews not only describe the policy programmes, their assessed impact and how they are designed, but also, as far as possible, goals, decision processes and incentives related to the policies. Despite getting interviews with relevant respondents, this proved to be difficult during certain of the interviews.

3.2.2 Selection of country cases

The selection of country cases is based upon a reading of the literature and talks with researchers who study business angels. The criteria for selecting the specific countries were that there is likelihood that the experiences from the countries may render learning for other countries. They should be considered best practices but one case should have attempted angel policies that seem to not work. The process has pointed to these countries: Flanders (Belgium); Wales; France; Denmark (no angel policies). These countries are expected to be interesting objects of study in different respects, as elaborated below.

On a very general level, it could be questioned how *best practices* should be identified. As is emphasised below there is very limited evidence on the performance of policy schemes in this area, therefore a precise pointing out of best practices can be difficult. As a validation it was therefore also part of the interviews to get the opinions of the respondents regarding what they assessed as best practises in Europe in this field. Even accepting that we do have a reasonable idea about the best practices it can be questioned if they are the best learning devises. If the same cases are repeatedly studied there is a risk of learning process to get too static and locked-in into the same type of arguments and studies.

Financial systems

The countries represent variety in several dimensions, which in itself motivates the choice of cases. Thus, the array of policies used is wide across the countries, and they encompass examples of different types of capital market systems. According to the often used taxonomy developed by Zysman (1983) financial systems may be grouped into: (i) capital market based systems, (ii) state-led credit based systems, and (iii) bank-based credit oriented financial systems. Although all types of financial systems in this typology are dominated by banks there is in *capital market based systems* a relatively more developed

equity financing and transactions are more market based as opposed to relational. In *credit-based systems* the debt financing is relatively more important and are often done in closer relationships between the borrower and lender. Either banks or the state may be relatively more important for transactions, but even in the latter case banks are dominant channels of finance.

Examples of the *capital market based* systems are often the US and the UK in casu Wales represents this type of financial system. Although there have been many changes in financial systems, generally towards a convergence of the types of systems, France is often said to be a *state-led credit based financial system*, while Denmark and Sweden have *bank-based financial systems*. Belgium resembles the French system although with a number of differences.

The market for innovation finance

The countries in the study are all considered to have a relatively well functioning market for innovation financing. The Danish Growth Fund (VækstFonden) use data from EVCA and the Global Competitiveness Report to calculate an index illustrating the position of a country in a ranking of how the market for innovation financing is functioning⁵². The variables in the index are venture capital under management, investments in domestic firms, early stage investments, access to loan financing, government investments, foreign investments. Their benchmark of the countries includes the countries in the present study. They are all four ranked in third to seventh position, thus placed rather similar in the benchmarking. Moreover, only Denmark seems to have noteworthy changes over time. In the period 2009–2011 Denmark has increased its index score more than the other countries in this study. The index published October 2013 shows a smaller increase in the index for Denmark in 2010–2012 compared to the increase in the previous period, but Denmark remains among the countries in the top of the ranking.

In each country section the contextual setting is explained in detail. This description is based upon interview information, statistics from OECD, and the European Commission. The next para has a brief motivation for the choice of country cases.

Individual countries

The individual cases are interesting in a number of respects specifically related to business angels policies and –activities. This goes not only for the structural characteristics and for the politics they pursue, but indeed also for the *changes* in policy attitudes present in the countries.

With respect to *France* this is probably the one country in Europe where the evolution of the business angels market has proceeded with the most rapid pace⁵³, and this evolution has been supported with a wide array of different policy instruments and an active participation of the FranceAngels organisation. The number of business angel networks in France has now exceeded that of the U.K. Different tax incentives were previously actively encouraging further angel investments. Recently major changes have occurred in this area as constraints on public budgets have altered this activist policy. This makes this case particular interesting.

⁵² <http://www.vf.dk/da/NyhederOgPresse/Nyheder/NyhedsArkiv/2012/20121126%20Benchmarking>

⁵³ Also the venture capital market in general has evolved rapidly in the 2000s and has grown with 10-20% on average, rendering France now being the second largest venture capital market in Europe after the UK.

In *Flanders* the policy instruments span different types; co-investment funds, fiscal incentives, support for business angel networks, and investment readiness/investor training programmes. Moreover, there have been business angel policies for a relatively long period, and it is one of the few places where systematic evaluation has taken place. In *Flanders* there have in recent years been structural changes in how the angel networks and policies are organised. Thus, a re-structuring into two main business angel networks for the Flemish and French-speaking regions was initiated by the government, and a number of changes in the policy attitudes make this case interesting.

The geography of *Wales* poses challenges to how networks should be organised, and the country has large differences between (a few) urban areas and rural areas, which is assessed as being relevant to the Swedish context. The *Xenos* network and the organisation *Finance Wales* has installed a policy for stimulating the business angel market that both takes the geography of *Wales* into account and is very conscious about being a co-player at the market on the private market terms. Instruments span a wide array of the instruments for policy and there have been continuous efforts to support the market. The way the public intervention is organised and the very attitude to policies has undergone fundamental changes during the past five years. Again, these changes in policy approaches make the case interesting.

Denmark is the country that is closest to Sweden in many respects; cultural, capital market wise, size of population etc. Both in *Denmark* and *Sweden* the national BAN has been merged into the national venture capital association. As the other countries in the study, and as *Sweden*, *Denmark* is regarded as having an efficient market for innovation financing (*VækstFonden*, 2012), but as opposed to the other countries the policy development and infrastructure regarding business angels lacks behind in spite of earlier efforts to boost this part of the market. There was a co-investment vehicle, *PartnerKapital*, but this closed down in 2010 after only three years of working. The experiences from this and other failed attempts to enhance the market are expected to render learning, not just the apparent successes. Moreover, it is interesting if the Danish case points to the possibility of having a well-functioning market for innovation financing without an active policy for promoting business angels financing.

There are differences regarding the degree to which the countries have an activist policy approach. Generally, *Flanders* seem active, *UK* as well but perhaps somewhat more hands-off in the policy design; *France* used to be more active but has retracted on this area due to budget cuts. *Denmark* is at the bottom of the list regarding active policies.

3.2.3 Structure and limitations to country studies

The study of the country cases describe the individual country context and then moves on to provide firstly a brief account of statistical foundations for knowledge on the business angels activities in the country, secondly, policy initiatives are described, including their background and objectives, in other words, what are the problems addressed, what is done, and are specific objectives formulated. Thirdly, available evaluations, if any, are discussed. The country sections end with an assessment of the results of the policies and to what extent there is learning to be derived for other countries.

It is worth emphasizing that all policy initiatives are not given equal weight in all country studies. This is because the overarching purpose is to generate learning and some initiatives may be more interesting in that respect than others. In some cases previous studies already elaborated on the content and results from some of the schemes. In such

cases the descriptions and analyses are kept brief. Moreover, some policies may be very contextual or linked to country specific structures, e.g. tax issues, which may make them less generic and transferrable.

Finally, it should be emphasised that although the studies of policies in different countries were done using available reports, web-information, and interview information, then generally, there is very little evidence and information available. This was also experienced by CSES (2012) who did a survey of business angel markets and policies in selected countries in Europe. They emphasised that:

“...with very few exceptions, relevant information was not available. Most of the policy tools were introduced only very recently and there are no monitoring data available.”
(p.9).

Adding to this, interviews, previous studies, and search reveals that national statistical offices have close to zero information in this area and that this is both an under-prioritised and under-evaluated policy areas.

Obviously, this has implications for far it is possible to get in reaching pure data based conclusions; in many cases the learning points emphasised are based on a combination of the sparse statistical facts, interview information, and own assessments. Moreover, the information derived from country studies are attempted to be structured around the different types of policies, however, due to the limitations in the available information it has not been possible to provide comparable data across country studies. Thus, the information is limited in scope and depth and information like the specific economic outcomes of schemes, the ex-ante objectives, weaknesses of programmes etc. are in many cases difficult or impossible to obtain.

On this basis it may be questioned if the learning points in each country section and the policy discussion in chapter 8 is founded on a solid basis. Even so, the available information, even if it is limited, should be used as a point of departure for policy considerations. As was mentioned in several interviews, even if this is a difficult area in terms of statistical knowledge and that we would prefer to have more statistical information, there is a limit to the utility of additional information.

3.3 The impact of business angels investments and policies relevant to business angels

3.3.1 Why should we care - the role and relevance of business angels in entrepreneurial finance

The supply side

Business angels are regarded as an important part of the financial eco-system as they are very important in the very early stage of the development of businesses, and according to interviews and some literature (e.g. NESTA, 2009, Mason et al., 2013) increasingly so.

Trends in the market described below accentuate the important role of business angels in the financial system. Quantitatively business angels supply a large share of both the number of investments and the amount of venture capital supplied to the small, early stage segment of firms in Europe (see below for a specific quantification). The supply side of this market can be understood in two manners; either the financial capital business angels supply and/or the number of active business angels at the market. Because it is both financial capital and the competences that angels provide to their portfolio businesses, both types of supply are relevant. Regarding the supply of angels there is rather little knowledge on the stock and flows in the number of angels being active or potential investors. According to information from interviews in this study there is an increased inflow of rich people who become business angels because the stock markets have become much more volatile, and bonds and sovereign debt markets are not attractive at the moment. Likewise, the real estate market has proven difficult. As a result of these closings of alternatives respondents in interviews claimed that an increasing amount of people allocate e.g. 10 percent of their wealth for investing in start-ups.

At the supply side also the tendency to syndication has risen, and syndicates and angel groups tend to be more visible in the investment landscape and act increasingly like venture capital funds, for example making follow-on investments to a higher degree (Mason et al., 2013). The changes at the supply side have begun to also include many cross-border syndications. Additionally, it should be remembered that the general awareness of the possibility of business angel financing has increased immensely across Europe during the past decades. This has in itself not only made entrepreneurs aware of angel financing; it has also stimulated potential angels to become active.

The demand side

The number of business plans received by angel networks has grown significantly, in the European context even doubled from 2009 to 2010 (EBAN, 2010c). Whereas this to a large extent has to do with the restrictions entrepreneurs and small firms have met at the market for debt financing during the financial crisis it is likely to also reflect a more positive side of the demand in the form of increased awareness and popularity of business angels financing. Despite this increased awareness, some markets remain under-developed. Some interviews in this project furthermore indicate that during the last decade or so there has been a change of attitudes with entrepreneurs towards more willingness to part with control when applying for external finance. The interviews also indicate clearly that the quality of the deal flow has increased.

There are now an increasing number of *investment readiness programmes* in Europe. These programmes are useful not only to enhance the ability of entrepreneurs to draft a

business plan and present it to potential investors, but also because the expectations with entrepreneurs on what is venture capital are not in line with realities. Investment readiness programmes and university teaching has helped to this end. An increasing number of accelerators/incubators are now helping entrepreneurs and small firms in their growth process. These organisations and entities are likewise effective in creating awareness around what is needed on the demand side. Finally, the financial crisis has had an impact on banks that are now much stricter in their assessments, which in turn means that business angels receive more deal flow that previously went solely to banks. These three trends together have generally meant that angels now receive better deals.

Angel characteristics and their contributions to business development

In addition to financial capital business angels contribute with important non-pecuniary factors. Hence, they additionally perform an important function in mentoring the firms they finance, which includes sparring on strategy issues, being a bridge to other financing sources, and generally providing access to networks. Often the amount of capital is not the primary thing. Rather to bring people together and the value added they bring in terms of management assistance. Therefore, the type of business angel is more important for a deal than the money they bring. Whereas it may be easy for governments to expand the quantitative side of the market then this management competence adding function is much more difficult to enhance with other policy instruments.

An additional characteristic of business angels financing add even further to the relevance of angel financing. The fact that the bulk of business angels prefer to invest in close geographical proximity to their home or office has been suggested as an additional argument for why business angels are important to the seed/start-up market, and why government should pay extra attention to this type of financing mechanism as it has a greater likelihood of contributing to bridging regional financial gaps. Hence, 55 percent of the business angels connected to the networks organised by EBAN invested in companies located in their region, and 42 percent in their home country outside their region of residence (EBAN, 2010c).

Often descriptions of angel financing are dominated by the positive contribution they provide to the development of small businesses. Not disregarding or devaluating this picture it should be remembered that business angel financing has down sides as well. Hence, they are known to be less inclined to make follow-on investments compared to their institutional venture capital counterparts, although increasingly angels now are prepared to, in some cases forced to, make follow on investments. They require the entrepreneur to part with some of the control, and can be costly capital providers because they fear dilution when other investors come in, therefore request a large compensation for exit and a large initial share of the equity in the firm.

3.3.2 What do we know, and how to get to know more - Indicators and statistical knowledge of the extent of business angel financing

Definitions of business angels and their measurement

Despite this importance the statistical knowledge on the extent of activities by business angels remain limited. Our knowledge on business angels is impeded by measurement problems but additionally the lack of clear and common definitions is blurring the picture as well as comparability of data.

Business angels may be defined in a number of ways (OECD, 2011, Avdeitchikova et al., 2008) the choice of which will impact immensely on results from measurement efforts. Moreover, it should be emphasised that in fact, the way business angels are defined also has policy relevance as it determines the scope and direction of policies. For example, there may be different instruments and targets for policies if the business angel definition is broad, maybe including those individuals who invest in family businesses. Likewise, as is elaborated later, some of the statistical knowledge we have on business angels relates to the angels who are organised in business angel networks. However, policies may be different if they address only the part of the market that relates to the ‘organised’ angels as opposed to the broadly defined total market. Later in the report we shall return to these points.

Although business angels make up a heterogeneous group they are generally regarded as *high net worth individuals who invest their own money in unlisted, small businesses* (Mason and Harrison, 2002). A more elaborate definition from the same authors (Harrison and Mason, 2010) is that:

“A business angel is an individual, acting alone or in a formal or informal syndicate, who invests their own money directly in unquoted businesses in which there is no family connection in the hope of financial gain and who, after making the investment, takes an active involvement in the business, for example, as mentor, adviser or member of the board.” (p.16)

The OECD Statistics Directorate has mapped definitions of business angels as well as the data collection methodologies (OECD, 2011). CSES (2012) summarise these methodologies and their advantages and disadvantages with a view to potentials for improving the data collection.

They generally emphasise that the exclusion of investments into family/friends’ businesses is an important difference, as is also explicit in the cited definition above. Some definitions also point to a certification or accreditation (OECD, 2011, p.29), however, other definitions do not have this aspect as it is often a self-certification.

There are some differences as to whether potential angels should be included or only those who actually have invested.

EBAN has the following definition (EBAN, 2010, p.2):

*“Business angels are high net worth individuals investing their own monies and their management/entrepreneurial experience into unquoted high growth potential start-ups.”*⁵⁴

The definitional issues are very important to quantitative studies and are often in academic debates referred to as the major impediment to comparability of data. Additionally, the way data are constructed in e.g. national or regional business angel networks, in turn

⁵⁴ They also list a more elaborate definitions that *“A business angel is an individual investor (qualified as defined by some national regulations) that invests directly (or through their personal holding) their own money predominantly in seed or start-up companies with no family relationships. Business angels make their own (final) investment decisions and are financially independent, i.e. a possible total loss of their business angel investments will not significantly change the economic situation of their assets. BAs invest with a medium- to long-term set timeframe and are ready to provide, on top of their individual investment, follow-up strategic support to entrepreneurs from investment to exit.”*

submitted to and processed and aggregated in EBAN, is much more an issue for data quality and comparability.

Even a business angel network is not easily defined. For example, OECD (2011, p.30) list the way angels organise themselves as angel groups or syndicates; angel networks, and angel associations. The former is regarded as either formal or informal ad hoc consortia that pool resources for individual investments. Angel networks are organising angels but do not make investments themselves, rather facilitate the matching between angels and entrepreneurs. The latter, angel associations, may be regarded as national or federal trade associations for angels, in other words are representing and coordinating some of the activities of lower-level, perhaps regional, networks. Just as with the business angels definition the boundaries and definition of a BAN is not only of interest in itself; it also can have consequences for the policies pursued.

The market for finance from business angels is intrinsically characterised by lack of and additionally highly asymmetric information. Therefore, the activities in the informal venture capital market are not easily measured. It is, though, established that finance from business angels make up a substantial share of early-stage funding (Harrison et al, 2010) even compared to the institutional venture capital. However, it is very difficult to get a full picture of the size of the market for business angel financing due to the intrinsic measurement problems involved (Mason and Harrison, 2008). Therefore, it is relevant to discuss the quality of data, efforts to improve it, and perspectives on further development of data collection.

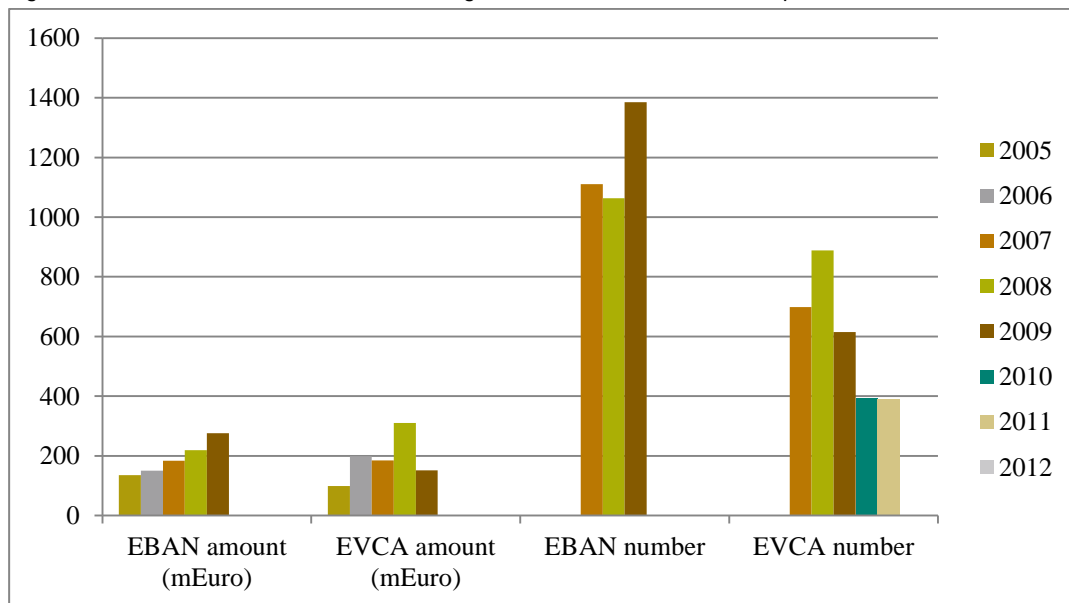
The European Business Angels Networks, EBAN, an umbrella organisation for business angel networks is a key organisation in data collection in this area – many reports refer to EBAN statistics and use these as the primary data in the field.

The number of business angels and their investment activities

Based on information from federations of angel networks and information directly from individual angel networks EBAN (2010c) estimates that there is around 75,000 business angels in Europe (for comparison it is estimated that there is around 250,000 angels in the U.S.) who invest in total around 4 billion Euro a year. CSES (2012) estimates that there are 25,000 angels in the UK alone and around 170,000–240,000 in EU-27. Based on GEM figures CSES (2012) arrive at 256,000 angels in EU-27. They furthermore estimate from EBAN data that the visible part of the market makes up EUR 660 million, and that the total market in EU 27 then is around EUR 4–5 billion. The differences in the estimates illustrate the varying (low) quality of the data and that measurement is immensely difficult to do with anything near precision.

According to EBAN (2010c) and EVCA (2012) the members of respectively EVCA and EBAN invest in the seed segment as illustrated in the Figure 2.

Figure 2: Investment activities of business angels and institutional venture capital.



It is usually regarded as a stylised fact that the number of investments done by angels outnumber those by formal venture capital, but it is clear from the numbers above that it also applies to the amount invested, when the focus is on the seed segment⁵⁵. What is also clear is that apparently the business angels are not as badly hit by the financial crisis as the formal venture capital market. The amount invested by angels through business angel networks have increased in all years⁵⁶, whereas the members of EVCA cut down investment amounts to half the level from 2008 to 2009. Likewise, the number of investments went down between these two years and continued to drop in 2010, contrary to the development among business angels.

Measuring the measurable

Whereas this is only “the visible part” of the market, that is the investments from angels registered with an official network, it is estimated that the total is much larger. In addition to the investments from registered angels in formal networks there is a part of angel investments that is visible as they are done through angel groups that are visible in the market. Finally, there are some investments that are visible because they are registered in co-investment schemes or through tax alleviation schemes. Even counting in these investments they make up only a small part of the total investments. The total in Europe has been estimated to be 5,557 million USD⁵⁷ in 2009 of which the visible part of it is only 383 million USD, corresponding to 7 percent (OECD, 2011).

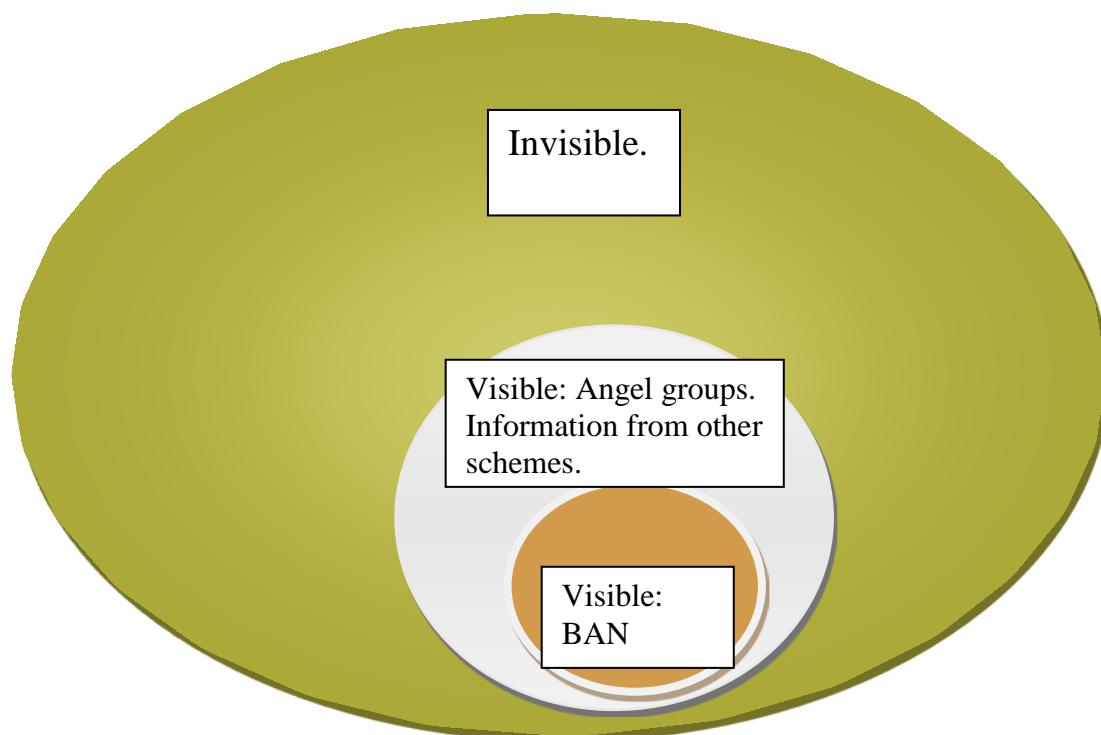
⁵⁵ It is usually said that these two types of investors invest in different stages, often later stages than the seed stage. For comparison the seed stage is in focus here, although the numbers do not reflect the total investment patterns.

⁵⁶ Some of the increase is perhaps from an increase in the number of angels registered in a network. In many countries the number of angel networks has increased, in others it has decreased. We do not, however, have solid evidence on whether the share of angels in the “visible” part of the market has increased relatively to the “invisible” part.

⁵⁷ For comparison OECD list that the formal VC market is 5,309 million USD. Also for comparison the US market is estimated to be 17,700 million USD investments.

Thus, as illustrated in Figure 3 below (Harrison and Mason, 2010), the invisible part of the market is by far the major part of the market. To what extent the market is more or less visible is in itself unknown and is different in different countries.

Figure 3: The visible/invisible parts of the business angels market.



It is obvious that the information obtained from members of EBAN provide only a partial picture of the total market. The 7 percent of investments from the BAN part of the visible part mentioned in much of the literature (OECD, 2011, p.45) seem realistic. In fact, the angels organised in business angel networks are not necessarily registered and surveyed by federal angel organisations or EBAN. The country studies revealed that the government support to angel networks provided an incentive (obligation) to provide information on the activities in the networks. Contrary, in Denmark there is no government support to the angel networks, and the knowledge of their members is very limited. When one of the networks joined EBAN recently (march 2013), the information required from EBAN was not readily available.

When statistics are produced, gross up factors are highly uncertain, but may to some extent be obtained from GEM⁵⁸. GEM figures are maybe not capturing angel activities in the classic sense, as their survey asks the working age population, (defined as 18–64 years) if they provided funds for a new business, started by someone else, during the past three years. Hence, this definition includes investments in families and friends, and may not involve any interaction with the investee firm. However, cross-country differences, and

⁵⁸ The Global Entrepreneurship Monitor (GEM) is an annual assessment of the entrepreneurial activity, aspirations and attitudes of individuals across a wide range of countries. The project continues to grow annually and the 2013 survey is set to cover 75% of world population and 89% of world GDP. See: <http://www.gemconsortium.org/>

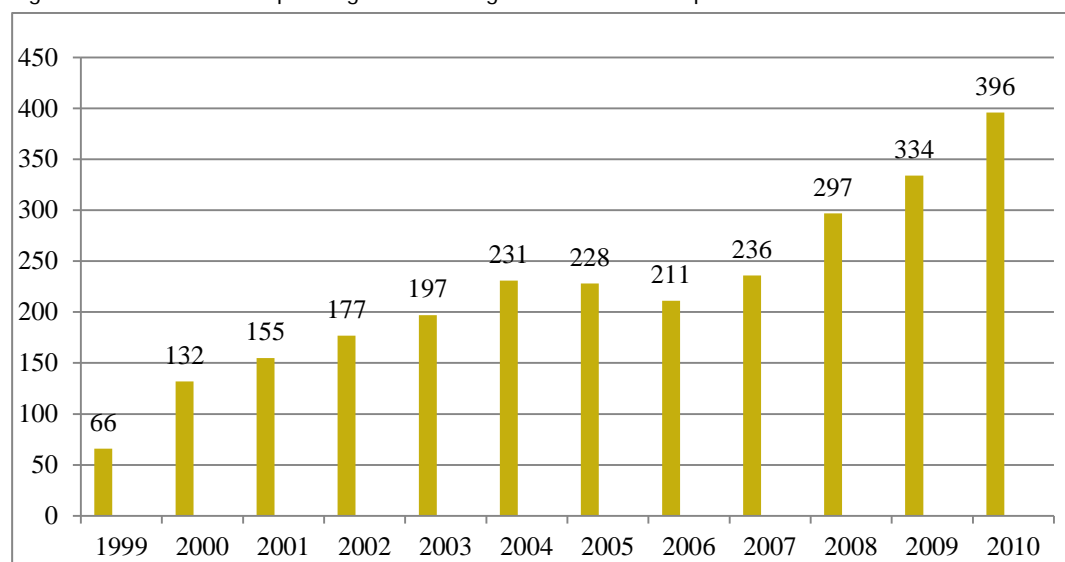
especially the development in these, may nevertheless be an indicator for real differences in business angel activities.

Because of the severe measurement problems we are left with development in the indicators as our best benchmark, not knowing very precisely if they mirror the right magnitudes. Even then, because business angel activities are often local in their nature the national markets are highly unequally distributed intra-nationally and when aggregating and comparing between countries these features are not visible.

Because of the nature of the market for informal venture capital, with a great deal of activities being of an invisible character, our knowledge on how the market has developed remains limited. Following the increased interest in this type of financing more investments have been registered, although we know little of how much of the increase should be attributed to a real increase of activities and how much is a result of improved statistics and registration of the activities.

Research has pointed out that in general the statistical foundation for knowledge on business angel activities is weak although there are some indicators (Mason and Harrison, 2008). For business angel networks indicators encompasses a wide array of information on the basics of the networks such as the number of networks in a country or region, the number of investors in the networks, number of angels recruited in a period, number of angels who left the networks in a period, investment amounts and number, number of angels per investment round. The number of business angel networks is often used. Although this indicator is imperfect as it may reflect changes in institutional conditions and policies rather than activities it nevertheless provides information on an aggregate activity and an important institution for facilitating the further expansion of the market.⁵⁹ The development depicted in Figure 4 indicates an increasingly important role for angel networks.

Figure 4: The number of operating Business Angel Networks in Europe.



Source: EBAN, 2010c

⁵⁹ In Flanders (cf. below) there has been a consolidation of the number of networks into fewer networks without activities being affected.

According to the figure there has been an increase in the number of networks. EBAN has registered 396 BANs in 2010, an increase from 66 in 1999. The number of BANs increased steadily until 2004 when it stabilised until 2006 and has risen since then (EBAN, 2010c). Moreover, BANs are now widespread across Europe (EBAN, 2008, 2010). The development in the number of BANs is, though, not evenly distributed across Europe. The number of networks has decreased in mature angel markets such as the UK but increased substantially in emerging economies, such as Poland, and in France.

The difficulties in estimating the full market in terms of absolute magnitudes will remain despite improvements in statistics. Despite variations in the estimates of the market size there is a tendency to fairly robust relative proportions, e.g. between Europe and the U.S. The majority of estimates point to that the size of the European market is between one third and one fourth of the U.S. market. Although it should be remembered that there are differences in culture, business structures and –norms etc., (cf. the section above on financial systems) limiting the validity of a simple comparison, then these proportions point to that there may be room for expanding the European market. When talking about the European market it should, though, be re-iterated that the European market is vastly heterogeneous, therefore the potentials for further expansion of the market also differ immensely.

Another type of benchmark is the development over time. If measurement errors can be assumed constant over time, the development in the results from different indicators can provide valuable information.

Initiatives to improve statistical knowledge on business angels

It is generally recognised that business angels' activity is an important phenomenon, but that we do not have good statistical knowledge of it. The gap between the realised importance and knowledge is attempted to be filled with recent initiatives. For example, EBAN has joined a partnership with a bureau who maintains business registers and who is expected to be able to improve the EBAN data. An important study is commissioned to the OECD on improving and harmonizing the data that is provided from business angels networks in order to make these more comparable across countries. They also look into the opportunities for utilizing available business registers to a higher extent (OECD, 2011).

Moreover, combining information from co-investment schemes, tax incentives and business angel networks may in some countries render information that is likely to constitute 50 percent of the market. The responses from ban-members in individual countries do, though, vary a lot. There are variations in how many answer, the quality of the reporting and there seem to be among some networks a perception of this information being sensitive and valuable. Finally, and above all, how network members build their data rather than their reporting is the major problem. When the original source of data is constructed differently the comparability of data gets difficult. There is no *best practice* in this respect.

EBAN is currently constructing a database of firms who received angel financing with the objective to do an impact study on these firms. This analysis is expected to be finalised at the end of 2013.⁶⁰

⁶⁰ At the moment EBAN is consolidating the data for the new activities report, which is expected to be published in early summer.

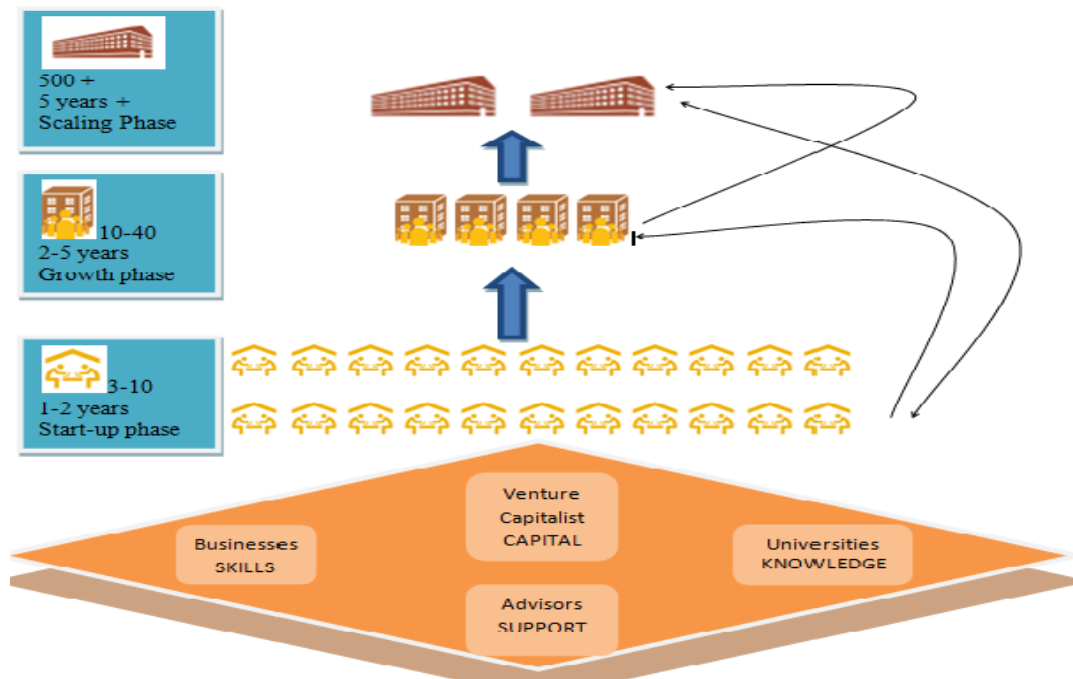
The future of improving the statistics in this area remains highly, remarkably, uncertain. On the one hand the above-mentioned initiatives clearly improve the situation. On the other hand a parallel organisation to EBAN, BAE (Business Angels Europe), has been formed by leading countries' national business angel network associations. They are different from EBAN in the sense that they aim to organise national organisations rather than the specific, local networks. One of their core missions is to improve and harmonise statistics on business angels connected to angel networks.⁶¹ Even if this sounds as an improvement it may be questioned if a parallel organisation will improve or hinder the development towards better statistics. The extent of collaboration between EBAN and BAE will be decisive to this.

3.3.3 Trends in the financial eco-system of relevance to business angels

Although business angels are in focus in this report it is important to understand the changes in the broader capital markets and how they affect the conditions for and behaviour of business angel, let alone the impact on the need and role of government in the market. Additionally, it is important to see the business angels in a wider system of not only other financial actors such as banks, but also an array of intermediaries and service providers such as incubators, patent agents, lawyers, development agencies etc. The totality of these actors and the links between them may be termed the financial eco-system. It has become increasingly popular to use the term "*entrepreneurial eco-system*" or similar concepts. For example, it is both used in OECD (2011, p.41) and Denmark (FORA, 2012). In the latter source the system is illustrated (see Figure 5) as a combination of capital, competences, support, and knowledge. Different actors are important in these four pillars, and have different weight in different firm size financing (p. 29). These actors provide different types of resources and are specialised in different phases of the development phases of firms.

⁶¹ According to strategy document of February 2013, Business Angels Europe BAE aims: to offer the business angel communities across Europe through their national federation or trade association, the opportunity to benefit from a strong coordinated voice to represent them to the European institutions; to support the development of a favorable fiscal, regulatory and policy environment for the growth of the business angel market across Europe; to encourage and enable the growth of national federations and trade associations across Europe; to promote professional and ethical standards and best practice among the business angel community including the exchange of experience; to be the resource of knowledge, experience and intelligence on the European angel market; to encourage the growth of cross-border investment at European and international level; to act as the key interface with the global angel community level.

Figure 5: The entrepreneurial eco-system.



Source: Modified from FORA, 2012, p.29

The recent evolution of financial markets has had a great impact on many actors at the capital markets. The market for entrepreneurial finance specifically has seen major changes, which in turn has spurred governments to consider even more how to alleviate financial constraints on growth caused by reluctance by capital market actors to finance risky businesses with growth potentials.

Financial gaps

Generally, what is often termed the *equity gap* for growth-oriented businesses in early stage seem to have widened even before the financial crisis (OECD, 2006a) but even more so with the financial crisis. At the same time, the equity market has become more important to these businesses because of severe restrictions and requirements for collateral at the market for debt.

In recent years the formal venture capital market has experienced a severe drawback of actors who engage in early stage businesses and are willing to invest in new businesses and industries. Thus, a number of venture capital firms have withdrawn from the early stage segments as well as the new industries such as “clean tech”. Instead they focus upon still larger investments (now typically 3–5 mEURO) and follow-up investments in their existing portfolio firms. As the majority of venture capital funds are fixed-end funds and because also the exit options for venture capital funds (IPO and the M&A-market)⁶² are

⁶² *IPO* is an abbreviation for Initial Public Offering. Meaning a stock market launch, that shares of stock in a company are sold to the general public, on a securities exchange, for the first time. *M&A* is an abbreviation for Merger & Acquisitions. Meaning consolidation of companies. A merger is a combination of two companies to form a new company, while an acquisition is the purchase of one company by another in which no new company is formed.

restricted during the financial crisis the venture capital funds are now to a much lesser extent an exit option for business angels and specialised early stage funds.

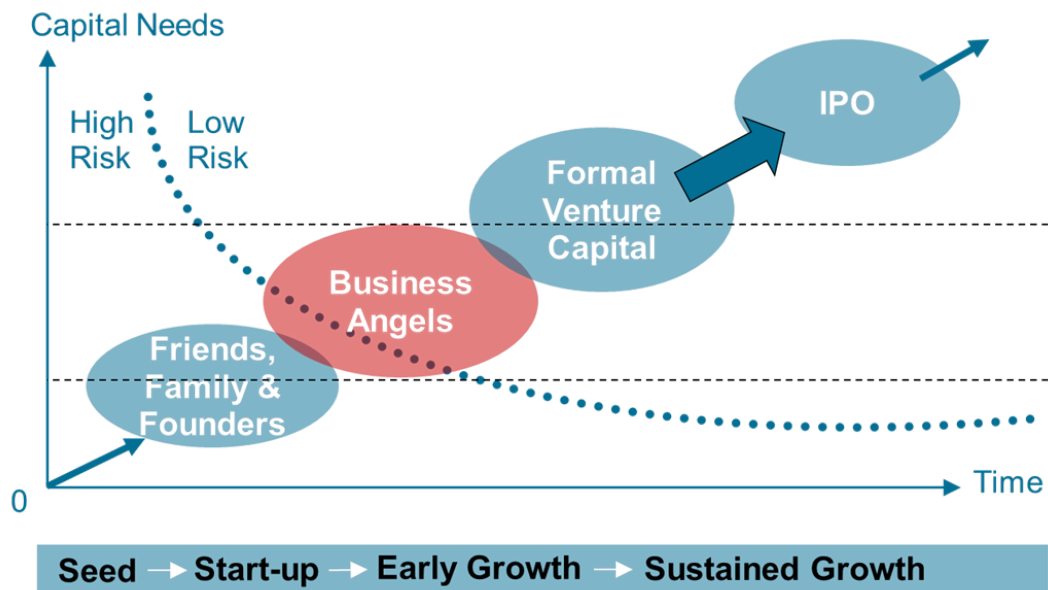
It can be questioned if there is a widening of the equity gap. Even if supply side changes are obvious in the figures (there is a steep increase in the amount of public venture capital but not compensating for all the decrease in the aggregated public or private supply) then it should be remembered that also the demand side has changed. Thus, there is perhaps now a decreased demand for venture capital. The discussion on “the finance gap” tends to be rather un-nuanced as every actor seems to advocate for their “own” favorite finance gap.

Moreover, there is debate about the concept of a finance gap in the first place (OECD, 2006a). In reality, government intervention should be thought through as for example creating a vibrant seed market and thus “closing” the gap in early stage just risks creating a supply-demand unbalance in later stage. It should be thought through how many investments are feasible to finance in the system and whether the public intervention distorts this balance.

The division of labour on the financial market

The market for entrepreneurial finance is characterised by a division of labour that spur specialization and therefore build-up of competences (Christensen, 2007). Although financial institutions do of course have overlapping work areas and do compete, they make up a system of specialised ways and means of financing. A smooth functioning financial system both has a full range of different types of financial institutions and a balanced overlap of how and where they work without leaving “holes” in the financing system for firms seeking capital. Often this financing system is depicted as different funding institutions placed in a setting where size of fund and needs are a function of the time/development stage of the firms, cf. Figure 6. The figure depicts that over the life time of a firm growing through stages from seed to sustained growth the risk decreases while capital needs increase. Because financial systems are characterised by specialisation among different types of actors with different risk/capital needs profiles there will be segments of investments that are more or less relevant to e.g. business angels. Thus, they typically come in when financing sources from 3F – *family, founders, friends* – are exhausted and they are typically fulfilling smaller capital needs than formal venture capital.

Figure 6: Funding sources, capital needs, and risk over development stages.



Source: Presentation by EBAN president Paulo Andrez, Malmö, February 2013

According to this idealised perception the financial system is providing a “financing ladder” (OECD, 2006a) or “funding escalator” (NESTA, 2009, Mason et al., 2013) in which one type of financial institution is providing finance for businesses to a certain stage where other financiers take over. *In casu*, business angels and early stage funds finance and develop businesses to a stage where institutional venture capital firms may take over the relay and further expand businesses. In reality, even if this is a nice, textbook-like picture, it remains a stylised version of how capital markets should work. Although, it is a nice construct then the picture and analogy of a financial system where every type of actor hand over a relay in terms of financing firms who develop to a further stage is somewhat overstated.

The heterogeneity of the actors within the stereotypes of actors should be taken into account as they tend to dissolve this picture. In the real world, there are elements of this way of functioning, but interviews and surveys of trends in financial markets indicate that increasingly the close links between types of finance is not present in the markets. Specifically, the links and collaboration between business angels and institutional venture capital funds is often subject to tensions and lack of collaboration. Some of the obstacles for further collaboration and co-investment between venture capital and business angels are the contractual differences and whether there is an appropriate level of compatibility between contracts used in venture capital and business angels.

Moreover, the picture in Figure 6 could be envisaged at both a micro level and a macro level of aggregation. The latter concerns the way the financial system is configured whereas the micro level perception regards how the individual firm may progress through the stages. Therefore, the macro perspective in reality is an aggregation of several “ladders”.

Exits

Generally the possibilities for exit have tightened considerably, and it is likely that this affects the number of new investors entering the market. The restricted exit routes in turn accentuate the need to think exit opportunities into the very first steps of developing businesses (Mason and Harrison, 2012).

Although not totally counter-balancing the trend of increasingly difficult exit options and larger capital requirements, one change in certain areas of production pulls in the other direction. In recent years advances in information technologies has both reduced transaction costs in several other industries and created a wealth of new business opportunities within the information technology sectors themselves. The start-up companies based on such technologies have relatively small start-up costs and are less dependent upon financing sources with large financial muscles for later rounds of financing. This has created a space where business angels have invested without the need for other financial capital partners for the exit (OECD, 2011). These “lean start-ups” (OECD, 2011, Mason et al., 2013) may have less demand for big trunks of capital for start-up, but will often require a capital injection later in their development. Thus, the need for external finance has not been eliminated, in many cases only moved to a later stage. In other words, the gap between venture capital and business angels may have widened but also there are indications of investment areas where there is no need for a handing over of the baton and there are indications of the point in time for when needs for external finance are accentuated is postponed.

In several countries this development has caused business angels and early stage funds to move closer together as investment partners in order to pool resources and compensate for the lack of formal venture capital firms as investors who can bring companies to the next stage. In turn, this has also meant that increasingly angels form investment groups and syndicates allowing them to invest in the segment where formal venture capital firms used to operate and to take firms through several funding rounds without being diluted by outsiders.

The general trend, though, is that despite this tendency for the business angel market to become more formalised and organised, the markets for entrepreneurial finance is increasingly fragmented. Moreover, exit options are, as mentioned above, restricted, which in turn makes the angel syndications and angel groups important players and subject to policy considerations. In fact, there are indications that in some countries such as North America and Scotland, the trend is for an increasing number and importance of angel groups, and this has reached a level that makes some authors point to a fundamental change in the way angel markets are organised (Sohl, 2012, Mason et al., 2013). Obviously this has implications for how business angels operate but it also poses challenges to and changes in the agenda for government policies in this area. This is discussed further in chapter 8. The market trends and how they affect the organisation of the market will be a recurrent theme in the following analyses and one that is addressed in more detail as we go along in the analyses.

Other relevant trends

Other trends in the market that came up during interviews with key organisations in the field (EVCA, EBAN, OECD) should be mentioned. There are some new trends in how the

informal venture capital industry is financing itself, where “fund of funds”⁶³ is getting more important. Also corporate venture capital⁶⁴ has proven successful in financing some of the funds. A trend at the supply side is that co-investment funds are increasingly popular and are effective in leveraging the amount of capital supplied to the market. Finally, tax breaks have been confined to a few countries, but appear now to be considered in many countries. A few new financial instruments may impact the business angels market as well. This goes for specific initiatives like a mutual guarantee fund in Austria with tax breaks.

Another is that participants in “crowd-funding”⁶⁵ increasingly use tax breaks. There is currently hype around crowd-funding. There are, though, still only a few equity crowd-funds and they are in most countries illegal. It is still highly uncertain how/if the crowd-funding trend will affect business angel financing. In addition to this there are no financial instruments currently under way that are likely to affect business angels. A third has not yet appeared in Europe but is now popular in the US, which is a revenue financing model based on steady income streams. A royalty of the income streams is offered as an alternative to fixed interest rates. The advantage for angels is that they begin to receive income shortly after investments, and for the entrepreneur that they maintain the flexibility.

3.3.4 The rationale for and against government intervention in the business angels ‘market’

The reasons why governments may rationally choose to support, or not to support, the development of financing from business angels can be divided into on the one hand general arguments to support capital markets and on the other hand why governments could rationally pursue policies promoting business angel financing specifically. The former is discussed in numerous papers and will therefore only be discussed briefly to allow more discussion of business angel policies specifically.

General arguments why government intervene in the capital markets

The traditional discussion on public intervention generally rests on several arguments, the most prominent of which is the “market failure” argument. This argument claims that where the market is not able to solve a (allocation-) problem efficiently, perhaps because of lack of information or externalities, then there may be a case for government intervention (European Commission, 2002, Murray, 2007, Mason, 2009 (and numerous others)).

Typically capital markets only fail partially leaving some parts of the market deprived of finance. Consequently policy intervention has been targeted towards specific gaps at the market. Debate prevails on where are the specific gaps in certain contexts and time (e.g. Harding, 2002), which is important to where potential policy initiatives should be targeted (see also section 8.4.1).

A number of issues are debated around the government intervention in capital markets and whether these are justified or not. Another, although related, issue is whether the

⁶³ Funds investing in funds rather than investing directly in portfolio companies.

⁶⁴ A specific subset of venture capital, where a large firm takes an equity stake in a small but innovative or specialist firm. The investment is made by a firm that does not have investments as a primary task.

⁶⁵ Crowdfunding is a variety of crowdsourcing, where an individual receive and leverage small contributions from many parties. Crowdfunding is the collection of small contributions from many parties in order to finance a particular project or venture.

intervention then is designed in an expedient manner (Da Rin et al., 2006). Lerner (2010) points out that generally public efforts to support the venture capital markets have long lead times. According to Lerner, the most common reasons for such initiatives to fail is (i) impatience, (ii) failure to see the broader context and (iii) relying on too narrow evaluation indicators. Later, we shall return to these three points.

*Arguments for and against supporting business angel financing*⁶⁶

Even if development of venture capital markets is also market driven governments have played a key role in the development of venture capital markets around the world (Lerner, 2010, Mason, 2009). In fact, the state has been the primary creator and driver of the venture capital industries in the majority of countries (Mazzucato, 2011), however, much less so in the informal part of the market. The primary focus in much policy making has been on the formal venture capital market, but indeed governments have also supported the development of the informal venture capital market (Mason, 2009).

As mentioned earlier, countries and regions support business angel investments by way of support to business angel networks, tax incentives, investor training programmes, matching events, or co-investment schemes. Nevertheless, there is debate on the appropriateness of government intervention to support the informal venture capital market. On the one hand this market may be said to be functioning under severe informational constraints and “market failures” implying a room for policy. On the other hand it could be argued that this type of market is best kept informal and functions best without too much formalization and intervention. An additional element in this debate is the ethical aspect in government using tax payers’ money to help rich people get even richer, an issue raised in the interviews in this project.

In other words, the rationale for public intervention on this market is questioned (Brander et al., 2008, Knyphausen-Aufsess and Westphal, 2008, Leleux and Surlémont, 2003) and even if there are arguments for promoting business angel activity in general (e.g. Mason, 2009, Sohl, 2007, Murray, 2007) there continues to be debate about the means, the timing, and the extent of a possible role for government.

To assess the rationale for intervention it is important to make clear the nature of the problems at the market. As opposed to interventions aimed at closing the gap in supply of financing angel policies also targets a different cause of financial constraint, that of informational problems. The players at the market are often not visible. In a much-cited passage Gaston (1989, p.4) described the market as “a giant game of hide and seek with everyone blindfolded”. Thus, search costs are relatively high and actors at the market have immense difficulties finding each other. The informal character of the market is underlined by the fact that even in the registered part of the market, e.g. the business angel networks, informal, non-market mechanisms are in play. Hence, in a survey among 219 business angel networks in Europe EBAN (2010c) found that 74 percent of the networks recruit new members to the network through word of mouth. The business angel market has therefore often been described as an example of a market with severe informational deficiencies.

Policies towards stimulating financing from business angels are not only founded in the help for young businesses (Lerner, 1998). The (sparse) evidence available indicates low costs associated with creating jobs through this type of intervention (Aernoudt, 1999,

⁶⁶ This section draws upon Christensen (2011a).

Mason and Harrison, 1999, EBAN, 1998), and deficiencies in the market are argued to be remedied through simple means (Aernoudt, 1999). A further rationale for public intervention in this market is related to the characteristics of the investments made by business angels: they have a different cost structure than institutional venture capital allowing them to make smaller investments; they are widely distributed geographically, which means that they contribute to alleviating regional financing gaps; and they provide management assistance in addition to the money they invest (Mason, 2009). In addition to the propensity of business angels to act more geographically widespread than formal venture capital there are also indications that they are more resilient to business cycle fluctuations than formal venture capital and that they invest in a wider array of sectors (OECD, 2011). They are therefore an important part of the total equity market.

As in all policy, support for developing the informal venture capital should be weighted against the costs involved. Such costs include the opportunity costs associated with government supporting business angel activity. Also, if government intervention takes place over long term, significant government involvement creates an expectation in the market that support will continue and remove incentives to search for business models that are not dependent upon government funding.

Moreover, it has been debated if public intervention crowd-out private investment in the market (Leleux and Surlemont, 2003, Brander et al., 2008). Take the case of BANs: Evidence on public and private BANs both from the UK (Mason and Harrison, 1997) and from a wider array of European cases (Lange et al., 2003, Leleux and Surlemont, 2003) suggests that private and publicly supported angel networks target different segments of the market, with the deals done through privately financed BANs being larger and at a later stage of development than those going through government sponsored networks (European Commission, 2002, Mason and Harrison, 1997). Therefore, crowding-out of private networks is unlikely. Whether this applies to other policy instruments for stimulating business angel activity is less clear.

It has been debated if business introduction services could be commercially sustainable without public support if they are to operate on the scale necessary to be effective (Mason and Harrison, 1995, 1996, 1997). EBAN (2008) found that in 2006 only 6.4 percent of European BANs were for-profit networks. However, this share has risen, first, because in many cases the initial government funding has run out, and second, due to the emergence of BANs with different models for revenue generation. The activities of these BANs goes further than generating deal flow, to include the process of negotiating the deal, which generates additional fees for the BAN (Mason, 2009). EBAN also found that 84 percent of BANs in Europe were co-funded by the public sector (EBAN, 2002, Mason, 2009) and that the majority of networks continue to be non-profit despite fluctuations in the share of private/public funded networks (EBAN, 2010). Whether it is possible for government to withdraw from financing BANs at a later stage is an open question. Aernoudt et al. (2007) find that contrary to expectations almost none of the networks in Europe have become financially self-supporting. The reality regarding public support to networks has worked against what was expected some time ago.

3.3.5 Policy instruments

The policy focus in the development of the informal venture capital market has been *support to business angel networks, investor training programmes, tax incentives, or co-investment schemes*, matching organisations (Mason, 2009). Although *investment*

readiness programmes are not directly targeted towards business angel investments, then they are aimed at improving the quality of how entrepreneurs set up their business and present the need for external finance. Therefore they are also increasing the quality of the deal flow for business angels.

The policy choice among these instruments is, however, not only one of choosing among a number of measures that have been operating in other countries. It is also the job of policy makers to decide on their adoption, and design the policies on the appropriate level, national, regional or local as well as to consider if policies that work in one country will work in another without modifications (Tillväxtverket, 2011).

Investor training programmes

Regarding the *investor training* programmes this is an area where governments potentially overlook a need for action. As business angels are usually highly experienced, successful business managers and –creators it is often presumed that they need no training. It has often been taken for granted that business angels are already trained and experienced mentors of any entrepreneur they might meet, however, in reality they often are in need of insight in how to coach start-ups. In fact it is very different to be investor and entrepreneur. Moreover, the population of business angels is very heterogeneous and the investor training where knowledge and experiences are transferred between experienced and less experienced angels is often an important part of developing markets.

There is now a better understanding of the importance of training of business angels. Interviews revealed a wide array of measures to deal with this challenge, and there is a little literature on it as well (Amparo et al., 2007) but interviews also revealed an often met perception among angels of no need for training. Spain has installed such subsidies for training of investors. Other examples include The Netherlands where the government supports a network for investor training. It was, though, often mentioned in interviews that the most effective type of training was “on-the-job” training, also because business angels are highly heterogeneous.

Tax incentives

Tax incentives have both pros and cons (OECD, 2011). In a survey of tax policies in 31 European countries EBAN (2010a) found that 8 of these countries have fiscal incentives supporting business angel investments. They furthermore state that there is a correlation between countries with tax incentives and countries where there is a vibrant business angel market. Of the countries studied in this report, France, Belgium and the UK is listed in this survey as three of the eight countries with fiscal incentives, Denmark is among the countries without specific tax incentives.

In addition to the costs for governments tax incentives tend to be rather complex and may provide incentives that are unintended such as stimulating to a larger extent those investors who are more “financially oriented” as opposed to “true”, entrepreneurially oriented angels. Tax incentives are general measures and therefore difficult to target precisely to the group of investors that should be helped. Usually a close monitoring, evaluation and adjustment would take care of some of these problems, however, in the lack of adequate data for these evaluations it remains highly uncertain to which extent the tax incentives are effective measures for enhancing business angel investments. Finally, it should be remembered that business angels are typically among the wealthiest individuals in the countries, and it has been questioned in the debate if it is morally defensible to alleviate

the tax burdens of these people. Respondents during interviews raised this issue themselves and explained that this affects the discourse around the policies in that it must be framed as helping entrepreneurs rather than angels.

Whereas France used to be among the most active in terms of tax breaks etc. for business angels they have now become less active in this policy area. The value of the tax break has changed with new legislation from 22 percent down to 18 percent. The UK EIS and SEIS schemes are among best practices (see section 6.3). Other countries include Turkey, Finland. Tax breaks are used by a wide array of people who are not necessarily 'true' business angels, therefore they are likely to be best designed as rather targeted instruments, however, this poses challenges regarding avoiding making the instruments too complicated.

Co-investment schemes

Co-investment schemes leverage business angel investments allowing them to go into larger deals, perhaps follow-on investments and to allocate more of their funds for new investments. There are several models for how they are designed (EBAN, 2011a). One basic difference between them is if angels are certified to do the due diligence and investment decision or if this is done (also) with the co-investment partner (usually a government). Just as with tax breaks it is difficult to determine the value and effectiveness of co-investment schemes. According to the OECD (2011) only the Scottish co-investment fund has been formally evaluated (see below). Additionally, there is a mid-term evaluation of the regional co-investment funds in Sweden, which includes matching investments also from business angels, but this scheme is broader than the co-investment schemes directly targeted to business angels⁶⁷. There was, though, a shared belief among the majority of interviewees (except in Denmark) that they are effective means for enhancing the business angel investments. Their popularity is increasing and according to interviews are not seen as expensive to governments (in Denmark the co-investment scheme Partnerkapital was officially closed down because of low take-up rates, however, in reality it also rendered substantial losses). Even in the case of default there are tax returns to governments and the potentials in the use of Structural Funds for the purpose of creating co-investment funds was underlined.

There seems to be indications that angel networks and syndications are pre-requisites for co-investment schemes to function adequately. Therefore, underdeveloped venture capital markets may not reap the full benefits of co-investment schemes (OECD, 2011). But used in an expedient manner they may be effective means and are now used in a number of EU countries such as the UK, The Netherlands, Austria, and Belgium. Sweden is considering a 10 mill Euro fund with 2/3 government funding. Thus, there is clearly a trend towards more co-investment schemes in the OECD countries. Some countries just have a *pari-passu* model⁶⁸ and others have different models like that of TechnoPartner⁶⁹ with varying degrees of government participation in three periods (EBAN, 2011a), rendering early payback to investors and higher returns if the investee firm progress.

⁶⁷ <http://publikationer.tillvaxtverket.se/ProductView.aspx?ID=1723>

⁶⁸ Equal conditions, treating all parties the same.

⁶⁹ EBAN pointed out in interviews that to copy the Dutch TechnoPartner scheme is an expedient approach. It is the best functioning of the European schemes. Portugal has done so, and even added other benefits to enhance angel investments. See features of the scheme in EBAN (2011a, pp. 40-48).

However, there is up until now little evaluation, and knowledge on whether they work or not. Some of the problems with evaluation are the time horizon in the effects, which is too long to capture and it is uncertain regarding when they appear. The Scottish co-investment fund SCF is probably the one that has been evaluated most thoroughly, and also the primary example of a scheme that works well. Results from evaluations include that the scheme has been critical to half of companies' efforts to raise capital, and that 3 in 4 regarded the fund as decisive to their survival. Job creation and leverage of investments has been shown to be substantial. One of the reasons why it works well has been said to be the fact that there are in Scotland a thriving business angel community that are to a large extent organised in angel groups and syndicates and has close collaboration to LINC Scotland (Harrison et al., 2010, Tillväxtanalys, 2011, Mason et al., 2013). Thus, the reason why Scotland has been successful to use co-investment policy is that there is simultaneously a long-termed effort to also establish angel syndications. This is a prerequisite as there must be organised, competent angels for them to work. However, according to interviews, the Scottish co-investment fund is special and is not likely to work in other countries.

Support to business angel networks

Support of BANs has been the most widely used policy in this area, as elaborated above. As will be evident later there is, though, considerable variation in how these policies are pursued. Generally, there has been discussion around if government should provide continuous support to BANs or only support their initiation. Even if taking the latter approach, there is often an impatience regarding the time perspective as often subsidies are provided for e.g. three years (France/UK) despite the fact that studies point to somewhat longer time horizons for networks to become sustainable. Across Europe the networks were supported from governments during the 2000s and it was expected that they could become self-sustained. In reality very few networks found a business model that rendered a prolonging of subsidies unnecessary (Aernoudt et al., 2007). They could operate for relatively small amounts, therefore in many countries the subsidies need not be very large. In a stylised example, a membership fee of 1000 euro (the majority of networks have membership fees in the 500–1,000 euro range) and a few sponsors will in several EU countries buy a manager and a secretary even with only 100 members. The government will then only need to provide a small addition. Nevertheless, even with sponsors and success fees⁷⁰ as income there are costs that cannot be incurred by these incomes and they have generally failed to become self-sustained.

There is now a variety of practices regarding BAN policy, and in some countries, such as Spain and Flanders (cf. below) the subsidy is partly outcome dependent. It applies to a varying degree to business angel policies generally, but perhaps especially regarding BAN support that this part of the policies targets the visible part of the market only. Consequently anticipated effects should be confined to that part of the market, although also BANs provide plenty of positive spill-overs to the invisible part of the market.

Investment readiness programmes

Investment readiness programmes are aimed at improving the “investability” of the investment opportunities that angels, and other investors, are presented to. They do so by training entrepreneurs and encouraging a better description of the business. The rationale

⁷⁰ Percentage (often approx. 5 %) of the investment paid to the BAN.

for such programmes is that supply-side initiatives like tax incentives and improvement of information and intermediation still leaves some angels with a wish to invest without appropriate investment opportunities. Additionally, even if proper due diligence is done in any case, then some of the transaction costs related to screening investment opportunities may be alleviated by an increased quality of the deal flow. Even if the trend is toward generally increased deal flow (cf. section 3.3.3) then investment readiness programmes are important complements to other angel policies that are usually supply side oriented. Additionally, they have an educational function that reach beyond the narrow complement of immediate policies because they provide genuine entrepreneurial skills that are useful for business development.

They are necessary for several reasons. First, there is an attitude amongst many entrepreneurs that they should keep ownership and control and that the mere injection of external financial and management resources is a last resort solution rather than one that comes in first hand to bring the business to excel. Another initial problem on the entrepreneur side is that many entrepreneurs are ignorant of the array of possible investors and what each of these has to offer regarding terms and management assistance. Investment readiness programmes typically introduce the basics of financial investors (although this has proven to be a problem that in some cases needs to be addressed with special means – see the description of the FinMix programme in Flanders later). Third, even if entrepreneurs do find and approach the “right” investor, then there are often shortcomings in the skills of the entrepreneur regarding capabilities to draft and pitch the business plan, and there may be issues regarding the strategy and/or organisation of how the business is (planned to be-) set up.

The investment readiness programmes have been vastly different. They were widely used in the UK and have only in recent years become common in continental Europe. There does not seem to be any convergence towards a common model. Some address only the training of drafting a proper business plan and presenting that to investors. It has proven in the evaluations that have been done on these programmes that it is essential to design the programmes in a manner that allows a rather specific advising rather than purely generic types of courses and training. Moreover, it is clear that there is a need to engage in rather long-term programmes. It also seems a crucial design issue that they are delivered by experts close to investment communities, and that there is some aspect of individual guidance. In some cases the use of mentors, who in some programmes have been business angels, have been a way to address these two issues simultaneously.

The policy instruments above will be assessed in the country studies. On the basis of the above discussion and the country studies they will then be critically reviewed in chapter 8 of the report.

4 Country study 1: France

This chapter contains the first country study. Here we describe policy measures to promote business angels in France from four perspectives: investment environment, statistical foundation, policy initiatives and evaluations. The chapter concludes with a discussion of experiences and learning.

4.1 The business angel and investment environment in France

The shares of micro, small and medium size enterprises within the French SMEs sector are roughly in line with the EU as a whole. The same goes for the sectorial distribution. Estimates from the most recent European Commission Small Business Action (SBA) fact sheet for 2011 show that French SMEs account for 63.9 percent of the jobs and 59 percent of the gross value added (GVA) in the French business economy (SBA, 2013).

The French SME sector has been severely hit by the recent crisis. The crisis has been reflected in the slowdown of positive long-term development in the number of enterprises and their contribution to employment and economic value added. It is estimated that for the period 2008–2010 the most harmful effect has been in employment, with 400,000 of jobs lost, representing 4.5 percent of the total workforce. Additionally, estimates for 2011 indicate only recovery for the number of enterprises (SBA, 2013).

In terms of policy actions, the main focus of the Government in 2010 and the beginning of 2011 was easing access to finance. The number of SMEs seeking finance has increased by 8.5 percent between 2007 and 2010 and it is expected to increase by 10.8 percent to 61.7 percent by 2013 (SBA, 2013). A report by *Conseil d'Analyse Economique* (the French Council of Economic Analysis)⁷¹ from 2009, state that there is a precedence of debt financing over equity financing, in line with the characterization in section 3.1 of France as a *credit-based financial system*.

According to the (SBA) fact sheet, 19 percent of the SMEs were denied credit by banks in 2009, 17 percent indicated more restricted access to public guarantees, and 30 percent have noticed a declining willingness of banks to provide loans. These indicators were generally on par with the EU. In addition, the cost of credit for small enterprise for loans under €1 million is about 25 percent higher than for larger enterprises. In 2011, the proportion of rejected loans significantly decreased from 19 percent in 2009 to 11 percent in 2011, while an increasing share of French business owners (33 percent) have noticed deterioration in the banks' willingness to provide loans. It has been suggested that in addition to general decrease in demand, the continuing tightening of the standards applied to borrowers has had the negative effect on entrepreneurs regarding applying for a loan. Additionally, the conditions for accessing public financial support have become more restrictive. Early stage venture capital investments amounted to 0.019 percent of the country's GDP in 2009.

France has had a tradition for public intervention at the capital markets using various instruments such as loan guarantees and tax reliefs to the smallest firms.

⁷¹ The Council is an independent, non-partisan advisory body reporting to the French Prime Minister. Its members belong to the academic community and are chosen by the Prime minister. To bring further knowledge, some economists from the business sector may join in to contribute to specific projects. See: <http://www.cae-eco.fr/CAE-en-anglais.html>

4.2 Statistical foundation for assessing business angel activity and -policies in France

Compared to other countries the share that the visible part of the market makes up is probably relatively large in France. France Angels estimate that angels outside the BANs number around 2,000–4,000, and CSES (2012) maintain that the share of the visible business angels is 70 percent, which is far above the shares between invisible and visible part that was listed in section 3.3.

In France an extensive questionnaire is sent to BAN members, and they are generally replied. The analysis of the 2012 survey will be finalised in May 2013 and is based on answers from 72 out of 85 BANs. France did a lot to improve data collection; including surveying portfolio companies in order to assess impact from business angel investments (a major impact study has been conducted on ministerial orders by Montpellier university researchers). There is also an initiative to gather researchers in the field in France. A major conference is planned to take place in September or October. In addition, there have been efforts by the *Centre d'analyse stratégique*⁷² (2011) to estimate the potential of business angel market based on the number of individuals that meet certain wealth criteria. In spite of this the statistical foundation for knowledge on the French business angels market still needs improvement.

4.3 Policy initiatives – background, objectives and design issues

4.3.1 Tax incentives

The French government has been very active in providing tax incentives to business angel investments however, recently the tight budget constraint has caused the government to dilute the value of tax breaks. According to information from interviews the tax environment in France used to be favourable to business angels, although somewhat complicated, but the value has now decreased to a level where the use and value can be questioned. The capital gain tax (CGT) is 62 percent and value of up front tax breaks are now down to 18 percent.

Previously, only a couple of years ago, private individuals could make direct investments through a business angel network and have a relief of 25 percent taxes of investments below 20,000 euro, shares should be kept for at least 5 years and the investee company must fit with the European definition of an SME. The capital gains tax on these investments was, though, slightly higher than ordinary CGT. Investments in small, unlisted firms render further benefits. Another way of investment is through investment clubs where the tax relief is distributed according to the share of investment through the investment club. The investment clubs can be organised either as a partnership or as a joint ownership of minimum 5 and maximum 20 members. There is a small cap on the investments as the annual contribution per member must not exceed 5,500 euro. In addition, the club life span is limited to 10 years.

From January 2011, the percentage of tax break was reduced from 25 to 22 percent. In addition, individuals eligible to the “Solidarity tax” on wealth (the so-called ISF) have been able to reduce wealth tax by 75 percent of the total amount invested in SME within

⁷² A research-based advisory institution under the authority of the Prime Minister. See: <http://www.strategie.gouv.fr/en/content/presentation>

the limit of 50,000 euro. The wealth tax break has also been applicable when investing in SMEs across the EU-27.⁷³ There is a belief among interview respondents that the high level of tax deduction on wealth taxes in France has attracted many financial investors instead of the targeted narrowly defined business angels. Recently, it has been decided to reduce the percentage of tax break on wealth taxes from 75 to 50 percent with a limit of 45,000 euro.

Another tax incentive is related to the investments with equity-linked saving plans (*Plan d'Épargne en Action, PEA*), in which private individuals were exempt from the capital gain tax if the gain is kept in the PEA for at least five years. The PEA has a limit of 132,000 euro for a private individual or 264,000 euro for a couple. Moreover, this tax break cannot be used simultaneously with the tax deduction for direct investments.

Tax incentives are also provided if investing in Venture Capital Mutual Funds (VCMF) or so-called Mutual Innovation Funds (MIF). In the case of the investments made in VCMF, tax exemption for the subscriber includes the revenue and the portfolio capital gain. Beside the revenue and the portfolio capital gain benefit from tax exemption, the MIFs and the Local Investment Funds offers the same tax incentives as in the case of direct investments. The investment target of the VCMs includes both quoted and unquoted companies with equal shares of funds devoted to each. On the other hand, Innovation Mutual Funds must commit 60 percent of their resources to innovative companies that are not listed on a regulated market.

In summary, an extensive array of tax incentives has been provided. Some of these are directly targeted towards business angels but generally they tend to be broader in their scope and target.

4.3.2 BAN

The French case is interesting for a number of reasons as indicated above. The number of business angel networks has increased rapidly and numbers now 85 (information from interview) where 4,000 angels are registered and invested in 2009 around 59 million euro (EBAN, 2010c). Angels registered with the networks under FranceAngels invested in 2011 in around 350 firms. Furthermore, the trend is upwards despite the financial crisis. The number of business angel networks is considerably higher than in the UK, which is otherwise often regarded as the most developed business angel market. For comparison slightly more than 20 BANs are operating in Sweden. According to EBAN (2010c, p.21) in 2010, 48 were active in the UK (+16 in Scotland). 53 million euro was invested in the UK by angels.

The BANs in France used to be based on government subsidy but according to France Angels some networks relied too much on that and failed to adjust their business model to a situation without subsidy. They therefore had to close when government subsidy was terminated. Now the existing BANs are based on success fee income, entrepreneurs pay 1–3 percent success fee (charged in the range 200–700 euro). This make up around a third of the income, and membership fees cover around 50 percent. The rest is coming from sponsors.

There is large variety in what the networks do, and how they operate. There are considerations with the Ministry of Finance and FranceAngels to install a certification scheme in order to increase harmonisation between networks. Generally, there are

⁷³ http://europa.eu/rapid/press-release_IP-08-434_en.htm

relatively many angels involved per investment compared to what is the case in other countries. They invest relatively small amounts, on average 16,000 euro (CSES, 2012). This structure may be created by the tax breaks that put a cap on the deductions.

In addition to the large number of networks there are a number of alumni networks in France that operate within business development. Exit conditions are not good, but there is consciousness about the importance of addressing this issue already at the outset when making deals.

4.3.3 Co-investment scheme

Much alike the situation in other countries, there is not a close link between angels and institutional venture capital firms, except for on the very local level. Here these two groups work together. The large, often Paris based venture capital funds are rarely working as partners for angels.

In December 2012, CDC Entreprises,⁷⁴ announced the creation of Angel Source, the first national fund for co-investments alongside the networks of business angels. This venture capital mutual fund will be managed by a professional venture capital company specialising in technology sectors. The priority of the fund will be to support start-up companies in the fields of information technology and digital industries as well as their applications in cleantech and health.

Angel Source has secured 20 million euro during its initial fundraising. The subscription period is set to run until the summer of 2013, with the objective of raising the fund's final size to 30 million euro. The aim of the programme is to make 15 to 20 investments in technology start-ups by 2016. The amount of the first round of founding will range from 0.5 to 1.5 million euro in order to match the contributions of business angels.

4.3.4 Investors/entrepreneurs training

There is a little investor training even if it is recognised that it is highly necessary. The primary training of investors is "on the job" training, which is performed within the individual BANs. FranceAngels also has a network staff training programme for the BAN members. It is not government funded, rather paid for and developed by FranceAngels.

Investment readiness programmes are primarily run in relation to clusters and some BAN. FranceAngels has a programme prepared, but it should be organised, delivered and funded.

4.3.5 Other initiatives

More recently, the innovation agency OSEO has started with a new approach in facilitating funding for innovative start-ups. OSEO is a public-sector institution devoted to economic development and a key source of financing and other support for SMEs. OSEO guarantees risk (up to 70 percent) of equity financing of SMEs undertaken by institutional investors and business angel networks via France Investment Fund Guarantee.

Beside warranty, OSEO is the founder and operator of EuroEquity, an online introduction service open to all SMEs seeking equity finance and taxpayers subject to the ISF wealth tax wishing to take advantage of the investing in SMEs for growth and employment. This service enables business angels and investment funds access to sourcing of investment

⁷⁴ A *Caisse des Dépôts* group subsidiary, which manages the National Seed-stage Fund (FNA) within the framework "Programme of investments for the future" (PIA).

opportunities through a search engine or by setting up notifications that enable finding businesses that match investors' specific criteria. Validation of business angels or investment funds is conducted by the service.

4.4 Evaluations

The evidence on effects of business angel policies in France is very sparse. Hence, CSES (2012, p.59) mentions that: *“To date, there has been no evaluation of the public support of Business Angels”*.

Information from interviews confirms this view.

4.5 Results, effectiveness and learning points from the policies

Regarding inspiration for the policy formulation process in France interviews points to that the policy making generally has been very introvert. There is not much learned from other countries although the UK policies could have been of more inspiration than currently is the case, according to interviews. The basic approach in France is now to reduce budget deficits. Currently the policies go against better conditions for angels, according to their trade association, FranceAngels.

One learning point from the French case is that government, *in casu* The Ministry of Finance, has been supportive in establishing a community around business angel networks, thus helping an organisation and professionalization of the angel market by way of enhancing the role of the federal organisation, FranceAngel. The measures taken by the Ministry includes financial support to FranceAngels, and support to individual networks to get organised and to get associated with the FranceAngels. This, together with the information from the use of the tax schemes, has meant that the “visible” part of the market is relatively large, which in turn is positive for the statistical knowledge of the development of the market, for the visibility of angels, and for awareness raising.

Related, it is clear from the French case that the federal organisation, FranceAngels, is a node in the business angels' community, and that it is performing a number of additional activities compared to many other national organisations. This has rendered a much stronger organisational structure of the market.

It cannot be ruled out that the previous active tax policies, which was used by a wide spectrum of people (also not exactly business angels in the traditional sense) contributed to the creation of an equity culture or at least an increased awareness of angel investments. This may have been instrumental in sustaining equity investments during recent set back of framework conditions for angel investments.

In sum, the Table 6 below provides an overview of selected, key aspects of the country case. Similar overviews are provided for the other country studies.

Table 6: France – policies and learning

Policy option	<i>Tax incentives</i>	<i>Co-investment schemes</i>	<i>Support of BANs</i>	<i>A: Investor training B: Investment readiness</i>
Actual policy and policy design	Previously an extensive array of favourable tax incentives. Now reduced.	Yes, Angel Source. Business angels and government.	No/yes, government subsidy generally terminated, but support to federal organisation and individual networks to get organised with France Angels.	Limited. Primarily through networks.
Learning points	Contribution to equity culture and increased awareness of angel investments. Thus, additional, un-measurable effects of policies.		Contribution to much stronger organisational structure of the market, which may be a platform for other policies.	

5 Country study 2: Flanders (Belgium)

This chapter contains the second country study. Except for a more general Belgian introduction, the study is limited to the Flanders region. Here we describe policy measures to promote business angels from four perspectives: investment environment, statistical foundation, policy initiatives and evaluations. The chapter concludes with a discussion of experiences and learning.

5.1 The business angel and investment environment in Flanders

The structure and sectorial distribution of enterprises in the Belgian SMEs sector is by and large in line with the EU average. The share of micro enterprises account for 93.9 percent of the firm population, and the SMEs account for 67.7 percent of the jobs in the business economy and 61.6 percent of the value added. Belgium's SMEs sector has dealt better with the crisis than its EU's peers. The number of enterprises stopped growing in 2010, but stabilised at a much higher level than SMEs in the EU generally.

According to the SBA fact sheet for 2012, Belgium performs better than the average EU Member State with respect to access to various types of finance for SME. For example, the amount of venture capital to early stage investments amounted to 0.039 percent of the country's GDP while the EU average amounted 0.02 percent.

There is not a close link between angels and institutional venture capital in Belgium. According to interviews, the venture capital industry have not treated the angels nicely, in many cases have "locked-in" the angels by not buying them out and still diluted the ownership shares. Therefore there is now generally a parallel investment system between these two groups. This situation has worsened as there is discussion if some angels are not investing based on professional, monetary evaluations, rather with a mixture of financial and non-pecuniary motives. One interview respondent found that this may be true in some cases where angels work alone, however, it is much rarer in syndications.

A number of policy initiatives to improve access to finance have been introduced in the Flanders region. Thus, above EU average is also accomplished in respect to access to public financial support including guarantees. They include quantitative improvements in the supply of capital and qualitative measures like "Finmix", which function as a consultancy service for entrepreneurs in determining the optimal financial mix for their specific situation.

5.2 Statistical foundation for assessing business angel activity and policies in Flanders

The statistical foundation for knowledge on business angel activity is, like in many other countries, limited. There is extensive information derived from the BAN Flanders. But little information is derived from policy schemes like BA+. The Arkimedes funds are potentially a source of information, but are not used for that either. EBAN remains a key information point. It was suggested in interviews that it could be considered to do a pan-European project on business angel investments in collaboration with EBAN. Another option would be to add a question detecting if business angels are involved whenever there is a notification to the Belgian business register of company capital increase.

A point raised in interviews in this connection is to what extent there is a need for further statistics to support the policy process. Although the evidence based policy formulation is a nice construct it remains as such and has often limited practical value. Policy formulation is rather based on gut-feeling, a sense of where the markets are heading, budget strings and –limits. Therefore, there is a limit to how much statistics is really needed if the purpose is to support the policy process.

5.3 Policy initiatives – background, objectives and design issues

5.3.1 Tax incentives

Flanderns do not have upfront tax breaks on investments, but there is an exemption from capital gain tax, which is favorable and used extensively. Compared to using upfront tax breaks it is likely that this provides a relatively stronger incentive for serial business angels, whereas the tax breaks are likely to render stronger incentives for new entrants to the “business angel market”.

On the basis of the so-called Aunt Agatha scheme introduced in the Netherlands, the Flanders region launched a WINWIN loan scheme, with a 2.5 percent yearly tax deduction of the amounts invested and a 30 percent tax reduction in case of non-reimbursement (Aernoudt et.al, 2007). It has favourable, fixed conditions regarding the term (8 years) and interest rates (2.12–4.25 percent). The WinWin loans in Flanders was discussed and in interviews mentioned as a scheme that has very little administration, not really any registration, and the control of the company maintained with the entrepreneur. It is, though, rarely used by angels as it is a debt-based instrument.

5.3.2 BAN

‘Organised’ Belgian angels are affiliated to one of two main business angel networks, BAN Vlaanderen in the Flemish region and BeAngels in the French speaking part of the country.

The BAN Vlaanderen list its objectives as:⁷⁵

- making entrepreneurs and candidate business angels aware of business angels financing.
- Informing, training, educating and preparing the entrepreneurs and business angels.
- Establishing contact between entrepreneurs and business angels (the actual “matching”).
- Bringing business angels together for syndication.

The matching function is mentioned as one of four key tasks illustrating that BANs nowadays are performing a number of different functions other than the pure matching between angels and entrepreneurs.

Originally it was thought that the government support to BANs needed only to be upheld for three years, after then the sustainable ones would manage without the support (Arnoudt et al., 2007). This showed out to be a wrong and a too optimistic assessment. It is difficult for BANs to survive based on for-profit models. In the case of Flanders BANs there was

⁷⁵ Source: Reginald Vossen.

originally (1997–2003) five networks and they were all government supported (50 percent based on costs, a maximum of 77,000 euro each). In reality a number of business angels were members in more than one network. The population base of 6 million people can be argued to be too small for five BANs and their performance was not good. Consequently, and based on a comprehensive evaluation, it was considered to end the subsidy and the BANs were urged to start a consolidation process, which resulted in the current structure. Moreover, the support structure would change from cost based support to output based support. Thus, in some cases the subsidies may also be used pro-actively to obtain political objectives.

There has been a debate in Flanders on the government support for BAN, whether it should be maintained. The rationale for continuous support was questioned as it was thought that the BANs could be self-supporting after the support was terminated. In the period 2004–06, at one point in time there was only one network left and an effort was put into lobbying and documenting the benefits of BAN-support. The support was changed in 2007, as the remaining BAN was supported with a combination of 45 percent of the support as a fixed amount (138,500 euro a year, insufficient to cover operating costs) and 55 percent output based funding (up to 170,000 euro). Criteria for evaluating the output were investments, number of contact between angels and companies, number of angels, presentations etc. As elaborated later on (in section 5.5) the support from 2011–14 has changed radically to 90 percent fixed support and 10 percent (up to 30,800 euro) is output based. The objectives and rationale behind this policy change is specified in section 5.5. The total budget for the BAN is around 800,000 euro a year, thus the above mentioned percentages refer to the structure of the subsidy. The remaining part of the budget must be provided through other types of income.

Despite being a small, dense, country the local element still plays a role in business angel investments. This is illustrated by the fact that Flanders is small and has one BAN, however, it is still organised in five regional offices that are used extensively.

According to EBAN (2010a) Belgian angels within the network invested 6.2 million euro in 2010. Moreover, this source lists that the number of deals increased and numbered 36, while the number of angels in networks decreased. However, the Annual Report 2010 conducted by BAN Vlaanderen and interviews with the general manager and one board member of BAN Vlaanderen provides a more detailed overview of the results obtained by the network:

Since its inception in 2004 the network reached a peak total of 338 business angels members by the end of 2010 from which there are currently around 180 active business angels. The number of members thus significantly exceeds the number of active angels. Interviews indicate that despite a screening of new members and approval by the Board, some of the current members act more as consultants than active angels. On this background there may be an issue of the credibility of policies for supporting the BAN. On the other hand it cannot be ruled out that fruitful links are created between angels and intermediaries.

In 2010 the BAN received 798 investment proposals of which 13 percent (97) were presented to network members, resulting in 29 completed deals. There is now 500–600 proposals flowing into the network rendering around 20–25 investments involving 40–50 angels. Success fee rates are decreasing with amounts and start from 5 percent. A typical amount charged is 3,000–4,000 euro. For legal reasons it is charged of business angels.

The median value of the amounts invested in the deals was lower in 2010 than in the two previous years. With a value of 95,000 euro, a more cautious investment behavior of angels was reported, with limited initial investments combined with an increased use of other co-financing mechanisms such as BA+ loan and phased investment. Furthermore, the co-investment fund, ARK Angels Fund⁷⁶ participated in 9 out of 29 deals. The amount of venture capital through BAN Vlaanderen that was provided through business angels, Participation Fund and Ark Angels Fund totaled 5,336 million euro in 2010, a *status quo* compared to 2009.

The BAN has created its own fund, ARK Angels Fund NV, where 42 angels put funds in 3.8 million euro into the fund. The Arkimedes programme supplemented 3.8 million Euro⁷⁷. This money has been invested during 2007–11 and investment activity has rendered important learning. The Arkimedes programme closed its first phase in 2012, but a second round of opening funds is in process. The new 14.8 million euro Arkimedes programme may have 4:1 gearing, but this may be too little, according to interviews.

5.3.3 Co-investment scheme

The venture capital fund, Ark Angels Fund NV (ARKimedes Fund SA + 42 individual business angels), is a risk investment vehicle of the Flemish government which acted from 2007 to November 2011 as co-investment fund for the Flemish Business Angels. The initiative of the fund came from BAN Vlaanderen. The drive for this policy was that the business angels displayed a wish to diversify their portfolio; that there was a growing inflow of investment proposals of a still higher quality; that the amounts demanded had increased; and that there was a wish to activate potential angels who had not yet invested.

Ark Angels Fund NV is a co-financing fund participating in companies in which the business angels BAN Vlaanderen wish to invest. It is funded by 42 business angels and government (the Arkimedes programme) on a 50/50 basis. There were clear investment objectives as the fund aimed at eight investments a year with an average amount of 200,000 euro. Over the lifetime of the fund it was stipulated that the fund should make new investments for around 5 million euro in the first 3–4 years. The leverage could be *pari passu* with business angels but the leverage could also be twice the amount of the business angel. There is no sector focus but the focus is on the segment of the “smaller” deals. The Ark Angels Fund NV is currently only doing follow on investments in the companies in which they have invested. The fund will close in 2018.

When the investment period of the Ark Angels Fund ended a second fund, Ark Angels Activator Fund was formed. The objectives was slightly different as it aimed at a higher leverage ratio for business angels (up to 4 times), and for somewhat larger investment size. The fundraising for this fund spurred interest from 59 business angels who provided 35

⁷⁶ The venture capital fund, Ark Angels Fund NV (ARKimedes Fund SA + 42 individual business angels), is a risk investment vehicle of the Flemish government which acted from 2007 to November 2011 as co-investment fund for the Flemish Business Angels.

⁷⁷ The ARKimedes Fund is a public initiative, managed by a Flemish Holding Company. The ARKimedes fund is, with fiscal incentives, attracting investments (shares or bonds) from private persons in Flanders. These investments are put into a fund that invests in private Venture Capital Funds. The ARKimedes funds invest their money in accredited risk capital providers, the so-called ARKIVs. These are private risk capital funds that have been accredited by ARKimedes Management NV. The ARKimedes investment in a fund is 50%. The ARKIVs invest in start up and expansion of SMEs in Flanders. See: http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country_pages/be/supportmeasure/support_mig_0020

percent of the total capital of 14.8 million Euro, while a bank matched that amount and government put in the last 40 percent. The investment period will be from 2012–2017.

5.3.4 Investor/entrepreneur training

Investor training is much needed but not used/done to a large extent. The BANs run a yearly BA Academy day and a general business angel day once a year as well. There is the boot camp for new members once a year. Every year 40–45 new members enter the BAN, however, around 10–15 attend, which illustrates that the perception of angels regarding if they need training is not fully developed. The training that does take place is rather by way of stimulating syndication. For this purpose the BAN has coaches (dealmakers) that mediate connections between angels, especially new members. They furthermore function as mediators of the deals and align interests between angels and entrepreneurs.

The primary training of investors is “on the job” training, which is performed to a large extent by the Dealmakers (who themselves are business angels). In addition to the mediating function they have a function in keeping track on if deals are closed. This is expedient in order to secure that success fee is charged. Previously (in 2007–2008) Vlerick Business School made an introduction to being a business angel and provided some training. It is considered to repeat this if adequate funding could be provided.

A project called *Groeigazellen* was launched at the end of 2010 by BAN Vlaanderen and was in operation until April 2012 offering in-house solutions⁷⁸ for non-financial issues such as human resources policy, management, organisational development, process optimization or intellectual property for so called “gazelles”. An intensive media campaign preceded the project with the aim of promoting positive image of “gazelles”. The project provided an individual coaching and counselling for 30 gazelles. Besides these individual counselling “gazelles” were provided with group activities such as panel sessions with experts, angels, and counsellors, mutual networking opportunities and information sessions for interactive learning

It used to be a big issue in Flanders to convince entrepreneurs of the benefit/need for parting with some of the control when expanding and taking in external capital providers. Now, however, there is a new generation of entrepreneurs who are much more open towards equity parties and to part with control. This awareness of terms for capital provision is spurred by the fact that GEM studies⁷⁸ in the first couple of years of their surveys showed Belgium to be at the bottom of the total entrepreneurship activity ranking (TEA).⁷⁹ This caused policy makers to be alert to enhancing an entrepreneurial culture and awareness, and a number of initiatives were taken along these lines, like business plan competitions, education, strengthening university technology transfer offices, TV programmes etc. Although it has taken a decade, the entrepreneurial culture now seems to have changed. Likewise, the strong family business culture has also changed considerably.

5.3.5 Other initiatives

The BA+ is only for business angels who belong to a BAN, which creates a link between these policies. BA+ are sub-ordinate loans of a minimum of 7,500 euro and up to 125,000 euro, and the interest rate charged is the prime rate + 1percent. The term of the loan is five, seven or ten years, depending on the nature of the investment to be financed. Moreover,

⁷⁸ Global Entrepreneurship Monitor (cf. section 3.3.2).

⁷⁹ The main indicator in the GEM-report is TEA (Total Early-Stage Entrepreneurial Activity).

the scheme offers one to three years exemption from the repayment of capital authorised, depending on the nature of the project. The BA+loan is provided by the ParticipatieFonds, a federal credit organisation serving the independent professions and small companies. However, BAN Vlaanderen is responsible for guidance and application of the loan. In total, the amount of the contribution of the business angel(s) and the founder(s) must be greater than or equal to the credit of the ParticipatieFonds. The study conducted by Rudy Aernoudt et al. (2007) has shown, that effects of the scheme are likely to be related to the number of investments made by business angels and the diversification of their portfolio rather than to characteristics of the deal (size, sector), the conversion rate, or the role of the business angels.

The *CombiFin* project similarly bring companies looking for capital together with a panel of capital providers such as venture capital, business angels, corporate banks, and government support agencies. Flanders PMV is an important part of the financial ecosystem in the small, seed end of the market.⁸⁰ Government also spur collaboration for example through the FinMix programme that not only provides advice regarding the right financing mix for entrepreneurs, it also is a forum for networking.

5.4 Evaluations

As in other countries systematic evaluations are sparse. One exception is Collewaert et al. (2010) who among other things finds that the subsidy per job in the BAN in Flanders was 1,731 euro. They compare this with 1,515 euro in the UK, 4,000 Euro in “the European business incubator initiative”, and 3,100 Euro in the “Belgium structural funds initiative”. Generally it was found that there does not seem to be an adverse selection of angels to the networks and that they “provide” jobs for a relatively small amount of subsidy.

The subsidy to BAN provides economic growth from the companies financed through BAN in the same magnitude as firms who found business angel financing through other channels than the angel network. Furthermore, they found that the subsidies to the network benefitted indirect effects such as raising awareness; training of investors and entrepreneurs; access to complementary financing.

An important statement in the evaluation is that the authors primarily focused on the direct effects of BAN although they do recognise the above-mentioned indirect effects, however, these are hard to quantify. Therefore, a more long-term evaluation is necessary for a comprehensive assessment of the value creation of BANs.

5.5 Results, effectiveness and learning points from the policies

Policy formulation in Flanders is often based upon inspiration from other schemes, often from schemes in other countries, such as the TechnoPartner in The Netherlands. Generally the Belgian/Flanders policy approach is UK inspired. An internal, key inspiration for the policy formulation process in Flanders has been Professor Rudy Aernoudt who took part in the creation of Archimedes funds in 2006–2007. Likewise, he was part of creating the BA+ which after 2000 was linked to BAN. To support the policy making process policy research centers have been established with a five year funding. They research specific issues and assist policy makers. They engage in both short term and long term projects, and there is an open call for each five year period. The funding is, though, not as substantial as the similar construction in the Netherlands.

⁸⁰ PMV is an independent investment company and an entity of the Flemish Government.

Interestingly, there is no real equity gap for smaller amounts. The financial eco-system is working regarding amounts up to 2 million euro. This is facilitated by the Archimedes small funds (12 funds) and a “dense” system of different actors providing small scale finance and advice. Moreover, policy measures are to a large extent aligned in this spectrum. It is primarily in the 2–5 million euro investment span where firms meet problems, the so called “second equity gap”. GIMV is the major Belgian venture capital company. They have 2 billion euro under management and also have Arkimedes funds, but they cannot close the second equity gap by themselves. It is clear that a lot of prosperous firms go down in that stage regardless if they have experienced a smooth positive development up until that point. Previously banks were very active in venture capital, both as fund-of-funds and directly investing. They had professional teams and were risk willing. The financial crisis stopped the equity arms of banks. This leaves an equity gap in the venture capital market. There is increased syndication between angels in order to act also in this segment. Moreover, there is increased collaboration with other financing sources.

International investors have entered. But it is a challenge to Belgium that there is a lack of an array of traditional venture back-funders like insurance companies and pension funds. It was suggested in one interview that one option could be to consolidate the Archimedes funds into fewer, stronger funds that were able to provide follow-up finance. This will also solve a problem with lack of professional management for so many funds. It may also mean that they will become attractive to international funds. However, another interview suggested that it would not be a good idea to concentrate the Archimedes funds into fewer, stronger funds. The diversity created through the Archimedes funds is important, and alongside these funds there are other funds like innovation funds and mezzanine funds.⁸¹

One of the most important lessons from the Flanders experiences and policies is that the continuous support from government has been essential. The recommendation from the Flanders experience on a general level is that government should not be short sighted, and should be prepared to do enough. This is particularly evident when it comes to the support to BAN. Previously the total government budget of 328,000 euro a year for the support for BAN was composed of a fixed amount of 60 percent, and the other 40 percent of the support was output related. Criteria were rather detailed on members, projects received, contacts, deals, press. This continued in 2004–2007, and again through to end of 2010. The admin burden and auditing were immense, e.g. 75 euro was refunded per contact, but it should be documented in writing that the contact took place.

In 2011 the requirements to administration were reduced substantially, the BANs were given independence and were provided 90 percent fixed amount and 10 percent output related subsidy (up to 30,800 euro). The process towards this solution was positive. The government was responsive to arguments e.g. around that the BANs would focus too much on the activities rendering income and preventing them from investing in long term activities and community building. A point from this process is that BANs must also be open to government and inform adequately and honest about what works and what doesn't. In BAN in Flanders there is a government representative in the Board. On a more specific level BANs must be ready to provide the broad range of services they do, not only to focus on being a matching entity. In sum, features of Flanders policy are highlighted in Table 7.

⁸¹ Mezzanine financing could be explained as a hybrid of debt and equity financing, typically used to finance the expansion of existing companies.

Table 7: Flanders (Belgium) policy and learning

Policy option	<i>Tax incentives</i>	<i>Co-investment schemes</i>	<i>Support of BANs</i>	<i>A: Investor training B: Investment readiness</i>	
Actual policy and policy-design	Yes. Absence of CGT after holding shares 3 years.	Yes. Ark Angels Fund Business angels and government BAN BA+	Yes, 40–45 % of budget is subsidy, composed of 90 % fixed support and 10% outcome dependent.	Yearly training day, dealmakers, bootcamp.	Programme for gazelles, CombiFin project, FinMix programme, regular presentation trainings for companies (8-10 times/year)
Learning points		The scale question important – how large amounts?	Continuous support from government has been essential.		Important to address inadequacies in knowing about financial sources.

6 Country study 3: Wales

This chapter contains the third country study. Here we describe policy measures to promote business angels in Wales from four perspectives: investment environment, statistical foundation, policy initiatives and evaluations. The chapter concludes with a discussion of experiences and learning.

6.1 The business angel and investment environment in Wales

In terms of access to finance, the UK has deteriorated significantly in several indicators measured by the SBA fact sheet, while still performing on the EU average level (SBA, 2013). 28 percent of SMEs were denied access to credit or offered credit on unacceptable conditions in 2011. Simultaneously it is 30 percent more expensive for SMEs to raise credit when compared to large companies, the difference being only 11 percent in the past. In addition, the percentage of lost payment increased from under the EU average to above the average. However, UK performed above the EU average level when it comes to well-functioning systems for the protection of legal rights, readily available credit information, and venture capital investment in start-ups as a percentage of GDP.

A number of UK studies on the provision of risk and growth capital for SMEs and potential market failure confirmed that there is a lack in the provision of such capital. A study from 2009 (the Rowlands report, 2009) found a gap in the provision of equity capital in the range between £2 million and £10 million. Interviews confirmed that the size of investments that meet a finance gap is nowadays much larger than it was a few years ago, in fact possible in the 5–10 million range. In relation to business angels, this amount is regarded to be at the top end of the amount that angels are able to provide (CSES, 2012).

There are differences between Wales and the rest of the UK. The crisis has meant that the credit markets are difficult and that the demand for debt has gone down, some of this demand has gone to demanding equity instead. But the equity market is also difficult for start-ups. However, as we shall see later, the capital supplied through public agencies has increased. The overall characterization of the Welsh financial eco-system is one of rather well-functioning interplay between actors in the seed and start-up capital market and between private agents and public policy. Generally, there is a perception of the financial system and the related funding mechanisms and – policies that they do make up a funding escalator, and that the system works well in that respect.

Finance Wales was established in 2001 by the Welsh Assembly Government. It provides commercial funding to growth-oriented SMEs in Wales. Finance Wales work closely together with banks, venture capital firms, the business angel network Xenos is an integrated part of Finance Wales. Finance Wales has since its inception invested in more than 2,500 firms. By end of 2011 direct investments amounted to £167 million and additionally they leveraged £355 million (EBAN, 2011b). They manage funds of £335 million.

There is a large degree of trust between public policy makers and Finance Wales. Even if there are now more evaluations and policy learning then Finance Wales is very much engaged in the policy formulation process and policy makers generally trust that Finance Wales know better about needs for intervention. The economic crisis has only meant that they stand more closely together.

Generally, there is in the policy circles and in Finance Wales alike a change towards a more commercial, rather than “soft” money thinking, even if a grant-culture still prevails in Wales (EIF, 2009), but it is the ambition to impose on the wider business community that a “grant culture” is inexpedient. Compared to the rest of UK maybe there is a more interventionist approach in Wales. Stakeholders are involved, though it is somewhat difficult in Mid-wales and other deprived areas. There is also a consciousness about the negative effects of too much bureaucracy related to the schemes. In line with this the whole business support system for Wales changed recently (2013) towards a one-string system where one consortium of different actors are delivering all business support services.

Regarding business angels, there are a few super-angels in Wales, but they act more like traditional venture capital funds. There are some fund-type of angels coming in as well. They are derived from family funds that take out a share to invest in small businesses. The profile of the average business angel has changed. They are not only younger; they are also much more inclined to syndication and co-investments. The syndication often takes place not only between angels themselves but also between angels belonging to the national BAN (Xènos) and Finance Wales funds. Another change is that they are not technology focused, rather succession and distress cases are becoming frequent.

Although still preferring local investments, then business angels now act across larger distances, illustrated by the fact that 30–40 percent of Xènos’ angels live outside Wales. There is four hours travel to North Wales, therefore there is not much interaction with the angels in the north and the south, rather Xènos interact with some of the angels who live in close proximity to Cardiff. Finally, the angels now come with a larger sum of money, partly because the gap in the market between the seed stage and where institutional venture capital step in has widened considerably, therefore the angels will have to come up with more money. Also at the demand side businesses require more money and longer time horizons for investments before there is an exit route.

6.2 Statistical foundation for assessing business angel activity and policies in Wales

There is some information derived from the EIS scheme and the recent SEIS scheme (see below), however, the information is partial and on aggregated level. Information from the (only) business angel network, Xénos, is detailed, but covers only the visible part of the market. The British venture capital association provides an annual overview of the venture capital market and has also looked into the business angel part of the market (Harrison and Mason, 2010) but the information is primarily on the UK as a whole.

6.3 Policy initiatives – background, objectives and design issues

6.3.1 Tax incentive

The Enterprise Investment Schemes (EIS) is a specifically designed fiscal incentive for BA introduced by the British Government to encourage early stage risk capital. The scheme offers tax incentives to investors buying shares in qualifying unquoted companies that have problems to secure finances from banks due to lack of previous track record or due to risky business sectors. The scheme includes detailed rules and restrictions that will be briefly described.

The main benefit for investors includes 30 percent income tax relief of the cost of the shares for the year the shares were issued. Relief can be claimed up to a maximum of £1 million invested per tax year, while there is no minimum investment requirement giving a maximum of annual tax reduction of £300,000. In order to be eligible for income tax break investors need to hold their shares for at least three years. Moreover, the investee company needs to continue a qualifying trade for the required period.

In addition, investors are freed from future capital gains tax provided that the shares are held for three years or more. If the shares are disposed of at a loss, it is possible for the investor to claim share loss relief against general income. This allows capital losses to shares in a qualifying EIS company to be offset against a person's income instead of capital gains either for the year of the loss or the previous tax year, or both years. Tax relief can equal to up to 50 percent of loss, providing that there is a sufficient tax liability to cover it.

The company that wishes to issue the shares must be an unquoted company without the company being a subsidiary or controlled by another company. Furthermore, the company must have fewer than 250 full-time employees at the time of issuing shares. The gross assets of the company must not exceed £15 million immediately before any share issue.

An EIS company can raise a maximum of £5million in any 12 month period – including money raised via a Seed Enterprise Investment Scheme (SEIS) and Venture Capital Trusts (VCTs) (see below), and there are restrictions on the type of trade that qualifies. From April 2012, the annual investment limit includes in addition any other investment received via measures covered by the EC or State Aid.

The Seed Enterprise Scheme (SEIS) is another fiscal incentive specifically targeting at BAs investing in small, seed stage companies. The scheme was introduced by UK Government in April 2012 and it was designed as a complement to the existing EIS. In line with EIS rules it is anticipated that companies that have secured an initial investment under the SEIS may want to use the EIS later. Under the SEIS individual investors who purchase qualifying shares in a qualifying company can benefit from a combination of income tax relief, capital gains re-investment relief (only during the tax year 2012/2013) and capital gain disposal relief. The combination of income tax relief set at a higher rate than that offered under EIS in combination with the potential to exempt capital gains reinvested in a SEIS company in a single year and save up to a further 28 percent in tax is seen as way of making SEIS attractive to potential investors.

The problems addressed with the introduction of the scheme are existence of a higher risk than investors are willing to take at the seed stage of the companies' development; the further movement of investments toward later stages of financing, and the planned changes in the amount companies can raise per year through EIS (CSES, 2012). The benefits and rules for claiming any of the benefits will be briefly described.

Income tax relief for investors who subscribe for shares in a qualifying company is available at 50 percent of the cost of the shares up to an investment limit of £100,000 per tax year. The amount invested can be distributed over a number of companies, enabling investors to spread their risk, with a limit set at 30 percent stake in the investee company. As in the case of EIS, the shares must be held for at least a three year period in order to claim the relief. A "carry back" facility allows investors to treat all or part of the costs of shares acquired in one tax year as though the shares had been acquired in the preceding tax year. Any gains on the SEIS shares are free from capital gains tax, providing certain

conditions are met. Additionally, any capital gains made on the disposal of assets if reinvested in shares which qualify for SEIS income tax relief are free from CGS. The limit of £100,000 investment per tax year applies as in the case of income tax relief.⁸²

A company that qualifies for issuing shares under SEIS must be a small UK company with the permanent establishment in the UK ; one with fewer than 25 employees and with less than £200,000 in assets. Additionally, the company's trade must have been going on in the two years before the issue of shares in an approved sector. The target company can raise a maximum of £150,000 in total under SEIS.

The Venture Capital Trusts (VCT) works as an approved investment trust, which invest in small unquoted firms on behalf of individuals. The selection and monitoring of investments is undertaken by a professional fund manager while a portfolio of investments helps individuals to diversify risk. The scheme also provides tax advantages, notably income tax relief, income tax exemption on dividends and the exemption from CGT. An investor can claim income tax relief at 30 percent of up to maximum £200,000 annual investment. The income tax exemption on dividends and exemption from CGT are available in respect of shares acquired within the permitted maximum of £200,000. Tax breaks have a CGT exemption when holding shares a minimum of three years. Companies that qualify for VCT investments mirrors EIS-qualifying company. By contrast with some of the rules about qualifying companies under the EIS, the need for these requirements to be satisfied is not limited to a particular period.⁸²

6.3.2 BAN

Xènos was established in 1997 as a national BAN underwritten by the Welsh government. It is organised with a central office and two regional managers. The staff has been cut down to two regional managers and one and a half staff at the central office. There used to be four regional networks, they are now two. Xènos is organised with regional branches because Wales has relatively large travel distances and differences in culture and business structure.

Finance Wales and Xènos has changed and grown especially since 2008. Thus, Finance Wales now invest in the area of £30 million a year, up from £5 million, and Xènos angels are investing 2–3 million a year, which used to be ½ million. Generally, Finance Wales has changed towards gaining a more commercially oriented model, and Xènos has moved in that direction as well, although somewhat more slowly. Now they went from largely undercharging for their services towards an increasing amount of revenues from success fees. Other revenues include sponsors (divided in different classes, paying £1,000 and are expected to host events and give two hours of free advice to portfolio companies), registration fees (size depends on where the firm is in the life cycle, varies from £125–750), services like selling companies, placing investors in firms as managers (a £1,000 fee is charged).

A recent (2012) implementation of success fees (a flat 5 percent) to Xènos caused a little resistance but not much, and it is hoped that they will generate around £100,000 a year, although probably only 50,000 the first year. Considerations of success fees were also on the agenda of Xènos back in 2007 but were not implemented. Costs for running Xènos has previously been in the order of £400,000 yearly, but is now (2012) reduced to 300,000, and with the just mentioned success fee it is hoped that it comes down to £200,000 in the

⁸² See, <http://www.seis.co.uk/enterprise-investment-scheme/>

future. There is now 50 percent subsidy or less in Xènos for running costs. In the rest of the UK the BANs have closed down in a number of cases because funding from the RDAs was terminated when these were dissolved.

Xènos angels are now investing much more than in 2008 when the changes began: From 100 angels investing £1 million or less to now 2–3 million a year, with 2012 reaching £3.1 million from 25 deals. The number of proposals is around 300 a year and 60–70 of these are presented to the angels. 15–18 (1 in 4) succeeded in raising capital. The average investment is £90,000 and at the demand side there are entrepreneurs looking for 25,000 and up to 500,000. The crisis has meant that investments are more spread out on a wider range of different types (size) of deals rather than activities are being cut back.

The number of angels registered with Xènos has gone down from 160 last year to now 120. This is a natural consequence of a preceding good year as the investors are simply not available when they have made a couple of investments as they are busy developing these businesses rather than engaging in new ventures. Recruitment to the network takes place through referrals, finance wales database and dedicated recruitment meetings. The relatively recent SEIS is a source of recruitment as well, the marketing is lacking though.

Xènos face a challenge of recruiting more angels to the network on a continuous basis. Wealth management is now a big business, and actors in this market may recommend customers to allocate some money for business angel type of investments. This development is especially spurred by the attractive tax regime provided by SEIS. This may attract some people to become a business angel provided they have the expertise to add to the firm. This is a pre-requisite for entering Xènos. Potential angels are screened through a personal talk. Angels based on inherited wealth are rare, currently there are no such angels as they often lack the expertise.

Syndication is a challenge in itself. Although truly syndication has increased, then still many angels prefer to invest alone. They join the network to obtain a deal flow that is structured. Through BAN the syndicates are often created, although it is difficult to put together a syndicate. They actually often fall apart because they have different (strong) beliefs on how a business should be run. BANs have an important task in creating syndicates but it requires a good knowledge of the angels.

6.3.3 Co-investment scheme

The co-investment fund JEREMIE⁸³ fund has been in operation since 2009. It has 180 million euro and had by November 2011 invested 24 percent (45 million euro) on a *pari-passu* basis. The way the Jeremie funds are operating seems to work well and is now “exported” outside Wales. 15 percent of funds are now outside Wales, especially in North England.

⁸³ The JEREMIE initiative offers EU Member States, through their national or regional Managing Authorities, the opportunity to use part of their EU Structural Funds to finance small and medium-sized enterprises through a revolving Holding Fund acting as an umbrella fund. Business Angel Matching funds are among the financial instruments that may be used. See: http://www.eif.org/what_we_do/jeremie/index.htm

From its' inception The AngelcoFund⁸⁴ was only working in England, thus was not eligible to Welsh firms. However, from July 2013 it has been extended to all of Great Britain.

6.3.4 Investor/entrepreneur training

Training of investors is primarily “on the job” training, which is performed in the individual BANs and angel syndicates. Investor training is necessary both as on-job-training and meetings. Xènos is now operating much more like a broker (not given advice due to regulations) than just making introductions and are conscious about the need for training activities. Xènos drafted a programme for investor training and submitted the proposal to the Welsh government but it has not yet been implemented or even decided on.

Investment readiness programmes are widespread and Finance Wales has followed one such course to give their input as to whether what was taught was in line with what is expected and used in reality. Generally, the quality of the programmes is good. Part of investment readiness could be said to be willingness to part with control and awareness of the opportunities related to equity financing (add of competences). There are still problems with the former, although maybe it is changing with a new generation of entrepreneurs. Regarding the awareness of angels and other equity investors, this has changed positively and Finance Wales have used role models and ambassadors as instruments in this. In several of the interviews in different countries it was mentioned that the TV programme “The Dragons Den”⁸⁵ has, though, perhaps been even more successful to promote and inform about individual investors investing in upcoming entrepreneurs.

6.4 Evaluations

The performance measures used in monitoring of Xènos are the number of deals, the amounts of money mediated, jobs (although this is difficult to measure and it is only registered as an effect from the initial investment, the subsequent growth is not captured in the registrations). However, the evaluation criteria are not confined to these parameters, also factors such as the number of opportunities presented, company presentations and other networking activities counts.

As mentioned the dominant instrument to promote business angel financing has been the establishment of business angel introduction services (Aernoudt, 1999, 2005). Whereas the general knowledge about the performance of BANs is still limited some evaluations have been undertaken in the UK context even early in their operation (Mason and Sackett, 1996, Harrison and Mason, 1996). These evaluations have shown that BANs contribute substantially to job creation and that the public costs per job are low (EBAN, 1998, Mason and Harrison, 1999, Harrison and Mason, 1996).

Moreover, government schemes are often subject to dead weight i.e. they support activities that would have been undertaken regardless of the support. The available evidence shows, however, that supporting the informal venture capital market is unlikely to render dead-weight effects and displacement effects (Mason and Harrison, 1996, 1999). Regarding Xènos, Mariott and Davies (2006) conclude in their study of the business angel network Xènos that it has been successful in mediating supply and demand for business angel

⁸⁴ The Angel CoFund is a £100 million government fund that invests between £100,000 to £1 million into small and medium sized businesses together with syndicates of experienced business angels. See: <http://www.angelcofund.co.uk/>

⁸⁵ The Swedish version of the TV programme was named “Draknästet”.

capital, and has been important in meeting the points of criticism often raised against BANs. Important in this has been the fact that the people running it had an understanding for and practical background from private sector business.

The EIS has been in operation since 1995 and has therefore been subject to evaluation (e.g. Cowling et al. 2008). Generally, these evaluations are positively assessing the EIS. They show relatively high take-up rates, for example, according to one study (NESTA, 2009) 80 percent of the investors surveyed used the scheme at least once during their investor career. The counterfactual situation if investments would have been made without the support is difficult to study with any precision and often rests on surveys of firms' perception, but one study (NESTA/Wiltbank, 2009) found that one in four of investments were likely to have been realised only because of the EIS. According to Mason (2009) the general assessment of the scheme is that it has proven additionality and positive effects on the firms in the scheme.

6.5 Results, effectiveness and learning points from the policies

The Welsh government has been actively promoting business angels financing even if lagging somewhat behind the English experience. Key actors at the capital market in Wales emphasise the benefits of strong links between different actors such as Finance Wales, Xénos, banks, other public sector organisations, and other actors. For Xénos, for example, these links are continuously an asset to the operation of Xénos and was at its establishment phase important in getting quickly integrated and recognised.

Generally the policy cycles are short compared to the effects of the majority of the initiatives taken in this field. Even if some effort is done there is perhaps still a need to get stakeholders together in the policy processes. Information from interviews indicated that policy processes and policy learning are often hindered by a lack of stakeholder involvement and discussions which in turn has led to a number of policy failures.

A related, important issue is that in many cases the policies have not considered the (lack of) absorptive capacity of firms. Therefore, some of the policy schemes have demonstrated low take-up rates because firms were not able to use them. Closer stakeholder involvement could possibly have prevented these situations.

Currently there are considerations on a co-investment scheme for Wales.⁸⁶ Scotland has had that co-investment fund approach for many years. It is suggested as a £5 million pilot-exercise but is one of several policy suggestions from Finance Wales, and as the Welsh government actually liked them all there is now a process of prioritization. In the policy process documentation and considerations have to be written down, such as whether there are crowding-out risks, if state aid regulations are violated, if there is a true market failure etcetera. Another interesting thing about these requirements is that during new policy formulation it should always be considered if they are aligned with existing policies.

An important current and future issue for business angels is that of scale. Angel networks continues to be small and local, but at the same time they need to be large enough to take businesses through several funding rounds and are likely to face a minimum threshold of a total of £50 million yearly investments to operate fully. This will require syndication of

⁸⁶ The AngelcoFund was not eligible for Welsh businesses at the time of the interviews. However, as from July 2013 the fund is active in the whole of Great Britain.

syndicates – some mechanism of aggregating the economic muscles of the angel networks is likely to be needed.

The general picture of policies in the business angel area being fragmented and not integrated, lacking a holistic approach is less pronounced in Wales. A second general element is the importance of trust between government and intermediaries. Table 8 sum up key points.

Table 8: Wales (UK) policy and learning

Policy option	<i>Tax incentives</i>	<i>Co-investment schemes</i>	<i>Support of BANs</i>	<i>A: Investor training B: Investment readiness</i>	
Actual policy and policy design	Yes. EIS, SEIS and VCT.	Yes, Jeremie Fund.	Yes, 50% subsidy of Xenos for running costs.	Little investor training.	Widespread investment readiness programmes.
Learning points	Absorptive capacity important.		Strong links and trust between different actors.		

7 Country study 4: Denmark

This chapter contains the fourth and final country study in *section III*. Here we describe policy measures to promote business angels in Denmark from four perspectives: investment environment, statistical foundation, policy initiatives and evaluations. The chapter concludes with a discussion of experiences and learning. Unlike the other three countries, Denmark has not been chosen as *best practice*. Learning in this case is based on the country previously *having used* policy measures for business angels but that they *did not* seem work.

7.1 The business angel and investment environment in Denmark

Access to finance for SMEs shows signs of deteriorating in two indicators in the SBA fact sheet from 2013. Denmark performed comparatively better than the EU average on most of the indicators. However, the share of loan applications rejected by banks is higher at 20 percent, than the EU average of 15 percent, and the cost of credit for small businesses in Denmark is 50 percent higher than for larger enterprises, and this gap is twice as large as in the EU, on average. The financial credit crunch in 2011 is recognised as a main obstacle for the growth of the SMEs in Denmark.

Years back, the Danish capital market has had a relatively well-developed and well-functioning debt market whereas the equity market has traditionally been less developed. Equity capital sources such as venture capital have been few and in short supply. Up until the beginning of the 1990s there was very little attention on business angels as a possible financing source for SMEs in Denmark. Also the institutional venture capital industry in Denmark is relatively young. A large accumulated financial loss since the start of the venture capital industry additionally caused many venture capital firms to follow a cautious, risk-averse investment strategy with the majority of investments occurring in the later stages of a firm's development (Christensen, 2003). This situation has, though, changed in recent years and the Danish venture capital market is now considered well-functioning and usually in the top end of international rankings of venture capital markets (Vækstfonden, 2012, OECD, 2013).

The Growth Fund (*Vækstfonden*) is a state-owned capital provider who has become a dominant player at the market. It has a mission of closing gaps in the financing system and is constantly alert to policy options for improving access to finance, especially innovation finance.

During the financial crisis *Vækstfonden* has been forced to adjust strategy. They originally preferred to have a private investor being the lead investor and then invest alongside this investor, however, because the private market has been sour it has been necessary for *VækstFonden* to act as lead investor through the first couple of financing rounds. Foreign funds are sometimes part of the investments. Many venture capital firms and the incubators/accelerators "*Innovationsmiljøer*"⁸⁷ have plenty of firms that are ready for exit, however, currently there are no buyers.

In recent policy reforms the investment limits for *Vækstfonden* has gradually been expanded, and new institutions have been established. In the reform programme of 2008–

⁸⁷ Government supported incubators for growth-oriented, technology-based companies. They have funds for equity investments into their portfolio companies' proof-of-concept and proof-of-business.

2010 *Sunstone Capital* was established as a venture fund with 400 million Euro under management for investing into early-stage life science and technology-intensive firms. The loan guarantee scheme managed by Vækstfonden was expanded in the 2011–2015 reform and two remarkable further funds has been established; a Business Innovation Fund (*Fornyelsesfonden*) with 100 million euro for innovation in green and welfare investments and *Dansk Vækstkapital*, that has substantial financial resources, primarily from pension funds, and is a fund-of-funds vehicle.

Interviews among key actors and policy makers in the field did not reveal a clear answer as to whether there is a finance gap in the market and if so, where this gap is. The general perception from other studies is that there is a gap in the phase after the Innovationsmiljøer (Ernst & Young, 2010, EIF, 2009). Thus, there is probably less of a problem / financial gap in the seed segment in Denmark, several complementary organisations and schemes operate in this segment, however, there is a gap between the pre-seed /seed segment and the institutional venture capital and Vækstfonden (even if Vækstfonden has a range of products for supporting small start-ups (e.g. “Get Started Loans”) they invest venture capital in relatively large firms).

The policy process is very dependent upon the hard facts and especially in the decision phase of the policy process the numbers are decisive. The discourse is another very important factor in the policy process. The public debate and the way policy areas are discussed are important to what is on the political agenda. Generally the business angel area is not working in Danish policies.

7.2 Statistical foundation for assessing business angel activity and policies in Denmark

In Denmark the statistics on business angels specifically and the venture capital market generally is primarily under the auspices of Vækstfonden. Statistics Denmark (*Danmarks Statistik*) and the National Bank of Denmark (*Danmarks Nationalbank*) have little information on this market. Vækstfonden is the operating entity for a number of support schemes, such as loan guarantees, different loans with special eligibility criteria and terms, and venture capital. Vækstfonden has as a benchmark for their activities to generally be self-sustained, defined as rendering a surplus corresponding to the bond market. They are also determined to act counter-cyclical in order to support the financial system in tougher times (Ernst & Young, 2010). It is part of the mission for Vækstfonden to provide analyses of the access to finance in Denmark. On business angels there is a lack of statistics, though. Based on a survey to a small panel of business angels they provided a quarterly monitoring of the market some years ago, however, this activity ended in 2010.

The public consultancy entity, FORA, has made an analysis on the potential number of business angels in Denmark. This was based on analysis of available, free monies, which is only a rough indicator of what is available for investments, not alone what is actually used for investments. They estimate that there are between 950 and 3500 potential business angels in Denmark.⁸⁸ It was furthermore concluded that seven percent of all high-growth enterprises received finance from a business angel.

⁸⁸ A similar analysis was made in France by *Centre d'analyse stratégique* (2011), who estimate that France has around 350,000 individuals with a minimum of 100,000 euro that could be invested without involving more than risking 5% of their wealth.

DVCA point out in interview talks that the statistical foundation for knowledge on business angels in Denmark is very thin, and a Danish parallel to the Norwegian Menon investigation (Menon, 2010) would be wanted to obtain a more solid foundation of knowledge on the market.⁸⁹ Even if there is limited knowledge on business angel activities and even if there may be a limit to the marginal value of additional knowledge in the policy process then there is a long way to a situation where market actors and policy makers have enough information.

Thus, there is extremely little statistical information on Danish angel investments. One of the reasons why there is little registration is that there is no public money involved in the (few) Danish angel networks (except the Region Midt supported angel network), therefore there are no reporting requirements. This illustrates that in some cases data and statistics may spur development of policies but in fact there may vice versa be cases where policies aid production of statistics.

Business Angels Copenhagen recently (January 2013) did a survey among their members to get more information on the investment activities etc. (40 out of 62 answered). It is the intention to repeat the survey in a year. There is a wish and intention to make a large scale empirical investigation of the Danish business angels market. The Danish Venture Capital Association, DVCA, has agreed to collaborate with *ErhvervsStyrelsen* (an operating entity in the Ministry of Business and Growth) on this, however, up until now there has been little progress in this.

7.3 Policy initiatives – background, objectives and design issues

Generally policies in Denmark is geared according to a perception that firms over their development face different needs hence different financing institutions and schemes target different stages and size of investments (EIF, 2009). In pre-seed phase six government supported “Innovationsmiljøer” support firms with incubation and capital (up to 100,000 euro). They are meant to support firms in their further strive for obtaining capital, which is also one of their performance criteria. The Innovationsmiljøer makes a performance report every year. One of their performance criteria is the amount of external capital flowing to their (total) portfolio. Business angels are part of the investors interested in firms in the Innovationsmiljøer, however, because the accounts from Innovationsmiljøer are based on the total portfolio it is unclear how many firms in reality are financed. Regarding specific policies the relatively new fund Dansk VækstKapital has provided substantial finance for young firms.

Generally, two policy initiatives targeted directly on business angels have been remarkable over the past couple of decades: the support to creating a national business angels federation, *DBAN* (in 2000, see section 7.3.2), and the establishment of a co-investment vehicle, *PartnerKapital* (in 2006). Nowadays, except for some regional government support to the business angel network they run in Region Midtjylland there is no public money involved in the business angel market in Denmark (EIF, 2009 and interviews).

7.3.1 Tax incentives

There are no tax breaks for investments into the segment that business angels operate in.

⁸⁹ However, a study as the Menon-study in Norway is not possible in Denmark as there is no register of owners. It is, though, under establishment in 2014.

7.3.2 BAN

DVCA work as a trade organisation for the venture capital and private equity companies in Denmark. DVCA has a board for business angels with representatives from the five regional networks and they have on their webpage contact details on the regional networks. In addition they promote policies conducive for business angel investments in their lobbying activities and policy pamphlets. Hence they are not particularly active in functioning as a national federation for business angels in the traditional sense as is seen in other countries such as France.

In reality there is some activity, but the networks are few and not all of them very active. Two Copenhagen based angel networks have merged and is now more organised, but the angel networks outside the Copenhagen area are suffering: *BanInvest* is connected/in practice part of the Østjysk Innovationsmiljø, *BanMidt* is a prestige project for Region Midt and is only working because of public efforts to get it running; *Switzr* is dependent upon the manager driving it forward, they tend to invest in large firms, and is currently inactive; Southern Denmark has no network.

Business Angel Copenhagen (BAC) organises business angels in the Copenhagen area as it is a merger of the former two angel networks in Copenhagen. They previously had some problems with their image as they had a number of angels who were members for socializing and not being very active in terms of investment activities. By rising the membership fees to 700 euro a year a number of these angels gave up their membership. There are now 62 members. Activities are at a relatively low level as they meet 4–5 times a year and have limited activities on top of the matching events. A separate organisation, Keystone, is handling the secretariat. The network is associated with DVCA and has recently (March 2013) joined EBAN.

Going a little back in time there was previously a national BAN, Danish Business Angel Network, DBAN⁹⁰. DBAN was established in 2000, by way of The Danish Growth Fund, who was supported financially with 700,000 euro for a 2-year period. Since its establishment DBAN attracted 200 business angels and a number of regional and sector-oriented BANs were set up or planned although these initiatives mostly ended as plans only. Moreover, the establishment of DBAN took up substantial financial resources.

DBAN did the things that angel networks usually do like matching functions, awareness campaigns and training. This contributed to a boost in the general awareness of business angels in Denmark. This in turn may alleviate some of the informational asymmetries and –deficiencies in the market.

The Ministry was reluctant to support the DBAN activities on a long term basis, because they feared being caught into a situation with permanent subsidy and the government had unrealistic expectations as to what could be expected in a short-term period. The reporting was focused upon easily measurable parameters like the number of investments made, number of introductions, and number of networks created. Several of what has been termed indirect effects above, such as the awareness raising and behavioral changes was not considered important. In spring 2004 it was decided to re-organise the network and make it part of the Danish Venture Capital Association (DVCA). The BAN activities under the auspices of DVCA since 2005 have been limited. It was investigated if there was any chance to continue DBAN on a private, for-profit basis. However, after one month of

⁹⁰ See more details in Christensen (2011a), which this explanation builds upon.

making and testing a business plan for such a continuation of the network it was concluded that it had no chance.

According to Mason and Harrison (1993) there are three pre-conditions for a successful establishment and growth of a BAN: (i) a high visibility and credibility through on-going marketing is needed to build a critical mass of investors and investment opportunities; (ii) it must be well resourced, and (iii) a hands-on and pro-active approach is needed. Most of these preconditions were met in DBAN. But the initiative was no success, measured in the number of investments made by the help of DBAN, and the value of indirect effects is difficult to measure. The limited success has had a bearing on subsequent political will to engage in support of angel networks.

7.3.3 Co-investment scheme

The co-investment scheme *PartnerKapital* was established in 2006 to get into operation from 2007, but closed down already in 2010. Prior to the establishment of *Partnerkapital* business angels articulated that they generally faced requirements to the amount of capital needed for investments that exceeded the business angels' capacity, even if they joint forces in syndicates of 3–5 angels. Therefore, a co-investment vehicle would be an expedient initiative. According to Vækstfonden they consequently first investigated if there were private investors who were interested in establishing a matching fund in line with those in other countries. As there was not enough interest from private investors Vækstfonden established *PartnerKapital*. The model had two experienced angels assessing the projects in collaboration with Vækstfonden. The eligible projects were in all industries and in investment sizes of 3–10 million Danish *kroner* (c. 0.4–1.5 million euro). The operation of the scheme rendered 10 investments and a total investment amount from Vækstfonden of 43.4 million *kroner* (c. 5.8 million euro) (Ernest & Young, 2010).

The scheme was evaluated internally in the Board of Vækstfonden, where it was concluded that it gave too many losses and take-up rates were unsatisfactory. It was also concluded that the deal flow did not come automatically even if some of the most connected business angels were part of the scheme. Therefore, there was a heavy work load involved in finding the potential investee firms. The next problem was to find the angels to match the investments. All in all, the work load involved in the co-investment process was much larger than anticipated.

The experiences with the co-investment scheme *PartnerKapital* was not assessed positively with the majority of observers in the capital market, and especially the political system, and Vækstfonden. According to interview information some observers in the debate of the *PartnerKapital* claim that the limited success/failure of the scheme is due to the fact that it could not be expected to render results in a very short time span, it was closed down too early. Another important factor was that money was lost during the scheme. Finally, it was under-capitalised with only 100 million *kroner* (c. 13.3 million euro). One positive outcome from the scheme was that it provided more professionalization of the contractual agreements used.

A co-investment vehicle has been re-considered and there was a visit of Vækstfonden to Belgium to learn from the co-investment schemes here. As it showed to render losses and was doing rather risky investments it did not comply with the model the Vækstfonden wanted, especially as there was an “outsourcing” of the due diligence to certified angels. Vækstfonden would prefer a model where the *projects* is screened rather than *the angels*. The costs of the due diligence process and administration of co-investment schemes should

be minimised in order to make it sustainable. In principle, there are two typical examples of that: (i) the process is done by certified angels who then are authorised to make the investment decisions. This could be termed the EAF/EIF-model;⁹¹ (ii) the assessments is done by the administrative authorities. In Vækstfonden there was a combination when they set up the PartnerKapital scheme. The EAF/EIF model where angels are certified has been criticised in the Danish political system.

The investment size for Danish business angels is typically in the range of ½–5 million *kroner* (c. 67,000–670,000 euro), therefore they need often to syndicate to cope with investments in certain segments, and investments like biotech are generally out of reach.

7.3.4 Investor/ entrepreneur training

There is little *investor training* of a systematic character although it is recognised that it is needed. A private consultancy organisation, Keystone, organise a one day training seminar/master class, but besides that the investor training is through and during the operation of the networks.

The *investment readiness* is primarily offered through Connect Denmark who ran a Proof-of-Business programme for some years. May 1st 2013, a call for tender for another period was announced. Moreover, investment readiness is done regionally by way of the “capital coach scheme”, which is run by the regional “Growth Houses” (*Væksthus*), entities for providing business support. This scheme is linking the entrepreneur up with a mentor that has experience in guiding on both the right capital mix and in how to apply for it.

Evaluations

In terms of evaluations the capital market is generally under-evaluated. There have been evaluations of the *loan guarantees* in 2012 and the *Innovationsmiljøer* are evaluated but besides that little effort are done regarding evaluation. In particular, there are no formal evaluations of the business angel policies in Denmark. *The Partnerkapital* scheme was evaluated internally in the board of Vækstfonden, and *DBAN* was never evaluated formally either.

Although not directly regarding business angel policies the Vækstfonden has undergone several evaluations, the last one is from 2010 (Ernst & Young, 2010). The overall conclusion from this evaluation is that Vækstfonden has had a big impact on improving access to finance at the Danish capital market, and that there will in the future also be a need for the presence of Vækstfonden. It is likely that there have been positive spillovers to business angels from the activities of Vækstfonden.

The policy process is based on both learning from other countries, but also to a large extent it is data driven. When new statistical information is provided stakeholders are involved and inspiration is sought regarding design issues. In some cases an inspiration group is formed encompassing major stakeholders. A model for change and perceived outcome from the policies is drafted. The idea of integrated policies is appealing and right and it has been considered and tried out in some areas, however, because it is rather difficult there is not much left of that anymore in the policy approach.

⁹¹ See: [http://www.eif.org/what we do/equity/eaf/](http://www.eif.org/what_we_do/equity/eaf/)

7.4 Results, effectiveness and learning points from the policies

Some interview respondents posed a question mark if there is at all a potential for activating business angels in the Danish financial system. It is often said that the BAs contribute to closing financial gaps and bridge the “valley of death” for new, growing firms. However, if they take firms to a stage where formal venture capital firms come in, they typically get diluted and their ownership shares will not necessarily be valued very high. So the option for business angel investors is often to stay with the company until exit e.g. through a trade sale. Therefore, business angels and formal venture capital firms do not co-invest. The fund Seed Capital, do some co-investments. The Innovationsmiljøer are important in the seed phase, however, they also face a dilemma of getting diluted by venture capital and at the same time having exits to private venture capital among their performance criteria.

Having established that there has been, and is, very little business angel policies in Denmark, the next question is if there is any signs of change of this situation?

Generally the Ministry is reluctant to take initiatives in this area. In particular, a policy where fixed, yearly grants or underwriting of costs are provided is not feasible, especially not at the current economic situation. Even if the Ministry is constantly alert to policy options there are currently no plans of doing anything in this area. One major reason is the negative experience with PartnerKapital (not used very much and rendered losses) and with DBAN. A co-investment scheme designed according to the model with certification of angels is not assessed feasible. A co-investment scheme is generally not in the radar, and if it should be so it would not be the EAF/EIF model.

Likewise there is resistance to be actively supporting networks or other infrastructure. If government should support Business Angels Networks it could be a task for the Regional Growth Fora (*Vækstfora*) using the regional Growth Houses (*Væksthus*) to provide an infrastructure for the angels. Even if Denmark is small business angel activities remain very much a regional activity because it is so dependent upon the monitoring and competence adding activities.

The question is if the angels would accept public money, and if the Ministry should engage in supporting this segment. Moreover, it is questioned by The Ministry if there are in reality very many competent angels who could be part of such a scheme. Moreover, the research by Menon (2010) found that: *“Both in Norway, Sweden and Denmark there is an opinion that business angels who engage in business angel networks are not the most competent angels or those with deep pockets”* (p.4, own translation). The interviews in Denmark confirm this perception within policy circles. It is, though, debatable if this perception holds. The data from the UK published in the BIS reports (Harrison and Mason, 2010) indicates instead that angels outside BAN make fewer investments than BAN members.

Interviews indicated that business angels in Denmark are to a large extent individualistic and see networks as a place to socialise and to some extent to generate syndications with other angels. Although syndication has increased there are still relatively many angels who invest alone.

Tax incentives are generally difficult as they have a tendency to attract people without competences to the schemes, and they should not be engaged in risk capital. There has been a standing discussion of how and if to activate the pension fund money, and they have provided some funds, but not to an extent that really boost the market. One of the problems

with start-up financing is the long time span between savings and needs. The *Etableringskonto* (income tax deduction for allocating some of the income to a separate start up account) illustrates that saving take many years whereas the need is immediate.

Capital gain tax exemption is politically difficult, but as long as the tax exempt gains are re-invested, tax incentives may be an option. One factor that could spur renewed interest in the area from policy makers would be to obtain more statistical knowledge. The EAF/EIF scheme is also providing incentives for policies but is hindered by the fact that there is a general perception with policy makers that there are relatively few experienced angels in Denmark and the model where angels are screened and certified is not appealing. There has, though, been talk in policy circles of re-vitalising the PartnerKapital scheme in connection to an Accelerator programme. One of the Innovationsmiljøer, *Symbion*, is doing something of the kind in a small scale. Table 9 sum up key points.

Table 9: Denmark – policies and learning

Policy option	<i>Tax incentives</i>	<i>Co-investment schemes</i>	<i>Support of BANs</i>	<i>A: Investor training B: Investment readiness</i>	
Actual policy and -design	No tax breaks.	No. PartnerKapital 2007-2010.	Regional government support one. DBAN previously.	No investor training.	Proof-of-Business programme, "capital coach scheme".
Learning points		Dependent upon the workings of other parts of angels market.	Other effects than direct. BAN pre-requisite for co-investment.		

8 Discussion and policy learning

This penultimate chapter of *section III* is discussing and deals with aspects like statistical situation, different policy directions, learning, target groups, policy instruments (pros and cons and also how they interact), policy targets and the complementary value of business angels.

8.1 Our statistical knowledge on business angels and business angel policies

The studies in this report included an assessment of the statistical information on business angels both generally and in the countries studied. This is interesting for the users of statistics, researchers, market actors like trade associations, and policy makers. The use and importance of statistical knowledge in the field has improved in the recent years. But the studies concluded that there is still a need to improve both quality, comparability, and scope/coverage of data. On the other hand, it was mentioned in interviews that evidence based policy is sometimes more an ideal than a reality. Contrary, it was also mentioned in interviews that more solid evidence could potentially spur the policy process. Finally, it was shown in the Danish case that indeed the policies may themselves help out in establishing a more solid statistical foundation: when government subsidies were involved there were reporting requirements that increased the registered part of activities.

In conclusion, the studies point to that even if there is a decreasing marginal utility of additional statistical evidence on the role of business angels in entrepreneurial finance and on the effectiveness of public policies in this area, then we are far from a situation where new statistical insights have little value for policy and other users. In particular, we lack more knowledge on the “invisible” part of the market. Consequently, an effort is needed to both enhance the statistical foundation of business angels in the market for finance and to increase the research in the efficiency and effectiveness of policies. Prior to the latter objective an effort is needed to improve the methodologies of evaluation, an issue discussed in further detail in chapter 9.

8.2 Policy making processes and policy focus

To the extent that active business angel policies are pursued some general trends in Europe may be distilled (Mason, 2009). Generally, supply side measures were initially dominant soon followed by focus on intermediation through matching services aimed at closing the information gaps in the market. Capacity raising have entered the policy instruments and recently the popularity of co-investment funds pointed to in the present study illustrates that many governments have returned to leveraging business angels’ funds due to the increasing need for “deep pockets” and follow-on investments.

The literature on venture capital policy generally and business angel policies specifically has pointed to different policy generating processes (although this has unfortunately not been very prominent in the literature) and different foci of the policies.

We have in the present studies seen a great variety in the policies pursued, from countries with activist, broad-ranging policies to Denmark with a current absence of policies. This points to a basic dilemma, or balance, in policy making (and essentially also for the extent to which we can derive learning from the studies in this report), which is the wish to learn from other countries on the one hand, but on the other hand to also think policies into the

specific context in which it needs to work. Mason and Brown (2013, p.222–223) thus end their review of policies for high growth firms by stating that:

“...policy-makers must attempt to balance the advantages of borrowing from best practice elsewhere, together with the pressing need to properly customise and shape policy to the nuances and specificities of their own distinctive economic and entrepreneurial context.”

This balance is not only about doing policy or not, also the specific policies are important. Thus, in the case of co-investment schemes we saw that some interviews advocated to copy the Dutch TechnoPartner scheme whereas other interviews pointed to that the Scottish LINC-programme is special and is unlikely to work in other places.

Regarding the foci of policies there has been varieties among countries, but nevertheless a few general trends in policy making may be derived. As mentioned above, Lerner (2010) point out that government must recognise that initiatives to boost the venture capital markets generally have long lead times. The lead times are not only on effects as such, also, and related, establishing the awareness related to business angel financing is a long term process that requires a continuous effort, as was emphasised in the country studies. In this perspective it should be remembered that policies for enhancing business angel activities are relatively young in Europe. We have seen in the country studies that the intensity of policies for stimulating business angels has fluctuated substantially even in a relatively short time period. Thus, we have seen a set back of the activist French policies and a virtual closing down of Danish business angel policies. It is not possible to assess all the effects of these changes in policies but in light of the recommendation from Lerner it could be questioned if continuity in policy making is more important than the design issues? Certainly governments should experiment with the different policy options and adapt policies to the way the business environment develops, but the time period in which policies could be expected to be effective is often under-estimated. Additionally, the side-effects from policies are perhaps also disregarded when policies are assessed. This point is further elaborated and explained in chapter 9 below.

8.3 Deriving policy lessons from experiences

The above discussion on policies for business angel investments⁹² derived from the desk studies and the experiences with policies pointed out in the “field work” render a mixed picture regarding recommendations on what specific policies to pursue. In several cases there are positive assessments of co-investment schemes and tax incentives, however, in other cases not. In fact, in some cases experiences with unsuccessful schemes has led to closing down of these policies. For example, in the Danish case co-investment schemes were abolished and evaluated negatively. Another example from the country studies was that the EIS tax scheme in the UK has been positively evaluated, especially regarding creating additional capacity, but in other cases such as Sweden⁹³ and the Netherlands, the tax schemes have not been assessed positively and were terminated.

⁹² The Growth Analysis’ report “Staten och riskkapitalet” (2010) [“The State and Risk Capital”] has the sole focus to review government interventions, therefore only selected sources are incorporated here as background references. The discussion in this section is primarily meant to be forward-looking.

⁹³ The tax breaks in Sweden was terminated in 1996 after only one year of operation. However, a new tax incentive was implemented by December 1st 2013. See below in section 8.3 for an elaboration of this new initiative.

Likewise, there is debate around if tax incentives are that important to angel investments. There is also debate on design issues in the tax incentives. One is that eligibility and other legislation regarding the use of the tax schemes makes them difficult to use, especially when they are changed frequently (has been an issue in France). It has also been mentioned that they may distort “natural” investment behaviour. Another, related, issue is that it is difficult to target “real” business angels with such general instruments as tax policy, rather the schemes are used by a wide array of different people and for other purposes (again an issue in France).

Sweden is now introducing a new investor deduction for private individuals. The proposed tax relief will come into effect on 1 December 2013 after approval by the European Commission. The aim is to stimulate investment in small companies in early development phases and give these companies better access to external financing. It is also mentioned that the tax relief is expected to reduce the transaction costs for due diligence and information processing and that it is important to reduce the initial financial costs (upfront), instead of designing the initiative as a result-based tax benefit. People (business angels) with limited financial resources will probably be given greater possibilities to enter the investment market and increase their resources to be able to invest large sums.

In brief the Swedish proposal means that private individuals who acquire shares in a small company when the company is set up or from a new share issue are allowed to deduct half of what they pay for their shares. The maximum deduction is SEK 650,000 (c. 75,500 euro) per person and year (equivalent to acquiring shares for SEK 1.3 million or c. 151,000 euro). From the point of view of taxation the effect is 15 percent of the amount paid, up to a maximum of SEK 195,000 (c. 22,650 euro) per person and year.⁹⁴ The total sum paid by the investor for their shares in one and the same company is limited to a maximum of SEK 20 million (c. 2.3 million euro) a year. (Govt. Bill 2012/13:134).

Any particular scheme has its’ pros and cons. If they perhaps have positive contributions to the leveraging of investments the tax schemes can be too wide in scope to actually hit the right target. Co-investment schemes also leverage investments amounts but may require substantial resources to run the scheme. Business angel networks likewise have pros and cons as they contribute to raising awareness and matching of investors and entrepreneurs, but are only targeting a limited part of the market and do not seem to be operating without public support.

Generally, comparisons of the different policy schemes of the same type but in different countries are limited, and there is even an absence of solid comparisons between different types of policies in the same country. These difficulties reflect that the mere policy area is in itself difficult to assess and operate in, and that a number of design issues and policy mix are essential to consider, just as it should be considered if there is a need for policy at all (Flanagan et al., 2011).⁹⁵

The just-mentioned issue around the need for a “business angel policy” at all may be also debated. In particular, the fact that Denmark fares well in rankings on access to innovation finance (Vækstfonden, 2012) despite absence of business angel policies raises the question if the need for policy discussed in section 3.3 is more or less pronounced depending on the country in question (see also section 8.4.1). The answer to this question is not black-white.

⁹⁴ The deduction is made under the Income of Capital heading. Maximum tax relief is SEK 195,000 (c. 22,650 euro) per person and year (SEK 1.3 million x 0.5 x 0.3 = 15% of 1.3 million = SEK 195,000).

⁹⁵ More on this in section 8.5 and 8.6.

It is to a large extent subject to interpretation but also it is intrinsically hampered by the fact that an optimum for the degree of policy intervention is impossible to specify. In CSES (2012, p.39) it is mentioned that:

“...in the case of Sweden the view of the authorities has generally been that SMEs are relatively well-served by the regulated market and the existing financial support institutions, so that separate intervention on behalf of Business Angels is not a major policy priority”⁹⁶

Somewhat the same view was found in the Danish case. On the other hand, policy learning processes involves a constant outlook for whether there are rationales for implementing measures to “smoothing” the functioning of financial systems, even if specific policies failed in the past. Both institutional and market conditions may change in a manner that justify re-consideration of the policy position. And again, the importance of continuity of policies should not be under-estimated.⁹⁷

8.4 To hit the right target

8.4.1 The financing gap

Part of the policy consideration is to consider targeting the “right” part of the market, in the debate often denoted the financing gap. However, the concept of a financing gap itself is not straight forward, and in fact it could be debated *if* there is a gap at all and – if there is one – what then is the *size*, and *where* is it. In addition, a financing gap should also be viewed *dynamically*. A dynamic view means that the size of the financing gap in certain segments of the market may determine whether there is a gap in other segments at a later stage (OECD, 2006a). For example, if all gaps are eliminated at the “lower” end of the chain, then this may in itself create a funding gap at a later stage as a larger number of firms get on to a later stage, where financing capacity have not, perhaps, been geared to the increased demand. Essentially, the finance gap is a reflection of a market selection process, and the question is *when* and *where* is the selection going to take place?

The country studies have shown that there are wide differences in the perception of where is the financing gap (which may reflect that they indeed *are* different in different countries). In Flanders the opinion was that the financial eco-system functions well for investment amounts up to 2 million euro. UK studies (BIS, 2012) have pointed to equity gaps of between 250,000 and 5 million euro (interviews pointed to large gaps – possible in the £2–5 million range), and in Denmark interviews pointed to that there is a gap between the pre-seed /seed segment and the institutional venture capital and Vækstfonden.

The recent changes in the “funding escalator” (cf. section 3.3) where financial gaps have generally moved further up in the amounts needed also have implications for policies as will become even more obvious below.

8.4.2 Heterogeneity in target groups

Basically the venture capital market and business angel activities are characterised by large degrees of heterogeneity and “irrelevance of means”, that is, behaviour with actors are guided by going beyond the average and trying to find the exceptionally good investment

⁹⁶ As mentioned this has recently changed towards more attention (the tax break) on policies for business angels.

⁹⁷ cf. section 8.1.

opportunity (and accepting a number of below average outcomes) rather than an average good one. Moreover, the heterogeneity is not only on the level of the business angel activities and who angels are, there is also immense heterogeneity among European countries in these dimensions, and possibly even more dimensions. We have seen some of this variety in the four countries in this study.

An important point for policy is that it should be recognised that in this area the policies are for very heterogeneous groups. The group of business angels is immensely heterogeneous, just as are the entrepreneurs and small businesses, and in fact, even within a country you will find vast differences between regions. Business angels may even display differences on the level of the individual business angel. Even if we would like to be able to characterise them into pre-defined boxes⁹⁸ each of them often takes on different roles depending on the investment, investment partners, and circumstances. Moreover, they also change their role in the course of their career as business angels.

Entrepreneurs are likewise very different, and may act according to certain conventions regarding business plans etc. (Karlsson and Honig, 2009) but are immensely different in actual business management situations. The variance was clear in a large scale survey where behaviour and needs of Swedish SMEs were found to vary between firms and entrepreneurs of different types (Tillväxtverket, 2012).

This creates huge challenges for policy making in several respects. One is the mere instrumentation as it is difficult to reach two (or more) heterogeneous groups with a few instruments and with instruments that are too general. Another challenge is to create an awareness of the opportunities among the target group and to reach an appropriate level of take up rates. Moreover, it could be discussed if it is from a policy point of view more interesting to see business angels as performing different *functions* than their static characteristics and potential groupings. It could be assumed that most business angels will provide some sparring and competences to the entrepreneurial venture in addition to the financial capital. In some cases it may, however, be more or less needed, and policy instruments would ideally be targeted towards the different functions angels fulfil. For example, co-investment vehicles may be instruments for leveraging the financial capital without necessarily enhancing the competences added.

Viewed in a dynamic perspective this way of looking at the policy assignment may also mean that different policy actors, like business angel network managers and policy makers, could emphasise different activities in different time periods because at different periods the contextual factors may determine the need for other priorities. For example, in periods with relatively easy access to finance there may be more need for the value added contributions from business angels compared to the financial capital and in turn there may be a case for intensified investor training programmes in these situations. Generally, policy makers could consider to dynamically adjusting the portfolio of policy instruments according to the development of the market needs. The backside of this is to balance the policy making against the need to have a level of continuity of policy making as emphasised above.

⁹⁸ Some of the literature on business angels is termed ABC-research, that is, it focuses on characterizing business angels' Attitudes, Behaviour, and Characteristics.

8.4.3 Awareness and absorptive capacity

A critical factor related to the awareness problem is the absorptive capacity of the target group. Policies that are deemed too complicated to use and too difficult to comprehend risk being ineffective and render low take-up rates. One of the findings from the field work, for example from Wales, was that these problems are real and that involvement of stakeholders in the policy making process rendered insight into the absorptive capacity problem and the awareness problem, but it also provided legitimization and relevance to the policy.

Therefore, neither policy processes nor policy design issues are trivial at all. For example, there is a balance between making schemes simple, thus easy to use, and their exact targeting specific groups.

8.5 The pros and cons of policy instruments

The combined field work and desk studies have pointed to the use and to some extent the strengths and weaknesses of the key policy instruments. Although the policy instruments are best assessed in the national context, as the same policy may be more or less expedient depending on the specific national context, then on a general level, the pros and cons of the four (five) policy options discussed in this report could be classified as in Table 10 below, which first summarise the advantages of the policy instrument, then points to disadvantages.

Table 10: Pros and cons of policy instruments

	Tax incentives	Co-investment schemes	Support of BANs	A: Investor training B: Investment readiness	
Advantages	Offset some of the investment risk. Add to the risk-return profile. Render more to be re-invested. Mitigate losses from failed investment decisions.	Leverage investment amounts. Alleviate risk. Share transaction costs (depending on design).	Alleviate information gaps. Raise awareness. Investor training. Syndicate facilitator. Cheap and predictable costs. Admin. burden low.	A: Improve due diligence capacity and –quality through learning. Improve business/investment, thus investment and monitoring quality.	B: Improve deal flow quality. Enhance absorptive capacity.
Disadvantages	Low additionality. Admin. burdens high. Eligibility criteria for tax breaks makes it difficult to target "real" angels without making rules too complicated. Dead weight effects.	Operating resources are often high. Potential losses that are not easily predicted. Potential moral hazard from angels.	Reaches only visible parts of the market. Adverse selection of low quality angels (?). Total additionality difficult to measure. Have not shown economically sustainable.	Reluctance to go into training programme, no need perception. Target only visible part of the market. Expensive.	Training often narrowly on pitching the firm. Expensive and costs cannot be recouped from fees. Long term effort is needed.

There is a risk of simplifying matters with the table above. The pros and cons and in turn the choice of policy mix is heavily dependent upon how the individual initiatives are designed and in which institutional and market circumstances they are implemented. Up

until now there is little knowledge and literature on and comparisons of the costs and benefits of neither the different e.g. tax schemes in different countries nor is there solid comparisons between different types of policies in the same country. Note also that the majority of our current policy making and knowledge on the policy schemes is confined to the (small) share of the market that we termed the “visible” part. Tax policies are most likely what is closest to also be useful for the “invisible” part of the market.

Generally, there is a need to move the policy process and targets further towards also incorporating this “invisible” part of the market. The next question is, of course, how this is done. In Flanders the BAN is a key node in some of the policies and activities reached beyond the matching function, rather it encompassed a range of functions and indeed it had half of its’ members being other types of actors than angels. Through this activity the BAN get closer to supporting the general business (angel) infrastructure in its’ full scope. In this manner, business angel networks have the potential to reach out beyond their members.

Related, complementary activities may be necessary in relation to the schemes, such as raising awareness of the scheme and to reduce search costs for the parties in the financial system. This point is elaborated below. Also related, and as already mentioned, the absorptive capacity of recipients should be taken into account.

The table above has issues on the resources entering the policy process. In some cases there are relatively small amounts put into the policies in this area. For example, it was mentioned above that the majority of business angel networks are operating with relatively small total costs, and that government support make up only a share of this. They nevertheless have substantial impact on the way the market develops and for the likelihood of other policies to succeed. The small costs involved may therefore be a factor that is taken into account when deciding on policies in this area.

The conclusion is that it is difficult to derive policy prescriptions based solely on a simple comparison of the advantages and disadvantages of single policy instruments. In particular, policies may be more or less successful depending on their administration, design and marketing, and they are likely to be interlinked with other policies, which is explored further in the next section.

8.6 Interaction between policies – hierarchy, sequence and timing

Although it is clear from the above that the primary policy instruments regarding stimulating the business angels market are tax incentives, investment readiness programmes, investor training schemes, co-investment schemes and support of business angels networks then the present study indicates that in fact some policies are interrelated and in some other cases the effectiveness of the policies depend on other policy.

The former, interrelatedness between policies, may be illustrated by the fact that business angel networks functions as a forum for syndication and a platform for mutual learning between angels in the network. Furthermore there are indications that the success of co-investment funds is closely correlated with the extent of other business angel initiatives and whether there is a thriving business angels market (OECD, 2011). In one of the country cases, BAN Flanders, there was even an institutional link between the BAN and other policies. Thus, the BA+ loans were only eligible for BAN-related angels.

The dependency upon other policies may be illustrated by the difficulties angels have in the current situation to actually exit from the investments. Policies for stimulating the exit

options thus are important not only for the exit situation itself but indeed for the very pipeline of business angels coming into the system.

More generally, it is therefore important to be conscious about the policy objectives and how different policies work in that respect. Thus, to ensure that there is a pipeline of new investors, different designs of tax policies may work differently. Tax breaks benefit all angel investors but provide relatively stronger incentives for potential angels to enter the market and start investing compared to the reduction/exemption from corporate gain tax that favour, in relative terms, more the serial, successful angels.

Objectives like stimulating the pipeline of angels call for other, complementary policy instruments than the four listed above. The instruments that were in focus in the country studies were closely related to business angels but instruments for obtaining the “softer” objectives like awareness raising etc. could be broader and is linked to what in the above was termed the financial eco-system. In the literature the term “entrepreneurial eco-system” is sometimes used (e.g. Lerner, 2010). This includes a broader range of actors than financial actors. It is maintained that the positive effects of networking on one type of actor are likely to spill over to other actors in the system. Therefore, the *linkages* between actors are determining to what extent these spill-overs are working efficiently. Thus, the literature has pointed to the importance of social capital in strengthening these links between actors (e.g. Shane and Cable, 2002, Sorensen and Stuart, 2001), which in turn affect the financial eco-system, i.e. the part of the system which is more narrowly related to the financing of new and expanding businesses. But more specifically the business angel policy instrumentation may be too narrow to achieve the “softer” objectives⁹⁹.

The character and strengths of links between actors and the softer objectives mentioned above are typically not part of what is often subject to registration and measurement on a market. It is neither part of what in policy terms typically are objectives and targets. The rationales for policies are often argued to be market failures. Market failures are argued to be related to e.g. information deficiencies and under investments in R&D. Modern policy approaches have recognised the insights from recent focus on and importance of the above-mentioned softer factors, and have moved from a point of departure in market failures towards addressing system failures. Collewaert et al. (2010) explicitly advise caution in using the market failure argument when considering government interventions in informal venture capital markets. Traditional approaches to policy has been supplemented, and in some cases replaced by, policies aimed at alleviating system failures (Lenihan, 2011). Policies to alleviate system failures often address institutions and capabilities related to the interaction between key agents in the system (Arnold, 2004, Woolthuis et al., 2005). As such, this perspective is a more adequate policy approach than the market failure perspective and is particularly relevant in relation to business angels¹⁰⁰.

Picking up on the point on linkages between policies, governments choose from a range of possible instruments, but by implication need also to consider the portfolio of policies and whether different policies perhaps make up a hierarchy or system that should be considered (and perhaps evaluated (Arnold, 2004)) as a whole. This raises the question if some of these policies are in fact best implemented in a sequence as one instrument may build upon

⁹⁹ A potential follow-up research project could be to develop inputs for such policies.

¹⁰⁰ This section draws in some sub-sections heavily upon Christensen (2011b).

the working of a proceeding instrument¹⁰¹. This important debate is not only a policy issue but has also begun attracting some, although, still very sparse, attention in academic debates. It is though, still the case that policy schemes seem to be assessed in isolation. In interviews this approach to see the policies in isolation was widely seen as the general approach followed in policy making although it was pointed out that in some cases, such as the seed market in Flanders, there is a coherent and complementary approach to ensure a well-functioning financial eco-system.

The idea of the benefits of seeing integrated policies as the way forward was tested on respondents in the interviews. Generally, it was assessed as most wanted and that policies generally are fragmented and focused upon single instruments. A couple of respondents pointed out, however, that the main obstacle for it to work is that from a budget (policy) point of view the working capital and investments are two separate things that rarely are aligned, and that a policy portfolio approach would compromise how funds for policy is usually allocated. Moreover, it was mentioned in Danish interviews that although the idea is appealing it is difficult to implement and get into operation in practice.

8.7 Objectives for policies

Even if it may sound obvious it was emphasised in several interviews that an important policy consideration and decision is to make clear what are the objectives of the policies (Storey, 1998).

For example, a forum to meet potential investors and training in pitching business ideas, such as business angel networks and investment readiness programmes, could be considered ordinary, commercial, activities that should spring out of market demand, but could also be considered to be part of the general business support infrastructure. Rather different policies and evaluations spring from these two approaches. If considered part of the general business support infrastructure government may allocate funds to support on a continuous basis such networks and training programmes. The criteria for evaluating their performance would in this case be relatively broad and not be confined to economic indicators like profits or self-sustainability.

According to a number of evaluations of business angel networks they generally provide value for support money, but many of them have failed to develop a business model for economically sustainable operation. It is, however, a question if they necessarily need to do so. If objectives for policies have been formulated in that manner termination of support should be accompanied with a plan for how an economically sustainable model should be reached. But if policy objectives are to see the functions of the network in the perspective of a broader business eco-system then support could be justified even if there are no immediate, short-term visible effects. This justification relates to several factors, one of them being that BANs have broader effects than their matching functions. Such broader effects have already been mentioned above. One of these was the increased awareness from activities of angel networks. In many countries there is a low level of awareness among entrepreneurs about the supply of equity financing (Aernoudt et al., 2007). BANs raise awareness of this type of financing both amongst entrepreneurs and their advisors. Additionally, they often provide training of both investors and entrepreneurs.

¹⁰¹ It is beyond the scope of this project to go into depth with the specific hierarchical structure of policies, but it would be an interesting and relevant topic for future research to develop a model for the policy interdependencies.

In chapter 9 such side-effects are elaborated and explained in more detail. The point here is that not only do policies such as support to business angel networks render positive spill-overs related only to the matching function but also an improved level of information on the equity market in general. In this manner the specific solution to the search problem provided through BANs may be a pre-condition for other types of policy intervention that rely on market transparency and connectivity. This was emphasised as a learning point in the study of the Danish case.

Somewhat in the same vein, the design of French tax breaks with small caps may have stimulated the formation of syndications with many people and it may have activated potential angels. Two side-effects may have resulted from this. First, potentially, there may have been learning and training involved in the large number of small investments by large syndicates. Second, this has most likely stimulated an increased equity culture in the country. Again, this point back to the policy portfolio approach: in order for the co-investment policy to work, maybe it is necessary to invest in BAN policy, even if it does not provide an immediate, isolated pay-back. It is, though, controversial to advocate for policies that, in theory, may have small chances of isolated pay-back. Moreover, as elaborated in chapter 9, this is also controversial to evaluation practices.

In certain cases, the policy objectives are reflected in how the policies are engineered. Going back to the BAN example, certain similarities can be seen in the development of business angel networks in the two countries. Both Sweden and Denmark already had a national business angel network. Both have been disbanded and in both countries national venture capital associations have more or less actively worked with business angel activities.

A national professional organisation called SwedBAN was set up in 2001 on the basis of a private initiative but was later discontinued. In the early 2000s the government agency Nutek supported various initiatives to develop the informal venture capital market; among other things, some organisations received support in starting up and developing regional networks for business angels. Between 2005 and 2008, the Swedish Private Equity & Venture Capital Association (SVCA) was instead commissioned by Nutek (in return for financing) to develop a professional organisation for business angels with associated activities. Problems with defining the task – and finding a financing model – developed and the commission was not extended.¹⁰² Nutek and its successor, the Swedish Agency for Economic and Regional Growth (Tillväxtverket), have to varying degrees supported small-scale development projects with a focus on early development phases, venture capital and business angel investments. The agency Tillväxtverket is also now carrying on discussions with several players about setting up an SBAN and has enlisted the help of FiBAN (the Finnish Business Angels Network) in the process.¹⁰³ Today, the SVCA reports that they have 30 business angels and 12 BANs as members.¹⁰⁴

As mentioned earlier, the DBAN in Denmark was discontinued in 2004 and the network was transferred to the DVCA. Under the management of the DVCA, business angel activities have been limited. The findings from our field work suggest that it is not in general a good idea to have BANs organised under a VCA.

¹⁰² IM-Gruppen, (2008), "Utvärdering av Nuteks insatser och stöd..." [Evaluation of Nutek's initiatives and support].

¹⁰³ Email communication with Andreas Ek, Swedish Agency for Economic and Regional Growth (Tillväxtverket). (1 October 2013).

¹⁰⁴ According to the situation 20 September 2013 (<http://www.svca.se/sv/Om-SVCA/>)

A general consideration regarding supporting BAN is to keep in mind that there may be differences in supporting federations of networks and the networks themselves. The role of a national organisation varies across Europe, from being a strong coordinator to be mediating contact. A federation could e.g. perform the following tasks (inspired by OECD, 2011, p.117):

- raising awareness of the industry
- representing the industry in policy making processes
- investor training programmes
- developing professional standards and reducing transaction costs by developing standard contracts
- be a hub for the angel community and facilitate mutual learning
- collect data from member organisations.

Even if support to (federal or individual) BANs seem as an inexpensive and value adding policy option, there are, though, downsides. For example, it is an issue in the debate of BANs whether BANs are subject to an adverse selection effect meaning that they may attract the low quality angels (Mason and Harrison, 2002)¹⁰⁵. Similarly, one could argue that firms approaching BANs may be of a lower quality as it indicates that they are unable to attract capital through other channels. On the other hand, it may be argued that this is exactly part of the rationale for BANs: they are learning devices and places where not that well-connected angels can team up and form syndicated investments and where entrepreneurs who have not yet build business connections to investors can enter capital markets. Hence, it could be argued that it is part of the rationale for BANs to enable less well-established/less networked angels to get access to a deal flow and entrepreneurs to get access to finance.

Many of these activities performed by a federal BAN could be argued to be beneficial to the broader business community, perhaps worthy of government support, whereas the activities of the individual BANs could be argued to be less obvious objects of government support. Moreover, whereas the policy route in Europe generally seems to support the BAN there may be perspectives in looking to the potentials in supporting angel groups and perhaps for both BAN managers and policy makers to look outside Europe, for example to the US for inspiration regarding development of the models for BAN but indeed also for alternatively ways of supporting angels.

Thus, as was briefly discussed in the second Tillväxtanalys report (2011) the angel groups in e.g. Scotland are supported through underwriting running costs and are now filling important gaps in the financial system. They are linked to the co-investment programme and provide substantial learning of new investors. For entrepreneurs they are visible and are offering to do follow on investments even all the way to exit, hence filling some of the gap that venture capital funds often leave¹⁰⁶. Compared to ad hoc networks of angels and the traditional business angel network model there are a number of advantages to the angel group model and this approach is becoming increasingly prevalent in the US, Canada and

¹⁰⁵ Whether BANs attract above-average risky firms was rejected in empirical studies by Collewaert et al. (2010).

¹⁰⁶ Thanks to Prof. Colin Mason for this point.

New Zealand. The basic differences between angel groups and angel networks may be summarised as follows:

An *angel network* mediate contacts between entrepreneurs and angels and is usually neutral in the evaluation of proposals and angels. The BANs are not involved in the investment decisions. Increasingly, the networks perform additional services such as training. *Angel groups* are angels who pool their capital and competences in joined investments. They are often organised with a “gatekeeper” who perform pre-screening and operational details, although they may also be member-led (OECD, 2011).

Having said that, the specific ways of operating in angel networks and angel groups are blurring the boundaries between the models. For example, within angel networks there are often groups of angels who invest together, operating as angel groups.

Angel groups are now widespread in some countries. For example, the ACA (Angel Capital Association) now organise 187 angel groups across the US and Canada. 24 groups operate in Scotland (Mason et al., 2013). According to Sohl (2012) there is a risk in that angel groups may develop into venture capital funds. Moreover, the fact that the gatekeeper of the angel group screen the investment proposals in advance also add to the costs and difficulties of obtaining finance for entrepreneurs. In some cases the angel groups even charge entrepreneurs for pitching the proposals.

However, it remains to be seen that that is really a risk, i.e. has negative consequences for the market. In policy terms it is probably not wise to deliberately try to strongly enhance a specific model. The way angels organise themselves on the market is likely to reflect a preference and an evolution of ways of organizing that should not be distorted with incentives to organise differently. On the other hand, it is clear that knowledge dissemination and training increases with more collaboration and co-investments between angels. Additionally, with the changes in the capital market accounted for in the introductory chapters the pooling of resources help funding of firms through several funding rounds (Mason et al., 2013). Therefore, it could be considered to support such angel groups with underwriting some of the running costs.

On a more specific level, given the need and trend for syndication among business angels it can be speculated if there is room and need for developing policy instruments for stimulating syndication, something which is not necessarily equating co-investment policies. At the same time, such policies need not involve a lot of money, and need not involve the government as a standing partner. Rather, as we saw in the Flanders case (e.g. “Dealmakers” who are angels within angel networks who also took part in facilitating syndication), there may be a range of other measures to stimulate connections and syndications of angels.

Because syndication is complicated, e.g. a number of non-economic factors are involved in finding syndication partners and getting them to work together, and because syndication is initiated and undertaken at a micro-level of aggregation there is not developed a wide, sophisticated set of public policy instruments for stimulating syndication.

Viewed in a systemic, societal context it is important that knowledge and learning is disseminated smoothly in the system. Syndication is one device for learning and knowledge exchange, therefore it could be considered a policy objective to facilitate and stimulate syndication. Syndication may take place on different levels, even if it is usually only regarded as being the co-investment of angels. It is, though, possible to see syndication in a broader understanding: Syndication between different BANs; Syndication

between angels inside a specific BAN; Syndication between angels across different BANs. Usually only the second is considered. In policy terms it may leave potentials for enhanced knowledge exchange to stimulate other types of syndication including the angel group model, but angels and angel network managers are key in implementing such policies.

Creativity and policy learning is needed to develop new instruments in this area. As it is a micro-level policy area formulation of new policy instruments should be pursued with the close collaboration of stakeholders like angels and angel network managers.

8.8 A complementary value of business angels

Often business angels are regarded as contributing solely to access to finance and provision of competences. The field work in this project showed that business angels may be mobilised for a range of other, complementary purposes. Thus, we saw in the case of Flanders that the BAN has coaches (so-called Dealmakers) that mediate connections between angels, especially new members.¹⁰⁷ They furthermore function as mediators of the deals and align interests between angels and entrepreneurs. Another function of business angels was found in the Danish case where business angels were used inside the Vækstfonden during the Partnerkapital co-investment scheme as an extra due diligence. Investment readiness programmes in the country studies were also found to often include one or more business angels in the teaching and coaching and in some cases where mentors were allocated to entrepreneurs these were often business angels. A third function was found in the Welsh case where business angels were used as turnaround consultants or 'firefighters' to rescue some of the portfolio companies of Finance Wales that was not progressing as planned.

Finally, it is an often pursued strategy of banks or other financiers to ask business angels to step in the board of portfolio companies. Although they then act on behalf of others they are often valuable assistants in the monitoring and nursing process of portfolio companies.

Taken together, these broader functions of business angels open up the range of policies that could be pursued in this area.

¹⁰⁷ See also Paul and Whittam (2010), for a little different but related perspective: gatekeepers in angel groups.

9 Perspectives: lessons for evaluation

This chapter concludes *section III* and with that also the international study. This chapter¹⁰⁸ picks up some of the critical issues for evaluation that springs from the studies. It does so by pointing to three generic difficulties in evaluation regarding: *i*) the “for whom”-perspective; *ii*) a time perspective and *iii*) what should be evaluated.

9.1 Value for whom?

The evaluation “for-whom” perspective is critically impacting the outcomes of evaluations. More precisely, evaluation of business angel policies are different depending upon if the perspective is of the *investor*, the *entrepreneurs* or the *government*, as explained below.

It has been argued both in the academic literature and in the interviews in the present studies that *investors* are not only motivated to invest by the potential pecuniary rewards. Additionally, the motivations of investors are driven by a wish to pay back to society, help entrepreneurs who they might identify themselves with; the wish to help the region; the fun of it (Baty and Summer, 2002, Sullivan and Miller, 1996, Vækstfonden, 2002). Intrinsically such subjective rewards are difficult to measure, and should not be a part of governments evaluating business angel policies but are natural parts of business angels’ evaluation of whether to invest or not.

Leaving these non-pecuniary objectives aside both the economic impact (on the portfolio firms) and returns of business angel investments (to the investor) generally are difficult to measure. Studies on this have been sparse. According to the interviews, a large-scale impact study is currently being planned in EBAN. By their nature, business angel investments are risky, and are likely to render extremely skewed distributions of returns. One study mentions that 9 percent of investments render 80 percent of cash flows for UK angels (NESTA, 2009). As an investor these skewed returns are part of the game. Business angels evaluating whether to increase activities assess possibilities for covering down-side risk, increasing the up-side, or e.g. leveraging the amount invested, and they have the perceived risk-return profile of investments in mind as well as his/her personal risk willingness and affordable loss. The benefits that policies provide such as leverage from co-investments or tax benefits enter the equation when evaluating the investment opportunities.

Even so neither the investments generally, nor the specific policies for enhancing business angels investments are easily evaluated from the investor perspective. Consider e.g. the “play money” perspective, that is, some business angels have allocated a fixed amount or proportion of their free funds to invest in small enterprises, not necessarily requiring a rate of return comparable to more secure investment alternatives. A low rate of return could, of course, have an impact when investors evaluate the value of investments, but a number of non-pecuniary criteria may be in play, which may affect the risk profile of the investments made.

In other words, if investors evaluate business angel policies two perspectives distort a “rational” evaluation. *First*, non-pecuniary motivations may out-weigh the incentives that the policies provide for investing; *secondly*, the individual investor needs are likely to differ. Hence, different policy alternatives are more or less appealing depending upon if the investor needs alleviation of informational constraints (BAN); leverage on investment

¹⁰⁸ This section draws in some sub-sections heavily upon Christensen (2011b).

amounts (co-investments); have some of the monetary risks alleviated for the (first) investment (tax breaks); or an incentive for keeping a larger share of the upsides (CGT).

From the perspective of the *entrepreneur* business angel investments are evaluated on their contribution to the development of the firm, which regards not only the monetary contribution, but also, and especially the management and network assistance entrepreneurs receive during the development of the firm. The evaluation of the benefits for the entrepreneur is done against the price of parting with control and equity of the firm.¹⁰⁹ This is in turn dependent on the circumstances of the entrepreneur such as other competences, access to alternative funding etc. If there is a lack of alternative funding the value of business angels may increase, and a substitution effect may prevail where entrepreneurs accept equity financing, even if debt was demanded. Most business angel policies target the angel side. However, training and matching policies often have the objectives to strengthen the demand side and hence fulfil different needs and has a different perspective, obviously affecting assessment.

For *governments* evaluation primarily regards the social benefits rather than private benefits, although increasingly many government schemes operate on a commercial, or semi-commercial basis and therefore returns comparable to those obtained on a commercial basis are also relevant assessment criteria. Jobs and firm creation is part of the socio-economic criteria for evaluation, but there are also other, broader criteria involved in evaluating business angel policies from a government perspective. More about that below.

9.2 The time perspectives of evaluation

It was mentioned above that quantification of effects is hampered by the fact that effects from business angel policies will materialise after several years, at a time that we do not know exactly when. Even if long time series for analyses of impact of business angel policies and learning were available problems for adequate assessment would still remain. This is due to the fact that a number of indirect effects are in play. Such indirect effects are exemplified and explained in section 9.3 below.

Focus in the debate on business angel policies has primarily been on the direct effects on job creation, investments etc., but evidence suggests that the impact of business angel financing in general may reach beyond its immediate effects. For example business angel financing is often a gateway to other types of financing - bank financing, government support programmes and other equity investments (Mason and Harrison, 1995, Mason and Sackett, 1996). Another effect is that business angel policies may generate what in evaluation studies is termed “behavioural additionality” (Georghiou et al., 2004, OECD, 2006b). Policy interventions often have long-term impact on the behaviour and strategies of actors, even if the scheme has been terminated. Generally, they tend to go beyond the measurable and are characterised by side-effects that increase market efficiency but are rarely part of ex ante objectives of policies.

The lesson for evaluation from this is that requirements to the precision in many substantial parts of a comprehensive evaluation must be adjusted to include at least some, important part of evaluations based on less precise, qualitative assessments¹¹⁰. Although a number of parameters can easily be measured with precision such as in the case of angel

¹⁰⁹ See section 3.3.1 on downsides of angel financing.

¹¹⁰ This is not an argument for rejecting quantitative evaluations altogether, contrary; it is an argument for the complementary value in having both quantitative and qualitative assessments.

networks the number of investments made¹¹¹, the number of presentations, the number of registered angels etc. (see Table 11 below). The point above is that other parts of an evaluation cannot be very precisely measured. This is due to the fact that policies in this area often have indirect effects that are difficult to anticipate and describe *ex ante* in the objectives of the policies; that is not at all clear when the effects appear; that many relevant effects are non-measurable. Additionally, it is difficult to provide precise answers to what are the effects of policy X and Y and in particular it is difficult to know the effects of the combination of X and Y. For policy making this does not need to be as big a problem as to politics where numbers on potential effects often play a big role in the decision processes.

If a dynamic perspective is applied matters get further complicated. Take for example the case of an angel network. An increased awareness about opportunities for business angel financing as a result of marketing from a BAN is likely to increase the deal flow for business angels even outside the BAN. In turn this means that business angels have less need for a BAN, which limits the incentives for government to support the BAN.

Ideally criteria for evaluating support to BAN should change over time. Not only is there a need for more nuanced evaluations and evaluation criteria, also openness to adjusting these in accordance with the market development is necessary. An increased specialization and development of the venture capital market could for example impact the need for business angel policy but may also impact the effects that are likely to appear from evaluations. Hence, a developed market with extensive substitution possibilities and alternatives to the finance that business angels provide is likely to produce smaller marginal effects of business angel policies.

9.3 What should be evaluated?

The considerations in section 8.6 on integrated policies have implications for evaluation as well. Generally, recent progression in policy evaluations has pointed to extensions of the way outcomes are evaluated. Traditional policy evaluations and policy makers mainly have focused upon directly measurable effects, and in particular effects such as: (i) input additionality¹¹²; (ii) output additionality¹¹³ and (iii) substitution effects¹¹⁴. However, there is now a growing recognition that policy schemes may have long-term effects (Roper and Hewitt-Dundas, 2012). Additionally, it is clear that the broader effects are now attracting attention in evaluation research. Lenihan (2011) argues that traditional evaluations tend to focus too narrowly on firm level effects, while a policy shift towards more emphasis on systemic policies call for broader evaluation metrics that also encompasses broader societal impacts.

Evaluating complex policy areas such as that of business angel policies poses challenges to evaluation and means that indicators required to provide a meaningful description of the impact on the complex system as a whole must be extended beyond traditional indicators, both in the scope and the type of indicators. Evaluation still needs to address appropriateness, impact and effectiveness (Arnold, 2004), but the systemic perspective moves attention and weight in evaluations from micro-level, single interventions (projects,

¹¹¹ Even this parameter is in some cases not precisely measured. As mentioned above (e.g. the DBAN case) some investments are done outside the BAN even if contact was established through the network.

¹¹² Essentially displacement effects on the *input side* – whether e.g. a subsidy is provided to *activities* that would have taken place anyway or if it induces complementary activities.

¹¹³ *Outputs* that would not have been achieved without support.

¹¹⁴ A governmental intervention that changes the *relative prices* in the market, which in turn changes the behaviour of the market participants.

programmes) towards diagnostics of the impact on an aggregated, system level (Lenihan, 2011). Arnold (2004) even point out that there is a need to evaluate to a larger extent the totality of programme portfolios and in turn the impact on the overall “health” of the system. To a large extent the policy mix rather than the individual initiative should be the object of study according to several observers (e.g. Flanagan et al. 2011). Again, as argued in section 9.2 with the point of departure in the time perspectives, implications for evaluation are that they become less rigid and more focused upon behavioural additionality. Even 15 years ago Metcalfe and Georghiou (1998) states:

“Operating in the context of complex innovation systems the policy maker must accept a considerable degree of indeterminacy and unpredictability in the consequences of policy initiatives. Complex systems are of necessity governed by ambiguity so that there is a strong case for policy experimentation and policy learning.” (pp. 80–81)

It may be controversial to advocate that in certain areas less precision in evaluation should be accepted. Hence, one of the main points in e.g. Storey (1998), which is used as a reference point for Danish evaluation of policies¹¹⁵, is that objectives should be specified in a quantitative manner that allows evaluation to assess to what extent these milestones and end-results have been achieved. This goes against the move towards more policy experimentation and less rigid, precise evaluations. In the introduction to this report a lack of “hard facts” in the field was pointed to. This is in itself an impediment to rigorous evaluation and precision in conclusions on what works and what does not work.

Following the arguments above the criteria for evaluating effects from business angel policies should be extended beyond the immediate, observable impact. But we need to be more specific on what we really mean by “a broader view” on what criteria to apply when evaluating angel policies. For illustration, let’s pick up on the example from above on business angel networks.

Most evaluations of business angel networks would focus on indicators such as the number of investments made through the network, the number of jobs created, and perhaps also the number of investors registered. However, in a broader perspective it is equally important to count other important variables for example the number of projects that have been screened but not financed; the increased awareness; the learning effects and the reduced transaction costs in society. In sum, the direct and indirect effects and their related indicators are broader (Collewaert et al., 2010). Christensen (2011b) provides an overview of evaluation criteria for angel networks and he includes those in Table 11 and Table 12 below.

Table 11: Direct effects of BANs. Indicators.

Direct effects	Indicators
Employment and Investments	Jobs created
	Number of investments
	Amount of invested capital
Network-/institutional effects	Number of sub-networks
	Number of matches made
	Number of angels registered
	Number of firms registered

¹¹⁵ Cf. Erhvervs- og Byggestyrelsen, (undated), ”Evalueringsguiden”.

Table 12: Indirect effects of BANs. Indicators.

Indirect effects	Indicators
Increased awareness	Articles, meetings
Screening of projects	Number of presentations and due diligences
Behavioural changes	
Upgrading of competences	
Syndication and network development	Number of syndicated investments.
Leverage additional capital	Financing from other sources
Regional distribution of capital	Investments in peripheral areas
Lower transaction costs	
Increased information increases effectiveness of other programmes and business services	

The majority of evaluations would limit the scope of criteria to those in the “Direct effects” table. The indicators related to these effects are obviously also those most easily measured. It is argued here, though, that they are far too narrow for a complete assessment of a BAN. The table on indirect effects shows a specification of the broader effects. It is clear that some of the indicators are missing, which illustrates that measurement problems persist. Such difficulties should though not prevent policy formulation and evaluation in this field.

In section 3.3 it was mentioned that some UK evaluations (Mason and Harrison, 1999, Harrison and Mason, 1996) point to relatively small costs per job from angel policies. Likewise, the evaluation of BAN Flanders in Collewaert et al., (2010) compares the subsidies and jobs created with other business support schemes. This point to the general importance of a relative assessment of angel policies: when lacking adequate precision in the measurement and evaluation of effects from policies a decision to implement angel policies or not could be guided by using a benchmark, which could be other small business support schemes as done in the just mentioned evaluations.

Even if this example is on the evaluation of BAN then it may be applied to evaluation of networks in a broader sense, and perhaps even generally to evaluations of policy areas that involve interaction between key agents in the system. The understanding of especially innovation but also other areas of business development nowadays emphasise the importance of networks and interaction between agents. Policy has likewise moved towards implementing schemes that facilitate interactions. The problems in angel policy evaluations above are probably larger than in the majority of policy areas because of the special characteristics of the informal venture capital market, but the principle difficulties remain in the assessment of many schemes. Hence, the learning points from this discussion of evaluation are valid in a broader setting.

IV A Swedish policy for business angels? – a concluding policy reflection

10 Swedish policy measures and policy reflections

Section IV, and chapter 10, concludes the report. It begins with a brief, general description of the main policy interventions in Sweden in recent years. The section ends with a few paragraphs where Growth Analysis reflects on, and discuss, various policy aspects.

10.1 A few words about the public sector's interventions in Sweden

The focus of the report is the international empirical study which primarily looked at two areas: business angels' role in the capital market and experiences from government policy measures aimed at increasing business angels' investments. Detailed experiences from Sweden thus lie outside the real purpose of the report. Such a review where background, goals, activities and outcomes are studied needs a report of its own. The most recent evaluation¹¹⁶ with such a thrust, as far as we have been able to ascertain, is from 2008 and describes Nutek's¹¹⁹ activities and operations.

In order to be able nonetheless indicate to some degree what is being done and what has been done in the area, we provide a delimited description in the section below.¹¹⁷ The information was obtained from the agency Tillväxtverket. Even if the description is very brief it gives at least some indications of the Swedish "policy picture" concerning business angels.

Policy measures within Tillväxtverket and the former Nutek¹¹⁸

Tillväxtverket (and its predecessor Nutek) are probably the two agencies in Sweden that have the greatest experience and the most extensive activities in the field of measures to promote business angels' investments.¹¹⁹ The long term goal of Tillväxtverket's business angel intervention is to improve the prerequisites for business angel investments in new and growing companies. To attain this goal, the agency is working to disseminate knowledge and increase competence.

¹¹⁶ IM-Gruppen, (2008), "Utvärdering av Nuteks insatser och stöd..." [Evaluation of Nutek's initiatives and support].

¹¹⁷ The Swedish version of the report also includes an appendix containing some concrete examples of ongoing publicly financed policy measures aimed at BA and BAN in Sweden.

¹¹⁸ The text in this section is written by Caroline Murray and Andreas Ek of Tillväxtverket.

¹¹⁹ Nutek (the National Board for Industrial and Technological Development) was disbanded on 31 March 2009. On April 1 the same year, Tillväxtverket (the Swedish Agency for Economic and Regional Growth) took over most of Nutek's activities and operations.

In the early 2000s Nutek had supported various initiatives to develop the informal capital market. Nutek conducted initiatives where, among other things, some 15 organisations received support in starting up and developing regional networks for business angels. Here it was possible at the same time to collect information about these networks. Continuing these efforts, Tillväxtverket still supports a small number of development projects with a focus on businesses in the early stages of growth, venture capital and business angel investments. Here it is a matter of promotional measures to develop new working methods, networks and forms of enterprise to make it easier for entrepreneurs and companies to develop and find financing.

In 2001, the national professional association SwedBAN was set up based on a private initiative, but was later discontinued. Between 2005 and 2008 the Swedish Private Equity & Venture Capital Association (SVCA) was instead commissioned by Nutek (in return for financing) to develop a professional organisation for business angels with associated activities. Problems with finding a financing model for its operations meant that its routine operations in principle ceased when Nutek's project support ended. On the other hand, Nutek/Tillväxtverket funded four small-scale projects between 2009 and 2011: Business Angel Day, EBAN Winter University, a study and another small-scale project. The SVCA also received funds to draw up venture capital statistics until summer 2011.¹²⁰

Alongside its work on building up regional networks and its participation in and driving the national professional organisation, Nutek also supported research on business angels, which was conducted at Lund University.

In the "Främja kvinnors företagande" [Promote female enterprise] programme, Tillväxtverket supported some ten pilot projects between 2008 and 2010. The primary aim was to strengthening female entrepreneurship concerning: (i) participation in business angel networks, (ii) being a business angel and (iii) being a business owner who wish to and know how to raise venture capital. The focus in the initiative was on various education and model programmes, as well as collaboration, networking and matchmaking. The projects were run by players who work with business and innovation development and as venture capital providers. The projects have clearly contributed to developing new organisational and business development processes.

Partly as a continuation of these efforts, Tillväxtverket currently supports a few models to promote business angel investments through competence development. This time also in the form of slightly larger projects than before, over a longer period and with more clearly defined demands for regional collaboration. There is also a demand that an active effort be made to reach women. The intervention, which had a total budget of SEK 5.5 million (c. 639,000 euro) was advertised in 2011. The intervention's targets are to develop/identify:

- new methods, models and working methods
- new target groups
- new collaborations and partnerships (based on existing regional player structures)
- participants are given access to knowledge to develop their competence as investors and to develop their innovation/business concept
- greater regional experience, knowledge and competence concerning business angel investments and business development and
- a greater number of women participating.

¹²⁰ As of 2013, Growth Analysis has an equivalent commission from the government.

The projects run for between two and two and a half years.

Tillväxtverket is also financing a project within SISP (Swedish Incubators and Science Parks), "Svensk Tillväxtsådd" [Seeds of Swedish growth], a national project to stimulate starting up and development of business angel activities and regional seed capital funds. The aim is to create national coordination and a point of contact for organisations and players that organise, represent, support and develop business angels and business angel investments and seed capital funds.

Tillväxtverket is also active in a Nordic collaboration programme where one (of a total of four) thematic area is "Entrepreneurship and Financing", in which business angel activities are an area of high priority. The aim is to stimulate a profitable exchange between Nordic countries and create a common vision and a Nordic collaboration forum. The overriding objective is that the Nordic region will become one of the world leaders in growth enterprising.

At present (autumn 2013), Tillväxtverket is planning further activities for a more generally educative and open part. With a shrinking risk capital market, the importance of business angels in early phases is increasing. To increase the amount of risk capital available, completed projects show that both business angels and entrepreneurs need to professionalise their activities and strategies. Tillväxtverket is therefore evaluating competence-raising initiatives aimed at business angels (investor readiness) and entrepreneurs (investment readiness).

The agency is also now carrying on discussions with several players about setting up an SBAN and with the Finnish equivalent FiBAN (Finnish Business Angels Network). Possible aims of an SBAN might be to form opinion, to act as a support function for business angels and business angel networks, education and to develop industry norms. Another task might be to draw up annual statistics that would be an important tool in the communication between different groups. The discussions with FiBAN, EBAN and Swedish players form the foundation for a broad assignment and a wish for operational financing. Discussions are also going on about the need for and possibilities to establish a (passive) co-investment fund aimed at business angels. This will give (accredited) business angels the possibility to increase their involvement in early stages in the hope that this will also lead to better endurance in the investments.

10.2 Policy reflection

The presented studies contain much information of relevance to policy in the business angel area. Fairly detailed summaries and discussions can be found in chapters 8 and 9 and consequently it is therefore not deemed necessary to develop this further here. This section should therefore, as its title suggests, be seen more as a series of reflections related to Sweden's regional co-investment fund intervention. The starting point is pragmatic: *can the prerequisites for an existing policy intervention be improved?*¹²¹

The background is thus the Swedish intervention with regional co-investment funds which is fully operative and by all accounts will continue its activities during the next structural fund period (2014–2020). Given the *existing* project, conceivable possibilities to improve

¹²¹ In other words we are not problematising the government intervention here. For such a discussion we refer to Growth Analysis' two previous interim reports: Tillväxtanalys, (2010), "Staten och riskkapitalet" [Growth Analysis, (2010), "The State and Risk Capital"] and Tillväxtanalys, (2011), "Kompetent kapital? – Tre länder, tre försök [Growth Analysis, (2011), "Competent capital? – Three countries, three attempts"]].

the prerequisites for its activities by means of complementary policy measures – if there is such an political ambition – are commented on.

Invisibility and evaluations

In section 2.3 it was pointed out that the business angel market is largely invisible. Christensen develops this further in several places in his study and points out that both our knowledge and our policy measures are largely aimed at the small, visible part of the business angel market. There is therefore a need to develop the policy processes, measures and goals to also include this “invisible” part of the market. An important foundation stone in this endeavour is to improve our knowledge of business angels. (See also Figure 3, page 46 for a graphical illustration of this).

Not unexpectedly, a great degree of invisibility means that little is known about business angels and their investments. One quote about this, that captures one of the areas characteristics well, can be found in chapter 7 where Christensen summarises current knowledge in Denmark: “*The capital market is in general under-evaluated*”.¹²² The lack of systematic evaluations is striking. This observation can also be said to apply to promotional measures aimed at business angels in Sweden. The most recent comprehensive evaluation that Growth Analysis found is a study of Nutek’s projects made in 2008.¹²³ On the other hand, a number of learning activities are going on, not least through the efforts of Tillväxtverket, for example get-togethers to exchange experiences, participation in activities and reports with goal attainment and descriptions for each project. The overall impression, however, is that the business angel area can be developed as regards evaluations.¹²⁴

Alongside his empirical descriptions Christensen also carries on an interesting discussion around evaluation issues with a broader system perspective. Important starting points in this respect are based on concepts such as unmeasurable effects, dynamic perspective, institutional conditions, capacity for interaction between the system’s key players and behavioural additionality. Such an approach makes great demands of both policy makers and evaluations but can undeniably give a deeper understanding of the processes and (dispersal) effects that arise. Such a discussion would however require a report of its own and is therefore not developed further in this context.

Long-term approach

One important aspect often taken up in policy contexts is the need for a long-term approach.¹²⁵ Somewhat drastically, Christensen asks whether *continuity* in policy creation even might be more important than its actual *design*. Even if this should not perhaps be taken too literally, there is no doubt that perseverance is an important dimension. Growth Analysis’ second interim report also contains such a discussion based on the experiences that were analysed. The market needs a long-term perspective and predictability to be able to work well. It was also pointed out that it is hardly possible to say exactly how long a

¹²² Section 7.3.4, page: 88.

¹²³ IM-Gruppen, (2008), ”Utvärdering av Nuteks insatser och stöd...” [Evaluation of Nutek’s initiatives and support...].

¹²⁴ In the Swedish version of this report, there is also an Appendix 2 containing a collection of examples of ongoing publicly funded policy measures aimed at BA/BAN in Sweden. In the appendix “... a distinct lack of evaluations and follow-ups” in connection with publicly funded policy measures is also noted.

¹²⁵ See for example Lerner J, (2010), “The future of public efforts to boost entrepreneurship and venture capital”.

long-term perspective should be, but the time horizon should at least exceed the regional fund's programme period.¹²⁶ In this respect we can say that the venture capital project will by all accounts continue also during the next programme period (2014–2020). This means greater possibilities as regards both a clear “offering” to the market and consideration of complementary policy initiatives.

Angel investments are growing in importance

The OECD's evaluation of Sweden's innovation system and policy was published in February 2013.¹²⁷ Among other things, the evaluation suggests that Sweden's state venture capital should focus on early phases. Up-to-date figures from Growth Analysis show that formal venture capital investments made in early and growth phases are showing a distinctly declining trend in Sweden.¹²⁸ This would seem to indicate that informal capital in these early phases is growing in relative importance, and thereby also the business angel market's function and potential.

In section 2.4 it was shown that the business angels' proportion of the total number of unique, private co-financers has hitherto amounted to roughly 40 percent in the venture capital project as a whole. The importance of business angels is therefore indisputable. There are at the same time significant regional differences (i.e. between the funds) in this respect, with shares ranging between 19 percent and 65 percent – a spread that undeniably awakens an interest in the reasons. How far can the differences be explained by for example the nature of the investments, the regional supply of business angels, history and norms within the regions and actual efforts to disseminate information and knowledge? Is there an unexploited potential as regards business angels? Can the proportion of business angel investments increase? There may be reason to return to these questions in subsequent reports where in-depth analyses can be made.

Companies' access to informal capital can be increased in two ways: *existing* investors can increase their volume and/or investment frequency and *new* investors can enter the market. It is important to remember what the objectives are and what target group is being aimed at when a policy intervention is designed and implemented. Heterogeneous target groups mean great challenges in such work. As is pointed out below, the design of tax incentives, for example, is expected to stimulate potential and established groups of business angels to different degrees.

From a business angel perspective, it is however not sufficient to identify interesting portfolio companies and make investments; the business angels must also see real possibilities to sell their shares. At present, the exit situation is in general difficult.¹²⁹ A functioning exit market is a necessity, not only for individual investments or angels but also for the possibility to recruit new angels and the continuation of the whole financing system.

¹²⁶ Tillväxtanalys, 2011, “Kompetent kapital? – tre länder, tre försök” [Growth Analysis, (2011), “Competent capital? – Three countries, three attempts”].

¹²⁷ OECD, (2013), “OECD Reviews of Innovation Policy: Sweden 2012”.

¹²⁸ Tillväxtanalys, (2013), ”Riskkapitalmarknaden i Sverige 2013” [Growth Analysis, (2013), ”The venture capital market in Sweden 2013”].

¹²⁹ See for example Mason C & Harrison R, (2012), “Exits in the informal venture capital sector” and OECD, (2013), “Policies for seed and early stage finance: findings from the 2012”.

Tax incentives

An investor deduction came into effect in Sweden on 1 December 2013 (see also section 8.3). Christensen points out that even if such a deduction is advantageous for all business angels, the incentives for investments are expected to vary between different categories of business angel (see for example section 8.6). The Swedish model probably means relatively stronger incentives for potential business angels to enter the market and begin to make investments compared to a reduction in or exemption from capital gains tax. The latter can be considered to be somewhat more advantageous for already established, serial angels. In this respect, the design of the tax instrument can therefore be assumed to favour the entry of new angels into the market.

However, the target group's absorption capacity might be an obstacle for the impact of the measure (see sections 6.5 and 8.4.3). Experiences from Wales for example indicate that this is a problem to be taken seriously. Detailed terms and conditions and far-reaching regulatory frameworks risk causing the investor deduction to be perceived as complicated and difficult to understand¹³⁰, probably more by new players than existing, accustomed, market players. A third aspect is whether the measure "hits the target", i.e. reaches a target group that not only has the ability and will to invest but can also bring important things to a portfolio company such as experience of the industry, networks, management expertise, etc. In France (see section 4.3.1), some doubts were expressed about this in connection with a tax deduction for investments in SMEs.

The net effect of these incentives remains unclear. *In Growth Analysis' judgement, it is very important that the effects of the investor deduction be evaluated.* In this particular case we have the possibility to follow a policy tool from the very beginning and increase our knowledge in this area. A fundamental prerequisite for this to be implemented is that data on investors and investment objects are able to be made fully accessible to future evaluators. An evaluation of this kind should also include issues of transparency and absorption capacity.¹³¹

Policy portfolio

An interesting reflection from the international study is the discussion on "policy portfolio", i.e. that certain policy measures can be considered parts of a cohesive system. According to that approach, the impact of a policy instrument can be assumed to vary depending on both what other interventions are made and the order in which they are launched. One consequence that further complicates matters is that an individual measure could through positive external effects also affect the prerequisites for other types of policy intervention to succeed – without the former appearing to be successful in itself in isolation.

One way of expressing this is to imagine a certain policy measure operating in an environment that is shaped by both market prerequisites and institutional conditions, both formal and informal. Existing policy instruments constitute a subset of the institutional

¹³⁰ A venture capital deduction has been tried before in Sweden (in 1996) but was abolished after only one year. The regulatory framework was perceived as complicated and far-reaching. See Govt. Bill 1995/96:109, SFS 1995:1623 and, for an evaluation, Nutek (1998), "Riskkapitalavdraget – och andra incitament..." [The venture capital deduction – and other incentives].

¹³¹ See also Growth Analysis' statement of opinion (*remissvar*) on the memorandum concerning the investor deduction (21 November 2012, reg. no. 2012/219).

context. Their impact on additional initiatives is determined both by their existence in itself and by their design and the order in which they are implemented.

In the report's international study, five policy instruments were used to review the promotional activities: Tax incentives, co-investment programmes, support for BANs, investor training and investment readiness. We can state that Sweden now has a different starting point than before 2009. In addition to a number of separate initiatives within the last three categories, there is now also a rolling co-investment programme (by all accounts until 2020) and an investment deduction in place.¹³² The prerequisites for the different policy tools have therefore changed.

Conceivable reinforcing policy initiatives

Given the starting points described above and experiences from the report's international study, what are the concrete implications as regards policy?

In the new "policy portfolio" situation that we now have, it seems likely that well-designed and focused initiatives can improve the prerequisites for the venture capital project. These might involve both a consolidation of existing activities and new measures. Of overarching importance is the development of a clearly defined government policy/strategy in the area that sets the direction for the more specific measures.

With such a strategy in place, conceivable policy tools are:

- Increase general knowledge in society of business angels' function (e.g. measures to support BANs).
- Increase business angels' competence, e.g. the mentoring function (investor readiness).
- Increase potential portfolio companies' readiness for investment and ability to communicate it (investment readiness).
- Increase the co-investment funds' knowledge of exit strategies.

One interesting question is for example to what extent potential angels (virgin investors) exist, who in themselves match an investor profile but who have not yet made any investments.¹³³ The main reasons for this might be lack of information (about interesting investment objects) or lack of knowledge (practical knowledge of business angel procedure). Such market problems may motivate other policy measures than solely striving to increase the supply of venture capital (see also Figure 1, page 22). Such measures could be implemented in dialogue with the regional funds in order to achieve the greatest possible synergy.

A well-functioning BAN can produce several direct and indirect services in a business angel market in addition to the matching function itself between entrepreneurs and business angels. One of these is more general dissemination of knowledge of the possibilities for business angel financing, i.e. a conceivable tool to reduce information deficiencies in the market (see for example the goals for BAN Vlaanderen in section 5.3.2). Focused initiatives in the areas of investor- and investment readiness are naturally other tools to consider. An observation from the four country studies indicates that

¹³² The investment deduction came into effect on 1 December 2013 and applies to investments made after 30 November 2013.

¹³³ See section 7.2 where studies of the number of potential business angels in Denmark and France are discussed.

interventions in the latter category are more common, even if the importance of the former – investor readiness – is emphasised, a need that Christensen also clearly brought out in several places.

Section 3.3.3 pointed out the situation with a generally restrictive exit market, which underlines the importance of discussing and preparing for exit possibilities early in the process. As pointed out in section 2.4 and also discussed in the ongoing evaluators' annual report for 2012, exit issues and exit strategies will also become increasingly important in the venture capital project.¹³⁴ From the government's perspective, in a policy context this means a growing need to be observant as regards exit possibilities and not only promotional measures for more business angel investments. In this respect, there may be possibilities to stimulate funds' opportunities to learn from each other.

Growth Analysis concludes by observing that while a number of policy measures are assuredly being implemented in the area, it is doubtful whether the impression is one of a cohesive policy portfolio. In Growth Analysis' judgement, the evaluation situation can also be improved. If reinforcing policy initiatives were of interest to consider, these might both take the form of consolidating existing activities and developing new initiatives. Tillväxtverket's plans for future initiatives within investor training and investment readiness and a possible SBAN seem reasonable in the context, but need to be given prerequisites in the form of strategic direction, a long-term perspective and coordination with other initiatives. Measures to promote business angels require continuity and patience. Clearly defined objectives and focus should not however preclude possibilities for regional adaptation of the tools.

Learning from other countries involves taking on board foreign experiences while also considering the context in which they developed. Initiatives in the entrepreneurial financing area must for example be interpreted on the basis of such factors as history, the nature of the financial market and differences in trade and industry structure. Simply copying is seldom successful. This being said, there is all reason for a small country in an increasingly internationalised world to actively acquire and analyse business intelligence from the rest of the world. Not least in a policy perspective.

¹³⁴ The report from the on-going-evaluators ("följeforskningen"): Tillväxtverket, (2013), "Följeforskning 2012: Regionala riskkapitalfonder" [The Swedish Agency for Economic and Regional Growth, (2013), "Ongoing evaluation 2012: Regional venture capital funds"].

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12 Appendix

List of interview persons

- Anders Hoffmann,
Director, Erhvervsstyrelsen, Denmark.
- Cornelius Mueller,
Head of research, EVCA.
- David Maas,
Network and regional manager, Xènos, Wales.
- David Pickernell,
Professor, Glamorgan University, Wales.
- Gorm Boe Petersen,
Head of Department, business angels board of DVCA.
- Jacob Borup,
Senior Analyst, Vækstfonden, Denmark.
- Jannick Nytoft,
CEO, Danish Venture Capital Association.
- Jesper Jarlbæk,
Director of Business Angels Copenhagen.
- Julie Sonne,
Head of Division, Ministry of Business and Growth, Denmark.
- Julien Krantz,
Researcher, EVCA.
- Karen Wilson,
Structural Policy Division, DSTI, OECD.
- Kristoffer Boye Astrup,
Chefkonsulent, Ministry of Business and Growth, Denmark.
- Luis Galveias,
Director of Secretariat, EBAN.
- Martin Vang Hansen,
Vækstfonden, CFO and Senior Vice President, Vækstfonden, Denmark.
- Paulo Andrez,
President, EBAN.
- Peter Wright,
Investment Director. Finance Wales.
- Phillippe Gluntz,
President of FranceAngels.
- Reginald Vossen,
Managing director, BAN Flanders.

Rudy Aernoudt,
Professor Corporate Finance, Director of Cabinet EU.

Sian Price,
Senior Strategy Manager, Finance Wales.

Simon McCarthy,
Professor, Glamorgan University, Wales.

Sophie Manigart,
Professor Corporate Finance, Vlerick business school. Flanders BAN board member.

Tanguy de la Fouchardière,
Manager of Paris Angels and in charge of Data Research of FranceAngels.

The Swedish Agency for Growth Policy Analysis (Growth Analysis) is a cross-border organisation with 60 employees. The main office is located in Östersund, Sweden, but activities are also conducted in Stockholm, Brasilia, New Delhi, Beijing, Tokyo and Washington, D.C.

Growth Analysis is responsible for growth policy evaluations and analyses and thereby contributes to:

- stronger Swedish competitiveness and the establishment of conditions for job creation in more and growing companies
- development capacity throughout Sweden with stronger local and regional competitiveness, sustainable growth and sustainable regional development.

The premise is to form a policy where growth and sustainable development go hand in hand. The primary mission is specified in the Government directives and appropriations documents. These state that the Agency shall:

- work with market awareness and policy intelligence and spread knowledge regarding trends and growth policy
- conduct analyses and evaluations that contribute to removing barriers to growth
- conduct system evaluations that facilitate prioritisation and efficiency enhancement of the emphasis and design of growth policy
- be responsible for the production, development and distribution of official statistics, facts from databases and accessibility analyses.

About the Report series: Growth Analysis' main channels for publications.

Other series:

Statistics series – continuous statistical production.

Svar Direkt [Direct Response] – assignments that are to be presented on short notice.

Memorandum series – some examples of publications in the series are method reasoning, interim reports and evidential reports.

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