

Understanding Policy targets

--- First Draft ---

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and

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This report has been prepared for the International Consortium on Entrepreneurship's (ICE) by FORA, a policy research unit in the Danish Agency of Enterprise and Construction. The report follows the project proposal that was agreed upon on ICE meeting in Copenhagen Feb. 2007. The project's objective is to increase our understanding of various policy targets for entrepreneurship, how these are measured, and how their measurement impacts the value of the targets. The main focus of the report is on performance targets.

Introduction

In the 1990s, many countries began to recognise the importance of entrepreneurship and made general statements about their commitment to increase entrepreneurship or at least improving the entrepreneurial environment. Knowledge about entrepreneurship and what factors affected it was still limited, so there were few specific entrepreneurship policies and even fewer explicit measures of entrepreneurship or the impact of entrepreneurs. Policy makers simply equated entrepreneurship policy and policy towards small and medium sized businesses (SME) in general based on the logic that new firms are small and SME policies therefore would benefit entrepreneurs.

Since there was a lack of clarity about what entrepreneurship was, and what the national goals were in relationship to it, there was little data to be found on how entrepreneurial one country was in comparison with other countries. Countries viewed entrepreneurship within their own national context; and while they exchanged information on best practices, there were few attempts to develop comparable statistics across countries.

This situation has begun to change in recent years. Many countries now recognise entrepreneurship policy as a separate field and have explicit goals and objectives for their entrepreneurship policies. Therefore, they have taken steps to improve the measurement of entrepreneurship.

This paper is the first part of a larger ICE project named “Understanding entrepreneurship policy targets”. The objective of the paper is to increase our understanding of various policy targets for entrepreneurship, how these are measured and how their measurement impacts the value of the targets. The main focus of the paper is on performance targets for entrepreneurship. A performance target is a measure of the entrepreneurial process that arguably affects macro economic performance in a country. The second part of the project aims at increasing our understanding of what is needed to reach a given target. The paper is to be discussed at ICE meeting in November 2007. At the meeting it will be decided whether or not the projects is to be continued with part two.

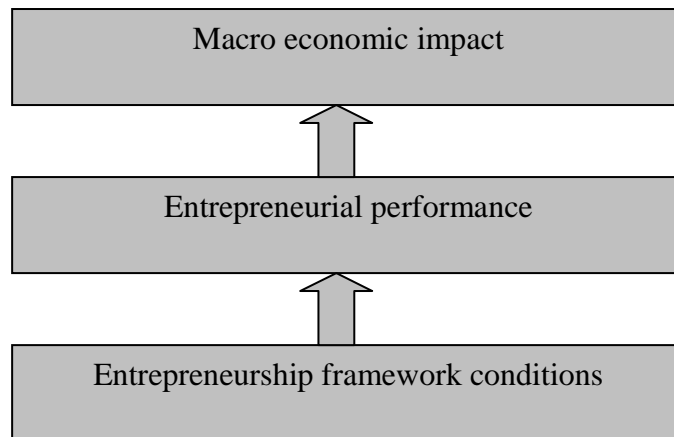
The paper starts out by providing a framework for understanding policy targets. It then discusses the macro-economic impact of entrepreneurship. Based on an understanding of the macro-economic impact the paper discusses possible indicators that can be used as targets for entrepreneurial performance. The choices of these indicators have a large impact on the usefulness of the policy targets and the instruments one should use to reach them. Consequently, the paper discusses the differences of the indicators and the impact of choosing different numerators and denominator in the indicators like e.g. the number of new firms, the number of high growth firms and the number of people engaged in entrepreneurial activities, etc. Policy targets for the framework conditions are then discussed. Finally, some general remarks about target setting are presented.

A framework for understanding policy targets

Many countries tend to focus on targets for the immediate output of policy to be delivered, rather than on the strategic thinking underlining the need to deliver the policy in the first place. A target of “delivering support to 5000 firms by a given date” or “establishing a given course for entrepreneurs before a given date” are examples of targets aimed at the items to be delivered. These targets can be useful from a policy management point of view but cannot provide guidance at a more strategic level.

The framework for understanding entrepreneurship policy can be understood as consisting of three layers – the macro economic impact level, the entrepreneurship performance level and the entrepreneurship framework conditions level (Figure 1).

Figure 1: A Framework for Understanding Entrepreneurship Policy



The *macro economic impact* is the value created by the entrepreneurs, which has an impact on macroeconomic variables like GDP growth or employment. Governments often set overall objectives for their term. These could be to increase the productivity (as in the UK) or to increase employment (as in Finland). The impact box measures how entrepreneurship impacts these overall policy objectives.

Entrepreneurial performance measures actions that are closer to the entrepreneurial process of creating value through identifying opportunities and exploiting new products, processes or markets. This could for example be the creation of new firms or the share of high-growth firms. The performance creates the impact. No single measure of performance can be identified because entrepreneurship affects the economy through many channels. For example, a higher share of high-growth firms will have an impact on job creation and economic growth but may only have limited impact on the environment. Different countries will therefore choose to focus on different indicators of performance depending on their policy objective (the value they wish to create).

A myriad of underlying environmental and sociological factors coupled with the personal attributes of entrepreneurs affect the outcomes of the entrepreneurial process. All of these factors and attributes are expressed in the *framework conditions* for entrepreneurship.

The basic idea of the framework can be illustrated by an airplane analogy. The airplane creates *value* by transporting you from one place to any city you want to go to. The politicians determine the city they want to go to. During the ride the instruments will tell you about the *performance* of the plane such as speed and altitude. These instruments will show you whether or not you are heading in the right direction and if you are flying at the right speed to get to the city in time. The size of the engine, length of the wings and so on are the *framework conditions* that determines performance. If you want to go at a higher speed, you need to make changes in the framework conditions like a fuel pump in the engine or perform major reforms like changing the wings.

Targets can be set at all three levels in figure 1 but the closer they come towards the top level the more relevance they have for macro-economic performance. Targets for the first level can be measured by indicators like GDP growth or unemployment rates. These are not directly related to entrepreneurship and will only briefly be discussed in the following. Targets for the second level can be measured by indicators like share of new firms that experience high-growth. These targets are the main focus of the paper and these targets and the suggested indicators for measuring them will be the subject of a more in-depth review in the following sections. Targets for the third level could be measured by indicators like venture capital investment as share of GDP or even more programme specific indicators such as number of firms having successfully completed managerial training. These targets should as far as possible be focused on the effect they are assumed to have on the entrepreneurial performance.

In the following sections we will address the macro-economic level, the entrepreneurship performance level and level of framework conditions for entrepreneurship.

Macro economic impact of entrepreneurship policy

Theoretically, entrepreneurship policies should be designed to meet a set of macro-economic policy objectives (Storey, 2002). These objectives reflect the governments' main priorities. The United Kingdom government's long-term objective is for example to raise the rate of UK productivity growth over the economic cycle. Finland "aims to achieve economic growth that is much faster than that presented in the economic forecasts for Finland". Furthermore, Finland aims at "raising the employment rate to about 72 per cent by the end of this term. The long-term target is to boost the employment rate to 75 per cent" (Finland's Government Programme, 2007). Not all countries have quantifiable targets at this level. The Danish government for example aims to make "Denmark a leading knowledge society in the world. And we must ensure that nobody is left behind in this process".

These macro-economic objectives vary across countries but in general, they can be grouped in three main groups: job creation, economic growth and poverty alleviation/social inclusion (OECD, 2004). These policy objectives reflect the value that countries want entrepreneurs to help deliver.

The overall impact of entrepreneurship is difficult to quantify for two reasons. First, the economic conditions are affected by countless of factors and the interactions among these factors. Isolating the effect of entrepreneurship is difficult. Second, often only partial indicators are available. The jobs created in a new firm will, for example, affect the employment in other firms, so the general equilibrium effects of these new jobs will depend on the functioning of the total economy.

Policy-makers often overcome the difficulties of measuring macro-economic outcomes by setting policy targets that are closer to the entrepreneurial process and the entrepreneurs and then arguing that these targets affect macro-economic outcomes. The focus of this paper is on the targets, which are measurable and linked to macro-economic performance.

The idea that *entrepreneurship and economic growth* are very closely and positively linked together has made its way since the early works of Schumpeter (1911). An increase in the number of entrepreneurs leads to an increase in economic growth. This effect is a result of the concrete expression of their skills, and more precisely, their propensity to innovate. The link between growth and entrepreneurship has also been substantiated in several later papers (Acs, *et al*, 2005, Audretsch and Thurik, 2000; Scarpetta *et al*, 2002; OECD 2003a).

The idea that *entrepreneurs create jobs* has also been around for some time. David Birch famous work on job creation in America has dominated the views on the subject. In 1981 David Birch showed - despite the conventional wisdom prevailing at the time - that, "*Whatever else they are doing, large firms are no longer the major providers of new jobs for Americans*" Birch (1981, p. 8). Instead, he discovered that most new jobs were created in small firms. Many of these small firms were new firms.

Policies in 1980s were in the UK for example targeted towards stimulating job creation by increasing start-up rates (Greene, 2002). This target was abolished in the 1990s, as research suggests that, if the objective was to enhance employment, implementing old-fashioned "birth rate" policies was difficult to justify from research (Stel and Storey, 2002). The focus is now on increasing the quality of the start-ups and existing firms, as research now suggests that the relative role of smaller firms in generating jobs varies enormously from time to time and place to place. Most small-firm job creation occurs within a relatively few firms - the Gazelles (Birch, 2004).

The links between *entrepreneurship and poverty alleviation/social inclusion* got new support in 2006, when Muhammad Yunus and Grameen Bank got a Nobel price for their "*efforts to create economic and social development from below*". Their micro-credit scheme has proved to be an important liberating force in societies where women in particular have to struggle against repressive social and economic conditions. Several countries have also used targeted programme to increase social inclusions of minority groups.

Countries Policy Targets/Objectives for entrepreneurial performance

Entrepreneurial performance measures actions that are close to the entrepreneurial process of creating value through identifying opportunities and exploiting new products, processes or markets (OECD, 2007). This could for example be the creation of new firms or the share of high-growth firms. The entrepreneurial performance creates the impact on the macro-economy.

No single measure of performance can be identified because entrepreneurship affects the economy through many channels. For example, a higher share of high-growth firms will have an impact on job creation and economic growth but may only have limited impact on social inclusion. Different countries will therefore choose to focus on different indicators of performance depending on their policy objective (the value they wish to create).

The OECD and EUROSTAT have done substantive work on defining entrepreneurial performance and the following sections are based on this work. The performance measures can be group in three main groups, as entrepreneurs create new value either by creating *new firms* or growing existing ones and thereby create *employment* and *monetary returns*.

New Firms

The group of new firms can be measured by data relating to business registers and surveys or by data relating to the people who create the firms (Table 1). A lot of indicators related to firm creation are used as policy targets. Indicators cover the number of surviving and existing firms. These sets can be combined to create additional indicators like net business population growth (birth - death)

or business churning (birth + death). Many ways exist for measuring these three sets of data each with strength and weakness.

Table 1: Firm creation

Based on firm data	Number of new firms Number of surviving firms Firms exist
Based on persons	Number of people starting new businesses

Number of new firms

The measurement of a new firm depends mainly on the definition of what a new firm is? Most countries have some legal requirement for registration of new firms. This is often the simplest measure of business entry. A lot of work has been done within Europe to make these data comparable, so comparisons among EU countries can be based on Eurostat’s business demography data. The requirements are very different in the US and Asian from the EU so targets based on international comparisons should be careful in using these registration data. The OECD/EUROSTAT project has consequently introduced two new definitions of what constitute a new firm – employment birth and economic birth.

A firm has an employment birth when it hires its first employee. The advantage of this indicator is that is easily comparable across countries, as almost all countries capture the first employees of a firm one way or another. The disadvantage is that, all unincorporated businesses with no employees that become incorporated (where only the owner(s) subsequently becomes an employee), are treated as births. Variations in employee birth rates over time and countries can consequently be due to for example a tax change which makes unincorporated businesses change status and become incorporated without any other change in activity level. Despite these disadvantages this measure of start-ups is the best around.

The problem of comparability of firm registration is partly corrected by introducing an economic birth, which is when a firm hires its second employee. The problem with economic birth is that a lot of economic activity is left out. About 40% of all establishments in Denmark have for example less than 2 employees.

Number of surviving firms and Firms exist

Neither survival or exit make good targets for government policy. A few countries have targets for surviving of firms. These measures are some what difficult to understand, as economic theory will tend to describe a death of a firm as a possible effect on aggregated productive. The least productive firms close. This frees up resources for other economic activity. Increasing survival of firms by for example subsidizing them will consequently have a large negative effect on the overall economy. Exits reflect the failure and closure of enterprises within the economy, whatever the demographic event be that a merger, renaming, split-offs, death etc. No countries have exits as a target.

Number of people starting new businesses

The number of people starting new businesses is an alternative measure for firm creation. The advantage of this measure is that the information can be obtained quicker than data based on firm

registrars. The disadvantage is that this data is based on surveys so the precision in the data is less accurate than the registrar data.

The quality and exact formulation of the questions are very important for the usefulness of these data. Entrepreneurship performance is a measure of business activities. This makes the performance indicators of entrepreneurship different from for example indicators of want-to-be entrepreneurs. At any given time a large proportion of the population is thinking/dreaming/planning to become an entrepreneur (*want-to-be*). Only a few of the want-to-be do take steps towards becoming entrepreneurs (*engaged*). Neither the want-to-be nor the *engaged* entrepreneurs create value as no economic activity is performed so they are not included in the performance indicators of entrepreneurship.

The Global Entrepreneurship Monitor does for example measure the share of people engaged in starting up a business by the following question: “Are you alone or together with others engaged in setting up a business”. Ideally, the share of engaged people is directly correlated with the share of people that do enter the market with a new firm or with the quality of the firms that actually enter. Two empirical findings do suggest that no direct correlation exists between number of people engaged in starting a new firms and the entry of new firms. First, US data shows that only 1/3 of the people saying they are engaged in starting a company will actually start an active firm (Reynolds *et al.* 2006). Second, work indicates that the share of people engaged in starting-up a new firm is not correlated with the actual number of people owning young firms or the number of new firms across countries (Hoffmann, 2007). The Global Entrepreneurship Monitors data can therefore not qualify as a performance indicator.

Employment creation

The performance indicators for *employment* cover a large possible numbers of indicators. The simplest measures are jobs created by new firms in their first year, jobs created by new firms in the following years and various modifications of indicators like average share of jobs created in new firms (Table 2). Most countries are able to track new firms over time and can therefore produce these data. Many countries also use the number of self-employment as a proxy for entrepreneurship.

Table 2: Indicators for employment creation

Jobs created by new firms in their first year
Jobs created by new firms in the following years
Employment growth in new firms
Number of self-employment
Number of growth firms based on employment

The OECD work mentions *number of growth firms based on employment* as the key indicators in this group but all of the indicators are relevant targets for countries wanting to stimulate job creation. *Jobs created by new firms in their first year* and *Number of self-employment* might be the least relevant of the indicators as the literature shows that it is only a very little number of the firms that create the jobs and furthermore more than 50% of all new firms close in the first years, so first year employment is a very partial measure.

Monetary returns creation

Not many indicators measure monetary returns. The only currently available indicator is *number of growth firms based on turnover*. Hopefully, indicators of *productivity in new firms* will be developed in the future as these would be highly relevant for the policy debate.

Comparative targets

Most countries tend to set comparative targets like having the highest number of start-ups in Europe. These comparative targets require a normalization of the indicators in order to be comparable across countries. Often little thought is given to the normalization. A number of different denominators can be used. Typically, statistical offices use the population of enterprises active in the reference year of interest but other measures can also be used – for example the working-age population or even GDP. Each measure has some advantages and disadvantages over the others and each is considered in turn below.

Number of active enterprises

The most common denominator is the number of active firms. This will provide indicators of births and deaths rates, which is comparable across countries. These rates are quite close to the OECD definition about entrepreneurship and the rates are closely linked to Schumpeter's work on entrepreneurs as innovators (Malkow, et. A. 2007).

It is important that the number of active firms is defined in the same way as the birth or growth firms are defined. The coverage of the known population of all enterprises, with and without employees, will differ across countries due to different legal requirements. In many countries, only businesses above a certain size threshold are required to register, and these thresholds vary across countries. Typically this means that the coverage of very small, micro, enterprises varies significantly across countries, and, as such, invalidates the use of the entire measurable and observable population of enterprises as a denominator. This is not, however, the case if coverage of the population of enterprises is defined in a consistent way with the coverage of births and deaths.

Similarly, high-growth firms will often be based on a threshold measure like having at least 10 employees. The denominator should in this case reflect that threshold.

A final point, international comparisons based on birth rates are only valid if countries of similar development are compared. Economies in transition, for example those moving from centrally planned to market economies, will generally have fewer market enterprises than in equivalently sized market economies. Birth rates also vary a lot across sectors, so the industrial structure of an economy affects the overall birth rate of an economy. Consequently, comparisons of economies with very different industrial structure consequently need to be corrected for this.

Human (Working-Age) Population

The working-age population is another possible denominator, which is very simple to use because all countries have this data available. Several versions can be used – total population, working-age population and total employment. Working-age population gives the most useful measure of measure of firm birth rates, as the denominator is the people that potentially could be starting new firms.

Using population instead of total number of firms has an important implication for policy. Countries with a large public sector will by definition have a lower firm birth than countries with a small public sector, because new public activities do not count as new firms. Countries with large public sectors will therefore – all other things being equal – have fewer firms than countries with small public sectors. A higher birth rate in the US than for example in Norway based on population does therefore not necessarily imply that the competitive pressure from new firms is higher in the US than in Norway.

Population based birth rates measure private employment contribution of entrepreneurs and not competitive pressure. It can be argued that rates based active firms provides rates close to Schumpeter's view on

entrepreneurs and should be used if the policy objective is to promote innovation and growth (Schumpeter, 1949). Rates based on population are closer to Knight's work and is often used if the policy objective is to create jobs through self-employment (Knight, 1971).

GDP

GDP is the least desirable of the three possible denominators and is not recommended.

Illustrating the Differences

In conclusion, the choice of denominator boils down to a choice between either 'the population of enterprises' or 'the working-age population' and different subset of these. The large differences among the denominators can be illustrated by a small example. The number of new firms in 15 European countries are normalised by 6 different denominators (Table 4). Estonia has, for example, the highest rate of new firms compared to total number of firms, whereas it has a low rate of new firms compared to the population. This is common for transitional economies. Countries with large public sectors like the Nordic countries also tend to perform much better if the number of new firms is compared to private sector employment and not total employment.

Table 4 – Ranking countries based on number of new firms divided by different indicators

	Existing firms	GNP	Population	Work population	Work force	Private sector employment
Estonia	1	2	7	n.a.	6	6
Hungary	2	4	2	2	2	2
Latvia	3	5	14	14	15	16
Bulgaria	5	1	11	10	8	12
Luxembourg	6	17	4	4	4	10
Norway	7	14	6	6	7	5
Czech Republic	8	3	1	1	1	1
Spain	9	6	3	3	5	4
Denmark	10	12	10	9	11	8
Finland	13	13	12	11	14	13
Italy	14	8	5	5	3	3
Belgium	15	15	15	13	12	11
Portugal	16	7	8	7	9	9
Slovenia	17	10	13	12	13	15
Sweden	18	11	9	8	10	7

In general, the six different denominators tell very different stories (Table 5). The correlation between the measures of existing firms and work population is for example negative. The correlation between the GDP measures and all other measures are also very low.

Table 5: The correlation between different indicators

Variable	Existing firms	GNP	Population	Work population	Work force	Private sector employment
Existing firms	1					
GNP	0.468	1				
Population	0.334	0.312	1			
Work population	-0.030	0.132	0.872	1		
Work force	0.349	0.358	0.984	0.859	1	
Private sector employment	0.282	0.317	0.955	0.852	0.957	1

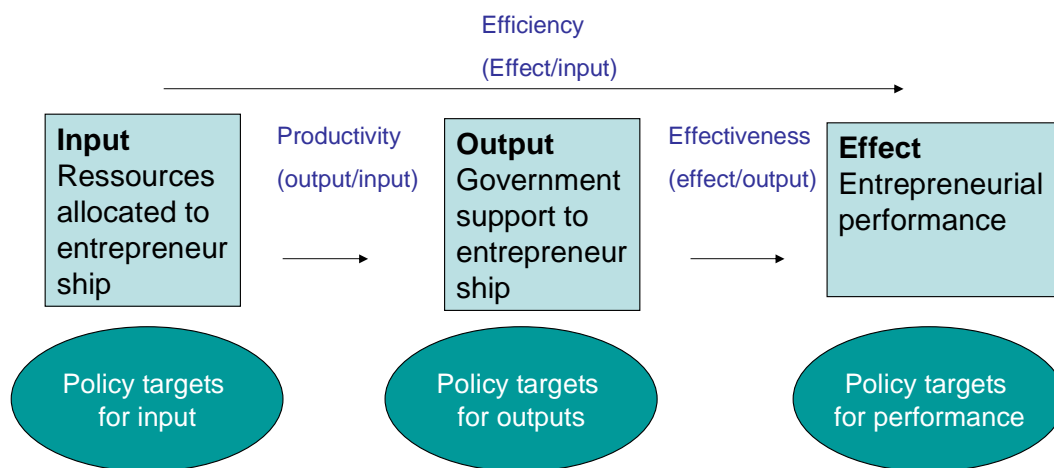
Consequently, the choice of the numerator is far from trivial if countries are using comparative targets.

Policy targets for framework conditions

Framework conditions are the myriad of underlying environmental and sociological factors coupled with the personal attributes of entrepreneurs that have an effect on the outcomes of the entrepreneurial process. It is the handles which governments can turn if they want to affect entrepreneurial performance.

Policy targets for framework conditions can be set to measure the inputs directed towards a policy, the output of the policy and the entrepreneurial performance which the policy seeks to address (see figure 2). Here, the model is applied at the programme level. However, it should be noted that it can also be used successfully at the macroeconomic level.

Figure 2: A model for setting policy targets



Policy targets can be set at all three levels.

- 1) The level of inputs. An important example is in the domain of science and technology policy where the Lisbon agenda sets out that 3 % of GDP should be spend on R&D. There are no considerations as to the outputs or effect such expenditure should have. An example from entrepreneurship policy could be spending \$10 million on entrepreneurship education.
- 2) The level of outputs. Output targets are also within the government's control. They are a step further from input. An example could be that 20.000 entrepreneurs should have completed managerial training with a successful result by 2010. The output targets do not examine the effects of a given policy but only focuses on what is delivered. Therefore, it is important that the output targets are formulated close to the performance target that they aim to address and the link from output to performance targets are stated as clearly as possible.
- 3) The level of performance or outcome. Performance targets are considering the desired changes in society if output targets are achieved. They are the effect of a programme or a policy. They therefore affects entrepreneurship *performance*. An example could be the number of firms in a specific program that experience high growth.

A few definitions relating to policy can be defined on the basis of Figure 2¹. *Productivity* is defined as output per input e.g. number of students taught in special entrepreneurship classes per 1000\$ given to entrepreneurship education to universities. *Effectiveness* is the effect per output e.g. the number of students setting up a new company within one year from graduation in relation to the number of students taught special entrepreneurship classes. Finally *efficiency* is defined as the effect per input e.g. the number of students setting up a new company within one year from graduation per 1.000 \$ given to entrepreneurship education to universities.

Two general comments can be made about targets for framework conditions.

First, there is a need to strike a balance between setting the target as close to the performance level as possible and setting targets that government has a chance of at least partly "controlling".

The need for setting a target close to the performance level can be illustrated by an example from a completely different policy area. Denmark have had targets for how much time the Danish Air force should spend looking for oil spilled at sea. The Air Force met the targets by doing a few big flight searches and then ignored the problem the rest of the year. A better target would have been the number of oil spill they located. Instead of basing targets on inputs or pure output, targets at the framework condition level should as much as possible focus on the potential impact that the framework targets could have on performance.

At the same time there is a need for setting "controllable" targets, which the programme can actually achieve. It is very important that targets can be reached in case the programme is successfully implemented. Otherwise, the setting of the target can have negative motivational consequences for staff and other stakeholders and the process of setting targets will loose its credibility.

¹ Definitions are depending on academic tradition. These definitions of productivity, effectiveness and efficiency are therefore only one of many definitions and is chosen for this specific purpose.

Second, the link from the target for framework conditions to the target at the performance level should be stated as clearly as possible. Often the effects of reaching the targets on overall entrepreneurial performance are unknown. Many countries for example have targets on reducing time it takes to register a business but little evidence exist on the positive impact of these reductions on firm creation.

It is important to have a theoretical understanding of the causality behind the policy targets at different levels. Thereby a more clear direction can be given to each policy target at the output level and the target at the performance level is never let out of sight.

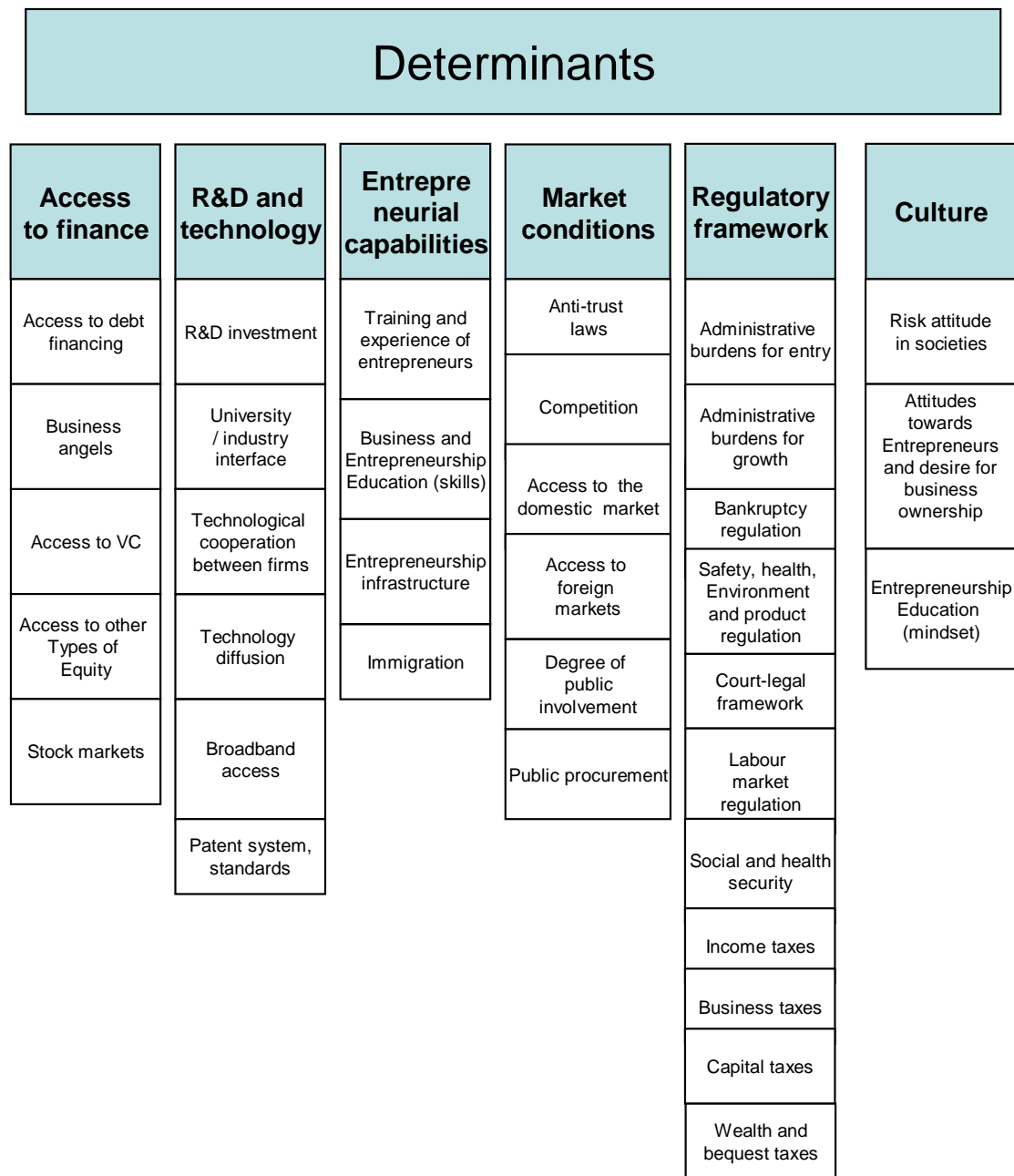
This facilitates policy learning. The hierarchy of policy targets should be clear and it will therefore be obvious that if all output targets are reached and there is still no effect on the performance target(s), then there is a problem with the causality. It will then be obvious that there is a need to revise the policy measures in place and consider elaborating on new policy measures.

The targets at all levels should therefore be linked through a hierarchy of policy targets. The causality should be formulated with a clear idea about *how* the input will lead to an output and *how* this output will have an effect on a performance policy target.

The targets for framework conditions can be useful tools if the two problems mentioned above are addressed when setting the targets.

From Hoffmann (2007) it follows that the framework conditions which have an important impact on entrepreneurship performance can be grouped into 6 groups: Access to finance, R&D and Technology, entrepreneurial capabilities, market conditions, regulatory framework and culture (see figure 3 below).

Figure 3: Framework conditions



Targets can be set in all of these policy areas, Three examples can illustrate this

Venture Capital

In venture capital an example of an input target could be the money allocated by a government to a venture capital fund. An example of an output target could be the amount of money invested in entrepreneurial companies in certain sectors of the economy, which are targeted by the VC fund. The example of a performance or outcome oriented target could be the number of companies receiving investments from the VC fund experiencing high growth compared to similar companies that do not receive such investment.

When evaluating such a programme, the *effectiveness* should be assessed by looking at how many companies experience high growth compared to the amount of money invested in companies. The *productivity* should be assessed by looking at the amount of money invested in companies compared to the amount of money allocated by the government to the VC fund. Finally the *efficiency* of the programme should be assessed by looking at the number of high growth firms compared to the amount of money allocated by government to the VC fund.

Entrepreneurship Education

An example of an input target is the amount of money put into entrepreneurship education. An output target could be the number of students having successfully completed a course on entrepreneurship with good evaluations and an impact oriented target could relate to the number of university graduates starting their own business.

The *effectiveness* of such a programme should be assessed by the number of graduates starting their own business in comparison to the number of students having successfully completed an entrepreneurship course. The *productivity* of the programme should be assessed by looking at the number of students having successfully completed the entrepreneurship course compared to the amount of money allocated to entrepreneurship education. Finally, the *efficiency* of the programme should be assessed by looking at the number of university graduates starting their own business compared to the amount of money put into the programme.

Administrative burdens

Regarding administrative burdens an input target could be a commitment by the government to establish an independent research institute examining administrative burdens for entrepreneurs. An example of an output target could be the number of procedures that it takes to register a new company should be reduced by X. An outcome oriented target should then relate to the amount of new start ups which can be directly attributed to the change in government registration procedures (compared to a comparison group) or if such data is not available, the best possible proxy.

The effectiveness of such a programme should be assessed by looking at the number of new start ups following from the reduction in the number of procedures. The productivity should be assessed by looking at the reduction in administrative procedures compared to the commitment of the government. Finally, the efficiency should be examined by looking at the amount of new start ups compared to the commitment of the government.

Another example considers targets for bankruptcy legislation. Again it is important to have a focus on the performance link (that entrepreneurs should have the possibility of restarting) rather than focus on pure output indicators (average time it takes to process a bankruptcy case). Both these indicators are useful, but the second indicator is only useful as long as it contributes to the first.

Conclusion and the way forward

This paper's objective is to increase our understanding of various policy targets for entrepreneurship, how these are measured and how their measurement impacts the value of the targets. The paper constructs a three level model for target setting and explains the links between the levels. The main focus of the paper is on performance targets for entrepreneurship, as these arguably affect macro economic performance in a country.

The paper identifies three different types of performance indicators, as entrepreneurs create new value either by creating *new firms* or growing existing ones and thereby creating *employment* and *monetary returns*.

The paper also illustrates the importance of getting the numerator right if comparative targets are used. Countries' ranking can shift quite substantive based on different numerators.

Finally, the paper discusses targets at the policy level and introduces a new model for target setting. Policy targets can be set to measure the *inputs* directed towards a policy, the *output* of the policy and the entrepreneurial *performance* which the policy seeks to address. Several examples are introduced and discussed.

The paper is the first part of a large ICE project. It is on the basis of this paper up to ICE members whether or not to continue this work with the second part. The second part of the project aims at increasing our understanding of what is needed to reach a given target.