

Business Angels and Business Angel Networks: Benchmarking South Tyrol in an international context

Abstract:

The first part of the thesis gives a theoretical background of Business Angels and how they handle agency costs, illustrates the functionality of the collaboration between Business Angels and entrepreneurs and shows how Business Angel networks operate. The second part benchmarks South Tyrol, with the help of a cluster analysis based on environmental factors, in an international context and outlines the strength and weaknesses of this region.

Abstrakt:

Der erste Teil der Abschlussarbeit liefert den theoretischen Hintergrund zu Business Angels und zeigt wie sie Agency Costs handhaben. Des Weiteren wird die Funktionsweise der Zusammenarbeit zwischen Business Angels und Unternehmern geschildert und die Funktionalität von Business Angel Netzwerken erläutert. Im zweiten Teil wird Südtirol, mit der Hilfe einer Clusteranalyse, basierend auf Umgebungsfaktoren, mit anderen Ländern und Regionen in der Welt verglichen und die Stärken und Schwächen von dieser Region aufgezeigt.

Abstract:

La prima parte di questa tesi di laurea offre una spiegazione teoretica dei Business Angels e dimostra come vengono maneggiati da loro gli Agency Costs. Inoltre viene raffigurato il funzionamento della collaborazione tra Business Angels e imprenditori, di seguito si illustra la funzionalità di reti di Business Angels. Nella seconda parte l'Alto Adige viene comparato, sulla base di un'analisi Cluster che si basa su fattori ambientali, con altri paesi e altre regioni nel mondo. In ultimo luogo vengono sottolineate le debolezze e le forze di questa regione.

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1 Introduction

“Entrepreneurs are the engines that drive new companies, and financing is the fuel that drives them. Hence, financial support, especially equity finance for starting a company, is an important entrepreneurial framework condition.” (Bygrave et al., 2002: p. 105). In fact over 24 million jobs were created by the entrepreneurial economy in the US between 1979 and 1995. In contrast 4 million jobs were lost in Fortune 500 companies during the same period (van Osnabrugge; 2000). Also in Europe the Small and Medium Enterprises (SMEs) are the engine of the Economy. In Germany over 70% of the workforce is employed by SMEs and they provide most of the new jobs (Institut für Mittelstandsforschung Bonn; 2007/2008). For this reason it is important to keep this engine alive.

It has never been easy for innovative start-ups to receive loans from banks or to attract capital which they need for financing and growth in the early stage because the capital they need is extremely risky. Nevertheless “retail, or high street, banks represent a major source of finance for new and growing business...” (Coveney and Moore, 1998: p. 6). Already in the 1990s British retail Banks had been less willing to make loans to start ups due to the fact that failures of new ventures increased dramatically in the early '90s and banks do not see themselves as provider of equity for small companies (Coveney et al., 1998). Today, short after the largest financial crisis in world history since 1929 banks have tightened their lending standards even more (Hofshire, 26. October 2009). Therefore entrepreneurs have three options. Either they are lucky and have enough savings available or can convince a bank to provide a loan or they can try to attract informal capital. Savings by the entrepreneur are often limited and banks may be unwilling to invest in the new company and as a result informal capital provided through Business Angels could be the only way to finance their start up. A typical

entrepreneur uses his¹ own savings first, subsequently he borrows from friends and family and if the venture takes off venture capital firms or banks can finance further growth. But between borrowing from family/friends and the entrance of venture capital firms/banks lies the so called “equity gap” (Coveney et al., 1998). This gap could be closed with the help of Business Angels who make the necessary equity/credit available.

In the following degree thesis I want to deal with the topic about Business Angels and Business Angel Networks and how they act as informal investors. The first part gives a theoretical background of Business Angels, illustrates the functionality of the collaboration between Business Angels and entrepreneurs and shows how Business Angel networks operate. In the second part I focus on the case of South Tyrol. In collaboration with Mr. Saviane from the TIS Innovation Park Bolzano I want to demonstrate the problems Business Angels and entrepreneurs are facing in South Tyrol and point out the strengths and weaknesses of this region. For that reason I compare South Tyrol with other regions in the world where Business Angels and Business Angel Networks are well established. The legal system is also taken into account.

2 First Part: Business Angels and Business Angel Networks: Who they are and what they do

This part should deliver all the necessary theoretical background about Business Angels, Business Angels Networks and the teamwork between entrepreneurs and Business Angels. In addition I discuss a type of

¹ Entrepreneurs and Business Angels can be both, female and male and the use of only male pronouns should not discriminate the female entrepreneurs and Business Angels. To avoid confusions and due to the fact that most of the entrepreneurs and Business Angels are male I will only use male pronouns in this thesis.

investment forms and illustrate how Angel investors and Venture Capital firms handle agency costs.

The first paragraph deals with the definition of Business Angels and what distinguish them from a Business Devil. In the second section I give an overview of the different Angel Types and their characteristics. The third passage delivers the necessary requirements for a successful collaboration between the entrepreneur and the Business Angel. In the fourth paragraph the role of the Business Angel in the company is outlined. The fifth section is about Business Angel networks and Business Introduction services. The last passage provides a sample of different investment options that can be made by the Business Angel.

2.1 Definitions of Business Angels

Business Angels are part of the informal capital market that consists of two main segments: Business Angels and friends and family members of entrepreneurs (Riding; October 2008). In some countries they are the main source of external funding beside friends and family for small, new ventures (S. Avdeitchikova et al., 2008). In literature various definitions of the term "Business Angel" could be found. According to the different definitions I would demonstrate what characterises a Business Angel and distinguish him/his from a "Business Devil".

"A Business Angel always has two wings, one capital- and one know-how-wing. If one wing is missing it concerns either financiers or consultants."² (Kleinhückelskoten et al., 2002: p.12).

² Translated by the author from the German: „ Ein Business Angel hat immer zwei Flügel, einen Kapital- und einen Know-how-Flügel. Wenn ein Flügel fehlt, handelt es sich um Finanziers oder Berater.“

“We define a business angel as a high net worth individual, acting alone or in a formal or informal syndicate, who invests his or his own money directly in an unquoted business in which there is no family connection and who, after making the investment, generally takes an active involvement in the business, for example, as an advisor or member of the board of directors.”
(Mason and Harrison; 2008: p.309)

„Business Angels tend to be private individuals, who often have started their own successful firms in the past and are now looking to invest some of their money and experience gained into a small entrepreneurial firm.”
(van Osnabrugge, 2000: p. 92)

The first definition implies that Business Angels invest two different resources, capital and know-how. If only one of these resources is available we can not use the term Business Angel. These two wings may be realised in varying degrees and do not necessarily have to be symmetric. Some Angels have more capital available others provide more experience and know-how, also known as non-tangible assets. The different angel types and their role in the firm are analysed in detail in later paragraphs. The other definitions describe the income situation of a Business Angel, the gained experiences during his career and his involvement in the venture after the investment. A Business Angel is typically a (former) entrepreneur or manager who looks back on a successful career and has accumulated a considerable fortune during this time. Now he has the readiness to invest some of his capital in the new venture and support the entrepreneur during the first years. The willingness to assume risks and to participate actively is another important characteristic of an Angel. Furthermore he should bring experience in leadership, entrepreneurship and general managerial know-how, branch-orientated expert knowledge and contacts to important companies and individuals (Kleinhückelskoten et al., 2002). But also the Angel would benefit from his investment. Depending on the Angel type he invests for fun and/or

for income reasons and/or wants to create a job for him (Coveney et al., 1998).

Kleinhückelskoten uses also the term “Business Devil” as the counterpart of an Angel investor. A Business Devil pretends to be a Business Angel but in reality he exploits the inexperience of the entrepreneur. Business Devils have insufficient know-how, experience, time and capital and just try to maximise their own advantage regardless of the consequences for the entrepreneur and his venture.

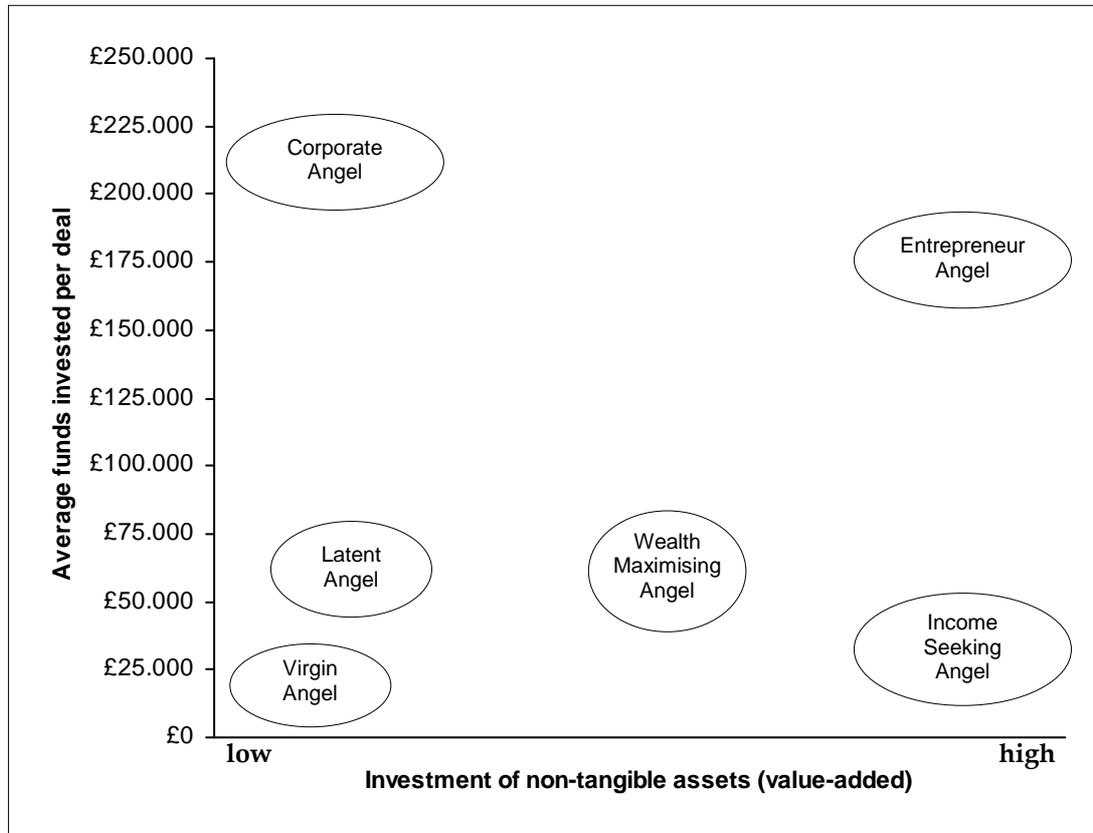
Therefore it is of prime importance for the entrepreneur that the investor has all the characteristics of an Angel investor mentioned above.

The next section outlines the different Angel Types and their characteristics.

2.2 Different Angel Types

This section is based on research in the UK provided through the Book: “Business Angels: Securing Start Up finance” (Coveney et.al, 1998). The different Angel Types can be identified by their invested amount of capital, their entrepreneur experience, their number of investments accomplished, their participation activity and their expectations and outcomes from the investment in the new venture. The following graphic illustrates the average size of funds invested and the investment of non-tangible assets by Angel Type:

Graph 1:³



Investment of non-tangible assets indicates how active the Business Angel participate at day-to-day operations after the investment and therefore how many experience and know-how is transferred to the new venture. Some entrepreneurs with top-class management teams would prefer a more passive Angel than inexperienced enterprisers who need more non-financial support (Coveney et al., 1998). The enterpriser can choose between the different Business Angels depending on his demand for capital or the need of non-tangible assets.

³ Source: "Business Angels. Securing Start Up Finance" (Coveney et al.; 1998); modified by the author

2.2.1 *The Corporate Angel (non individual investor):*⁴

Corporate Angels are, how the name indicates, companies that act as a Business Angel and invest in new enterprises. This group of Angels has the largest funds available compared to all other individual Angel Types because they can finance their investments with corporate resources. This Angel class invests on average a total amount of £540,000 in 3 ventures and prefers to have 1.3 co-investors per deal. 38% of the Corporate Angels place more than £500,000 and 60% prefer majority shareholdings. In a typical Corporate Angel Deal a sum of £214,000 is invested in 1.7 rounds with an initial investment of £159,000. They take an equity stake of 51% with an annual rate of return of 8%. The rate of return is pretty low compared to the returns of the other typical Angel deals. These Business Angels invest predominantly for financial returns, for fun and satisfaction and also for “social responsibility” reasons. The highest influence on their investment decision has the personal impression of the founder, their own experience in the business sector and they tend to place their funds close to their workplace. Incentives for Corporate Angels to increase their informal investments are better exit routes, better tax incentives and better knowledge of the founder (Coveney et al., 1998).

2.2.2 *The Entrepreneur Angel:*⁵

Entrepreneur Angels are the most experienced and active Angel investors and make serial and large scale investments. This group is much wealthier than the other individual (non corporate) angels and they often look back on a successful entrepreneurial career. Frequently they started and build up their own ventures and sold them with a significant gain. Entrepreneur Angels invest on average a total amount of £590,000 in 3.4 ventures and 43% of them supply more than £500,000. In a typical Entrepreneur Angel deal a

⁴ Source of all the numbers and data in this paragraph: Coveney et al., 1998

⁵ Source of all the numbers and data in this paragraph: Coveney et al., 1998

total sum of £174,000 is invested in 2.0 rounds with an initial amount of £111,000. They take an equity stake of 38% with an annual rate of return of 61%⁶. These Angels like to place their funds with an average number of 2.3 co-investors. A representative Entrepreneur Angel is male, middle-aged (average age of 52 years) and well educated. Similar to the Corporate Angels these Angels invest for fun, satisfaction and financial returns. The personality of the venture founder represents the most important investment-criteria and for only one-fifth the industry sector plays a significant role. An Entrepreneur Angel expects an annual return of 22%, would liquidate his investment after six years and 52% like to have co-investors. With better tax incentives, better exit routes and a better knowledge of the founder this Angel group would be encouraged to increase its informal investment activities. The Entrepreneur Angel would be the best Angel for an inexperienced entrepreneur who needs a large scale of funds and entrepreneurial and managerial advice (Coveney et al., 1998).

2.2.3 *The Income Seeking Angel:*⁷

Income Seeking Angels are active individual investors who place smaller sums in unquoted ventures and have invested one or two low-level funds in unquoted companies over the past three years. This Angel group is less wealthy and less entrepreneurial than other individual Angels and most of them have never run their own business. As a result they place only a total amount of £35,000 in 1.5 ventures and just 27% of them are investing more than £50,000. Therefore a typical Income Seeking Angel deal is looking quite different compared to the typical deals mentioned before. On average they invest a sum of £24,000 in 1.5 rounds with an initial investment of £17,000.

⁶ This number looks quite high. But, as mentioned in Coveney et al. (1998), Angel investors do not like to talk about bad investments. Therefore the value-weighted return may be significant lower.

⁷ Source of all the numbers and data in this paragraph: Coveney et al., 1998

They take an average equity stake of 20% and have three co-investors on average. 98% of the Income Seeking Angels are male, well educated and have an average age of 48 years. These Angels invest mainly for financial returns or to create a job for themselves. A substantial percentage of this group wishes to take a full time position in the new venture. The minority of this group is investing for fun or satisfaction. They have to take this business more serious than the Entrepreneur or the Corporate Angel because the Income Seeking Angel has considerable fewer funds available and he depends more on the outcome of his investment. Incentives for Income Seeking Angels to increase their investment activities are better knowledge of the founder, better exit routes, better co-investment opportunities and better tax incentives. But the tax incentives are not so important for them like for the Corporate and Entrepreneur Angels. This could be attributed to their lower incomes and their lower tax rates (Coveney et al., 1998).

2.2.4 The Wealth Maximising Angel:⁸

Wealth Maximising Angels are active, wealthy investors who have made a couple of investments in start ups but they are not so rich and experienced like the Entrepreneur Angel. On average they place a sum of £131,000 in 2.1 ventures and only 8% of them are putting more than £200,000 in an unquoted firm. In a typical Wealth Maximising Angel deal a total amount of £54,000 is invested in 1.75 rounds with an initial investment of £21,000. They prefer minority shareholding with an average number of 2.5 co-investors. This group, like the other Angel Types, is predominantly male, well educated and has an average age of 48 years. They invest for financial gains and to create a job for themselves. The impression of the founder is the most important fact to place their funds in a venture. The location of the venture is not of importance for the Wealth Maximising Angel and 40% of them would be willing to put their funds in a company that is more than 200 miles away. A

⁸ Source of all the numbers and data in this paragraph: Coveney et al., 1998

substantial number of these Angels, compared to the other Angel Types, generated their wealth through inheritance (Coveney et al., 1998).

2.2.5 *The Virgin Angel:*⁹

Virgin Angels are private individuals who never have made an informal investment but tend to make such an investment in the future. Therefore they are inactive investors. This group is not so wealthy like active Angels and they principally invest for financial returns or to create a job for themselves. They are attracted by higher outcomes compared to the formal capital market. Virgin Angels are also well educated, in general male and have an average age of 46 years. They would increase their investment activity if they have better exit routes and a better knowledge of the founder. These Angels represent a high potential for the informal capital market because their number is enormous compared to the number of active Angels (Coveney et al., 1998).

2.2.6 *The Latent Angel:*¹⁰

Latent Angels are inactive investors who have not placed funds in start ups during the last three years but in contrast to the Virgin Angel this group has made informal investments in the past. They are exclusively male, have an average age of 50 years and are more entrepreneurial than the Virgin, Income Seeking and Wealth Maximising Angel. These Angels are pretty wealthy and they have large funds available to invest in new ventures. They mainly invest for financial gains and expect that the returns of informal investment are higher compared to the expected returns in the formal capital market. A better knowledge of the founder and better exit routes are the main

⁹ Source of all the numbers and data in this paragraph: Coveney et al., 1998

¹⁰ Source of all the numbers and data in this paragraph: Coveney et al., 1998

incentives for this Angel group to increase their investment activity (Coveney et al., 1998).

2.2.7 Review

All the Angel Types mentioned above have similar characteristics in age, gender and education and prefer local investments close to their domicile (Mason et al.; 2008). However they are distinguishable in their amount of available funds, their activity and their entrepreneurial experience. Moreover they invest for different reasons and have diverse expectations about the outcome of their investment. Therefore it is important that the entrepreneur identifies the adequate Angel investor.

In the next section I give an outline about the requirements that have to be fulfilled by the entrepreneur and his venture to attract a Business Angel.

2.3 Elements to attract an Angel

This section outlines the main characteristics of the venture and of the entrepreneur. Investors make their investment decision on both the personal impression and skills of the founder and the attractiveness of the business. Therefore the enterpriser should provide all the necessary information about his person and his business idea. The course of action should be summarised in a detailed business plan and moreover he should give a detailed analysis about the opportunities and risks of the new venture.

2.3.1 Value and commitment signals

Signalling value to a Business Angel is the most important criterion an entrepreneur could provide if he needs external funds. Only if the venture or a project adds value to the investor he would decide to put some money and efforts in the firm or project. An older approach in literature by Leland and Pyle (1977) suggests that the best value signal to an investor is the amount of

stocks hold by the entrepreneur if he has unlimited initial wealth (Prasad, Bruton and Vozikis; 2000). A fundamental problem of this approach lies in the unlimited initial wealth of the entrepreneur. In reality, hardly any entrepreneur has unlimited funds available and the stock ownership may not be the right value signal for the investor (Prasad et al.; 2000). Prasad et al. developed a mathematical equation that provides a relationship between the mean return of a project and the project signal. He argues that this project signal is based on the invested amount by the entrepreneur in proportion to his initial wealth. This “noiseless” signal could support the investor during his decision process and help him to understand the real value of the project/venture (Prasad et al.; 2000). Therefore it could be either used by the Business Angel to evaluate his outcomes or by the entrepreneur to attract investors. The proof “...that a large proportion of the entrepreneur’s wealth is invested in the project (may) provide a direct signal of value and commitment about the project and this should be strongly ‘advertised’ by the entrepreneur when constructing the business plan for the project, especially since this model has the additional benefit of demonstrating that entrepreneurs can analyse their rate of return before making an investment decision.” (Prasad et al.; 2000: p.176). The importance of an appropriate business plan is illustrated at a later point in this paper.

2.3.2 Demands on entrepreneurs who launch the business

Beside the value proof of his venture the entrepreneur should have certain skills and qualities. As mentioned above the impression of the founder is ranked first among the investment decisions of informal investors. This is due to the fact that Business Angels and entrepreneurs will work a considerable time together. In addition to the first impression the entrepreneur should have various hard and soft-skills. The foundation of a firm should always be borne by a team with at least two persons. A “One-man-show” might hardly have a chance because a single entrepreneur can not bear the brunt of work alone and has only in the rarest cases all the

necessary business skills. In addition it is pretty risky if the whole Business is based on a single women/man in the case that she/he has an accident. To run the business efficiently the team has to fulfil all the technical, marketing and sales and distribution qualifications. Additionally the members of the team have to provide leadership, the ability to cooperate and of course entrepreneurial thinking (Kleinhückelskoten et al.; 2002).

2.3.3 The Business Idea

The Business Idea is the main element of a new business. It was first elaborated by Richard Normann (1977) and consists of the market segment, the product, the production system and inner organizational arrangements (Normann; 1977). The combination of these elements distinguishes the company from its competitors and could therefore create a competitive advantage. The competitive advantage could be achieved through cost advantages or differentiation advantages (Grant; 2006). The products or services offered by the new venture should provide an outstanding value for the customer and the advantages over products from possible competitors has to be clearly visible. Further the Business Idea should not be easy to imitate and provide high growth potential or “First Mover” advantages (Kleinhückelkoten et al.; 2002).

In the next section the Business Idea is integrated in the Business Plan and the crucial elements of this plan are discussed.

2.3.4 The Business Plan

“Business Plans are required whenever money is to be raised, whether from a bank, a finance house or a provider of equity capital.” (Blackwell; 2008: p.5) This statement illustrates the importance of an adequate Business Plan. With a Business Plan the entrepreneur must win the interest and confidence of the investor (Blackwell; 2008 and Coveney et al.; 1998).

“The Business Plan has to be sound and I want to see evidence that the business idea is viable.” (Coveney et al.; 1998: p.99)¹¹

“Throughout the decision process I relied a lot on the business plan, my own investigations, and my impression of the entrepreneur. But the business plan foremost.” (Coveney et al.; 1998: p.99)¹²

The statements in a Business Plan should be written in a clear and plain language without spelling or grammatical errors and should always be supported with numbers. It should consist of the following elements:

Executive summary, description of the business/idea, operating plan, market and industry analysis, organisational structure, financial plan and risks and opportunities. (Blackwell;2008 ; Kleinhückelskoten et al.; 2002 and Coveney et al. 1998)

The executive summary gives a brief overview of your business plan and has the task to encourage the potential investor to read the rest of the business plan. Therefore everything of importance for the investor should be mentioned and described (Coveney et al.; 1998 and Kleinhückelskoten et al.; 2002)

The description of the business (idea) should outline the components of the business and the venture, explain the target market and clarify the competitive advantage(s) of the products/services sold. This section sends a signal to the investor that the entrepreneur understands his business.

The operating plan breaks down the strategic planning to the day-to-day business. The enterpriser illustrates the main elements of the value chain and therefore provides a more detailed analysis of his business. This part of the business plan demonstrates how the value is delivered to the customer and explains the main elements of the business system (Coveney et al.; 1998).

In the next chapter of the business plan a market and industry analysis is provided. Therefore the entrepreneur can use different analysis tools to

¹¹ This is a quote from a Business Angel who was surveyed by the authors of the book

¹² This is a quote from a Business Angel who was surveyed by the authors of the book

demonstrate the competitiveness of his venture. Some well known tools from literature are the Porter Five Forces model, which determines the competitive intensity and as a result the attractiveness of the market (Porter; 1980), the SWOT analysis, which evaluate the internal strengths and weaknesses and the external opportunities and threads involved in a venture (Invernizzi; 2004), or the Industry Life Cycle Tool, which describes the different stages of the industry life cycle with the attributed characteristics (Coveney et al.; 1998).

The organisational structure outlines the composite of the management team, the hierarchical organisation and the legal form of the company (Kleinhückelskoten et al.; 2002).

The next part of the business plan consists of a financial plan and an outlook for the business.

“The financial numbers and the reality behind the numbers should always be shown in the business plan. I always expect the cash flows to be done and well thought out.” (Coveney et al.; 1998: p.122)¹³

Business Angels expect that the entrepreneur delivers cash flow forecasts, percentage growth rates, financial ratios and percentage profit margins (Blackwell; 2008 and Coveney et al.; 1998). The investor is also interested in the general financial situation indeed how much debt the venture has, who the co-investors are and what his equity stake is. Further he matters about possible exit routes. An Angel would like to liquidate his investment after a certain time. The entrepreneur should provide an outlook about these possibilities and after how many years they can be achieved.

The last part delivers risks and opportunities for the investor.

Especially new ventures are extremely risky. Therefore the entrepreneur should provide an analysis about the risks and opportunities for the investor. Straightforwardness and trust are of great importance in the relationship between Business Angels and entrepreneurs.

¹³ This is a quote from a Business Angel who was surveyed by the authors of the book

2.3.5 Review

To attract an Angel investor the entrepreneur has to fulfil all the criteria mentioned in this paragraph. His Business and his business idea have to create value for both the customer and the investor. This is achieved through the competitive advantage. The enterpriser must prepare a detailed business plan which provides all the necessary information about strategic and operative planning, the financial circumstances and an analysis about the business chances and risks for the investor. I attached great importance to the business plan because it is a crucial element of raising venture capital and it helps the entrepreneur to convert its dream into reality (Coveney et al.; 1998).

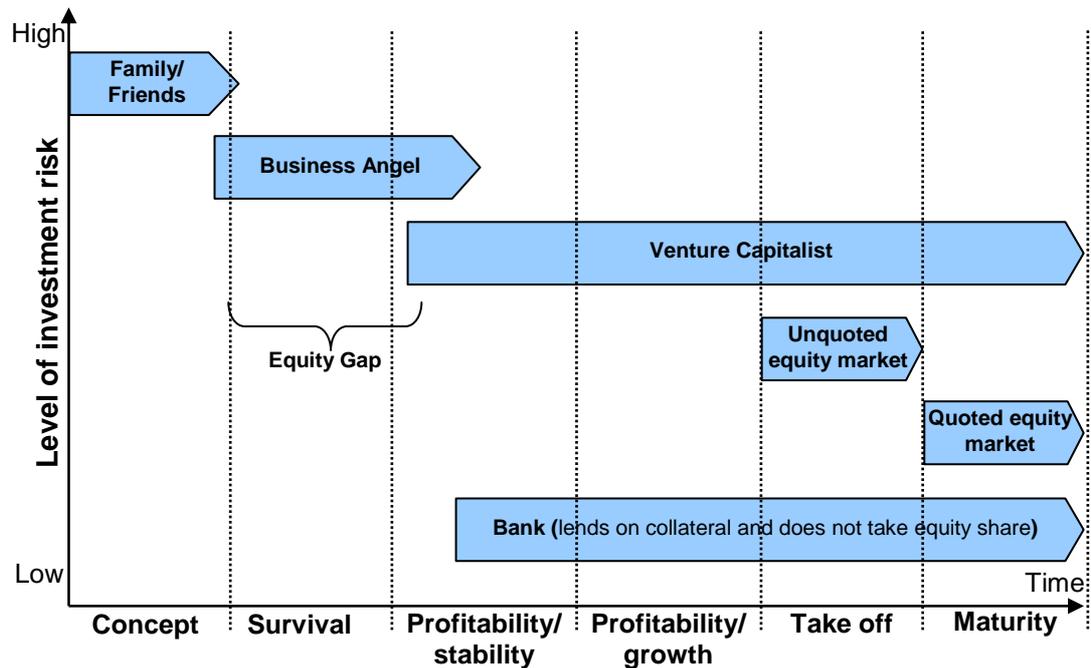
2.4 The role of the Business Angels

Business Angels play an important role in the informal capital market because they are the largest single source of risk financing for entrepreneurial firms in the USA and the UK (van Osnabrugge; 2000). As mentioned in the introduction this kind of informal investors can close the so called "equity gap". In this part of the paper the six steps of financing are illustrated and I focus on the main differences between Business Angels and Venture Capital firms. Furthermore agency costs are discussed and the transfer of non tangible assets is outlined.

2.4.1 Steps of Financing

Neil C. Churchill developed a model with the six key phases of company growth and Coveney et al. allocated to each of the stages the adequate finance source (Churchill and Lewis, 1983; Churchill, 1997; and Coveney et al., 1998). The following graph illustrates the six different stages of company growth and the corresponding capital providers for each stage.

Graph 2¹⁴: Six phases of company finance



2.4.1.1 Concept stage (1):

In this stage the venture is in its infancy. The organisation structure and all the system or planning tools are low developed or do not exist. The business risk is extremely high and the only target of the firm is to survive.

The Finance is mainly provided through the savings of the entrepreneur or received from family and friends. In this stage there is no incentive for external investors to supply capital because the product's/service's market acceptance and potential is not verified. The risk for external investors is simply too high and family and friends invest for personal reasons (e.g. want to help the entrepreneur). Therefore they are the only source of financing beside the entrepreneur's own savings (Churchill and Lewis, 1983; Churchill, 1997; and Coveney et al., 1998).

¹⁴ Source: Coveney et al., 1998 (modified by the author)

2.4.1.2 Survival stage (2):

At this stage the firm has proofed that it can survive and the main product is feasible (Churchill and Lewis, 1983). But there is still a high uncertainty whether the venture generates enough cash flow to grow. The financial resources of the entrepreneur and of his friends/family are exhausted and the venture needs external capital to grow further. Banks usually lend only on collateral if the loan is risky and at this stage the venture does not hold sufficient tangible assets. For venture capital firms the investment may be too small to cover their monitoring and due diligence cost. At this stage we talk about the “equity gap” (see graph 2). Fortunately there exists an investor who helps to bridge this gap, the Business Angel. The Angel investor is ready to take the risks and has the advantage that equity is not so expensive like at a later stage. This offers his high grow potentials. An Angel makes his investment in several investment rounds. Depending on the Business Angel type he provides between 40% and 75% of the total amount in the first round. The rest is invested in a second or third round when more capital is required (Coveney et al., 1998).

2.4.1.3 Profitability/Stabilisation (3):

In this stage the company started to earn positive cash flows and the products/services are successfully integrated in the market (Churchill and Lewis, 1983). Nevertheless the cash flows may not be enough for uncertain periods in the future or further growth. The external capital needs during this period is in general too large and expensive for Angel investors and banks provide only small, asset secured loans. At this point venture capital firms come into play. They have the resources to supply the required amount of capital and can take advantage of the high growth potentials of the venture (Coveney et al., 1998).

2.4.1.4 Profitability/Growth (4)

At this stage Churchill states: “The owner consolidates the company and marshals resources for growth. The owner takes the cash and the established borrowing power of the company and risks it all in financing growth.” (Churchill and Lewis, 1983: p.34) Like in the last stage the free cash flow of the company may not be enough to progress to the take off stage and as a result more external funds are needed. These funds easily exceed what a Business Angel is willing to place. Bank loans can finance short term growth but they still present limitations (Coveney et al., 1998). Therefore the main source of finance is again the venture capital firm which can cover the capital demand.

2.4.1.5 Take off (5):

At the take off stage the crucial point is to achieve fast growth with adequate financial resources. Nevertheless many entrepreneurs are unsuccessful in this stage because they try to grow too fast or are unable to delegate (Churchill and Lewis, 1983). As in the previous two stages venture capital firms remain the main source of finance and in addition they can recruit manager teams which have the expertise and can guide the company through the fifth growth stage. Alternative funding options are unquoted equity markets like the Alternative Investment Market (AIM) in London or the open market in Germany. The venture is now less risky than start-up firms but still not secure enough for a quoted equity market (Coveney et al., 1998).

2.4.1.6 Maturity (6):

In this stage the company has reached a considerable size and the systems and management is well developed and professional. For an effective run of the sizeable firm budgets and long term strategies must be adopted. The main challenge is to preserve the entrepreneurial qualities and to remain

competitive (Churchill and Lewis, 1983). Cash flows of the company and bank finance can cover most of the cash and acquisition needs. Nevertheless many developed firms decide to go public and add additional trading value to the company. Moreover the former informal investors can liquidate their investments and realise their long expected profits (Coveney et al., 1998).

2.4.2 Agency costs

Agency costs occur in every relation when ownership and control are separated. In a non financial context the problems come up when one person (the principal) delegates work and responsibility to another party (the agent). The agent acts on behalf of the principal and a separation in decision and risk-bearing results (Jensen and Meckling, 1976). In such relation, information asymmetries can appear between the principal and the agent. The agent can use his information advantage for his own purpose and does not act in the interest of the principal (van Osnabrugge, 2000). As a result the principal tries to use contracts reducing the agency costs. But contracts themselves are not costless and in many cases these costs exceed the benefits (Fama and Jensen, 1983). Start-up ventures mainly consist of human (intangible) assets which are difficult to secure through contracts. This leads to "...conflicts in alignment and verification of goals, and conflicts in risk sharing." (van Osnabrugge, 2000: p.94) As a result of these conflicts two special agency problems (moral hazard and adverse selection) appear. For the investor-firm relation two main approaches of agency problems can be identified (van Osnabrugge, 2000).

2.4.2.1 The principal agent approach

The first is an ex ante approach and describes the formulation of an optimal contract. This principal agent approach focuses on due diligence and screening before the investment is made to reduce asymmetric information. In this case the principal tries, with the help of an exact analysis of the

entrepreneur and his venture, to formulate an optimal contract to control the behaviour or outcome of the agent. In the behaviour based contract the principal faces monitoring costs and it may be difficult for him to monitor the agent and his behaviour. Therefore he can imply intrinsic and/or extrinsic incentives (outcome based contract) for the agent that is related to his performance. With these two contracts, the behaviour based and the outcome based, the principal may limit his agency costs and can transfer some of the risk to the agent but there is always a trade-off between the different costs and some agency costs are unavoidable (van Osnabrugge, 2000).

2.4.2.2 The incomplete contract approach

The second is an ex post approach and outlines that writing contracts is pretty costly (incomplete contract approach) because not all variables are observable. As a result the contract itself is always incomplete and "...the ex post allocation of power is what really matters." (van Osnabrugge, 2000: p.95) After Hart (1995a) the main costs of writing a contract are transaction costs, bounded rationality and asymmetric information.

According to the transaction costs approach four ex ante costs may outweigh the benefits of contracting. First, there are planning and thinking costs about all the possible options that can occur during the duration of the contract. In addition there are always costs of negotiations. Third, it is expensive to write a contract that is checkable by a third party when it is violated or not fulfilled (Hart, 1995b). At last there are addition costs to the writing costs that occur when the contract has to be enforced and verified by a third party (van Osnabrugge, 2000).

Beside the transaction costs approach the bounded rationality view outlines that "...agents either have only limited ability to evaluate elaborate contingencies or are not able to foresee unlikely contingencies." (van Osnabrugge, 2000: p.96).

Asymmetric information is another possibility for incomplete contracts and this approach argues that someone may not include a clause in the contract if the counterpart can draw a conclusion from this clause.

According to this three cost types, contracts have to be renegotiated whenever new information arises.

Both approaches can reduce the agency costs, but what really matters is the ex post allocation of power and control (Hart, 1995a, b). In start ups and small ventures, where hardly real assets exist, the best way to achieve control may be through an active involvement in the company after the investment (van Osnabrugge, 2000). In the next section the main differences between Business Angels and Venture Capital firms are outlined and how they deal with agency costs.

2.4.3 Differences between Business Angels and Venture Capital firms

As shown in Graph 2 Business Angels and Venture Capital firms finance different stages in the company life cycle. In general Angel investors invest smaller funds compared to venture capital firms and enter the company at an earlier stage. The following table provides data taken from several investments of Angels and Venture Capital firms:

Graph 3¹⁵:

Financing round (in \$1000)	Number of individual Business Angels	Distribution of Business Angels	Number of Venture Capitalists	Distribution of Venture Capitalists
less than 250	102	57,63%	8	4,62%
250-500	43	24,29%	14	8,09%
500-1000	15	8,47%	31	17,92%
more than 1000	17	9,60%	120	69,36%
Total	177	100,00%	173	100,00%

This table illustrates that venture capitalist and Business Angels complement each other in providing funds for ventures. In this case the individual Angel investor covers most of the finance needs less than 250.000\$ and only 9,6% of the individual Business Angels invest more than 1.000.000\$. In contrast, Venture Capitalists prefer to invest higher amounts (more than 1.000.000\$) in new ventures. This can be referred to several reasons.

Venture Capital firms usually invest money from external capital providers and in contrast to the Business Angels not their own money. Therefore Venture Capitalists have to demonstrate competent behaviour before the investment is made. As a result they prefer the ex ante approach and spent a considerable time and money in screening, due diligence and contract formulation (van Osnabrugge, 2000). This process is often pretty expensive and for this reason Venture Capitalist invest larger funds to cover this costs and of course they also have larger funds available than most individual informal investors. Business Angels in contrast prefer the ex post approach because they often invest for different reasons compared to venture capital firms (Kelly, P. et al., 2003 and van Osnabrugge, 2000).

As mentioned above some Angel types invest, beside the financial returns, for fun or to create a job for themselves. Due to this fact they are more

¹⁵ Source: Freear and Wetzel, 1990

strongly involved in the after investment process and often hold a job in the financed venture. Therefore they can control and influence the behaviour of the entrepreneur after the investment is made, and do not have to spend a considerable amount of money and time in the pre-investment process. In addition Venture Capital firms have to fulfil the expectations of their customers (Kelly, P. et al., 2003). Business Angels place their own funds and are not responsible to anyone else. Some Angel investors see their invested money as “gambling money” and they do not really care if an investment is a total loss.

Compared to banks, Business Angels and Venture Capital firms face lower asymmetric information, because most of these (in)formal investors have experience in the business sector or environment of the start up.

2.4.4 The transfer of non-tangible assets

Besides closing the equity gap, Business Angels transfer also a considerable amount of non-tangible assets to the new venture. Politis (2008) demonstrated in his paper the value added role of Business Angels according to several studies he found in literature. As a result of the reported value added benefits four main value added roles were outlined:

Graph 4¹⁶: Main value added roles of Business Angels

	Value added based on human capital	Value added based on social capital
Resource Provision	Sounding board/ strategic role (Building and protecting the bundle of valuable resources in the firm)	Resource acquisition role (Creating and maintaining a stable flow of critical resources)
Governance	Supervision and monitoring role (Minimizing conflicts of interest by means of formal control mechanisms)	Mentoring role (Minimizing conflicts of interests by means of informal control mechanism)

¹⁶ Source: D.Politis (2008); modified by the author

This table illustrates that Business Angels add more than just financial assets to a new venture. The transfer of non-tangible assets is the main characteristic that distinguishes the Business Angel from other investors (the two wings of an Angel Investor as mentioned above) and is an important asset for start up firms.

2.5 Business Angel Networks (BANs)

Business Angel Networks (BANs) act as intermediaries between ventures seeking capital and informal investors (zu Knyphausen-Aufseß et al., 2008). These institutions are actively involved in the matching process. Therefore they arrange matching events, publish newsletters or provide matching databases and online matching. Furthermore BANs preselect the deal flows to guarantee that only high potential businesses are presented at the matching events. On the other hand only high-quality Business Angels are admitted to the network and they have to sign a so called “Code of Conduct¹⁷” (zu Knyphausen-Aufseß et al., 2008). In addition Business Angel Networks provide further services, like consulting, information events and network support for both entrepreneurs and investors (European Business Angel Network).

BANs exist on local, national and international levels and often are supported through public and private funds¹⁸. BANs have tried to generate profits (membership fees, success-based fees and fees for advisory) but no sustainable method was achieved (zu Knyphausen-Aufseß et al., 2008). Most of the Business Angel networks are non-profitable institutions, beside some for profit organisations (compare Coveney et al., 1998: p.143), and this can cause problems as mentioned in the research paper from zu Knyphausen-Aufseß et al. (2008).

¹⁷ <http://www.eban.org/membership/code-of-conduct> (22.04.2010)

¹⁸ <http://www.business-angels.de/default.aspx/G/111327/L/1031/R/-1/T/130344/A/1/ID/130711> (22.04.2010)

They analysed the deal flows and activity of the Northern Bavarian Business Angels (Nordbayerische Business Angels: NBA), the most successful network in Germany, and concluded that ventures financed through Angel Investors with the help of the NBA are significantly more likely to become insolvent than firms financed through Business Angels without the help of this network (zu Knyphausen-Aufseß et al., 2008). The main argument for this poor performance was related to adverse selection which occurs when BANs help new ventures to construct their business plans. As a result also unattractive ventures are able to present a business plan which meets the requirements of the investors. The paper did not criticise the service itself but how it is provided. The fundamental problem is that the NBA is not affected (positive or negative) by the outcome of the venture (zu Knyphausen-Aufseß et al., 2008).

The dataset of this study was pretty small but, nevertheless, it has shown that BANs may adopt new methods to foster Business Angel investments.

2.6 Different forms of investments

In this chapter different forms of investments are briefly outlined and their differing characteristics are discussed.

2.6.1 Equity

In this case the Business Angel buys stocks of the venture and receives all the rights and duties of a shareholder. The informal investor can exert the highest influence on the venture with equity financing and equity offers the highest returns. Nevertheless it is also pretty risky because debt is preferred over equity and in the case of a bankruptcy the Angel will lose all his funds.

2.6.2 *Silent partnership*

A silent partnership belongs to the mezzanine financing instruments and has characteristics of both equity and loans. The venture has to pay interest and possible profit-related compensation. In the case of insolvency other debt is preferred over the silent partnership but it has preference over equity¹⁹. This could be interesting for more risk-averse angels that would like to have a fixed annual return on their investment (Kleinhüchelkoten et al., 2002).

2.6.3 *Shareholder loan*

These loans are provided by a shareholder (Business Angel) without collaterals and may have the character of risk capital if the stockholder owns more than 10% of the firm (Kleinhüchelkoten et al., 2002). Due to their riskiness, shareholder loans pay high interest rates.

2.6.4 *Profit participating certificate*

The owner of the profit participation certificate provides capital and other non tangible assets and receives therefore a proportional participation at the economic success of the venture. In Germany these certificates are not regulated by law and could be designed freely. In addition they could be traded in a market and do not have to be recorded in the register of companies. The owner of this certificate remains anonymous but does not have the right to vote at the shareholder meeting. Due to these facts the entrepreneur maintains his autonomy and the investor can liquidate his investment more easily (Kleinhüchelkoten et al., 2002).

In addition to the mentioned investment forms there are various hybrid forms depending on the legal system of the country. Therefore two or more of these investment forms can be combined.

¹⁹ http://www.max-planck-innovation.de/en/inventors_founders/founders_faq/#09
(22.04.2010)

3 Part 2: Benchmarking South Tyrol in an international context

This part will outline the position of South Tyrol in an international context and evaluate the strengths and weaknesses of this region for informal investment. For the benchmark with other regions in the world I try to construct a simple model that is based on environmental factors. At the end of this part I will give some examples of best practice in the European Union, how Business Angel investment may be stimulated.

3.1 An Empirical study about the correlation between Business Angel Investments and macroeconomic data

The first part of this thesis described the individual characteristics of Business Angels and what is important for their investment decisions. According to a research paper from the University of Jena, informal investments are also driven through macroeconomic factors. This paper is based on a large population survey, representative for about 4 billion people of the world population, from the Global Entrepreneurship Monitor (GEM) and outlines the correlation between informal investment and macroeconomic variables (Szerb et al., 2007). I will focus on the correlations between the “classical Business Angel” (compare Szerb et al., 2007) and the macroeconomic parameters.

Hypothesis 1:

“Countries with higher levels of per capita GDP are more likely to have a greater percentage of their population acting as informal investors.” (Szerb et al., 2007: p.14)

This hypothesis is accepted and is significant at a $p > 0.001$ level (Szerb et al., 2007).

Hypothesis 2:

“Countries with higher real GDP growth rates are more likely to have a greater percentage of their population acting as informal investors.” (Szerb et al., 2007: p.14)

This hypothesis is accepted and is significant at a $p > 0.001$ level (Szerb et al., 2007).

Hypothesis 3:

“Countries with higher levels of income tax are less likely to have a greater percentage of their population acting as informal investors.” (Szerb et al., 2007: p.15)

This hypothesis is accepted and is significant at a $p > 0.001$ level (Szerb et al., 2007).

Hypothesis 4:

“Countries with pro-enterprise government programmes are more likely to have a greater percentage of their population acting as informal investors.” (Szerb et al., 2007: p.16)

This hypothesis is supported but not significant (Szerb et al., 2007).

Hypothesis 5:

“Countries with higher levels of university-level entrepreneurship education programmes are more likely to have a greater percentage of their population acting as informal investors.” (Szerb et al., 2007: p.18)

This hypothesis is accepted and is significant at a $p > 0.001$ level (Szerb et al., 2007).

3.2 Developing the model

With the help of this empirical study I will try to benchmark different regions/countries in the world with a kind of cluster analysis. I add some more variables like culture, the entrepreneurial environment (TEA index), the quantity and quality of Research and Development departments and incentives for Business Angel investments. These are all factors that seem to influence entrepreneurship and therefore informal investment activities. Entrepreneurship is an important factor for Angel investments because entrepreneurs start new businesses. Business Angel will only invest if they have sufficient investment opportunities. Entrepreneurs are the demand side in the informal capital market and without them there will be no match between the demand and supply within this market.

In this model all factors are weighted equally which could be a problem, because some may be more significant than others. I just try to develop a basic and simple model, which is able to compare the different countries/regions in relation with the Business Angel activities and provides a possible conclusion, which combination of factors may be relevant for Business Angel investments. Another problem is to evaluate the amount of informal capital provided through Business Angels because most of the numbers are based on estimations. Nevertheless these numbers are able to demonstrate a tendency where Angel investment is well established.

3.2.1 *The score distribution in the model*

The model used for the analysis is based on a simple score distribution. It consists of 10 different categories and for every category the best country/region will receive 10 points, the second 9 points and so on. If two countries have an equal vote in one category both countries/regions will score equally and the following country receives two points less (e.g. if two countries receive 9 points the following will only receive 7 points). If there

was no data available for the two regions (Bavaria and South Tyrol) they will score like Germany (for Bavaria) or Italy (for South Tyrol).

3.2.2 Explaining the variables

According to the above mentioned study by the University of Jena different macroeconomic factors influence the informal investing activities.

Furthermore the analysis is enriched with more variables that are relevant for entrepreneurship and for Business Angel investments (see Appendix: Table 7).

3.2.2.1 Category 1: Gross Domestic Product (GDP)

Hypothesis 1 supports that countries with higher per capita GDP are more likely to have informal investment. Table 1 illustrates the GDP per capita within the different countries/regions (see Appendix: Table 1)

3.2.2.2 Category 2: Real GDP growth

Hypothesis 2 supported that countries with higher real GDP growth are more likely to have informal investment. Table 2 outlines the different real GDP growth rates across the countries/regions (see Appendix: Table 2)

3.2.2.3 Category 3: Ease of doing business

This category is based on a ranking from the World Bank which evaluates the parameters within a country to start a business (see Appendix: Table 3). It seems obvious that countries with better conditions in the business environment are more attractive for new start ups.

3.2.2.4 Category 4: Income tax rates

Hypothesis 3 supports that countries with high income tax rates are less attractive for informal investment. Table 4 illustrates the different income tax rates across the different countries (see Appendix: Table 4).

3.2.2.5 Category 5: Capital gain taxes for individuals

Investors care about this type of tax because it will reduce their after tax profits. Therefore countries with high level of individual capital gain taxes are less attractive for informal investment (Benchmarking Business Angels, 2003). In this category I will only take into account the individual capital gain tax for holdings in unlisted companies that exceed 25% (see Appendix: Table 5). Possible tax deductibles for investments in start ups or tax incentives are ignored but will be evaluated in the Category 9: Incentives for Business Angels.

3.2.2.6 Category 6: The TEA-Activity

The Early-Stage Total Entrepreneur Activity (TEA) is an index from the Global Entrepreneurship Monitor that evaluates the Early-stage entrepreneurial activity within a country (see Appendix: Table 6). Higher entrepreneurial activity, especially in the early-stage, seems to increase the demand for Angel capital and therefore may influence the attractiveness of a country for Business Angel investments.

3.2.2.7 Category 7: Universities

The point distribution for this category is based on the QS University Ranking and focuses on the ranking for Lifestyle/Biomedicine and Technology/Engineering (see Appendix: Table 8). This is due to the fact that over two third of total Business Angel investments are made across these sectors (European Directory of Business Angel Networks, 2008). Universities are considered in the analysis for two reasons. Firstly, they educate experts

for the sectors which are attractive for Business Angel investments. Secondly, many universities afford spin offs and start ups that are lucrative for Angel investments. Good universities seem to influence entrepreneurship and therefore the attractiveness of a region for Business Angel investments (see Appendix: Table 7).

3.2.2.8 Category 8: Research and Development

Similar to universities, R&D departments launch spin offs and start ups and therefore influence the entrepreneurial framework conditions of a country (Appendix: Table 7). In this category the points distribution is based on three parameters, all weighted equally: R&D expenditures in % of GDP, Number of High Tech Patents and the ranking of R&D departments (see Appendix: Table 9a, b, c and d)

3.2.2.9 Category 9: Incentives for Business Angels

This category includes variables like tax incentives, co- and refinance programmes for Business Angels and the availability of venture capital funds that (see Appendix: Table 10), as mentioned above, complement Business Angel investments. The effectiveness of these incentives was evaluated together with Mr. Saviane and is based on *Benchmarking Business Angels in Europe* (2003), *Encouraging angel capital: what the US states are doing* (Lipper et al., 2002), *The usefulness of tax incentives for Business Angels and SME owners: An Empirical Analysis* (Carpentier et al., 2005), *Business Angels* (Coveney et al., 1998) and *Business Angels* (Kleinhückelskoten et al., 2002). Some of these incentives are displayed in the best practice part (see: 3.4. Incentives for Business Angels: best practices) of this paper.

3.2.2.10 Category 10: Culture

It is pretty difficult to evaluate the cultural effect on entrepreneurship and Angel investment activities. Therefore I used the Entrepreneurial Attitudes and Perceptions from the GEM global report 2009 that may give some indications about the effect of the culture on entrepreneurship and Business Angel activities (see Appendix: Table 11). The problem with this dataset is that the data for Austria a Canada is not available. Due to this data from the national reports of these countries, GEM Austria national report 2005 and GEM Canada national report 2003, was evaluated, but the data and indicators differ from that of the global report. Therefore we tried to evaluate the position of these countries within the international benchmark. According to these facts it may be possible that under a diverse measurement of available data a different point distribution may result.

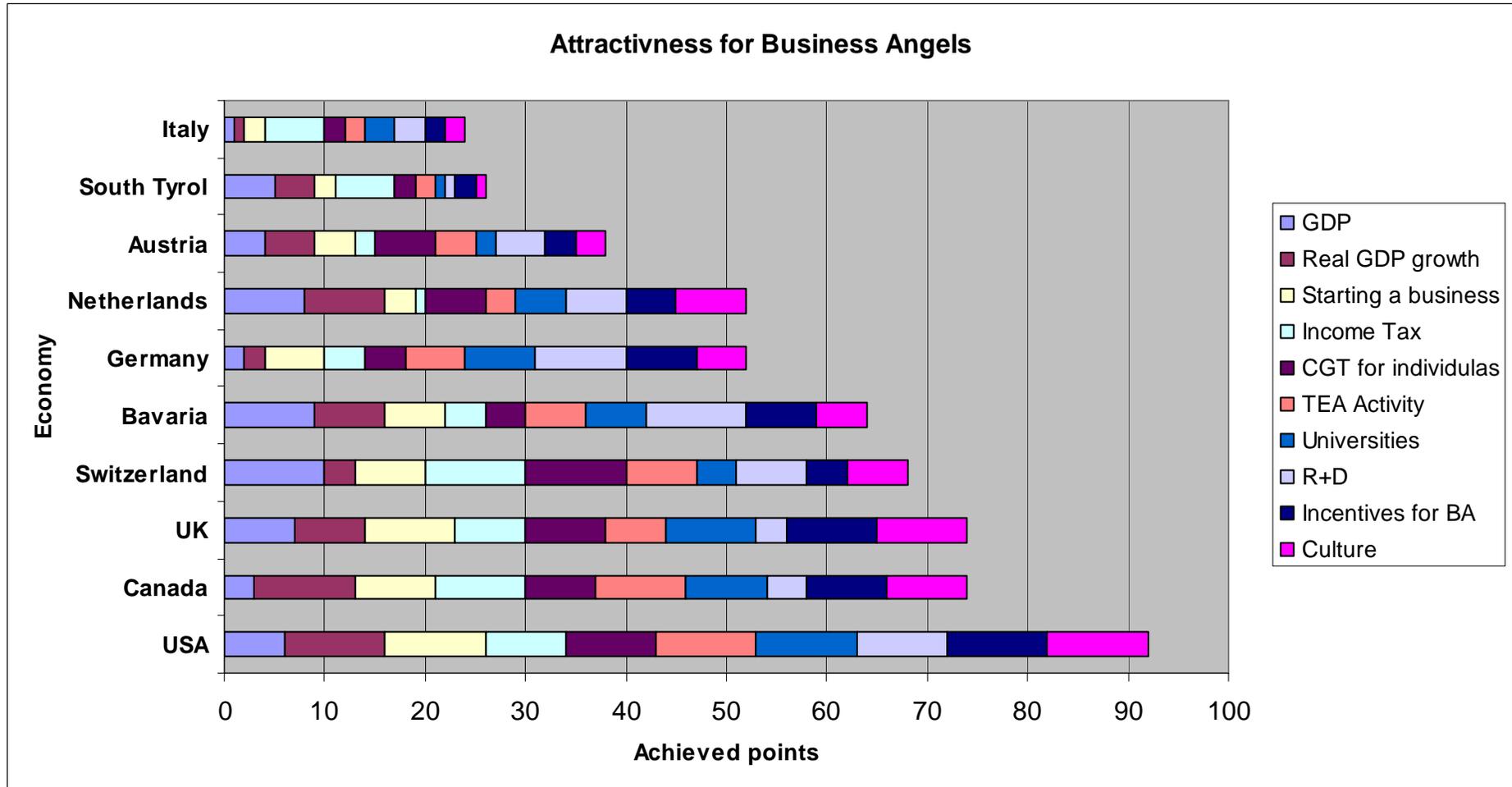
3.3 Analysing the model

After the point distribution for each category the sum of all points for each region/country was calculated and confronted with the Business Angel investment activities across the economies (see Appendix: Table 12). The point distribution and the Business Angel Activities are displayed in the following Graphs:

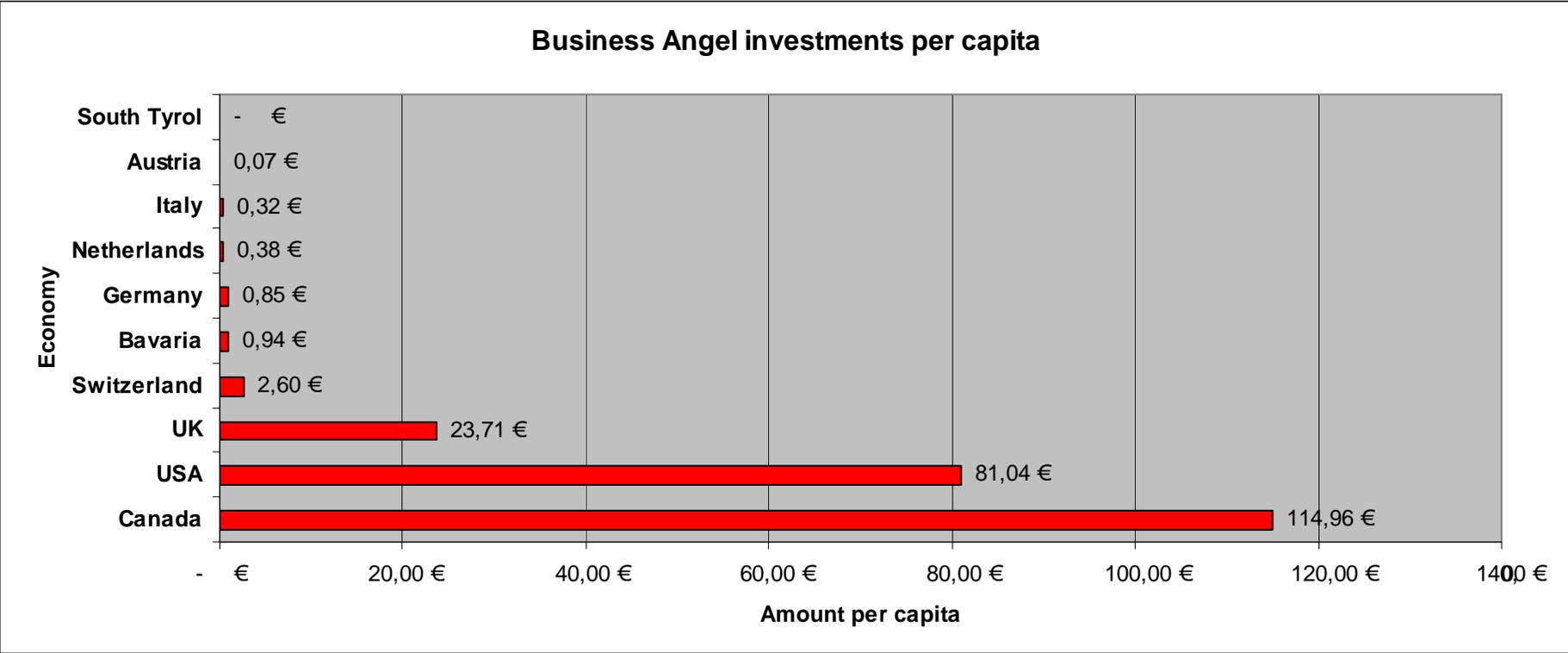
Graph 5: Point Distribution

Economy	GDP	Real GDP growth	Starting a business	Income Tax	CGT for individuals	TEA Activity	Universities	R+D	Incentives for BA	Culture	Total Points
USA	6	10	10	8	9	10	10	9	10	10	92
Canada	3	10	8	9	7	9	8	4	8	8	74
UK	7	7	9	7	8	6	9	3	9	9	74
Switzerland	10	3	7	10	10	7	4	7	4	6	68
Bavaria	9	7	6	4	4	6	6	10	7	5	64
Germany	2	2	6	4	4	6	7	9	7	5	52
Netherlands	8	8	3	1	6	3	5	6	5	7	52
Austria	4	5	4	2	6	4	2	5	3	3	38
South Tyrol	5	4	2	6	2	2	1	1	2	1	26
Italy	1	1	2	6	2	2	3	3	2	2	24

Graph 6: Graphical point Distribution



Graph 7: Business Angel activity



According to Graph 7 the highest investments per capita are made in North America (Canada 114,96 € and USA 81,04 €). Europe is far behind these numbers. Only the United Kingdom (23,71 € per capita) has a clear higher investment activity compared to the continental European economies. The Angel Investments for South Tyrol were 0€ for 2009 and there have been only two due diligences for informal investments (with no positive conclusion) with a worth of 250.000€ and 300.000€ (information provided through Mr. Saviane). When we analyse the point distribution of the model across the countries the differences between North America and Europe are significantly smaller compared to the disparity in the Business Angel activities. The ranking in Graph 6 and 7 is pretty similar. The model indicates that the most attractive country should be the USA but the investment activity displays that investments per capita are higher in Canada than in the USA. Due to the point distribution South Tyrol should be more attractive than Italy but in reality zero investments have been made in South Tyrol in 2009 (South Tyrol was ranked 9th according to the point distribution and was on the last place in the Business Angel investments ranking). Also Austria was estimated to have higher investments per capita due to the attractiveness ranking but it changed its place with Italy in the investment per capita ranking. It was mentioned above that most of these numbers are based on estimations and can vary in large size but the differences between Europe and North America seem to be significant. This leads to the crucial point of this analyse. There must be a certain combination of factors that stimulate informal investment.

It was outlined that Business Angels are the supply side and start ups/ entrepreneurs the demand side in the informal capital market. Only if both sides exist there will be an intersection between demand and supply.

Informal investors like to invest in innovative and high growth ventures that provide high returns. These innovative and high growth start ups are often spin offs from universities, R&D departments or founded by former university students. Due to these facts the important factors for innovative

enterprises seem to be the combination of universities, R&D departments and knowledge spill over of these institutions.

A classical region where these institutions are well established is the Silicon Valley in California (USA). Silicon Valley counts for 29% of venture capital investments in the USA and also for a high amount of total Business Angel investments (Index of Silicon Valley, 2009). In South Tyrol only the supply side in the informal market is sufficiently distinctive. The Business Angel Club from the TIS in Bolzano has funds of 5 million Euros²⁰ available to invest in new enterprises. This makes approximately 10€ per capita which is significant more than in most of the other European countries/regions. The fundamental problem of this region is that there is a lack of innovative new start ups which are worth to invest in. This may be the result of low R&D expenditures (only 0,55% of GDP and less high tech patents than the other countries), a young and small university with no school of Lifestyle/ Biomedicine/ Technology and only a small school of Engineering. The problem of South Tyrol is not a lack of capital but a lack of innovative enterprises. Tax deductibles and other incentives for informal investors only make sense if they can place their funds in enterprises.

In the next section I would like to give some best practices how Business Angels investments may be stimulated if there is a sufficient demand and supply side in the market.

3.4 Incentives for Business Angels: Best practices

3.4.1 The programmes of the Kreditanstalt für Wiederaufbau (KfW) and the Technologie-Beteiligungs-Gesellschaft (tbG) in Germany

These programmes provide risk sharing and co- and refinance for Business Angels.

²⁰ Information provided through Mr. Saviane

Graph 8²¹:

	KFW/ Bundesministerium Für Wirtschaft und Technologie- Beteiligungsprogramm (BTU)	ERP- Innovationsprogramm (Beteiligungsvariante) der KFW	BTU-Programm Start-Up-Phase der Deutschen Ausgleichsbank und der tbG
Aid for:	Young technology ventures not older than five years	Technology firms	Young technology ventures not older than five years
Scope of investment:	Boost of technologies and innovations through refinancing of and risk-sharing with investors	Boost of technologies and innovations through refinancing of and risk-sharing with investors	Finance of early stage-phase, innovations and exit
Mode of Investment:	No shareholding, loan for the investor	No shareholding, loan for the investor	Silent partnership as a co-investor together with the BA
Amount of finance provided:	A maximum of 70% of the investment is refinanced (up to 1,4 million €)	A maximum of 75% of the investment is refinanced (up to 5 million €)	Same amount like the BA as silent partnership (up to 1,5 million €)
Duration:	Maximum of 10 years; withdrawal and repayment possible at a earlier stage	Maximum of 10 years; withdrawal and repayment possible at a earlier stage	Maximum of 10 years; withdrawal and repayment possible at a earlier stage
Repayment:	At the end of the duration in one amount	At the end of the duration in one amount	At the end of the duration in one amount
Fee:	0,25% service fee; fixed fee between 8% and 9% p.a.; moreover performance-related fee between 10% and 30% of the invested amount (liquidation profit included) by the BA	Fixed for the whole duration; interest between 8% and 9% p.a.	1% service fee; fixed fee of 8% p.a.; moreover performance-related fee between 10% and 20% during the duration; in addition value accrual (Wertzuwachspauschale) of 6% p.a.; all together at least 30%
Indemnification clause:	100% for the refinance credit	60% for the refinance credit, for 40% the BA has to take the risk with adequate collaterals.	50% of the investment, a fee, between 15% and 30% of the investment, is charged

3.4.2 Reduced nominal tax rate for Small and Medium enterprises

Some countries offer reduced nominal tax rates for small and medium enterprises. This has not only a direct influence on the venture but also an

²¹ Source: Kleinhückelskoten et al., 2002; modified by the author

indirect influence on the investments from the Angels. Reduced tax rates lead to higher free cash flows and therefore to a higher return on equity.

Graph 9²²:

Economy	Nominal tax rate	Reduced nominal tax rate for SME
	2009	2009
Canada	31,32%	15,92%
Netherlands (Den Haag)	25,50%	20,00%
United States (Boston)	39,10%	20,02%
United Kingdom (London)	30,00%	21,00%
Switzerland (Zürich)	21,17%	--
Austria (Innsbruck)	25%	--
Germany (Berlin)	29,80%	--
Bavaria (Munich)	29,80%	--
South Tyrol	30,4-30,9%	--
Italy	31,40%	--

These are just two examples how informal investment may be stimulated. Almost every country within the benchmark offers some kind of incentives for informal investors. Hawaii (USA), for example, has a 100%, five-year tax credit for angels investing in 'qualified', high-tech businesses (Lipper et al., 2002).

Also Italy is creating a similar framework for investments in start-up companies called SME Business Act, providing capital gain taxation reduction if disinvested money is reinvested in other start ups.

3.4.3 The TIS and Chamber of Commerce in Bolzano

In South Tyrol there does not exist a real Business Angel Network, but there is a Business Angel Club which is part of the Technology and Innovation Park in Bolzano (TIS). This club was founded in 1999 and has 10 active Business Angels at this time but without any new, active investments in 2009. The Business Angel Club in Bolzano matches fund seeking start ups with appropriate Business Angels in this region.

²² Source: OECD Tax Databases

The chamber of Commerce and the TIS offer services that are also provided through classical Angel Networks. They have workshops for entrepreneurs, help them with financial and legal issues and provide support in developing a Business plan. Therefore the structure of a classical Business Angel Network is present in this region. In addition, new start ups have the option to get an interest reduced loan, up to 30.000 €, from the local government (TIS Bolzano and Chamber of Commerce Bolzano).

4 Conclusion and Outlook

The first part outlined the different Angel types with their characteristics, predominantly male, wealthy and well educated, and illustrates that these informal investors close the so called equity gap in the company growth cycle. Therefore the entrepreneur has to provide different value and commitment signals to attract Business Angels. Compared to Venture Capital firms, Business Angels invest smaller funds and prefer the incomplete contract approach (ex post) to deal with agency costs. Angel investors transfer more than just financial assets and invest also a significant amount of non tangible assets. Business Angel Networks act as intermediaries between the capital seeking side (Entrepreneurs) and the capital supply side (Informal investors) and offer services.

In the second part we have seen that informal investment activity is also driven by environmental factors. The developed model is based on 10 categories and compared Business Angel investments per capita with environmental variables. The informal capital market consists of a supply and a demand side. Only if Business Angels have sufficient ventures available to place their funds this market works properly.

South Tyrol has sufficient capital resources available but there is a lack of innovative, new enterprises. Universities and R&D departments seem to increase the demand side of the informal capital market. They educate experts, launch spin offs and provide a sort of knowledge spill over. South

Tyrol has some leading innovative and technology firms, especially in the alpine technology sector (Standortkatalog Südtirol), but underperforms in the University and R&D comparison. Developing these areas can only be achieved in the long run, because it will cost a considerable amount of time and money. In the mid 50's Silicon Valley was the 10th largest fruit producers in the USA without any kind of high tech or innovative firms. But over the last 50 years it became one of the world leading regions with high tech industry, Universities and large R&D departments (Index of Silicon Valley, 2009).

In the short run South Tyrol can try to compensate the lack of innovative start ups and try to attract ventures from outside the region. Enough money would be available to finance them but other incentives for these start ups have to be set. At this point tax incentives and support for SMEs and for Business Angel may be an option to attract foreign companies. It is difficult to evaluate if incentives were set first and then new firms moved to or were launched in the region or if these incentives were set after ventures have moved to or were launched in the region, but it should go hand in hand. South Tyrol offers a stabile political system, high life quality, a beautiful landscape and with its bilingualism and its location it connects the German, Austrian, Swiss and Italian Market. In addition the Fraunhofer Institut, one of the leading R&D departments in Germany, has launched a subsidiary, the Fraunhofer Italia Research Konsortial-GmbH, in Bolzano short time ago (21.12.2009)²³ .

But when the Silicon Valley and South Tyrol are compared there is especially one significant difference. In the Silicon Valley the wealth was created by (educated) immigrants (Americans and foreigners) that moved to this region

²³Fraunhofer Institut, press release:

<http://www.fraunhofer.de/presse/presseinformationen/2009/12/fraunhofer-italien.jsp>

(26.05.2010)

and launched their new high-tech enterprises. Due to this fact wealth was the result of entrepreneurship and innovation.

In South Tyrol this is slightly different. About 8,6% of the male population is employed in the agriculture sector (Astat press release, No. 14, 23.04.2010).

The wealth in South Tyrol was not mainly achieved through entrepreneurship and innovation. Most of the money in this region is “old” money that has been passed from generation to generation. These difference may affect the attitude towards innovation. Why should we change the system when we are living well here? The Silicon Valley is successful because people have had to be innovative and changed things to make their money. It was a opportunity for them to climb the social ladder and create wealth for them and their families. In South Tyrol the old system seems to work pretty well and there seems to be no or only little demand for innovation and change. According to the author this cultural component also seems to play an important role when we talk about innovation.

This last part of the conclusion is based on personal experiences of the author during his 4 year stay in South Tyrol and reflects his personal opinion.

4.1 Future Research

The developed model in this thesis is a very simple and basic model and analysis with the help of a score distribution the correlation between Business Angel Investments and different environmental variables.

It would be interesting to construct a more complex model with longer time series that is able to show correlations between macroeconomic variables and Angel Investments and is able to predict how informal investment will change if certain variables are modified (e.g. increase of R&D expenditures, tax incentives etc.).

5 Appendix

Table 1: GDP per capita in current prices²⁴

Economy	GDP per capita 2007	GDP (2007) in €	Average Euro/US Dollar (2007) ²⁵
Switzerland	\$58.513		
Bavaria ²⁶	\$47.562	34.704 €	1,3705
Netherlands	\$46.774		
United Kingdom	\$46.099		
United States	\$45.725		
South Tyrol ²⁷	\$45.089	32.900 €	1,3705
Austria	\$44.852		
Canada	\$43.674		
Germany	\$40.400		
Italy	\$35.745		

Table 2: Real GDP growth (change in % from previous year)²⁸

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average per annum (1996-2009)
Canada	1,6	4,2	4,1	5,5	5,2	1,8	2,9	1,9	3,1	3,0	2,9	2,5	0,4	-2,7	2,6
United States	3,7	4,5	4,4	4,8	4,1	1,1	1,8	2,5	3,6	3,1	2,7	2,1	0,4	-2,5	2,6
Netherlands	3,4	4,3	3,9	4,7	3,9	1,9	0,1	0,3	2,2	2,0	3,4	3,6	2,0	-4,3	2,3
United Kingdom	2,9	3,3	3,6	3,5	3,9	2,5	2,1	2,8	3,0	2,2	2,9	2,6	0,6	-4,7	2,2
Bavaria ²⁹	1,5	2,2	4,1	3,1	3,8	2,0	1,9	0,4	2,5	1,6	3,7	4,4	2,4	-3,2	2,2
Austria	2,1	2,3	3,9	3,7	3,1	0,8	1,6	0,8	2,6	2,9	3,4	3,4	1,9	-3,8	2,1
South Tyrol ³⁰	n.a.	n.a.	n.a.	n.a.	n.a.	2,2	1,4	0,7	2,2	2,0	3,4	1,6	1,5	0,5	1,7
Switzerland	0,6	2,1	2,6	1,3	3,6	1,2	0,4	-0,2	2,5	2,6	3,6	3,6	1,8	-1,9	1,7
Germany	1,0	1,9	1,8	1,9	3,5	1,4	0,0	-0,2	0,7	0,9	3,4	2,6	1,0	-4,9	1,1
Italy	1,0	1,9	1,3	1,4	3,9	1,7	0,5	0,1	1,4	0,8	2,1	1,5	-1,0	-4,8	0,8

²⁴ Source: International Monetary Fund, World Economic Outlook Database, October 2008

²⁵ Source: European Central Bank: Statistical Data Warehouse

²⁶ Source: Statistische Ämter des Bundes und der Länder: (18.05.2010)

http://www.vgrdl.de/Arbeitskreis_VGR/tbls/tab01.asp#tab08

²⁷Source: Eurostat News Release 23/2009 (Data for 2006)

²⁸Source: OECD.Stat Extracts: Real GDP growth rates

²⁹Source: Statistische Ämter des Bundes und der Länder: (18.05.2010)

http://www.vgrdl.de/Arbeitskreis_VGR/tbls/tab01.asp#tab08

³⁰Source: WIFO of the chamber of commerce Bolzano: Wirtschaftsbarometer (2003-2010)

Table 3: Ease of doing business (of 27 OECD countries)³¹

Economy	Ease of Doing Business Rank	Starting a Business	Dealing with Construction Permits	Employing Workers	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Closing a Business
United States	2	4	8	1	4	2	2	15	10	7	12
United Kingdom	3	6	3	9	8	1	5	5	8	15	8
Canada	6	2	9	6	12	13	2	8	18	23	3
Switzerland	14	19	12	5	6	5	27	7	19	18	21
Germany	16	22	5	25	18	5	18	16	7	6	20
Austria	17	25	19	13	13	5	25	22	12	10	17
Netherlands	18	18	26	19	10	17	21	10	6	19	9
Italy	26	21	24	16	23	24	11	27	21	27	19

Explanatory notes:	
Starting a Business:	Procedures, time, cost and paid-in minimum capital to open a new business
Dealing with Construction Permits:	Procedures, time and cost to obtain construction permits, inspections and utility connections
Employing Workers:	Difficulty of hiring index, rigidity of hours index, difficulty of redundancy index, redundancy cost
Registering Property:	Procedures, time and cost to transfer commercial real estate
Getting Credit:	Strength of legal rights index, depth of credit information index
Protecting Investors:	Strength of investor protection index: extent of disclosure index, extent of director liability index and ease of shareholder suits index
Paying Taxes:	Number of tax payments, time to prepare and file tax returns and to pay taxes, total taxes as a share of profit before all taxes borne
Trading Across Borders:	Documents, time and cost to export and import
Enforcing Contracts:	Procedures, time and cost to resolve a commercial dispute
Closing a Business:	Recovery rate in bankruptcy

³¹ Source: World Bank: Doing Business: <http://www.doingbusiness.org/economyrankings/>

Table 4: Income tax rates³²

Country	Personal allowance / Tax credit ²	Marginal rate ⁴	Threshold	Marginal rate	Threshold	Marginal rate	Threshold	Marginal rate	Threshold	Marginal rate	Threshold	Marginal rate	Threshold	Threshold	Marginal rate
Austria^b		0,00	10.000	38,33	25.000	43,60	51.000	50,00							
Canada^a	1,440 (wc)	15,00	37.885	22,00	75.769	26,00	123.184	29,00							
Germany^d		0,00	7.665	15,00	-	-	250.000	45,00							
Italy^a	1840 (wc)	23,00	15.000	27,00	28.000	38,00	55.000	41,00	75.000	43,00					
Netherlands	2,074 (wc)	2,45	17.579	10,70	31.589	42,00	53.860	52,00							
Switzerland^a		0,00	13.600	0,77	29.800	0,88	39.000	2,64	52.000	2,97	68.300	5,94	73.600	712.400	11.5 of total income
United Kingdom^a	6,035 (a)	20,00	34.800	40,00											
United States^a	8,950 (a)	10,00	8.025	15,00	32.550	25,00	78.850	28,00	164.550	33,00	357.700	35,00			

Key to abbreviations and explanatory note: see next side

³²Source: OECD Tax Databases: http://www.oecd.org/document/60/0,3343,en_2649_34533_1942460_1_1_1_37427,00.html#trs (18.05.2010)

Key to abbreviations:

n.a.: Data not provided

*: some form of sub-central taxation applies

[]: surtax as % of central government tax measured gross of tax credit

(): surtax as % of central government tax measured net of tax credit

a: Basic (fixed) allowance available to all (single) taxpayers without dependents. Where an allowance is determined as a percentage of gross income (rather than fixed), the percentage is shown in square brackets (e.g. [0.15] (a)).

wc: Basic wastable tax credit, non-tapered, available to all (single) taxpayers without dependents.

wc/t: Basic wastable tax credit, tapered, available to all (single) taxpayers without dependents.

nwc: Basic non-wastable tax credit, non-tapered, available to all (single) taxpayers without dependents.

nwc/t: Basic non-wastable tax credit, tapered, available to all (single) taxpayers without dependents.

Explanatory notes:

1. This table reports central government (statutory) personal income tax rates for wage income and the taxable income thresholds at which these statutory rates apply. The table also reports basic/standard tax allowances and tax credits, and surtax rates. The information is applicable for a single person without dependents. The threshold, tax allowance and tax credit amounts are expressed in national currencies. Further explanatory notes may be found in the Explanatory Annex.

2. The first column reports basic/standard tax allowances and tax credits available to all taxpayers (wage income of single persons without dependents). Such reliefs are universally/automatically available and are unrelated to expenditures incurred by the taxpayer, and typically available as fixed amounts or some fixed percentage of income. Where relief is provided in the form of a tapered tax credit applies, the maximum credit is shown.

3. Surtax rates determined as a percentage of: i) taxable income -- shown without brackets; ii) central government tax measured gross of tax credits -- shown with square brackets []; iii) central government tax measured net of tax credits -- shown with round brackets (). Where surtax rates vary with the level of taxable income, the maximum surtax rate is shown.

4. The marginal statutory rates are expressed as a percentage of taxable income and exclusive of surtax (if any). Sub-central tax rates are not included. The marginal income tax rate shown in a given column applies to taxable income in the range given by the immediately preceding threshold column (lower band range) and the immediately following threshold column (upper band range). The first marginal tax rate shown in the table applies to taxable income up to the threshold amount shown in the immediately following column -- where that rate is 0, a zero band applies. The last marginal tax rate shown applies to taxable income in excess of the threshold amount shown in the immediately preceding column.

Country-specific footnotes:

(a) For Australia, New Zealand and the UK, all with a non-calendar tax year, the rates and thresholds shown are those in effect as of 1 July, 1 April and 5 April, respectively.

(b) A new income tax schedule was introduced in 2005, partly based on linear interpolation. In this table, the new schedule is transformed into a usual marginal tax rate schedule. See the Explanatory Annex for more details.

(c) These are the rates applying to income earned in 2007, to be paid in 2008. This table does not take account of the effects of the prime pour l'emploi (PPE). Furthermore, it does

Table 5: Capital gain taxes for individuals³³

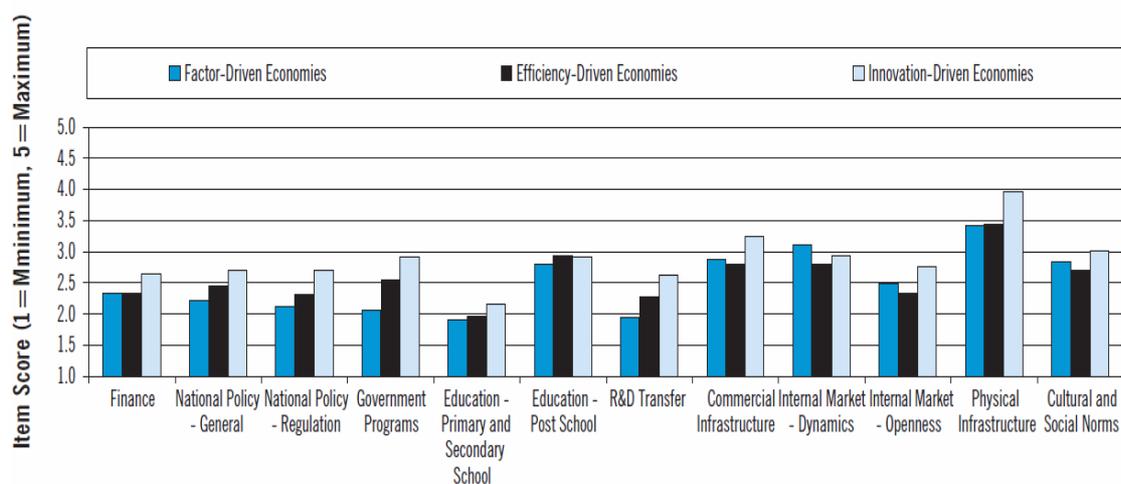
Economy	Capital Gain Tax (CGT)	Note	Considered tax rate
Germany	26,28% (Abgeltungssteuer since 2009)	Capital gains are taxed at a flatrate of 25%+church tax+ Solidaritätszuschlag= 26,28%	26,28%
Italy	12,5%	If the participation exceeds 2 % - 5 % in listed companies or 20 % - 25 % in unlisted companies, CGT is 27 %.	27%
Netherlands	1,2 % for gains exceeding a threshold (€18 146 to €240 166 depending on tax bracket).	If holding is over 5%, taxed at a rate of 25% . Tax relief available for investments in start-up companies.	25%
Austria	25%	Old. No CGT. If the participation is 1 % of shares or more (in the last five years), investment income is subject to half of the average rate of the total income (up to 50 %) for investments held more than one year.	25%
UK	18%		18%
Switzerland	No CGT for residents	Taxed under personal income (marginal 13,2%)	13,20%
USA	No CGT	Short term capital gains are taxed under the personal income tax rate; long term capital gains are taxed under personal income tax but at a lower rate (0 - 15% depending on the bracket)	15%
Canada	21,5%	50% of your profits from capital gains are taxed under your marginal income tax rate (43%)	21,50%

³³ Source: Benchmarking Business Angels (2003) and OECD Tax Databases (18.05.2010)

Table 6: Early stage TEA³⁵

Early stage total entrepreneurial Activity (TEA)	
	2003
Austria ³⁴	5,3
Bavaria	5,2
Canada	8,8
Germany	5,2
Italy	3,2
Netherlands	3,6
South Tyrol	3,2
Switzerland	7,4
UK	6,4
USA	11,9

Table 7: Scores on Entrepreneurial Framework Conditions Rated by National Experts, by Stage of Development (unweighted country averages)³⁶



³⁴ General Entrepreneurship Monitor: Austria GEM National Report 2006

³⁵ General Entrepreneurship Monitor: Canada GEM National Report 2003

³⁶ General Entrepreneurship Monitor: Global Report 2009

Table 8: University Ranking³⁷

University Ranking (Focus on Lifestyle/Biomedicine and Technology/Engineering)					
	No. of Universities under the TOP 100 worldwide (Lifestyle/ Biomedicine)	Place of best university	No. of Universities under the TOP 100 worldwide (technology/ engineering)	Place of best university	Sum
Austria	0	0	1	73	1
Bavaria	1	62	1	45	2
Canada	7	10	7	8	14
Germany	4	42	5	45	9
Italy	0	0	1	57	1
Netherlands	3	56	2	15	5
South Tyrol	0	0	0	0	0
Switzerland	2	49	2	10	4
UK	11	2	10	4	21
USA	28	1	22	1	50

Table 9a: Ranking of R&D Institutes³⁸

Ranking of Institutes	
Economy	Rank(out of TOP 100)
Bavaria	8
USA	1
Germany	8
Switzerland	131
Netherlands	81
Austria	74
Canada	51
Italy	17
UK	94
South Tyrol	17

³⁷ QS University ranking: <http://www.topuniversities.com/university-rankings/world-university-rankings/2009/results>

³⁸ Ranking web of world research centres: http://research.webometrics.info/top3000_r&d.asp (18.10.2010)

Table 9b: R&D Expenditures per capita³⁹

Expenditures for R+D in % of GDP							
	2004	2005	2006	2007	2008	2009	Average
Switzerland	2,90%	3,00%	3,00%	3,00%	3,10%	3,10%	3,02%
Bavaria ⁴⁰	n.a.	n.a.	n.a.	n.a.	n.a.	2,82%	2,82%
USA	2,60%	2,60%	2,70%	2,70%	2,70%	2,70%	2,67%
Germany	2,50%	2,50%	2,60%	2,60%	2,60%	2,60%	2,57%
Austria	2,30%	2,40%	2,50%	2,60%	2,70%	2,80%	2,55%
Canada	2,00%	2,00%	2,00%	2,00%	1,90%	1,90%	1,97%
UK	1,70%	1,70%	1,80%	1,80%	1,80%	1,80%	1,77%
Netherlands	1,80%	1,70%	1,70%	1,70%	1,70%	1,70%	1,72%
Italy	1,10%	1,10%	1,10%	1,10%	1,10%	1,20%	1,12%
South Tyrol ⁴¹	n.a.	n.a.	n.a.	0,55%	n.a.	n.a.	0,55%

³⁹ Euromonitor: Global Market Identification Database (18.05.2010)

⁴⁰ Bayerische Staatsregierung <http://www.bayern.de/Forschung-und-Entwicklung-.333.20895/index.htm> (18.05.2010)

⁴¹ Astat; <http://www.economics.unibz.it/it/public/press/presscuttings/ViewIWPBlob.customHandler?NewsID=29261&language=IT> (18.05.2010)

Table 9c: High Tech Patents per 1 million habitants⁴²

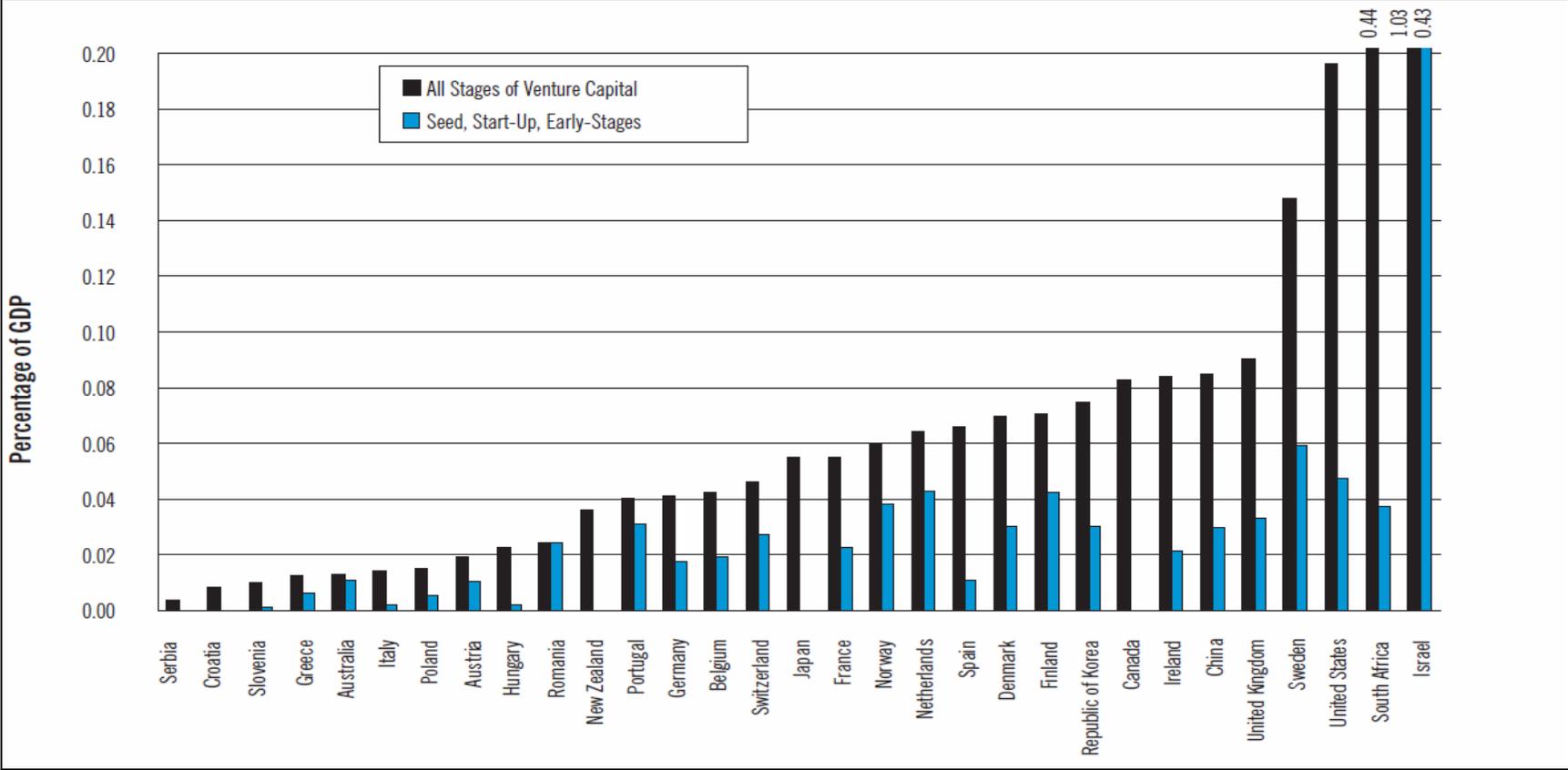
GEO/TIME	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	Average
Netherlands	11,4	47,008	56,325	61,892	42,862	70,149	98,01	76,127	61,494	50,424	42,175	34,858	54,394
Switzerland	21,707	44,322	53,774	56,146	41,893	54,555	63,835	62,867	53,078	42,375	36,117	28,131	46,567
Germany	19,994	36,276	39,703	42,062	38,268	44,55	47,2	48,297	43,359	37,416	30,722	25,492	37,778
United States	4,707	27,416	34,627	34,655	34,316	35,657	36,504	39,522	39,299	35,662	31,057	27,306	31,727
United Kingdom	4,775	18,899	21,441	22,483	22,231	25,384	28,212	30,547	28,547	24,643	19,373	17,574	22,009
Austria	12,803	33,887	27,594	22,753	24,651	26,585	22,689	17,829	18,571	13,504	10,752	9,701	20,110
Canada	10,748	26,408	31,006	27,955	20,257	19,551	18,846	17,727	17,328	15,838	12,602	9,031	18,941
Italy	3,412	7,134	9,607	8,669	8,257	8,446	6,854	7,978	6,315	6,504	5,569	5,145	6,991

Table 9d: Point Distribution for R&D

Economy	Points for R+D institutes	Points for R+D expenditure	Points for High-Tech Patents	Average points
Bavaria	9	9	8	8,67
USA	10	8	6	8,00
Germany	9	7	8	8,00
Switzerland	1	10	9	6,67
Netherlands	3	3	10	5,33
Austria	4	6	4	4,67
Canada	5	5	3	4,33
Italy	7	2	2	3,67
UK	2	4	5	3,67
South Tyrol	7	1	2	3,33

⁴² Eurostat: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=pat_ep_ntec&lang=de (18.05.2010)

Table 10: Venture Capital Investments as % of GDP (2008-2009)⁴³



⁴³ General Entrepreneurship Monitor: GEM Global Report 2009

Table 11: Entrepreneurial Attitudes and Perceptions 2009⁴⁴

	Perceived opportunities	Perceived Capabilities	Fear of failure	Entrepreneurial Intentions	Entrepreneurship as a good career choice	High status to successful entrepreneurs	Media attention for entrepreneurs
Austria	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canada	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Germany	22	40	37	5	54	75	50
Italy	25	41	39	4	72	69	44
Netherlands	36	47	29	5	84	67	64
Switzerland	35	49	29	7	66	84	57
UK	24	47	32	4	48	73	44
USA	28	56	27	7	66	75	67

⁴⁴ GEM Global Report 2009

Table 12: Investment activities of Business Angels⁴⁵

Economy	Total amount invested	Average per capita	Habitants 2009 ⁴⁶
Canada ⁴⁷	3.907.994.640 €	114,96 €	33.993.106
USA ⁴⁸	25.000.000.000 €	81,04 €	308.470.703
UK ⁴⁹	1.461.261.946 €	23,71 €	61.634.599
Switzerland ⁵⁰	20.000.000 €	2,60 €	7.701.856
Bavaria ⁵¹	11.818.182 €	0,94 €	12.520.000
Germany ⁵²	70.000.000 €	0,85 €	82.002.356
Netherlands ⁵³	6.200.000 €	0,38 €	16.485.787
Italy ⁵⁴	19.500.000 €	0,32 €	60.045.068
Austria ⁵⁵	600.000 €	0,07 €	8.355.260
South Tyrol ⁵⁶	- €	- €	503.434

⁴⁵ Foreign currencies were transferred into Euro currency with the average exchange rate of the corresponding year from the European Central Bank (UK: 1€=0,68434 GBP (2000) and Canada: 1€=0,8956 \$ (2006))

⁴⁶ Eurostat Database, Population

⁴⁷ Canadian Government, http://www.sme-fdi.gc.ca/eic/site/sme_fdi-prf_pme.nsf/eng/h_02021.html

⁴⁸ BAND (2009), <http://www.business-angels.de/default.aspx/G/111327/L/1031/R/-1/T/134048/A/1/ID/134053/P/0/LK/-1> (23.05.2010)

⁴⁹ BBAA, Research Report May 2009, data from 2000

⁵⁰ BrainsToVentures AG, press release (2008)
http://www.seca.ch/sec/files/newsletter/pdf-news118/Medienmitteilung_b_to_v.pdf
(23.05.2010)

⁵¹ Netzwerk Nordbayern, <http://www.netzwerk-nordbayern.de/fileadmin/templates/pdf/Imagebrosch%C3%BCre.pdf>

⁵² BAND, <http://www.business-angels.de/default.aspx/G/111327/L/1031/R/-1/T/134048/A/1/ID/134053/P/0/LK/-1>

⁵³ European Commission, Enterprise and Industry,
http://ec.europa.eu/enterprise/policies/finance/data/enterprise-finance-index/figures-ms/business-angel-finance/index_en.htm

⁵⁴ European Commission, Enterprise and Industry,
http://ec.europa.eu/enterprise/policies/finance/data/enterprise-finance-index/figures-ms/business-angel-finance/index_en.htm

⁵⁵ European Commission, Enterprise and Industry,
http://ec.europa.eu/enterprise/policies/finance/data/enterprise-finance-index/figures-ms/business-angel-finance/index_en.htm

⁵⁶ Data of 2009 provided through Mr. Saviane from the TIS Bolzano

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