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A COMPARATIVE ANALYSIS OF START-UP POLICIES IN NORTHERN EUROPEAN COUNTRIES

Master's Thesis

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I have written this master's thesis independently. All viewpoints of other authors, literary sources and data from elsewhere used for writing this paper have been referenced.

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ABSTRACT

Start-up businesses have been identified as economic growth enablers; however, they are faced with several unfavourable conditions that make reaching their potential challenging. Several initiatives are instituted with the aim of creating conditions favourable for them to thrive. Policy instruments have played a key role in ensuring the survival of Start-ups and European countries are reputed to have the best instruments in this regard. This research, therefore, seeks to analyses, comparatively, Start-up policy instruments implemented in six Northern European countries including what they aim to achieve and bringing out the differences existing between them. To achieve this, the area of impact of the instruments were used as criteria to create a framework for comparing the instruments. The result will show that there are differences in the various instruments used in the among the six countries.

Key words: Start-up, Policy, Instruments, Aims

1.0. Introduction

Start-ups are the 'downstream' effect of entrepreneurship and they present the platform for effectively nurturing and implementing new innovative ideas until they become real solutions to real-world problems with paying customers. The search for a real solution for which a customer is willing to pay exposes the 'gamble' that these Start-ups face throughout their life journey. This was captured by Erik Bohemia *et al*. when they described Start-ups as a human institution created with the intention of converting a business idea into new products and services but with high level of uncertainty (2012, p. 151). Notwithstanding the uncertainties and their challenges, Start-ups are regarded as breeding grounds for, and have remained important enablers of, innovation (Carlson & Usher, 2016). There will probably, be little to no innovations if all were left to the existing traditional firms, considering their lethargic and bureaucratic processes (Teece, 1996). As a result, supporting Start-ups has become a very important aspect of government spending in the past couple of decades because their presence is regarded a strong determinant of economic growth and development (Audretsch, 2004).

Start-up activities have direct impact on economic growth and success so, governments that create enabling environments for Start-ups through policy interventions are among the most successful countries, globally (Kollmann et al., 2016). StartupBlinks is a Start-up ecosystem research centre which collects quantifiable data on, and ranks Start-up ecosystems of 1000 cities and 100 countries separately since 2017. The company sources its data from mostly public institutions in different countries serving as local partners who help with data collection. Their evaluation is based on three criteria; the count of Start-ups and supporting institutions; their quality and that of supporting institutions and, also, the business environment and critical mass of each ecosystem. Scores are then awarded for each criterion and that is what goes into the ranking (StartupBlink, 2020).

The quantity score factors the count of Start-ups and other support systems providing resources, access to capital and networking in each city or country. The support system for Start-ups is an important ingredient for their growth. According to StartupBlinks, how the Start-ups are driving innovation and their domain authority in a country or city is what goes into the quality score. Some factors that influence this score are domain authority, monthly visits and customer base of the Start-ups. The last is the business environment and critical mass and this is influenced by the country's business environment, infrastructure and the

ability to freely operate a Start-up in the country. This is where R&D investments and some international indexes such as World Banks ease of doing business and Internet freedom comes into play. These are the factors considered by StartupBlinks in its ecosystem ranking.

Some countries have distinguished themselves as having relatively good ecosystems which seemingly, has no correlation with country size. For instance, in 2019 Start-up report, 3 Nordic countries, known to have small sizes featured prominently in the first 20 of a 100 countries ranked globally (StartupBlink, 2019a). Sweden was ranked 7th whiles Finland and Denmark ranked 12th and 16th, respectively. Also, another small country which is not officially Nordic -Estonia, was ranked 13th ahead of several big-sized countries. In the 2020 version of the same report, even though Sweden dropped to 10th position whiles Finland and Denmark dropped to 13th and 22nd positions, the region's overall score still indicates relatively competitive ecosystems. Estonia was also ranked 11th as it moved up 2 places in the 2020 report (StartupBlink, 2020).

Generally, Northern European countries seem to have strong presence when it comes to support for Start-up and related activities despite their small sizes. This is show strongly in another report where European countries were ranked based on how conducive their conditions are for Start-ups based on 4 determinants; economic health, cost of doing business, business climate and labour force quality. Economic Health data considered general state of each economy and indicators such as GDP per capita, GDP growth rates and unemployment rates were some of the influencers. Data collected for cost of doing business included business operations costs such as corporate taxes, salary expectation ranks and cost of living. business climate scored the ease of doing business, such as ease of starting a business, how the justice system is perceived venture capital funding availability. labor force quality data, attainment in basic and secondary education and availability of vocational training were used to estimate the skill level of a country's workforce. Scores for these went into the ranking. This time, 4 Nordic countries -Norway, Sweden, Denmark, and Finland ranked among the first 10 countries in both 2019 and 2020 (NimbleFins, 2019; NimbleFins, 2020). In 2019, only 12 countries were in the ranking list however, the number increase to 30 for 2020. This time too, Estonia ranked 5th and 12th for 2019 and 2020 respectively. These rankings indicate how much efforts governments invest into Start-ups and related activities and how they impact their respective Start-up scenes. This has, however, never been enough.

This research focuses on Start-up policies in 6 Northern European countries; Denmark, Finland, Iceland, Norway, Sweden, and Estonia. This selection is based on the fact that the Nordic countries are highly innovative (Lundström, 2008a) and also, are considered innovation leaders (Romanainen et al., 2016). These countries also have functional economic cooperation which is the Nordic co-operation. (*The Nordic Together - Uniting the Nordic Startup Ecosystem: Rising North Impact Fund 2016–2018*, 2019). However, even though it is a Northern European country, Estonia is outside the Nordics. The country was added to the list firstly because it is the most competitive country and has the best Start-up results among the transition countries (Laar, 2008; StartupBlink, 2019b, 2020). For instance, in 2019, the country was ranked 13th by StartupBlink, ahead of 3 Nordic countries. It moved up 2 places to be ahead of 4 from the region in 2020 edition of the same report. Secondly, the country's citizens have high educational levels similar to those of the Nordics. Up to 35.9% of its population between the ages 15 to 64 have attained tertiary educational and this position is ahead of Demark (32.7%) and a few percentage points behind Norway, Finland, Sweden and Iceland which averaged 37.1% together (*Europe*, n.d.). Lastly, aside being a small country similar to those in the Nordics, it also has a cultural heritage with the Nordics and according to Lagerspetz, the country has even attempted to change its public image to reflect that of a Nordic country (2003).

1.1. Aims and Objectives

The aim of the research is to analyse and compare Start-up policies in six Northern European countries with particular focus on the different instruments used in achieving the aims. The objective is to analyse – comparatively, the different instruments characterizing the Start-up policies in Denmark, Estonia, Finland, Iceland, Norway and Sweden. Also, an attempt will be made to trace policies that are behind the successes in different contexts. Providing answers to the following questions will help in accomplishing this task:

1. What are the Start-up policies in the focus-countries?
2. What do they aim to achieve?
3. Is there any unique pattern of similar policies in the different contexts?

The rest of the paper is structured in the following manner; Chapter 2 provides the theoretical framework within which this research will be conducted. This will be followed by chapter 3 which provides the methodology used for the research. Results and discussions are in

chapters 4 where I present the arguments on the findings. The conclusion and recommendations will be presented in chapter 5 and, finally, all sources used will be referenced in chapter 6.

2.0. Literature Review

In this chapter, I will present the theoretical framework for the research. The review is subdivided into 2 main themes and these are National Innovation Systems and the role of Start-ups and Start-up Policies Framework used in the focus-countries.

2.1. National Innovation Systems and The Role of Start-Ups

National Innovations System (NIS) consist of Universities, research centres, training centres, industry and government –known as actors, interacting among themselves to enable innovation. It is important to understand that innovation does not happen in a vacuum. It is the coming together of different local institutions to interact, resulting in creating, consuming and diffusing of new knowledge and ideas to enable innovation. NIS is defined as;

"**the set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and which provides the framework within which governments form and implement policies to influence the innovation system**". (Metcalfe, 1995)

The term is also defined as how different national systems create diversity, reproduce procedures and processes and select firms, products and routines (Lundvall, 2007). Thus, different institutions working together creating a unified approach towards innovation. Producing and diffusing new knowledge is key to innovation process and the proper functioning of the NIS. An effective NIS means effective interaction between all the institutions -also called actors, within the system creating the advantage for specific types of innovations to flourish (Edquist, 1997). This mean that all actors have roles to play; either they are producing knowledge or consuming it and this is how knowledge gets diffused across the NIS. Universities and research centres produce knowledge whiles industry and training centres engage in its consumption. To some extent, Universities play a dual role of producing knowledge and, at the same time, consuming it. The consumption is through establishing spinoff. University spinoff commercialises new knowledge, just as the firms do, except that the spinoffs are created in a non-commercial setting (Ismail et al., 2010; Pirnay et al., 2003). Generally, knowledge produced within the NIS is used to create new businesses, new products and improved processes. Government uses policy instruments as the tool to make this a reality. Figure 1.0. show a NIS framework with the various actors.

Being tools that bridge the gap between policy formulation and implementation, policy instruments are the different ways that government 'coerces' its citizens to do what they probably will not do, given their free will (Nispen, 2011). They seek to alter actions and thoughts to, eventually, create change. Choosing which instruments to employ when formulating innovation policy is a very important step to its effectiveness. Making wrong instrument choices impacts the effective implementation of a policy negatively. In most cases, a single instrument is not enough to single-handedly achieve a policy goals (Scordato et al., 2018a). This calls for a policy 'mix' (Edler et al., 2013) –combination of instruments to improve the chances of achieving policy goals. The overall success of innovation policy is largely influenced by how coherent the different combination of instruments are (Edler et al., 2013). As a result, the instrument selection process has become very complex for policy makers. Carefully combining different policy instruments to ensure their overall effectiveness at different levels creates a maze which ultimately affect final outcome of a policy (Edler et al., 2013). Due to the need for different interventions at different stages in the live of Start-ups, targeting them must be a complementary effort of financial and non-financial instruments, and in the right proportions (Edler et al., 2013). Which intervention to employ largely depend on the policy rationale.

So, policy rationales are the reasons for government intervention. Arguments from neoclassical economists suggest that market forces are able to efficiently and equitably distribute resources effectively without any interference. To them, public intervention rather distorts the perfect functioning of market forces (Lambert et al., 2012). However, there is always a gap -a market failure- between theory and reality and that is what free marketeers, on the other side, argue for (Baumol, 2004; Edquist & Chaminade, 2006). Some types of markets failures are information asymmetry and externalities effects (Dollery & Wallis, 2001; Müller & Rammer, 2012) and these constitute reasons why innovation policy is required.

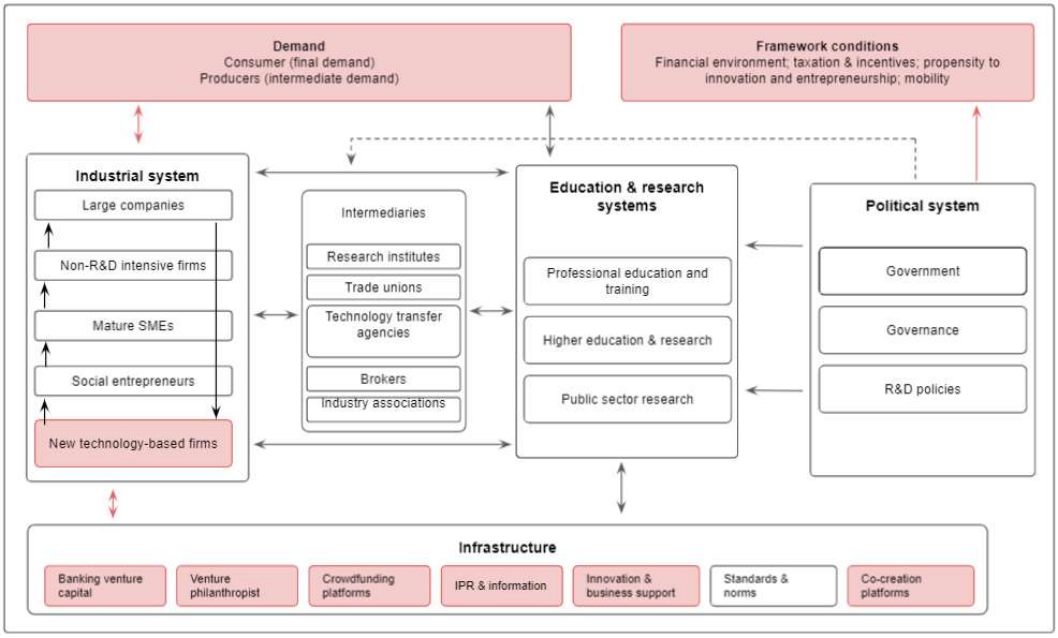

Figure 1.0. NIS framework with some new actors added. The actors highlighted in red are the most relevant to Start-ups and are directly linked to their success

Source: Warnke et al. (2016), Stefan Kuhlmann & Erik Arnold (2001)

Government's responsibility is to coordinate the activities within the NIS and it does so through Innovation Policy (IP). Government is able to control the volume, direction and consistency of the interaction among the actors within the NIS using IP (Freeman, 1995). The term is defined as a combination of all actions taken by public institutions to influence innovation process (Borrás & Edquist, 2013a). This means IP concentrates on addressing bottlenecks hindering innovation and helps government to steers the interaction among NIS actors, providing support that influence innovation.

Government is keen on creating dedicated policies to support innovation because it has been proven to be the single most important component of long-term economic growth (Rosenberg, 2004). As a result, the responsibility rests on government to ensuring that necessary policies supporting innovation are formulated (Edler & Fagerberg, 2017). IP therefore provides the possibility for government to influence innovation process by allocating more –or fewer– resources, and in calculated measures, to targeted specific sectors of the economy. It is argued that creating new firms –SMEs and Start-ups, impacts innovation profoundly (Borrás & Edquist, 2013a). This is because of their contributions to innovation and job creation and by extension, economic growth (Audretsch, 2004). These are reasons are

why governments are keen on tackling market failures – they economic growth.

Information asymmetry is a type of market failure which creates a situation where there is lack of adequate information on one side of the market (Davila et al., 2003; Paschen, 2017; Venugopal, 2017). This is prevalent in transactions where not providing adequate information about a transaction serves the interest of one party (Venugopal, 2017). The practice is particularly disturbing in money markets because it negatively affects access to credit. Financial institutions rely on credit history of businesses in order to assess their ability to service loans (Müller & Rammer, 2012). This is bad for Start-ups because they do not have any credit history. Again, banks do not offer loans on the basis of viability of business ideas. Potentially, some investors may have more information on the viability of a Start-up idea than the founder or vice versa (Akerlo, 1970; Borooah, 2003).

External effect is also another market failure that occurs when the actions of one economic agent affect others (Borooah, 2003). There are three main external effects –network effect, external economies and diseconomies; and spillovers (Borooah, 2003; Dollery & Wallis, 2001; Müller & Rammer, 2012). Network effect is when the existence –or otherwise– of other businesses or technologies provides value for Start-up and its activities (Boudreau & Jeppesen, 2015). This is very critical, mostly for technology Start-ups because their products and ideas create value on existing technologies. Another effect is knowledge spillovers happens when Start-ups end up disclosing vital information on their product prior to entering a market. Now, whether the idea succeeds or not, this vital information will already be out there in public domain (Audretsch & Keilbach, 2005; Dollery & Wallis, 2001). The last effect is external economies and diseconomies and this is the situation where industry size negatively or positively affect the survival of a Start-up (Scitovsky, 1954). In all these cases the, the economic agents have no control over the situation.

Even though Market failures are important determinants of what instruments government employs, it is not an automatic success because innovation is a cumulative process which is also both path and context dependent (Lundvall & Borrás, 2006). Whichever way one looks at these possible paths, the choice to support Start-ups depends largely on the policy rational. The question then is, what is a Start-up and why must governments give it attention at all?

Start-ups are ‘the downstream’ effect of entrepreneurship and they present the platform for effectively nurturing and implementing new ideas. This makes them a fertile ground for

generating, nursing and growing innovations. However, this requires a systemic approach to making it a reality. A definition of Start-ups by Ries in the book, "*Leading Innovation Through Design*", provides a true reflection of the rough and unpredictable life journey of a Start-up. Ries said a Start-up is "a human institution designed to create new products and services under conditions of extreme uncertainty" (2012, p. 151). So then, what makes them important?

It is argued that the creation of new firms is a very important part of innovation because that is when new products and services with economic and social significance come from (Borrás & Edquist, 2013a). Government spending on Start-ups will not yield any result if efforts to help new entrepreneurs found and sustain new businesses is not added to the equation. The Australian government, for instance, has invested more than half a billion AUD over the last 5 years in a bid to make funds accessible to Start-ups and, generally, innovation activities in Queensland (StartupBlink, 2019b). However, these efforts are useless if new businesses converting ideas into products, services or processes and offering value, are not founded.

A measure of entrepreneurship in terms of number of established Start-ups has confirmed a positively correlation between Start-ups and economic growth (Westlund & Olsson, 2011). The relevance of Start-ups in the innovation process is rooted in the fact that they create innovative solutions from new ideas and improve existing processes which usually present immense scalable commercial value. Start-ups spend very little on R&D comparatively but have a rather significant share when it comes to creating new products and services (Audretsch, 2004). As well, they constitute one sectors of the economy that complements job creation efforts by the government, improving household income and government revenue, ultimately. These make Start-ups crucial to innovation process and also, establishes the need for government support at every stage of their growth. The different types of support are captured in the Start-up policy framework and this is discussed in the next section.

2.2. Start-up Policies Framework

Perhaps an overview of the stages in starting a new business will provide some idea on the challenges they face. It will also help situate the role of Start-up policy and policy framework in a proper perspective. Anyone thinking of setting up a new business has four miles stones to cross (Müller & Rammer, 2012). Crossing these milestones comes with several hurdles and a combination of these hurdles, happening at different stages, make the

Start-up journey volatile. The next few paragraphs highlight the different stages that a Start-up business travels and the challenges they face may face.

The ideation stage, seed stage, Start-up stage and the expansion stage (Cukier & Kon, 2015; Mueller et al., 2012; Salamzadeh & Kawamorita, 2015) form the major milestones that every Start-up business must cross to reach self-sufficiency. These stages may be named differently in different contexts and the list here may be expansive but the activities do not vary much.

An entrepreneur identifies a business opportunity or a solution to an existing problem and makes the decision to pursue it (Cukier & Kon, 2015). At the ideation stage, there could be several ideas on how to approach the opportunity or solve the problem. This is where generating, gathering, and assessing of ideas happen leading to choosing the highly potential one for implementation (Kurt et al., 2017). These ideas remain ideas until the entrepreneur goes through processes of validation (Müller & Rammer, 2012).

The seed stage is where the entrepreneur develops a business model and investigates market conditions including market potential, latent competition and costs (Müller & Rammer, 2012). Are all the resources including finance and technologies required for the product to succeed readily available? At this stage, the Start-up is focused on investigating the viability of the product. Also, all research that needs to be conducted on the product is carried out at this stage (Albers et al., 2008; Salamzadeh & Kawamorita, 2015).

Business registration processes are carried out and product development begins at the Start-up stage (Mueller et al., 2012). An office premises is secured and required equipment for the business, acquired Also, first employee is recruited. Access to finance and ease on bureaucratic processes is crucial at this stage (Müller & Rammer, 2012).

At the expansion stage, the business is established; the product is selling with an impressive client base. Production is scaling and market response is positive leading to inflows of income. This stage is often the initial attempt the Start-up makes at committing resources to a growth strategy (Churchill & Lewis, 1983; Müller & Rammer, 2012).

Different interventions are required at each of these stages and their effectiveness largely depend on the timing. The right intervention at the right stage of the process is key (Müller & Rammer, 2012; Sekliuckiene et al., 2018). The next few paragraphs explain some challenges that they usually will be faced with.

The most common challenges of Start-ups are grouped into four main categories, namely; human resource, financial, support mechanisms and environmental elements (Salamzadeh & Kawamorita, 2015).

Start-ups founders often point to their teams when asked about the source of their success. This is to say that human resource play a significant role in Start-ups success (Nascimento, 2017). To Start-ups, people with the right, attitudes and skillset are important assets. Unfortunately, it is commonplace to have Start-ups lacking people with the right skillset, mindset and experience (Giardino et al., 2014) critical their success (Salamzadeh & Kawamorita, 2015). This is because they do not have the finances to attract and motivate experienced minds. Rather, they offer some flexible with the hope that it will attract talents. Generally, also, Start-ups are more prone to experiencing inefficient human resource management practices (Chatterji et al., 2018) which adversely affect their success.

Funding limitation is by far the most acute challenge that Start-ups face leading to their early exits. Most Start-ups use bootstrapping at the early stages, getting family and friends, plus their life-saving to invest in their idea (Vanacker et al., 2011). This is, however, not sustainable because once the funding runs out, it jeopardizes the product building process for the (Okrah & Nepp, 2017). At this point, founders are forced to find external funding which come with its own challenges (Dollery & Wallis, 2001; Müller & Rammer, 2012). (Dollery & Wallis, 2001; Müller & Rammer, 2012) Also, even when they have access to open market financing options, they may not have credit history or collateral to back any loan applications (Huyghebaert, 2006). Without funding, operation is stalled; salaries can't be paid and employee's morale falls. It obviously affect major aspects of the Start-up operations and can kill the business altogether (Salamzadeh & Kawamorita, 2015).

Isenberg (2011) presented a '*six domains*' diagram depicting the various elements whose presence, together, create the environment for all innovative activities to succeed. These are policy, finance, markets, culture, support and human capital. It is important for these elements to be present and, in the right proportions to make the environment conducive for Start-ups. Policy is key to Start-up survival; however, its formulation and effective implementation rest on political will and that poses a threat to new businesses (Kozubikova et al., 2019). The unavailability of funding options; venture capital, angel investors and high interest rates makes the environment unfriendly (Hellmann & Puri, 2002). Hostile market conditions, such as competition and market uncertainties can prevent innovative products

from succeeding (Robinson, 1990). Going further, the general worldview of people and their upbringing affect how they perceive uncertainties Hofstede (2011) which consequently affects how receptive they are to new situations, innovation and innovative products. Non-availability of support mechanism such as incubators in science and technology parks (Gursel, 2014), Start-up grants and government contracts (J. Doutriaux, 1991) also weigh heavily on Start-up success. Lastly, the presence of a human resource pool of creative and talents makes the development and growth of Start-ups successful. These all make up the environment within which a Start-up can thrive.

Finally, the availability of support mechanisms either by the state or private institutions is another important determinant of Start-up success is. Start-ups are infant businesses that cannot survive without some form of support (Watson et al., 1998). So, different institutions need to be involved at different stages of their development with different forms of support (Vekic & Borocki, 2017). Mechanism such as business incubation in science and technology parks must be available and tailored to the needs of Start-ups at different stages of their growth (Gursel, 2014). Also, incentives that encourages and support university spin-offs are necessary for Start-ups to thrive. There is also evidence that peer advice and formal training is a form of support to Start-ups and has significant effect on their survival (Chatterji et al., 2018). If all these don't exist, growing successful Start-ups becomes difficult and failure is highly probable (Salamzadeh & Kawamorita, 2015).

Creating a conducive environment and making the market more open to the new businesses until such time that they become self-sufficient is important. Which is why Start-up policy has become a very important aspect of innovation policy. The term may vary from country to country; however, the purpose remains same –to help Start-ups succeed.

2.2.1. Start-up Policy

Start-up policy is that aspect of IP that employs a combination of different instrument with different aims targeting Start-ups at different stages of their growth. By definition, Start-up policy is a mix of different policy instruments coherently working together to achieve an overall goal (Edler et al., 2013). The main purpose is to stimulate the formation, growth and survival of Start-ups and SMEs. This is because an increase in Start-up activities has been directly linked to increased employment rates, increased household income and decreased unemployment rates (Kollmann et al., 2016). There is no policy instruments which can single-handedly stimulate the desired atmosphere for Start-ups to survive (Scordato et al.,

2018b). Instead, it is the coherent interaction of different instruments at different levels, supplementing one another, that creates the atmosphere for their survival (Edler et al., 2013). Instruments that address all Start-up activities are under the umbrella called Start-up policy. A Start-up policy framework maps all the instruments for supporting Start-ups.

Since Start-ups go through different stages in their journeys, the different instruments that see them though each of the stages are grouped into three broad categories forming a framework. The three categories are Start-up promotion instruments; framework conditions and market entry influencing instruments and, instruments that affect early business growth and target-groups (Guimón, 2013; Müller & Rammer, 2012; OECD, 2012a). The purpose of the framework is to aid policy makers in selecting the appropriate instruments that, depending on their specific aims, will minimize failure.

These include instruments that seek to create awareness on and promote Start-ups and entrepreneurship through education; media campaigns; establishing award schemes and other media related activities (Guimón, 2013; Müller & Rammer, 2012). Instrument under this policy groups include the provision of information and advisory services to entrepreneurs on how to start a business (Müller & Rammer, 2012). This can be accomplished through business incubation and establishment of science and technology parks (Albort-Morant & Oghazi, 2016; Guimón, 2013; van Weele et al., 2017). Business mentoring, coaching and networking platforms are made accessible to them, as well.

Framework conditions and market-entry influencers are instruments that improve ease-of-doing-business for the Start-ups – competition policy such as antitrust laws; business regulations that affects business registration procedures and other legislations bordering around bankruptcy (Müller & Rammer, 2012; OECD/EC, 2016a). In fact, all strategies meant to influence Start-up market entry. Introducing tax regimes that favour Start-ups over existing businesses and establishing favourable intellectual property laws to protect knowledge-based Start-ups and research commercialization (Müller & Rammer, 2012; Valliere, 2010). Finally, introducing flexibility in regulatory and administrative regimes that weigh heavily on Start-up resources.

Policies that affect early business growth are are instruments that ensures that; conditions such as R&D tax breaks are favourable and accessible to Start-ups so that; they can bid for public procurement contracts; there is easy access to debt and equity financing and capital –

grants, loans, venture capital for Start-ups (Müller & Rammer, 2012). It ensures that advisory services and training on management skills are available to Start-ups (Davila et al., 2010). Also, there are specific bracket of businesses – such as SMEs, high-growth firms, high-tech firms at different level of their growth stages; or people that are more likely to found companies that generate value –for instance, faculty students in university spinoffs or former employees in the case of corporate spin-offs– are targeted for policy support (OECD, 2012b; OECD/EC, 2016b).

This framework forms the pool of policies and instruments from which policy makers select to create Start-up policies depending on what is to be achieved. The policy framework is presented in Table 1.0 and it is a 4-column table containing a more concise version of the Start-up policy framework. Also, visuals of a fairly structured framework with the different policies and instruments in separate boxed and so are the general aims and the many challenges faced by Start-ups is also presented (see Figure 2.0).

Table 1.0

Start-up policy framework. Column (1) contain the countries, column (2), the instruments, the policy aims are in column (3) and the column (4) contains Start-up challenges.

(1) Policies	(2) Instruments	(3) Policy aims & objectives	(4) Start-up challenges
Funding & access to finance	Seed funding Start-up grants Start-up loans	Creating new jobs & reducing unemployment	Financial Challenges
	Business angel networks	Enhancing innovation & new technology	
	Venture capital	Enhancing innovation & new technology; accelerating structural changes	
	Loan refinancing for Start-up loans (VC) Guarantees for loans Direct financial support	Creating new jobs	
Framework conditions & administrative barriers	Easing business registration processes Flexing banking regimes Bankruptcy legislations	Creating new jobs & reducing unemployment Increasing competition	Environmental elements
	Reduced corporate tax		

Taxation & social contribution regimes	Tax breaks Flexible social security contribution requirements	Creating new jobs; increasing competition	Environmental Elements
Competition & market entry policies	Antitrust measures	Enhancing innovation & new technology; Increasing competition	
	Flexible licensing & compliance requirements for Start-up	Increasing competition; accelerating structural changes in the economy	Environmental Elements
	Procurement deals	Increasing competition; Enhancing innovation & new technology; Local economic development	
	IPR laws for knowledge-based Start-ups	Increasing competition; Enhancing innovation & new technology	
Group policies	Support for high-growth firms Support for innovative small firms & SMEs	Creating new jobs & reducing unemployment; Local economic development	support mechanism
Business mentoring, coaching & training	Business Advisory services Management skills training Incubators & accelerators Legal and management advice	Increasing competition; Enhancing innovation & new technology	support mechanism Human Resource
Networking initiatives	Networking platforms Science and technology parks	Enhancing innovation & new technology	support mechanism

Source: compiled by author, 2021 (Müller & Rammer, 2012; OECD, 2012a; OECD/EC, 2016a)

The Start-up policy framework with policies and policy instruments and how they connect to the policy aims and general Start-up challenges earlier discussed were captured in figure 2.0.

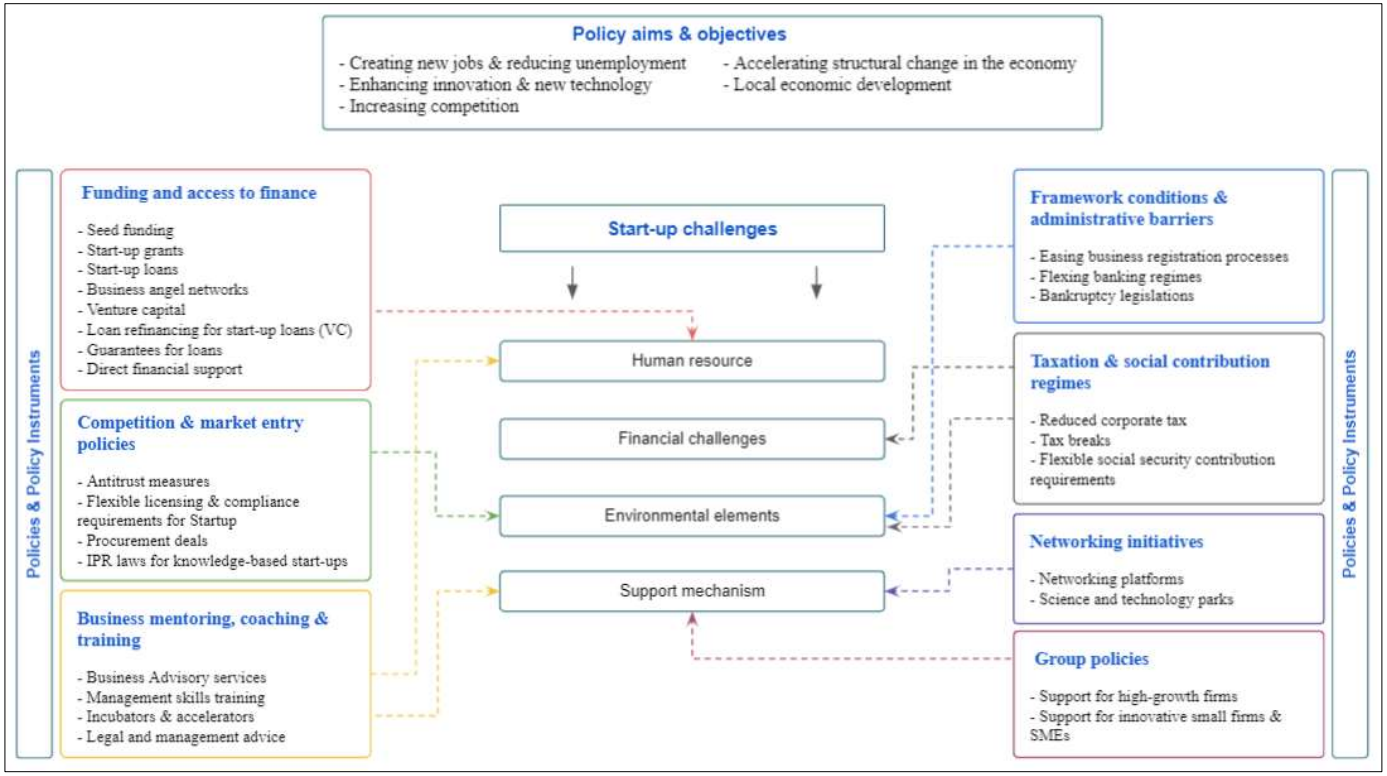

Figure 2.0. The Start-up policy framework showing the policies and policy instruments and how they connect to the policy aims and general Start-up challenges

Compiled by author, 2021

Figure 2.0 presents fairly complex Start-up policy framework with the different policies and instruments connecting to the general policy objectives and the many challenges faced by Start-ups. The boxes on the extremes left and right contain the policies and related instruments. The middle section has the Start-up challenges and the top has the policy aims. For the policies and instruments, each box has a specific policy in bold blue text at the top and related instruments under it in plain text. Also, each box has, at least, one directional arrow pointing to a challenge that can be solved using the instruments it contains. A box has multiple arrows for instances where the instruments in it can solves more than 1 challenge. There are 2 arrows, one each from side of policy boxes, pointing to the policy objectives at the top and this indicates that they represent means of reaching the objectives

What a Start-up policy aims to achieve is an important factor that governments consider when formulating the policy. The overall aim of the policy provides a basis for instruments selection. According to Müller & Rammer (2012), some five broad aims and objectives that governments focus on when formulating Start-ups policies are: to create new jobs and reduce unemployment; increase competition; enhance innovation and new technologies; accelerated structural changes in the economy and economic development (2012).

It has been proven over time that new firms create more jobs on average than existing firms (Birch, 1979; Neumark et al., 2011). This revelation led to a shift in attention among politicians towards the creation of, and the support for new smaller enterprises. Therefore, public support for Start-ups is an indirect support for job creation; either as an employer creating jobs for several unemployed or as moving from unemployment to self-employment. This directly impacts the entrepreneurship culture in the society (Thurik et al., 2008).

Competition pushes firms to find more efficient means of production and the result of this is lower prices (Busso & Galiani, 2015) and improved products and quality service for the consumer. Start-ups usually enter the market with new improved methods of production which tend to be cheaper than the methods used by the tradition firms so they introduce cheaper products as a result. Public support for Start-ups is, therefore, a way of introducing competition and forcing efficiency in the market (Müller & Rammer, 2012). Other forms of competition could be targeting the economic sovereignty of a country, for instance, globalization leading to the influx of cheap products already produced in the country (Wang, 2004). The response could be introducing incentives for innovative and cheaper production methods or for an innovative alternative to the competition.

Start-ups that survive competition from existing and entrenched firms do so by innovating. They are famous for product and process innovations; introducing new products and better (cheaper and faster) processes. Start-ups therefore present opportunity for new technologies to be commercialized and scaled making them agents of innovation. Supporting Start-ups in this regard equals to promoting the idea of people starting their own businesses. It also promotes the use of new technologies and serves as an incentive for more academic researchers and employees of existing firms to innovate by starting their own businesses. In the end, more jobs are created, and better quality of products and services made available to consumers.

Start-ups use new methods of production, rendering the old existing methods obsolete. They may be referred to as agents of change because they engage in what is called 'creative destruction' (Schumpeter, 1934; Müller & Rammer, 2012). Creating new products and new processes can lead to continuous adaptation and evolutionary progress of the economy (Müller & Rammer, 2012).

Another aim for supporting Start-ups is to create equal opportunities for people across all regions in an economy. It is common for people to move from regions with less opportunities to others with higher chances of success. Promoting Start-ups in less endowed regions can lead to curbing 'internal brain-drain' (Müller & Rammer, 2012). Setting up new firms in regions with less chances of success ensures that capital stays and circulates within the region. Talented people are motivated to remain since they have the chance to be successful.

These are some policy goals that Start-up policy aims to achieve with Start-ups policy. The key motivation is to improve the economic conditions of the country.

So, considering the many instruments that combine to form a 'holistic' Start-up policy, how has the countries under consideration been solving the afore-mentioned challenges that Start-ups face?

Several countries in Northern Europe made changes to their trade and economic policies to give room for Start-up policy. For instance by 2003, Sweden, Denmark, Iceland and Estonia have all shifted to a more Start-up-friendly policy regime where interventions were made to support Start-ups (Lundström, 2008b). Estonia, also within the same year (2003), instituted policies that sought to improve entrepreneurial activity in the country as did the other countries in the Nordic region. OECD reports on Start-up performances has consistently

ranked Finland, Sweden, and Denmark, among the best because they offer Start-ups better chances of survival and growth, comparatively. StartupBlink(2019a), an institution that relied on raw data and algorithms to rank 100 countries by their Start-up activities, listed some of the focus-countries among the best performing countries globally. The institution considered three metrics in the rankings – the number of Start-ups and other auxiliary organizations (quantity); the quality of the Start-ups and other auxiliary bodies; and the business environment and critical mass. Table 2.0 shows the performance of the six focus-countries in each of the three factors considered in the ranking.

Table 2.0

The performance of the focus-countries in the 2019 Global Start-up Ecosystem ranking by StartupBlink

Country	Rank (1-100)	Quantity score	Quality score	Business score	Overall score
Sweden	7	0.19	2.87	9.71	12.77
Finland	12	0.11	1.63	1.62	11.37
Estonia	13	0.10	1.52	9.64	11.27
Denmark	16	0.14	0.65	9.87	10.66
Norway	46	0.05	0.07	8.30	8.41
Iceland	58	0.02	0.29	5.35	5.66

Source: compiled by author, 2021

Rank (1-100) in Table 2.0 is the position of each country out of the hundred countries measured. The ranking was influenced by the quantity of Start-ups, their quality and the business environment of each country. Discounting factors included significant Internet restrictions (StartupBlink, 2019b). All scores for each country combined to form the 'overall score'. Also, Table 3.0 presents venture capital for the focus countries.

Table 3.0

The presents venture capital investments - in million dollars, between 2014 and 2018 by the focus-countries

Country	2014	2015	2016	2017	2018	Totals
Denmark	89.54	80.59	102.45	113.91	333.34	719.81
Estonia	14.08	4.21	8.02	1.75	16.99	45.05
Finland	163.65	121.30	143.58	156.44	263.75	848.72
Iceland	-	45.6	-	-	-	45.60
Norway	120.14	72.09	111.21	99.77	92.41	495.63
Sweden	382.10	193.01	261.39	279.04	485.45	1601.00

Source: OECD Stats, compiled by author, 2021

It is important to know how many new enterprises were created during 2014 and 2017 -an important period for this research. Table 4.0 contains count of new enterprises at the end of quarter four of each of each year. There was no data for 2018 as at the time of collecting this data. The number of new enterprises created is, to some extent, an indication of how easy it is for businesses to be formed and the availability of necessary support systems to sustain them

Table 4.0

The number of new enterprises created in the focus countries between 2014 and 2017

Country	2014	2015	2016	2017
Denmark	97.35	99.78	96.82	92.89
Estonia	62.47	63.67	64.3	66.73
Finland	74.7	87.61	90.08	86.68
Iceland	97.56	101.34	99.07	96.32
Norway	124.28	123.31	122.86	121.18
Sweden	99.53	101.85	98.9	94.37

Source: OECD Stats

In this chapter, I have examined NIS and the role of innovation policy in NIS as well as how Start-up policy helps in fuelling the growth and survival of Start-ups in an economy. Also, about what works has done on Start-up policies in the six model countries, the types of instruments used and the rationales.

In the next chapter, I present the methodology with which I went about collecting the data and analysing it.

3.0. Methodology

3.1. Introduction

In the previous chapter, a review of the literature establishing the theoretical framework of this research. In this chapter, the methodology used for the research is explained. The research aims 'to compare Start-up policies in six European countries with particular focus on the different instruments used in achieving their aims'.

To achieve this aim, qualitative research approach was employed and secondary data was collected. The research questions, formulated suggested this approach and this was pointed out by Robson & McCartan (2016) that the research questions can dictate the approach for data collection (p. 27). Besides, qualitative approach is widely used in the social sciences in measuring experiences, meanings and perspectives (Hammarberg et al., 2016). It is believed that this method helps with measuring phenomena which is fluid, dynamic and constantly changing depending on place and time (Antwi & Hamza, 2015). This relates to Start-up policies because the fact that it was successfully implemented in one country or ecosystem does not necessarily mean that it can be successful if implemented in another. The key research questions were "what are the Start-up policies in the focus-countries?" and "what do they aim to achieve?". The core data for answering these questions were documentary data on Start-up policy and strategy. These are fluid and changes with place and time meaning it is path and context dependent (Lundvall & Borrás, 2006).

Some available methods for gathering data in qualitative research approach are interviews, focus groups, case studies and documentary analysis (Antwi & Hamza, 2015; Palmer & Bolderston, 2006; Robson & McCartan, 2016). Apart from the focus group method; interviews, particularly, via telephone, case studies and documentary analysis all have inherent advantages and are used widely so I could have been employed them in this research. However, documentary analysis had inherent advantages that best suited the demands of this research, making it a preferred choice over the others. Telephone interviews may be quick and direct when collecting information at minimal cost and allows for clearing all doubts promptly (Bolderston, 2012); but respondents are sometimes not uncooperative and this is a major setback. Too, they either withhold vital information or introduce biases in their responses even when they decide to respond (Robson & McCartan, 2016). Focus groups is expensive timewise and financially and is beyond the budget of this research. Lastly, case

studies is for research that requires in-depth and multi-faceted understanding of a topic (Crowe et al., 2011). This approach could not have been entirely useful in this research because the research questions do not aim take a granular approach to understanding Start-up policy in these countries. This left me with document analysis.

Document analysis involves systematically collecting and analysing documentary evidence, both printed and electronic, systematically in order to answer specific research questions (Bowen, 2009; Frey, 2018). The systematic procedure is important because the documents artefacts is the data and a wide range of these needed to be analysed (Robson & McCartan, 2016, p. 346). Therefore, to ensure due process is followed, the process is important. It is inexpensive and unobtrusive; is provides better transparency and wider coverage; it is relatively stable and can be replicated with reliable results (Bowen, 2009; Frey, 2018; Robson & McCartan, 2016). Despite these advantages, documentary analysis is associated with low retrievability; insufficient details; selection biases and could result in lose of context due to reformatting (Bowen, 2009; Frey, 2018; Robson & McCartan, 2016; Yin, 1994). However, its advantages outweighs its disadvantages which makes the disadvantages 'inherent flaws' instead of real disadvantages (Bowen, 2009).

3.2. Document Selection Process

To effectively answer the research questions, I gathered documents, reports and journal articles on the topic for each focus country –Denmark, Estonia, Finland, Iceland, Norway and Sweden. Then keywords such as Start-up, policy, strategy, national, economic, entrepreneurship and innovation were used in different combinations together with the country names. Example, "*estonian+entrepreneurship+strategy+policy+startup+research*" was one of the queries used for sourcing links to relevant websites in Google search. A search in Google provided all relevant links to mainly official governments other institutions such as international organizations and ranking institutions. The search procedure was systematic and this involved skimming, reading and interpretation (Bowen, 2009). Skimming allowed for a cursorily scanning through several hundreds of documentary evidences for a gist on its content to ascertain whether or not it has some relevance to your topic (Bowen, 2009; Maxwell, 1972). To ensure that selected documents did not extend beyond the relevance of the research questions and, at the same time, have a fair representation of each country, I took measures to limit the selection and the criteria were

1. Since I was dealing with Start-up policy and strategy documents, I expected to see the duration of the implementation period of each document. So, I created an age bracket using the most relevant year range as the age bracket for inclusion (Frey, 2018). I chose 2014 – 2018 as the implementation bracket and this meant that each document included in the final count must have been created in or after 2014 at the earliest. An exception was made for Iceland, which had a strategy document spanning 2011- 2020. Also, documents which spanned only one year we included in the list, as long as the year us within 2014 and 2018. The end date was however relaxed because I did not intend to evaluate the impact of these strategies on their respective ecosystems.
2. Then I focused on geographical representation (Frey, 2018) where I ensure that ANY document that contained, at least, a name of the focus-countries; Denmark, Estonia, Finland, Iceland, Norway and Sweden.
3. Lastly, I ensured that selected documents were published by governments of the focus countries or supranational governments, economic and political cooperation to which the focus countries are members. Example, the European Union (EU), European Economic Area (EEA) and the Nordic political and economic corporation.

After this initial process, I was down to 32 documents. The next step was to sieve through them and drop those which are not focused or irrelevant to answering the question.

A final thorough review of the documents was done to reduce the number of documents in the selection by dropping the less relevant and redundant ones. This ensured that the content of the remaining ones was relevant to answering the research questions. The criteria were;

1. Any document which is a reproduction of an original publication by a government of, at least, one of the focus countries is dropped.
2. Documents published before 2014, except for Iceland, and excluded.
3. Finally, documents that didn't contain any policies specific to Start-ups or SMEs were excluded.

17 of the documents did not meet the criteria and were excluded from the final list. 12 out of the remaining 15, constituting 80% were policy documents; 2 constituting 12.3% were reports and 1 which forms 6.7% contained a ranking list. The documents that met the criteria were gathered in Table 5.0.

Table 5.0 is a 5-colums table that provides the final list of 15 document along with their demographics.

Table 5.0

(1) No.	(2) Country	(3) Document Title	(4) Year	(5) Focus
1	Denmark	National Operational Programme for the European Social Fund	2014-2020	Government policy document on entrepreneurship
2	Denmark	Innovation Fund Denmark 2015 Strategy	2015	Government disbursement of funds for innovation
3	Denmark	The User Experience of Innovation Fund Denmark	2018	Government innovation fund
4	Estonia	Estonian Entrepreneurship Growth Strategy	2014-2020	Government policies on entrepreneurship growth
5	Estonia	Estonian Research and Development and Innovation Strategy	2014-2020	
6	Finland	Programme for Sustainable Growth and Jobs	2014-2020	Actions points on structural fund on growth and jobs
7	Finland	Subsidies and allowances	-	A running government program for entrepreneurs
8	Iceland	Iceland 2020	2011	Governmental policy statement for the economy
9	Iceland	S&T Policy and Action Plan	2014-2016	Science and Technology Policy
10	Iceland	S&T Policy and Action Plan	2017-2019	Science and Technology Policy
11	Norway	Good ideas – future jobs -	2016	Government policy on entrepreneurship
12	Norway	Long-term plan for research and higher education 2015–2024	2015-2025	framework for how the Government will reinforce research and education
13	Sweden	Sweden's National Strategy for Sustainable Regional Growth and Attractiveness	2015-2020	National growth strategy
14	Sweden	The Swedish Innovation Strategy	2014-2020	Government policy on innovation
15	-	EU Start-up Monitor	2018	Reports on Start-up

Source: Author, 2021

During the search, I came across some documents that were published by countries where the primary languages is not English and that was a key challenge was language barrier. However, since these countries were members of supranational bodies, there were English versions published as well. Even though it required extra effort, it was necessary. However, there were chances that some aspects of the document may have been lost so I engaged a language translation tool to help with comparing content in the two versions -the original language and in English.

3.3. Content Analysis

Content analysis, Frey (2018), Robson & McCartan (2016), was performed on the final list of documents leading to normalising the names of the policies, their aims and the instrument. This was necessary because there were no dedicated policies for Start-ups exactly. Instruments pointing to Start-ups were bulked together with others so I needed to separate them. The criteria were as follows;

The inclusion criteria are as follows;

1. Any instruments that specifically points to improving or promoting Start-ups businesses in one way or another at any growth stage was included in the list.
2. Any instrument that seeks to improve on a Start-up support system was included.

The exclusion criteria are as follows;

1. Any instrument which does not specifically seek to promote or improve Start-up businesses at any stage of their growth was excluded from the list,
2. Any instrument that does not seek to improve on or promote Start-up ecosystem or support system

After the selection, I went ahead to normalise them into the policy names in framework in (see Table 1.0.).

A 4-column table (see Table 6.0) has been created to show Start-up and entrepreneurship policy strategies formulated by the focus-countries spanning together with the aims and instruments for Start-ups. Column (1) contains the focus-countries; column (2) has their policies; column (3), policy aims and column (4), the instruments.

Table 6.0

List of policies, policy instruments and policy aims as gathered from the from the document sources.

(1) Country	(2) Policies	(3) Policy aims	(4) Policy instruments
Denmark	Business mentoring, coaching & training; Group policies; Networking initiatives	To increasing the number of self-employed and increase the survival rate of Start-up businesses	Direct consultancy services for entrepreneurs or subsidy for extra specific consultancy costs; mentoring schemes for entrepreneurs in the process of starting an enterprise or already have a business running within the past three years; consultancy schemes for groups: gender, disability, ethnicity or other factors found to have special needs; facilitating access to physical facilities, e.g., testing and prototype facilities in industrial parks or fabrication laboratories
Estonia	Competition & market entry policies; framework conditions & administrative barriers; funding & access to finance; business mentoring, coaching & training	To increase productivity per employed person to 80% of the EU average and raise the employment rate in the age group 20–64 to 76% To promote the inflow of foreign investments for Start-ups; improve the	Government procurement of innovative products and solutions from Start-ups; help Start-ups complete prototypes and introduce MVP to market; increase availability of finance for new Start-ups; improve management skills of Start-up management teams; provide foreign investors with RD vouchers

	Promoting research and development and innovation	availability of capital for Start-up enterprises coming from universities	
Finland	Group policies; Competition & market entry policies; increasing competition; local economic development; framework conditions & administrative barriers	Improve competitiveness of SMEs; Increase employment; to help SMEs save energy on their operating processes and reduce greenhouse gas emissions	Supporting development and creation of new businesses; helping SMEs commercialise ideas into product and services; help new SMEs to start exports whiles existing enterprises who are exporting products will be supported to start exporting to new business areas; create workable transport systems beneficial to SMEs; introduce new solutions that improve energy efficiency
Iceland	Group policies; Taxation & social contribution regimes; Competition & market entry policies; Business mentoring, coaching & training	Increase the impact of science and innovation funding (2014-2016); to strengthen Iceland's international status (2017-2019)	improving access to venture capital for innovative SMEs through tax incentives; increase participation in international competitive programmes and international markets; increase support and consultancy to innovative enterprises aiming for international market; provide guidance and assistance to entrepreneurs and Start-ups to establish themselves and develop; creating a support system for improvements in Start-ups and entrepreneurs; Increased investment in innovative enterprises
Norway	Funding & access to finance; Taxation & social contribution regimes; Competition & market entry policies; Group	To increase diversity among Norwegian entrepreneurs; make Norway a more attractive entrepreneurial country for a variety of people	provide seed funds and Start-up grants to new businesses; improve access to government funding for Start-ups; stimulate access to private capital for early-stage business through combination of wide tax base, low tax rates and equal tax treatment; create competitive funding schemes for exports; provide counselling for entrepreneurs facing

	policies; Business mentoring, coaching & training		challenges with international market; To improve on commercialisation system; to improve on incubator schemes
Sweden	Competition & market entry policies; Funding & access to finance;	achieving the overall target of having the EU's lowest unemployment rate by 2020; To solve key challenges in the global society	Supporting innovative enterprises through public procurement of innovative products and services; internationalisation of products and services; Providing capital to entrepreneurs; increasing international corporation by investing in companies to widen their networks.

Compiled by Author, 2021

3.4. Normalising the policies and policy aims

In answering the first and second research questions, the names of the policies and their respective aims collected from the policy documents were normalised using the standard names as captured in the policy framework (see Table 1.0 and Figure 2.0). This was to help place all the different aims on the same level. For instance, if a country has a policy aim as 'To promote the inflow of foreign investments for Start-ups'. This is replaced with one or more of the 5 broad policy aims captured in the policy framework. This changes the name to 'Creating new jobs & reducing unemployment' according to the policy framework.

Again, in answering the last question, in the second section, I normalised the instruments to make it easy in spotting the similarities, if any. So, I placed the them in a table -in adjacent columns and this is what Table 8.0 column (1) contained the list of policies, column (2) has the list of instruments as captured in the policy framework (see Table 1.0 and Figure 2.0). Columns (3) to (8) contain a focus country each with respective checks corresponding to whether a policy instrument on the far left of each row. Checks were used to indicate if a country implements a specific instrument during the period under review. The checks used were (✓) = yes meaning that the country implemented the policy instrument on the far right of the row and 'x' = no, the country did not implement the policy instrument on the row. The policies instruments are grouped into which policy they belong to (see Table 8.0).

4.0. Result and Discussion

In the previous chapter, methodology for the analysis was explained in detail. In this chapter the research findings are presented alongside with the discussion to put it in a better context. Analysing the documents in the previous chapter, two themes emerged and these shall be discussed under 2 separation sections. The first themes bordered around the policies and policy aims and the second was the different instruments used in achieving the aims. As a result, the findings will be reported in 2 sections, one for each theme.

4.1. Policies and what they aim to achieve

This is where the policies and their respective aims were presented but with replaced name. The standard names used for the policies and the aims names in the policy framework (see Table 1.0) were used to replace the names from the policy documents for easy comparing. In the policy and policy aims section, I used *Table 7.0*, a 3-column table, to presents a summary of the Start-up policies and the focus countries and their and aims. Column (1) contains the countries; column (2), the policies and column (3), the broad policy aims. Each row represents a country, its aims and policies except row (1) which serves as title row. This section attempts to answer the research questions:

1. What are the Start-up policies in the focus-countries?
2. What do they aim to achieve?

Table 7.0

(1) Country	(2) Policies	(3) Policy aims
Denmark	Business mentoring, coaching & training; group policies; networking initiatives	Creating new jobs & reducing unemployment; local economic development
Estonia	Competition & market entry policies; framework conditions & administrative barriers; funding & access to finance; business mentoring, coaching & training	Creating new jobs & reducing unemployment; local economic development; increasing competition; enhancing innovation & new technology;
Finland	Group policies; competition & market entry policies; increasing competition; local	Creating new jobs & reducing unemployment; local economic development; increasing

	economic development; framework conditions & administrative barriers	competition; enhancing innovation & new technology;
Iceland	Funding & access to finance; taxation & social contribution regimes; competition & market entry policies; business mentoring, coaching & training	Local economic development; increasing competition; enhancing innovation & new technology; accelerate structural changes in the economy;
Norway	Funding & access to finance; taxation & social contribution regimes; competition & market entry policies; group policies; business mentoring, coaching & training	Creating new jobs & reducing unemployment; local economic development; increasing competition; enhancing innovation & new technology;
Sweden	Competition & market entry policies; funding & access to finance;	Creating new jobs & reducing unemployment; local economic development; increasing competition; enhancing innovation & new technology

The table show countries with renamed Start-up policies and aims

Compiled by author, 2021

Not necessarily comparing, but the data shows that 5 out of the 6 countries –Denmark, Estonia, Finland, Norway and Sweden, aimed at creating new jobs or reducing unemployment. It is quite surprising that, even though Norway aimed at creating employment, its quantity score in the StartupBlink ranking for 2019 was pretty low, scoring 0.05 points, 0.03 points ahead of Iceland (see Table 2.0). Iceland's score makes some sense though because it did not put in any effort in the regard. The remaining 4 countries scored an average of 0.14 points with the highest being 0.19 and lowest 0.10. The policy aim that cuts across all countries is the local economic development. This simply means that the group of policy aims that is supposed to bring development to local economies is important to these countries. The case of Estonia is quite revealing because the country has consistently scored high in Start-up rankings and perhaps the policy aims says a lot. It would be even more revealing to know which instruments help them in achieving these aims. May be the next section has some answers on this.

4.2. The Different Instruments Used in Achieving the Aims

The section provides attempts an answer for research question:

3. Is there any unique pattern of similar policies in the different contexts?

To answer this question, Table 8.0 captured each country with its instruments. The general impression I got from the data was that, countries do not actually use lots of instruments at the same time. The data showed that out of 29 instruments only 15 were actually implemented in the focus countries. In the first block which contains instruments on funding and access to finance, Estonia and Norway both provided funding to seed-stage Start-ups while Sweden joined Norway were the only countries that provided general Start-up grants. Estonia, again was with Iceland to be the only countries that took steps to improve venture capital funding. Also, Sweden had an instrument that provided direct financial support to Start-ups. So, even though the 4 countries had instruments that touched on funding and access to capital, there were similarities. It is worth mentioning that between 2014 and 2018, Start-ups in Sweden received a whopping 1601 million Euros in venture capital funding. Even there were fluctuations in-between the years, this figure is substantial and perhaps this has been one of the reasons why it has continued to dominate the Start-up rankings among the focus countries. Perhaps not, because, even though Estonia receive way less, about 3% amounting to 45.05 million Euros during the same period, it has performed significantly well (see Table 3.0). So, perhaps it is not about the money, clearly.

Going forward, Norway and Sweden were the only countries that had some instruments meant to help Start-ups reach the market and stay competitive or introduce competition. Estonia and Sweden were providing procurement contracts for Start-ups. The 2 countries but, also with Norway this time, had instruments that were supposed to help Start-ups bring their product to market. The other 3 countries had no instruments touching on this. There are some similarities in instruments that seek to provide training mentoring and coaching as well. The odd one out here is Sweden which had no instrument. However, the remaining countries do have but with slight similarities and just to highlight that only Norway paid attention to business incubators. Instruments that sought to make flexible tax, including social tax regimes were only implemented by Norway and Denmark. Sweden, Finland and Iceland were the countries that had instruments supporting groups.

Table 8.0

Table has 8 columns with the various policy, instruments and countries from the policy framework (see Table 8.0)

(1) Policy	(3) Instrument	(4) Denmark	(4) Estonia	(5) Finland	(6) Iceland	(7) Norway	(8) Sweden
Funding and access to finance	Seed funding	x	(✓)	x	x	(✓)	x
	Start-up grants	x	x	x	x	(✓)	(✓)
	Start-up loans	x	x	x	x	x	x
	Business angel networks	x	x	x	x	x	x
	Venture capital	x	(✓)	x	(✓)	x	x
	Loan refinancing for Start-up loans (VC)	x	x	x	x	x	x
	Guarantees for loans	x	x	x	x	x	x
	Direct financial support	x	x	x	x	x	(✓)
Competition & market entry policies	Antitrust measures	x	x	x	x	x	x
	Flexible licensing & compliance requirements for Start-up	x	x	x	x	x	x
	Procurement deals	x	(✓)	x	x	x	(✓)
	Market support & prototyping	x	(✓)	x	x	(✓)	(✓)
	IPR laws for knowledge-based start-ups	x	x	x	x	x	x
Business mentoring, coaching & training	Business Advisory services	(✓)	x	(✓)	(✓)	x	x
	Management skills training	x	(✓)	x	(✓)	x	x
	Incubators & accelerators	x	x	x	x	(✓)	x
	Legal and management advice	x	x	x	x	(✓)	x
Framework conditions & administrative barriers	Easing business registration processes	x	x	x	x	x	x
	Flexing banking regimes	x	x	x	x	x	x
	Bankruptcy legislations	x	x	x	x	x	x
	Infrastructure	x	x	(✓)	x	x	x

Taxation & social contribution regimes	Reduced corporate tax	x	x	x	x	x	x
	Tax breaks & flexible taxation	x	x	x	x	(✓)	x
	Flexible social security contribution requirements	x	x	x	x	x	x
Networking initiatives	Networking platforms	x	x	x	x	x	x
	Science and technology parks	(✓)	x	x	x	x	x
Group policies	Support for high-growth firms	x	x	x	x	x	x
	Support for innovative small firms & SMEs	(✓)	x	(✓)	(✓)	x	x
	Special demographic groups	(✓)	x	x	x	x	x

Compiled by Author, 2021

5.0. Conclusions and Recommendations

A Start-up policy may ideally have all these instruments present to be comprehensive, but this depends on the prevailing conditions. The reason being that the choice of instrument largely depends on the aims and objective of the policy maker. These aims, unfortunately, vary from country to country making is difficult for one country to implement policies that have hitherto been successful in another. Different choices of instruments may have the same outcome but the mode of implementation and its impact on the target group, also dictate its success (Borrás & Edquist, 2013b). Also, the need to understand which problems can be solved with policy and which instrument is 'a good fit' is important, as well. All these, together have introduced complexities in selecting instrument for formulating Start-up policies.

The research questions at the beginning of the research were;

4. What are the Start-up policies in the focus-countries?
5. What do they aim to achieve?
6. Is there any unique pattern of similar policies in the different contexts?

The journey so far has been revealing. I have reviewed the literature on NIS, IP, Start-up policy, Start-ups and related theories. The need for innovation system to exist at national level in order for it to thrive was identified. The impacts of innovation on an economy were also discussed together with the role of Start-ups in nursing innovation. The rationale for government intervention was discussed briefly and a policy framework within which policy makers select instruments and create Start-up policies was established.

The also brought out the policies used in these countries and policy aims that are to be achieved (see Table 07). This answered questions '1' and '2'. The findings established that the policy instruments used in the focus-countries in achieving their policy goals had a fair score of similarities (see Table 8.0).

I would say my expectations at start of the research was met. I expected some similarities and this was confirmed from the data. Due to the many similarities as in country sizes, with a good percentage of active population attaining tertiary education, all located in Northern Europe and share a cultural heritage. So, I did expect the similarities are not surprising to me.

5.1. Limitations and Recommendation for Future Research

The research did not look into whether the intended policy aims were effectively achieved using the policy instruments. Even though this was out of the scope of this research, it would have provided some context. Also, the research did not look, in detail, if the four categories of challenges common to Start-ups were being address with the policy instruments. Lastly, the research did not look into the specific instruments directed at Start-ups at each stage of its journey. I think all these limitations would have place the research in a better perspective if all these specific aspects were researched as well.

Perhaps a further research looking into whether the instruments used in the various countries actually helped in achieving the set policy aims in the respective countries or not. I believe this will provide a better perspective to and understanding to my work. Also, the research could probe into whether there were new instruments introduced to complement the existing or rather, some others were abandoned along the course to improve the overall effectiveness of the instruments. Another suspicion I had at the start of the project was that it takes more than just helping to create new Start-ups and offer congenial environment for their survival to actually make them successful. This is still a hypothesis that can be tested with further work.

6.0. References

1. Akerlo, G. A. (1970). *The Market For "Lemons": Quality Uncertainty and The Market Mechanism*.

2. Albers, J., Henke, R., Katz, R., & Mazzullo, T. (2008). *Understanding the Language of Entrepreneurship and the Path Forward*. 15.

3. Albort-Morant, G., & Oghazi, P. (2016). How useful are incubators for new entrepreneurs? *Journal of Business Research*, *69*(6), 2125–2129. https://doi.org/10.1016/j.jbusres.2015.12.019.

4. Antwi, S. K., & Hamza, K. (2015). Qualitative and Quantitative Research Paradigms in Business Research: A Philosophical Reflection. *European Journal of Business and Management*, 11.

5. Audretsch, D. B. (2004). Sustaining Innovation and Growth: Public Policy Support for Entrepreneurship. *Industry & Innovation*, *11*(3), 167–191. https://doi.org/10.1080/1366271042000265366.

6. Audretsch, D. B., & Keilbach, M. (2005). Entrepreneurship capital and regional growth. *The Annals of Regional Science*, *39*(3), 457–469. https://doi.org/10.1007/s00168-005-0246-9.

7. Baumol, W. J. (2004). Entrepreneurial Enterprises, Large Established Firms and Other Components of the Free-Market Growth Machine. *Small Business Economics*, *23*(1), 9–21. https://doi.org/10.1023/B:SBEJ.0000026057.47641.

8. Birch, D. G. W. (1979). The Job Generation Process. *MIT Program on Neighborhood and Regional Change*, *Vol.*, 302 p.

9. Bolderston, A. (2012). Conducting a Research Interview. *Journal of Medical Imaging and Radiation Sciences*, *43*(1), 66–76. https://doi.org/10.1016/j.jmir.2011.12.002.

10. Borooah, V. K. (2003). *Market Failure An Economic Analysis of its Causes and Consequences*.

11. Borrás, S., & Edquist, C. (2013a). The choice of innovation policy instruments. *Technological Forecasting and Social Change*, *80*(8), 1513–1522. https://doi.org/10.1016/j.techfore.2013.03.002.

12. Borrás, S., & Edquist, C. (2013b). The choice of innovation policy instruments. *Technological Forecasting and Social Change*, *80*(8), 1513–1522. https://doi.org/10.1016/j.techfore.2013.03.002.

13. Boudreau, K. J., & Jeppesen, L. B. (2015). Unpaid crowd complementors: The platform network effect mirage. *Strategic Management Journal*, *36*(12), 1761–1777. https://doi.org/10.1002/smj.2324.

14. Bowen, G. (2009). *Document Analysis as a Qualitative Research Method*.

15. Busso, M., & Galiani, S. (2015). *The Causal Effect of Competition on Prices and Quality:* 63.

16. Carlson, M., & Usher, N. (2016). News Startups as Agents of Innovation. *Digital Journalism*, *4*(5), 563–581. https://doi.org/10.1080/21670811.2015.1076344.

17. Chatterji, A., Delecourt, S. M., Hasan, S., & Koning, R. (2018). *When Does Advice Impact Startup Performance?* 36.

18. Churchill, N. C., & Lewis, V. L. (1983, May 1). The Five Stages of Small Business Growth. *Harvard Business Review*, *May 1983*. https://hbr.org/1983/05/the-five-stages-of-small-business-growth.

19. Crowe, S., Cresswell, K., Robertson, A., Guro Huby, Avery, A., & Sheikh, A. (2011). *The case study approach*.

20. Cukier, D., & Kon, F. (2015). *Early-Stage Software Startup Patterns Strategies to building high-tech software companies from scratch*. 11.

21. Davila, A., Foster, G., & Gupta, M. (2003). Venture capital financing and the growth of startup firms. *Journal of Business Venturing*, *18*(6), 689–708. https://doi.org/10.1016/S0883-9026(02)00127-1.

22. Davila, A., Foster, G., & Jia, N. (2010). *Building Sustainable High-Growth Start-Up Companies: Management Systems as an Accelerator*. ResearchGate. https://www.researchgate.net/publication/259729303_Building_Sustainable_High-Growth_Start-Up_Companies_Management_Systems_as_an_Accelerator.

23. Design Management Institute, International research Conference, Bohemia, E., Liedtka, J., & Rieple, A. (2012). *Leading innovation through design*. Design Management Institute. http://www.dmi.org/dmi/html/conference/academic12/AC12Proceedings.pdf

24. Dollery, B., & Wallis, J. (2001). *The Theory of Market Failure and Policy Making in Contemporary Local Government*.

25. Edler, J., Cunningham, P., Flanagan, K., & Laredo, P. (2013). Innovation policy mix and instrument interaction: A review (Compendium of Evidence on the Effectiveness of Innovation Policy Intervention,). *London, Nesta*.

26. Edler, J., & Fagerberg, J. (2017). Innovation policy: What, why, and how. *Oxford Review of Economic Policy*, *33*(1), 2–23. https://doi.org/10.1093/oxrep/grx001.

27. Edquist, C. (Ed.). (1997). *Systems of innovation: Technologies, institutions, and organizations*. Pinter.

28. Edquist, C., & Chaminade, C. (2006). *Rationales for public policy intervention from a systems of innovation approach: The case of VINNOVA*.

29. Erik Bohemia, Joanne Liedtka, & Alison Rieple. (2012). *Leading innovation through design*. Design Management Institute. http://www.dmi.org/dmi/html/conference/academic12/AC12Proceedings.pdf

30. *Europe: Share of population with a degree 2018*. (n.d.). Statista. Retrieved May 16, 2021, from https://www.statista.com/statistics/1084737/eu-28-adults-with-tertiary-education-attainment/.

31. Freeman, C. (1995). The 'National System of Innovation' in historical perspective. *Cambridge Journal of Economics*. https://doi.org/10.1093/oxfordjournals.cje.a035309

32. Frey, B. B. (2018). *Document Analysis*. SAGE Publications, Inc. https://doi.org/10.4135/9781506326139.

33. Giardino, C., Wang, X., & Abrahamsson, P. (2014). *Why Early-Stage Software Startups Fail: A Behavioral Framework*. ResearchGate. https://www.researchgate.net/publication/300574540_Why_Early-Stage_Software_Startups_Fail_A_Behavioral_Framework.

34. Guimón, J. (2013). *Promoting university-industry collaboration in developing countries (Innovation Policy Platform,OECD and World Bank)*. https://doi.org/10.13140/RG.2.1.5176.8488.

35. Gursel, A. (2014). Science and Technology Parks and University Collaborations. *Periodicals of Engineering and Natural Sciences*, *2*, 35–40. https://doi.org/10.21533/pen.v2i2.41.

36. Hammarberg, K., Kirkman, M., & de Lacey, S. (2016). Qualitative research methods: When to use them and how to judge them. *Human Reproduction*, *31*(3), 498–501. https://doi.org/10.1093/humrep/dev334.

37. Hellmann, T., & Puri, M. (2002). Venture Capital and the Professionalization of Start-up Firms: Empirical Evidence. *Journal of Finance*, 169–197.

38. Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. *Online Readings in Psychology and Culture*, *2*(1). https://doi.org/10.9707/2307-0919.1014.

39. Huyghebaert, N. (2006). On the Determinants and Dynamics of Trade Credit Use: Empirical Evidence from Business Start-Ups. *Journal of Business Finance & Accounting*, *33*, 305–328. https://doi.org/10.1111/j.1468-5957.2006.001364.x.

40. Isenberg, D. (2011). *The Entrepreneurship Ecosystem Strategy as a New Paradigm for Economic Policy: Principles for Cultivating Entrepreneurship*.

41. Ismail, K., Mason, C., Cooper, S., Omar, W. Z. W., & Abdul, I. (2010). *University Spin-off Formations: How decision making process has been made? 1*(2), 21.

42. J. Doutriaux. (1991). High-tech start-ups, better off with government contracts than with subsidies: New evidence in Canada. *IEEE Transactions on Engineering Management*, *38*(2), 127–135. https://doi.org/10.1109/17.78409.

43. Kollmann, T., Stöckmann, C., Hensellek, S., Kensbock, J., Universität Duisburg-Essen, & Lehrstuhl für E-Business und E-Entrepreneurship. (2016). *European Startup Monitor 2016*.

44. Kozubikova, L., Kotaskova, A., Dvorsky, J., & Kljucnikov, A. (2019). The Impact of Political Factors' Perception on Suitability of International Business Environment: The Case of Startups. *Recent Issues in Economic Development*, *12(1)*, 61–79.

45. Kuhlmann, S., & Arnold, E. (2001). *RCN in the Norwegian Research and Innovation System*.

46. Kurt, O. E., Ucler, C., & Vayvay, Ö. (2017). *From ideation towards innovation: Pillars of front-end in new product development*. ResearchGate. https://www.researchgate.net/publication/319877006_From_ideation_towards_innovation_pillars_of_front-end_in_new_product_development.

47. Laar, M. (2008). Leading a Successful Transition: The Estonian Miracle. *European View*, *7*(1), 67–74. https://doi.org/10.1007/s12290-008-0024-z.

48. Lagerspetz, M. (2003). How Many Nordic Countries? Possibilities and Limits of Geopolitical Identity Construction. *Cooperation and Conflict*, *38*(1), 49–61. JSTOR.

49. Lambert, R. A., Leuz, C., & Verrecchia, R. E. (2012). Information Asymmetry, Information Precision, and the Cost of Capital*. *Review of Finance*, *16*(1), 1–29. https://doi.org/10.1093/rof/rfr014.

50. Lundström, A. (2008a). *Entrepreneurship policy in the Nordic countries – perspectives of the development since 2003*.

51. Lundström, A. (2008b). *Entrepreneurship policy in the Nordic countries – perspectives of the development since 2003*.

52. Lundvall, B.-Å. (2007). *National Innovation Systems—Analytical Concept and Development Tool*.

53. Lundvall, B.-Å., & Borrás, S. (2006). *Science, Technology, and Innovation Policy*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199286805.003.0022.

54. Maxwell, M. J. (1972). Skimming and Scanning Improvement: The Needs, Assumptions and Knowledge Base. *Journal of Reading Behavior*, *5*(1), 47–59. https://doi.org/10.1080/10862967209547021.

55. Metcalfe, J. S. (1995). Technology systems and technology policy in an evolutionary framework. *Cambridge Journal of Economics*, *19*(1), 25–46. https://doi.org/10.1093/oxfordjournals.cje.a035307.

56. Mueller, S., Volery, T., & von Siemens, B. (2012). What Do Entrepreneurs Actually Do? An Observational Study of Entrepreneurs' Everyday Behavior in the Start-Up and Growth Stages. *Entrepreneurship Theory and Practice*, *36*(5), 995–1017. https://doi.org/10.1111/j.1540-6520.2012.00538.x.

57. Müller, B., & Rammer, C. (2012). *Start-up promotion instruments in OECD countries and their application in developing countries* (Research Report). ZEW Gutachten/Forschungsberichte.

58. Nascimento, C. (2017). *What is the role of Human Resource Management in growing start-ups?* 89.

59. Neumark, D., Wall, B., & Zhang, J. (2011). Do Small Businesses Create More Jobs? New Evidence for the United States from the National Establishment Time Series. *Review of Economics and Statistics*, *93*(1), 16–29. https://doi.org/10.1162/REST_a_00060.

60. *NimbleFins*. (2019). https://www.nimblefins.co.uk/best-countries-europe-startups.

61. *NimbleFins*. (2020). https://www.nimblefins.co.uk/business-insurance/best-countries-europe-startups-2020#nogo.

62. Nispen, F. K. M. van. (2011). *Policy Instruments*. https://www.researchgate.net/publication/247509440_Aims_and_strategies_in_regional_innovation_and_growth_policy_A_Danish_perspective/link/0a85e53bd09ea3cce1000000/download.

63. OECD. (2012a). *OECD Science, Technology and Industry Outlook 2012*. OECD.

64. OECD. (2012b). *OECD Science, Technology and Industry Outlook 2012*.

65. OECD/EC. (2016a). *OECD science, technology and innovation outlook 2016.* http://0-search.credoreference.com.emu.londonmet.ac.uk/content/title/oecdoecd?institutionId=5061.

66. OECD/EC. (2016b). *OECD science, technology and innovation outlook 2016.* http://0-search.credoreference.com.emu.londonmet.ac.uk/content/title/oecdoecd?institutionId=5061.

67. Okrah, J., & Nepp, A. (2017). Factors Affecting Startup Innovations and Growth. *International Journal of Business Management and Leadership*, *Volume 8*, 11–21.

68. Palmer, C., & Bolderston, A. (2006). A Brief Introduction to Qualitative Research. *Canadian Journal of Medical Radiation Technology*, *37*, 16–19. https://doi.org/10.1016/S0820-5930(09)60112-2.

69. Paschen, J. (2017). Choose wisely: Crowdfunding through the stages of the startup life cycle. *Business Horizons*, *60*(2), 179–188. https://doi.org/10.1016/j.bushor.2016.11.003.

70. Pirnay, F., Surlemont, B., & Nlemvo, F. (2003). *Toward a Typology of University Spin-offs*.

71. Robinson, W. (1990). Product Innovation and Start-Up Business Market Share Performance. *Management Science*, *36*. https://doi.org/10.1287/mnsc.36.10.1279.

72. Robson, C., & McCartan, K. (2016). *Real world Research* (Fourth). Wily.

73. Romanainen, J., Angelis, J., Fikkers, D. J., Nausedaite, R., Ärenman, E., Henningsson, K., Eljas-Taal, K., Vallistu, J., Maier, F., & Müürisepp, K. (2016). *Nordic Entrepreneurship Check 2016*.

74. Rosenberg, N. (2004). *Innovation and Economic Growth*. 6.

75. Salamzadeh, A., & Kawamorita, H. (2015, January 1). *Startup Companies: Life Cycle and Challenges*. https://doi.org/10.13140/RG.2.1.3624.8167.

76. Schumpeter, J. A. (1934). The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.

77. Scitovsky, T. (1954). Two Concepts of External Economies. *Journal of Political Economy*, *62*(2), 143–151.

78. Scordato et al., L. (2018a). Policy mixes for the sustainability transition of the pulp and paper industry in Sweden. *Journal of Cleaner Production*.

79. Scordato, L., Klitkou, A., Tartiu, V. E., & Coenen, L. (2018b). Policy mixes for the sustainability transition of the pulp and paper industry in Sweden. *Journal of Cleaner Production*, *183*, 1216–1227. https://doi.org/10.1016/j.jclepro.2018.02.212.

80. Sekliuckiene, J., Vaitkiene, R., & Vainauskienė, V. (2018). Organisational Learning in Startup Development and International Growth. *Entrepreneurial Business and Economics Review*, *6*, 125–144. https://doi.org/10.15678/EBER.2018.060407.

81. StartupBlink. (2019a). *StartupBlink Ecosystem Ranking Report 2019 v2.pdf*. Google Docs. https://drive.google.com/file/d/1M3xWTTb6cn4IuNdSd6T5dFGWjVzzW_vR/view?usp=sharing&usp=embed_facebook.

82. StartupBlink. (2019b). *StartupBlink Ecosystem Ranking Report 2019 v2.pdf*. Google Docs. https://drive.google.com/file/d/1M3xWTTb6cn4IuNdSd6T5dFGWjVzzW_vR/view?usp=sharing&usp=embed_facebook.

83. StartupBlink. (2020). *StartupBlink Ecosystem Report 2020.pdf* [Https://report.startupblink.com/]. Google Docs. https://drive.google.com/file/d/1QigrAt5KBRMVhIcbKkbxyYZuifahrcMB/view

84. Teece, D. J. (1996). Firm organization, industrial structure, and technological innovation. *Journal of Economic Behavior and Organization*, 193–224.

85. *The Nordic Together—Uniting the Nordic Startup Ecosystem: Rising North Impact Fund 2016–2018*. (2019).

86. Thurik, R., Gelderen, M. van, & Hessels, J. (2008). Entrepreneurial aspirations, motivations, and their drivers. *ResearchGate*. https://www.researchgate.net/publication/5158486_Entrepreneurial_aspirations_motivations_and_their_drivers.

87. Valliere, D. (2010). Reconceptualizing entrepreneurial framework conditions. *International Entrepreneurship and Management Journal*, *6*(1), 97–112. https://doi.org/10.1007/s11365-008-0077-0.

88. van Weele, M., van Rijnsoever, F. J., & Nauta, F. (2017). You can't always get what you want: How entrepreneur's perceived resource needs affect the incubator's assertiveness. *Technovation*, *59*, 18–33. https://doi.org/10.1016/j.technovation.2016.08.004

89. Vanacker, T., Manigart, S., Meuleman, M., & Sels, L. (2011). A longitudinal study on the relationship between financial bootstrapping and new venture growth. *Entrepreneurship & Regional Development*, *23*(9–10), 681–705. https://doi.org/10.1080/08985626.2010.502250.

90. Vekic, A., & Borocki, J. (2017). *The Role of Institutions in Supporting Start-up Companies*. 6.

91. Venugopal, B. (2017). *Homophily, Information Asymmetry and Performance in the Angels Market*. http://dx.doi.org/10.2139/ssrn.2981033.

92. Wang, G. (2004). The Impact of Globalization on State Sovereignty. *Chinese Journal of International Law*, *3*(2), 473–484. https://doi.org/10.1093/oxfordjournals.cjilaw.a000530

93. Warnke, P., Koschatzky, K., Dönitz, E., Zenker, A., Stahlecker, T., Som, O., & Cuhls, K. (2016). : *Opening up the innovation system framework towards new actors and institutions*. 51.

94. Watson, K., Hogarth-Scott, S., & Wilson, N. (1998). Small Business Start-Ups: Success Factors and Support Implications. *International Journal of Entrepreneurial Behaviour & Research*, *4*, 217–238. https://doi.org/10.1108/13552559810235510.

95. Westlund, H., & Olsson, A. R. (2011). *Economic Entrepreneurship, Startups and Their Effects on Local Development: The Case of Sweden*. ResearchGate. https://www.researchgate.net/publication/254457482_Economic_Entrepreneurship_Startups_and_Their_Effects_on_Local_Development_The_Case_of_Sweden.

96. Yin, R. K. (1994). *Case study research: Design and Methods* (2nd ed.). SAGE Publications, Inc.

7.0. Resümee

PÕHJA-EUROOPA RIIKIDE IDUFIRMADE POLIITIKA VÕRDLEV ANALÜÜS

Emmanuel Attu

Idufirmasid määratletakse kui majanduskasvu võimaldajaid. Kuid nendel ettevõtetel on mitmeid kitsaskohti, mis raskendavad neil oma potentsiaali saavutamast. Idufirmadele soodsamate tingimuste saavutamiseks üldreeglina tehakse mitmeid järeleandmisi seadusandluses. Heade poliitiliste vahendite tõttu on Euroopa riikides parimad tingimused idufirmadele.

Teoreetiliselt ei kasva idufirmad vaakumis. Pigem loob erinevate vahendite kasutamine parajates proportsioonides soodsaid tingimusi nende kasvuks. Seetõttu oli selle uuringu eesmärk võrrelda idufirmade poliitilisi võimalusi ja eesmärke kuues Põhja-Euroopa riigis ja tuua välja sarnasusi. Uurimistöö keskmes olid Taani, Eesti, Soome, Island, Norra ja Rootsi.

Uurimiseesmärkide saavutamiseks kasutasin uurimismetoodikana kvalitatiivset lähenemist, mis on populaarne nähtuste uurimisel, mida ei saa arvuliselt mõõta. Selline meetod sai valitud, kuna valitsuste poliitikaid, eesmärke ja vahendeid ei saa arvuliselt mõõta, seega sobib selline lähenemine siinkohal kõige paremini. Koguti riiklikest allikatest dokumentaalseid tõendeid idufirmadele rakenduvadest seadusandlusdest aastatel 2014-2018. Analüüs viidi läbi dokumentidel, mis vastasid kõigile kuuele riigile seatud kriteeriumitele.

Analüüsist selgus, et vaatamata erinevustele, oli sihtriikide seadusandlustes ka märkimisväärseid sarnasusi. Jõuti järelduseni, et ainuüksi rahastamine ei taga idufirmade edukust.

Ehk on tulevikus võimalik teha täiendavaid uuringuid mis tõestaks, kuidas erinevates riikides seadusandlus täitis oma eesmärki. Lisaks teha kindlaks, kas antud perioodil võeti kasutusele uusi meetmeid või loobuti olemasolevatest. Usun, et see annab minu tööle parema perspektiivi.

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