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Countryside and Innovation

A Document Analysis of the Relationship Between The Districts and Innovation

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Abstract

Countrysides all over the world are in decline and have been so for decades. The negative development of the Norwegian countryside, or districts, has been on the political agenda since the 1950s. Nevertheless, the districts had political instruments dedicated primarily to them, but since 2004 they have been placed under the Innovation Norway umbrella. This thesis explores the reasons for the coalition between innovation and districts and how it has developed from 2004 till 2020.

Ten official documents from the period have been analyzed and discussed in light of innovation literature. The research finds that the districts have regarded innovation as key to the countryside's reinvigoration and still do in 2020. On the other hand, innovation policy has dedicated substantial financial resources to the districts but have not dedicated strategic focus to the districts. The relationship between innovation and countryside is reasonably one-sided and counterproductive - geographical conditioned support drains resources from innovative non-district-based businesses, and the value creation in the districts does not increase; in fact, it can contribute to its depopulation.

Acknowledgements

Rem Koolhaas and his thinktank AMO have inspired me, both in terms of researching the countryside and thinking new in terms of academic research. They compiled a book that is both thought-provoking and surprising, and the exhibition at the Guggenheim in New York is a refreshing and engaging way to showcase research.

Inspired by Koolhaas and Amo, I picked a topic that is placed is a bit of a left-turn in innovation studies, and also I applied a method that is seldom used in the field. Document analysis is usually connected to Science and Technology Studies, but I found it useful to research the relationship between innovation and the Norwegian countryside. Hopefully, this can be my contribution to widening the scope of innovation studies.

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1.0 Introduction

The UN predicts that almost 70 % of the world's population will live in cities by the year 2050, increasing by 15 % compared to 2018. (United Nations, 2018) The urban lifestyle has been dominant for some years, and there are no signs of the domination decreasing. To the renowned Dutch architect Rem Koolhaas it is a paradox that so much of our focus is aimed at improving cities, making them sustainable, or as Koolhaas says, solidifying its characteristics, while cities only use 2 % of the earth's surface. (Koolhaas, 2020)

For Koolhaas and his thinktank, AMO, this paradox triggered a decade-long study of what the countryside is in the 21st century and what their futures hold. The architect is one of the most influential urbanists of our time - the two books "Delirious New York" and "S,M,L,XL" are manifesto-like takes on the concept of the contemporary city, and had a significant impact in the field of architecture. For a now 76-year-old, who spent the previous four decades focused on the concept of the city, it is a change of pace when he dedicates his twilight years to the city's counterpart.

He says that "the countryside is transforming into something new: an arena for genetic experimentation, industrialized nostalgia, new patterns of seasonal migration, massive subsidies, tax incentives, digital informers, flex farming, and species homogenization. It would be difficult to write such a radical inventory of the city" (Koolhaas, 2020). In other words, the countryside is changing rapidly, and, in his view, the mainstream discourse is not paying attention. According to Koolhaas and his group of researchers from Harvard, amongst others, there are new possibilities within the rural realm, maybe unintentional, redefine what we see as architecture, society, and countryside. While the city might become more extreme versions of their old self, the countryside is the subject of massive and somewhat directionless change. (Koolhaas, 2020)

For Koolhaas, his research culminated in an exhibition at the Guggenheim Museum in New York and an anthology book called "Countryside, A Report," where they present different stories from countrysides around the world. This was the trigger for this thesis: the world's demographic makeup is changing, affecting not only the cities but also the countrysides. We have to make the urban lifestyle sustainable, of course, but letting rural areas slip into oblivion would be irresponsible for

many reasons. These areas can have location-specific resources (natural resources like oceans, and physical like available space) and possibilities that cities cannot provide, and not exploring their role in contemporary society would be wasteful.

1.1 The Norwegian Countrysides

Koolhaas has a global perspective on the countryside; this thesis will explore the Norwegian version. Norway is a big country with a small population, but that population follows the global trend as well - they want to live in and around cities. The urbanization of Norway has progressed steadily over the past six decades, and the development is still ongoing. However, the urbanization of Norway happened slower than in its neighboring countries. Steinar Juel of Civita says that this can be explained by the scope of support schemes to slow down centralization (Juel, 2017, p. 12). He also states that the settlement is largely governed by developments in the business structure, which in turn is often driven by technological advances and discoveries of natural resources (Juel, 2017, p. 1).

From the perspective of innovation that this thesis comes from, this is interesting. Juel says that the Norwegian countryside's development has been dependent on innovation, business, and governmental support schemes. The logic is quite clear; to thrive, the countryside needs jobs, and to do so they need businesses. If they want old businesses to adapt to changing markets and heightened competition, they need innovation. To be able to innovate, they need support schemes. The relationship between the field of innovation studies and the discussion on countrysides are real.

Let us take a look at the history of the support schemes aimed at rural Norway. In 1961 the Regional Development Fund (DU) (in Norwegian, the word "District" was used), and was supposed to develop industries in the districts in order to conquer the growth in Oslo. (Teigen, 2012, p. 159) They developed the popular growth center strategy, which, according to Teigen, was a theory for and about the technology-heavy cornerstone company (Teigen, 2012, p. 160), and during the sixties, the authorities tried to plan where these growth centers should be placed. At the beginning of the next decade, the goal of a decentralized settlement was discussed. In 1972, the government proposed to look away from this goal, but they were overruled, and the year after, the goal of maintaining settlement patterns was reinstated. (Teigen, 2012, p. 160) In the mid-eighties, the population flow turned for a moment, and the districts experienced growth. Later researchers have

found this turnaround to be the result of international trends and have not been attributed to any policy or support scheme. (Teigen, 2012, p. 160)

After the finance crisis in 1988, there was a need to have one agency to solve issues in rural areas and cities. In 1992 The State Business and District Development Fund (SND) was established, and, unlike DU that was owned by the Ministry of Local Government and Regional Development, the new agency was owned by the Ministry of Trade and Industry. This agency just barely made teenager status, as in 2004 it was merged with three other agencies. This new reincarnation was named Innovation Norway, and their main goal was to contribute to increased innovation in industries all over the country (Ministry of Trade and Industry 2003, p. 8).

1.2 Innovation Norway

As we see, the countryside and innovation have a shared past. The dedicated tool for developing and taking care of the districts has evolved into a tool dedicated to helping industries all over Norway to innovate. With the inception of Innovation Norway, they share this instrument.

This somewhat shared political existence creates a bond between the two that is interesting to explore. With the districts being depopulated and in decline for decades, and innovation coming to the forefront on political agendas from the mid-nineties, what have the relationship between them been since they were merged into one agency? Is there a conflict between innovation and districts, or have they made each other stronger?

Koolhaas writes about a countryside occupied by computer centers and metropolitan sized cities composed of automated buildings with only a minimum of human elements. (Koolhaas, 2020, p. 272) He sees a possible future where the countrysides are thriving, but with the depopulation being almost complete. We can see tendencies to this happening in Norway as well. In rural Rogaland, the inhabitants discuss whether they should allow the establishment of a mammoth-sized data center or not. This would be an innovative use of rural space, but it would come at the cost of arable land. One of the farmers who oppose this data center wants to stop the process. She wants to take care of the employment from the farming industry. Another states that jobs do not come greener than those we already have - agriculture. The data center must be established in a more suitable place (Eggum, 2020).

This case can point to innovation and the countryside being in conflict, but it can also point to the innovation side taking advantage of the countryside's unique characteristics to enable innovation. This leads to the research in this thesis - the relationship between innovation and districts.

The following research question have been formulated:

How has the relationship between the district and innovation policies evolved since the inception of Innovation Norway?

1.3 Positioning the Thesis

The principal of this thesis is the districts. The research springs from and revolves around the districts. The thesis is a contribution to the discussions on what the future should hold for this way of living, and the author's background in innovation studies can provide a unique perspective. It builds on the recent works of the aforementioned Rem Koolhaas and can be read in light of that, but it is also an independent contribution to the Norway-based discussion on the districts' role.

While the districts are the principal of the thesis, innovation literature is the basis on which this thesis will try to answer the research question. It is a contribution to the discussions around systems of innovation and mission-oriented innovation policies and use this thesis to speak about a topic within the innovation policy discourse that is not over-populated.

2.0 Literature and theoretical framework

This thesis explore the role the districts have procured in the work of Innovation Norway. This chapter will present relevant concepts, contexts, and literature from the field of innovation and present a short overview of the history of district policy. As this thesis looks at the districts from the innovation perspective, the theoretical contributions from the district's side are kept at a minimum.

2.1 Systems of Innovation

First of all, we have to start with a definition. Wired Magazine called innovation “the most important and overused word in America” (Wired, 2020) - while the actual product of the word is essential, it has been used so much without precision that it has become a watered out expression. As this thesis deals with this buzzword, it is useful to present a definition. Jakob Edler and Jan Fagerberg define innovation that shows its all-consuming nature; “innovation is understood as the introduction of new solutions in response to problems, challenges or opportunities that arise in the social and/or economic environment” (Edler & Fagerberg, 2017, p. 3). Innovation is a generator for economic and societal change and transition, independent of previous effectiveness, sector, region, or zeitgeist. (Edler & Fagerberg, 2017, p. 3-4)

In an earlier paper, Fagerberg points out that innovations are the “result of a lengthy process involving many interrelated innovations” (Fagerberg, 2013, p. 8). This connects innovation to imitation. He writes that innovations would have a significantly lower impact without imitation. Without the original innovation being copied, adjusted, and introduced to new markets and contexts, the original would not experience diffusion and thus have a smaller impact on society. Fagerberg points out that the imitator’s use, appropriation, and adjustments of the original innovation, makes them an innovator as well. “Therefore, innovation studies focus not only on how innovations occur, but also on how innovations spread (or diffuse), through imitation or by other means, and the feedback from this process on innovation activity” (Fagerberg, 2013, p. 9).

Charles Edquist defines systems of innovation as “the determinants of the innovation process” and “all important economic, social, political, organizational, institutional, and other factors that influence the development, diffusion, and use of innovations” (Edquist, 2005, p. 182). The actors in such systems form complex structures and networks, and innovation is the product of such

interdependent activities. This perspective sees innovation as a result of more than the individual firm's decision-making. "Innovation involves complex interactions between a firm and its environment" (Smith, 2000, p. 73). The environment includes both customers, suppliers and competitors, and social, cultural, and institutional factors. (Smith, 2000, p. 73) Fagerberg cites Edquist's holistic perspective and follows Smith in the approach that the system consists of all relevant factors that lead to the creation of innovation and its diffusion. (Fagerberg, 2013, 14-15)

According to Smith, the relevance of systems of innovation on the national level is due to its importance for the individual firm's competitiveness and its economic pervasiveness - "the processes which affect innovation thus shape overall trajectories of economic development" (Smith, 2000, p. 74). High levels of creation and use of innovation cause economy-wide growth. There have been many different boundaries to systems, but generally, there are three variants of systems of innovation: national, sectoral, and regional. The national system consists of actors on the national plane, the sectoral system consists of actors within a specific sector, and the regional system comprises actors within a specific region. Yet, the division between them is not absolute - "different variants of systems of innovation coexist and complement each other" (Edquist, 2005, p. 184). The physical borders between countries and regions are used to identify different systems, thus making constructive determinations of which factors influence innovation in the specific system. The borders between different types of systems and different systems might be more adjusted to theoretical exploration and analysis - in reality, these systems are dynamic and always changing.

This thesis will apply a generic approach to systems of innovation rather than a specific one. Innovation policy, and Innovation Norway, tackle all the different systems within its realm, and the different systems seep into each other. (Edquist, 2005, p. 184) For instance, the districts are both part of the national system as a general entity, part of sectoral systems through agriculture, and specific districts are part of specific regional systems. Here we take a generic approach to innovation policy, and we use the generic version of the district term - it is not a specific district we want to explore - rather it is the concept of the Norwegian countryside that is in focus. These districts exist all over Norway, in different types of systems, and are used differently in different systems. To get an impression of the relationship between districts and innovation, we have to understand systems in a generic way but be aware of the different incarnations it can have.

2.2 Strengths of Systems of Innovation

SIs (systems of innovation are often abbreviated as SI, but NIS (National Innovation Systems) and IS (Innovation Systems) are also used) have been influential in innovation policy. OECD and EU use it, and Innovation Norway's Swedish equivalent is named the Swedish Agency for Innovation Systems. (Edquist, 2005, p. 184) This echoes what both Edler & Fagerberg and Spilling have mentioned.

The principal of the systems of innovation is the innovation itself. (Edquist, 2005, p. 184) It is interdisciplinary at its core and focus on "interdependence and non-linearity" (Edquist, 2005, p. 185), and it "emphasizes the role of institutions" (Edquist, 2005, p. 185). Systems of innovation take a process-oriented approach to innovation, where innovation is the result of dynamic interactions between an ever-changing set of actors in an evolutionary and interdependent system. The ability to innovate is down to the set of abilities both with the system as a whole and the components within it, and "innovation policy must therefore be designed to influence the conditions in the innovation system that are important for the companies' innovation activity" (Spilling, 2010, p. 14).

Edquist states that the system's overall goal is to generate innovation, and the activities that happen within the system to achieve it are numerous. There are both traditional instruments like funding of R&D and stimulation of demand, and system-oriented ones like facilitation network formations, helping organizations adapt to new realities, and provision of consultancy services. (Edquist, 2005, p. 190) This provides a sketch image of activities that happen within the system. Furthermore, and more importantly for this thesis, these are activities that policy can influence.

Nevertheless, Edquist is adamant that the effect policy can have on systems is limited due to their ever-changing and dynamic nature and the lack of an objective optimal system. (Edquist, 2005, p. 191) In order to influence the systems, the policies can not be completely exogenous. One can discuss whether the policy is part of the institutions in a national system of innovation or outside it. However, with the introduction of Innovation Norway, the policymakers have an operational tool that embeds them in the systems - both nationally, regionally, and sectorally. Innovation Norway is endogenous to the systems and is well-placed to understand the respective systems within the boundaries of their operation. This makes them well-placed to collect data from the systems, analyze them against theory, and take action through the system failure argument.

2.3 Rationales for Innovation Policy

Spilling cites professor Arne Isaksen when he defines innovation policy as “the policy that aims to facilitate and promote innovation activity in different parts of society and business” (Spilling, 2010, p. 12). Edler & Fagerberg elaborates on this view and shows that innovation policies are multi-faceted phenomena. “There is a narrow perspective, considering invention only, and there is a broader, more holistic perspective, which emphasizes the importance of looking at the entire innovation cycle from the creation of novel ideas to their implementation and diffusion” (Edler & Fagerberg, 2017, p. 4).

Traditionally, the rationale for innovation policies has been market failures, which entails that a “completely competitive, decentralized market system will provide a sub-optimal level of knowledge and that this leads to a case for either public subsidies to knowledge creation, or to creation of intellectual property rights” (Smith, 2000, p. 94). According to Spilling, market failure can also mean that the market has challenges that create a deficit in the exploitation of resources. This can be positive or negative externalities, failure of competition, or failure of information. (Spilling, 2010, p. 15)

The market failure rationale springs out of neoclassical theory and is linked to linear model approaches. (Smith, 2000, p. 94; Spilling, 2010, p. 16) Fagerberg elaborates on this. He writes that within this approach, it is hard for firms to focus on the creation of new knowledge because the spillovers to competitors would make it hard to not only recoup the initial investment but also make a profit from it. “A self-regulating market would fail to secure a socially optimal allocation of resources in the economy. For economists, such “market failure” justify market interventions - or policy instruments - aiming to increase investments in science in the economy towards the socially “optimal” level. (Fagerberg, 2013, p. 20)

According to Edler & Fagerberg, the market failure approach has led to different types of policy instruments; *public production of knowledge* (i.e., universities and state-run research facilities), *subsidizing R&D in private firms*, and *strengthening the incomplete property rights regime* (i.e., legal protection). They argue that even though the market failure is genuine, it is not given that policies can improve this. The vague nature of these policies means that implementing them can

make things worse. To exemplify this, they raise a telling question; “what is the (socially optimal) level that R&D investment should be raised to in, say, a particular country, region or industry?” (Edler & Fagerberg, 2017, p. 7). Even though the market failure approach has existed for decades, if not longer, it is “increasingly seen as inadequate to justify and guide the design and implementation of innovation policy more broadly” (Edler & Fagerberg, 2017, p. 8-9). The system approach can be used to analyze the dynamics in the system that creates innovation. “If the dynamics are deemed unsatisfactory by, e.g., policymakers, the approach may then be used to identify the mechanisms – or “problems” - behind the result and discuss what can be done about it” (Fagerberg, 2013, p. 28). In order to intervene, the policymakers need to have in-depth knowledge of the system in question, and “they may need to coordinate policies across different domains” (Fagerberg, 2013, p. 28). One such tool is Innovation Norway, the agency tasked with gathering knowledge about the different systems in the country and identifying the dynamics behind them. As discussed in this thesis, its mission is also spread across different domains.

The system approach does not dispute the market failure argument nor the policies that follow. Smith highlights the difference between the market failure approach and the system approach “Is that market-based systems not only suffer from an under-supply of knowledge, but are likely to actually generate areas of systematically weak performance. These areas of ‘systemic failure’ may call for actions contrary to conditions of perfect competition, for example, cooperation and collaboration between firms to facilitate knowledge flows, government regulation and the creation of incentives” (Smith, 2000, p. 94). Fagerberg argues that empirical data show that firms are not averse to knowledge flows - they are more concerned with gaining competitive advantages within the market. The same data shows that firms do not extract themselves from their environment - they use suppliers and customers to gain knowledge. (Fagerberg, 2013, p. 25)

Edler & Fagerberg say that “the environment can function as a resource (or enabler) for firm-level innovation” (2017, p. 9). If the system contains the complementary factors that Edquist mentioned, the result is a system geared towards innovation. (Edler & Fagerberg, 2017, p. 10) If the system contains a bad node, it might not innovate at a satisfactory level. This is somewhat a break with what Edquist says. Edquist believes that the systems evolve in a “largely unplanned manner” (Edquist, 2005, p. 191), and controlling them is not possible. However, if we rephrase, the two can be combined. If a system does not operate at the desirable level (i.e. reaching political

goals), there is one or more bad nodes. The challenge will then be to formulate and set goals that are productive for the respective systems. Smith highlights a series of issues that policymakers can have when constructing policies. He says that there is a need to have a thorough assessment of each system's specificities, generic system dynamics, different knowledge bases within different systems, and barriers in knowledge flows. (Smith, 2000, p. 97)

2.4 Different Types of Innovation Policy

Edler & Fagerberg sketch three different types of innovation policy. They are interlinked but have a few characteristics that make it constructive to differentiate them:

- *Innovation-oriented policies*: these policies focus on the invention phase and “leave the possible exploitation and diffusion of the invention to the market” (Edler & Fagerberg, 2017, p. 5). According to the writers, this was a reigning genre of policy in the years after World War II. At that time these policies went under the R&D, research, or science policy umbrellas, but today it is part of innovation policy. (Edler & Fagerberg, 2017, p. 5)
- *System-oriented policies*: this approach views innovation as generated in a system of actors. The policies seek to improve the system's parts that are not working properly or enhance the interaction in the network of actors that make up the system. “The development of such system-level policies is related to the emergence of the so-called “national innovation system” (NIS) approach around 1990 and its subsequent adoption by the OECD in policy-advice and evaluations” (Edler & Fagerberg, 2017, p. 5).
- *Mission-oriented policies*: with this approach, the policies seek to develop new solutions “to challenges that are on the political agenda” (Edler & Fagerberg, 2017, p. 5). The goal is not innovation in and of itself, but to solve problems that concern society. A prime example is the issues the global society is facing with global warming. These policies take a broad approach and focus on all parts of the innovation process from design to implementation. (Edler & Fagerberg, 2017, p. 5)

While innovation-oriented policies can be said to be closely linked to the linear model and market failure, mission-oriented policies are built on the foundation of the system approach. The previous pages provide an in-depth statement on the first two, with a focus on system-oriented policies. Yet, while the purpose of system-oriented policies mainly is to facilitate the creation and diffusion of

innovation to provide general societal value to its inhabitants, the mission-oriented take a more determined approach to policy-making.

2.5 Mission-Oriented Policy

A strong advocate for abandoning the “failure” argument for political intervention is Mariana Mazzucato. She argues that the failure based arguments are not an adequate basis on which to form innovation policy. She wants states to be front-footed and proactive - she wants them to not only fix the markets but to create them. (Mazzucato, 2017, p. 2) This approach to innovation policy goes under the moniker “mission-oriented policies”.

Mazzucato says that “mission-oriented policies can be defined as systemic public policies that draw on frontier knowledge to attain specific goals” and that they “provide a solution, an opportunity, and an approach to address the numerous challenges that people face in their daily lives” (Mazzucato, 2017, p. 4). According to this view, innovation is not an uncontrollable phenomenon that the state should mostly keep out of the way from. It is a tool that should be harnessed in order to reach specific goals. The very fact that states have a set of ambitions for the direction of growth implies that growth in itself is not enough - it has to be of benefit for the larger society. (Mazzucato, 2017, p. 2) This takes the state from being a more or less passive facilitator whose main role is to eliminate barriers to a generator that pushes growth in a targeted direction. The market can be flawless and the system complete without failure, and it is still not a given that the result is innovation that will benefit society.

Mazzucato states that to implement mission-oriented policies, the policymakers have to have an in-depth understanding of the system of innovation. “This requires not only the identification of missing links, failures and bottlenecks – the weaknesses or challenges of a national system of innovation – but also recognition of the system’s strengths” (Mazzucato, 2017, p. 7). In other words, the mission-oriented approach builds on the systems of innovation approach. However, while both Mazzucato and Edquist speak of systems as incredibly dynamic and ever-changing, they disagree on whether it can be controlled by policy. The latter says that policy can have a relatively limited impact (Edquist, 2005, p. 191); the former says it can at least be pushed if not controlled. Based on cumulated and expansive knowledge on the system the government wants to change or activate, they can set missions that “draw on the strengths of the country’s system of innovation and consider ways to overcome its weaknesses” (Mazzucato, 2017, p. 10). She says that the market failure

approach is typified by indirect policies, like tax incentives, and mission-oriented policies are direct. (Mazzucato, 2017, p. 21) One is passive and focused on correcting; the other is active and focused on creating.

Mazzucato echoes both Smith and Fagerberg when she states that policymakers have to have a thorough understanding of how innovation is created. Policies must consider that actors in a system of innovation cannot know the results of their work in advance. It must know that the actors need to gather and accumulate human capital, competencies, and resources in order to innovate. Moreover, it must acknowledge that the actors must work collectively and share both risk and reward. (Mazzucato, 2017, p. 21)

When policymakers and governmental agencies have gathered in-depth knowledge about the theory of systems, the reality of the system and have a grasp of how innovation is created, they can create productive missions that the system can be aimed at solving. The writer says that such missions should be;

- 1) well defined so that it can be monitored and measured,
 - 2) trigger a multitude of projects and R&D processes, and
 - 3) result in policies that can be implemented throughout the government's agencies and instruments.
- (Mazzucato, 2017, p. 9) She goes on to say that missions have “no ‘one size fits all’ definition”, but that they should be bold and inspirational, targeted, realistically ambitious, cross-disciplinary, and have multiple possible solutions. (Mazzucato, 2017, p. 14-15)

While the approach builds on the logic behind the systems of innovation approach, it does not put innovation for innovation’s sake at the center. The mission-oriented policy approach is ever-relevant in our current societal climate - UN’s Sustainable Development Goals function as a blueprint for all governments to use in order to create a better future for its inhabitants. The new developments of vaccines for Covid-19 are also examples of mission-oriented innovation in full effect. While the approach is apparent in the world’s current affairs, Mazzucato says that “mission-oriented innovation policy has a major part to play in delivering better quality growth while addressing grand challenges, but the changes in mindset, theoretical frameworks, institutional capacities and policies required are by no means trivial. So what is the practical way forward?”

2.6 Overview of the History of the District Policy’s Instruments

In 1955, in a report to the Storting dedicated to agriculture, threats to the districts were identified. The chainsaw and tractor made its entrance in the woods and the mountains, which reduced the need for employment. At the end of the fifties, another report was dedicated to the development of industry in the districts. "The general nature of districts' problems was the background for this report to the Storting, and it was this general nature of problems that made the government at the same time start the work of establishing DU" (Teigen, 2012, p. 158). DU, the District Development Fund, was created with a complete political agreement. The agency was charged with stopping Oslo's growth and being active and taking the initiative in the districts' development. (Teigen, 2012, p. 159) In other words, the districts' challenges have been on the political agenda for the best part of 70 years.

In the sixties, the growth center theory made its entrance in district policy. Every part of the country should have its own growth center, which would stop the population flow towards Oslo. (Teigen, 2012, p. 160) This was then seen as a threat to the scattered settlement - "If the growth center were to grow to anything close to the dimension that formed the basis for the growth center theory, it would have to be at the expense of population development on the outskirts" (Teigen, 2012, p. 161). This was opposed, and the idea of maintaining the settlement patterns was introduced in 1973, and it has been the goal of the policy ever since. (Teigen, 2012, p. 162)

The financial crisis in 1988 hit the cities hard, and it became apparent that there was a need for one agency that could control the growth in both the city and the district. This new agency was called the Norwegian Industrial and Regional Fund (SND) and was established in 1992. Unlike DU, this new agency was owned by the Ministry of Trade and Industry. (Teigen, 2012, p. 164) Twelve years later, this agency was merged with The Norwegian Export Council, The Norwegian Tourist Council, and The State Guidance Office for Inventors. The new agency was named Innovation Norway, which still exists at the time of writing.

2.7 Clarification of Concepts

The central word to this thesis is "district". The word is an enigma. It is, according to "Great Norwegian Encyclopedia," a name for an "area which was under the jurisdiction of a sheriff". The modern meaning is twofold; it is a word for an administrative division and scarcely populated rural areas some distance from the city. The former definition means that the "district" can function as a synonym to the word "region," which, according to the encyclopedia, is a word for an area defined

by jurisdiction as well. This specification might seem small, but in the perspective of this thesis, it is crucial. Nevertheless, a region can contain large cities (Oslo is part of a region), but, as per the latter definition, districts cannot do the same. In everyday speech, it is common to mix "district" with "region," and it should not be taken for granted that writers of governmental documents are aware of the difference.

District policy has classified six different area types in Norway, from most central to least central. The map in figure 2.7.1, provides an overview of the division and where the different types are located. Level five and six are often mentioned as “districts”. In this thesis, the word “district” is used about such areas. Both “rural” and “countryside” is used as synonyms to “districts” and allude to level five and six in figure 2.7.1.

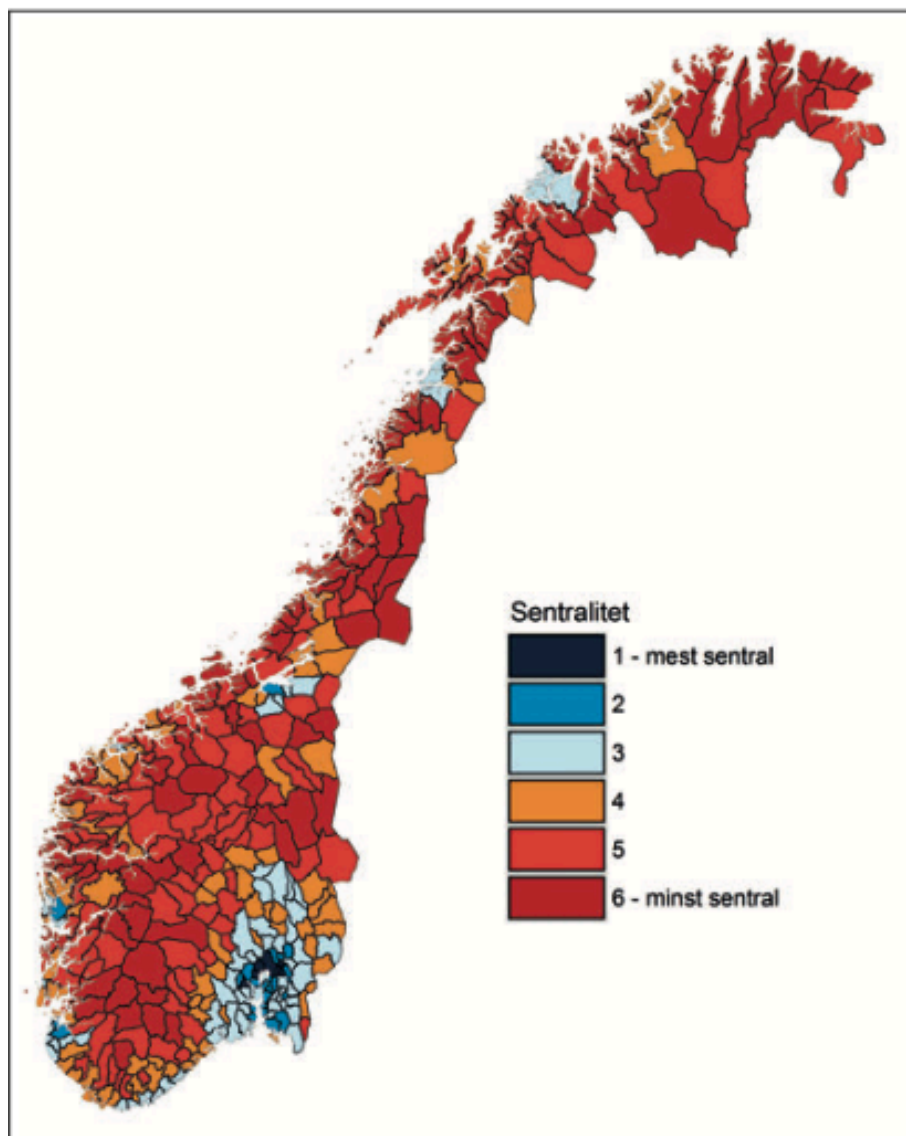


Figure 2.7.1 (Meld. St. 5 (2019–2020), p. 23)

2.8 Summary

The systems of innovation approach are central to innovation policy (Spilling, 2010, p. 14) and the Norwegian innovation policy should be analyzed and discussed with that in mind. Innovation is a result of interaction between all actors that influence innovation. There are several different systems, most notably national, regional and sectoral, but these systems are intertwined. This thesis will therefore speak about systems in a generic form. Political intervention is usually justified by the identification of a market failure or system failure. The first can be when the market produces a sub-optimal level of knowledge, while the latter can be a dysfunctional actor in a system that makes the system operate at a lower level. The mission-oriented approach builds on the system approach, but it adds that the systems can be made to work towards a specific target.

Later in this thesis, the issues related to the districts will be discussed in light of its role within Innovation Norway and general innovation policy. What has happened with this relationship? Have they made each other stronger? Has the districts' tide turned? What can the future hold for the districts?

3.0 Method and analysis

In this thesis, I will utilize document analysis (Asdal & Reinertsen, 2020). This chapter will explain the method, present an argument for why it will help answer the research question, describe the analytical framework, and discuss the pros and cons of using the method in this particular thesis.

3.1 Quantitative vs. Qualitative

The wording of the research question, “How has the relationship between the district and innovation policies evolved since the inception of Innovation Norway?” does not set logical boundaries for method choice. It could have been studied from a quantitative perspective by using the vast numerical data that exist both within the organization itself and from the authorities. It could also have explored this topic with a qualitative method by conducting interviews with stakeholders.

The chosen method is positioned in between the qualitative and quantitative. In the book *How To Do Document Analysis* Asdal and Reinertsen describe the two facets of documents as a phenomenon; documents are something purely textual, but also a “thing”, something material (Asdal & Reinertsen, 2020, p. 16). This implies that the method is as much about studying the wordings, arrangements and language, as it is studying underlying contexts and connections to other documents and actors. They go on to define text as symbols that can be interpreted (Asdal & Reinertsen, 2020, p. 83), which in turn makes it possible to analyse numbers within the method.

Numbers are thus also interpreted, both by those who produce the numbers and those who read and use them. There are often several premises and assumptions baked into a number. This means that the difference between qualitative and quantitative representations is not necessarily as clear as we would first think (Asdal & Reinertsen, 2020, p. 92). Document analysis leans on the analyst’s analytical abilities, and, as with pure qualitative studies, the results will not be universal and absolute truths. However, that is not the case with numbers based studies either. Numbers might not lie, but their presentation can project different messages to different people depending on how they interpret them. In his book “*Risk Savvy: How To Make Good Decisions*,” Gerd Gigerenzer presents an example of how the presentation of numbers matter: “(...)“if you take antidepressant, you have a 30 percent chance of developing a sexual problem.” Does that mean that 30 percent of all people

will develop a sexual problem, or that you yourself will have a problem in 30 percent of your sexual encounters?" (Gigerenzer, 2014, p. 5) Numbers and statistics, and other quantitative results need to be digested by the observer, and therefore contains aspects of subjectivity. Thus, document analysis is placed in between the two traditions - it can be used to analyze both qualitative and quantitative data.

3.2 Document Analysis

The purpose of document analysis as a method is to extract meaning from text. As stated above, in this case, "text" is not defined as words and letters in isolation but as interpretable symbols. (Asdal & Reinertsen, 2020, p. 83) This is also called semiotics, defined as the study of signs within society by the linguist Ferdinand de Saussure. The method builds on the semiotics tradition - material quantities are transcribed into, translated into, drawing systems (Asdal & Reinertsen, 2020, p. 238) - also called material semiotics. Document analysis is further inspired by the closely linked laboratory studies and actor-network theory. Bruno Latour coined the term "inscription devices," by which he meant instruments that "provide visual displays of any sort in a scientific text" (Latour, 1988, p. 68). In Latour's laboratory studies, these devices were pictured as technical objects that created "a final layer in a scientific text" (Latour, 1988, p. 68). Asdal and Reinertsen appropriate this into their document analysis. To understand power, one has to understand the technology (the inscription devices) that makes the power possible. (Asdal & Reinertsen, 2020, p. 228) While Bruno Latour pointed to telescopes and Geiger counters, another actor-network pioneer, John Law, pointed to maps and navigation (Asdal & Reinertsen, 2020, p. 228). Asdal and Reinertsen say that inscription devices also come in the form of documents, and, relevant for this thesis, such documents include legal texts, reports to the Storting, propositions, and regulations (Asdal & Reinertsen, 2020, p. 229).

One aspect of these inscriptions is that they are not neutral (Asdal & Reinertsen, 2020, p.230). They are used with a purpose - a goal - and thus exist within a particular context. Actor-network theory is about exploring the context, the different possible meanings, how the inscriptions move. Documents are the inscription device Asdal and Reinertsen focus on in their book. Moreover, as with all inscriptions, they are not neutral either. The document itself can reveal much more than just its subject matter. The wording, the layout, the style, and the structure of a document can say something about the actions it contains, what effect it is intended to have, and what its intentions

were. (Asdal & Reinertsen, 2020, p. 80) In many ways, the method focus on the symbols, the semiotics, and how it exists in a societal ecosystem. It sees documents as something textual and discursive, but also something "thingly," something material (Asdal & Reinertsen, 2020, p. 16). They are non-neutral inscription devices that can be used to understand and analyze both social and natural phenomena (Asdal & Reinertsen, 2020, p. 19). As Asdal and Reinertsen say: if we pursue an actor-network theory inspired understanding, it will involve understanding documents as an enabler for action, objects that help us take action (Asdal & Reinertsen, 2020, p. 229).

3.3 Why Document Analysis

According to their mission statement, Innovation Norway is supposed to contribute to innovation in business and develop competitive companies and "development in the districts (Innovation Norway, 2020). This means that there are documents that either provided them with this task or permitted it. They have been given the responsibility of both the country's innovation and its countryside. As stated in the research question, "How has the relationship between the district and innovation policies evolved since the inception of Innovation Norway?" this thesis will research how this duality has fared since the organ's inception in the early 2000s to 2020.

Documents are an enabler. It gives power to action. Bureaucratic and governmental documents maybe more so than others. They can give someone the power to build a house, or it can deny it. They can give resources to some sectors, and it can drain resources from others. It can push societal developments in specific directions and contribute to neglecting other areas of society. Official documents document the explicit intention behind Innovation Norway; they document the general development and evaluate its progress. However, as discussed in this chapter, documents can say more than just the specific meaning of its words and symbols.

The structure and building blocks of a text frame the document's subject matter and affect how it can and wants to be interpreted. The arrangement of the text, and the points and arguments placed in introductions and lead paragraphs, can for instance give the analyst information about the writers perception of importance. (Asdal & Reinertsen, 2020, p. 87) Documents regarding Innovation Norway, especially those created or commissioned by the Government, will say something about how the relationship have evolved. Exactly what and how much it will say is not clear, but it will say something which will help answering the research question.

3.4 Data Collection

To gain a broad understanding of the evolution of the district-innovation relationship, the period was divided into three stages. Stage 1 addresses the time surrounding the establishment of Innovation Norway in 2004. Stage 2 is four to six years after the inception, and Stage 3 from the present day. The data collection was limited to documents from the time around these three stages. It had to be official documents, either reports to the Storting, propositions, external reports or NOUs. These have different characteristics, but they all play a part in creating strategies and policies. The search process was also limited to documents that either concerned Innovation Norway directly, innovation generally or district policy generally. This was done to secure that the analysis would have a macro perspective and deal with the relationship's big lines.

At every stage a document was picked as the starting point. These were identified as directly regarding Innovation Norway or documents on the big lines in one of the two policies. The chosen documents contained references to other documents with varying degree of relevance. The linked documents were assessed; if they directly regarded Innovation Norway or general policy, they would be relevant and were included in the analysis. This methodical move is built on Asdal & Reinertsen's "follow the case". They speak about following how a case is created, how it changes and how it unfolds (Asdal & Reinertsen, 2020, p. 109). This analytical tool is applied to the relationship as a whole - it is followed from the creation of Innovation Norway to 2020, but in the data collection it is used to make sure that no relevant document that fit the criteria is overlooked.

The documents that fulfilled the criteria of either directly regarding Innovation Norway, or dealing with the big lines of the policies were:

- 1) 2003: About Law on Innovation Norway (Proposition to the Storting)
- 2) 2003: Political Instruments for Innovative Industries (Proposition to the Storting)
- 3) 2004: Effects and Effectiveness (NOU)
- 4) 2004: Viable Districts and Regions (NOU)
- 5) 2008: An Innovative and Sustainable Norway (Report to the Storting)
- 6) 2010: Evaluation of Innovation Norway (External report)
- 7) 2009: Local growth and optimism for the future (Report to the Storting)
- 8) 2017: Sustainable Cities and Strong Districts (Report to the Storting)
- 9) 2019: Thriving Communities for the Future (Report to the Storting)

10) 2020: The Importance of Business for Thriving and Sustainable Local Communities (NOU)

These documents are spread across 17 years, have different authors and receivers, and different genres. The variety means that the relationship between districts and innovation can be examined by looking at multiple angles.

3.5 Analytical framework

Asdal & Reinertsen present several analytical tools that can be used in document analysis, but they are adamant that the overall topic, the research question and what role the documents will play in the thesis as a whole, define how the analytical framework will be. Designing the analytical framework will thus be down to the researcher's choice of framework. That involve picking, choosing, and adapting approaches from Asdal & Reinartsen. The structure of the analysis is as follows:

Before each Stage, the time was put in a political context. What was the composition of the government, and which ministries dictated the two policies.

Then each document were examined with these questions in mind,

- **Who** is the sender/writer and who is the receiver?
- **What** is the document's genre and subject matter?
- **When** was the document written?
- **Why** was it written?
- **How** was the district-innovation relationship presented?

These questions provide broad insight into each document. **Who** shows who writes the document; is it politicians, professionals or stakeholders? Are the writers exogenous to the policies or endogenous? **What** describes what the document is about. **When** place it in the chronological context. **Why** says something about the document's purpose. **How** contain the most interesting parts. This question says something about the relationship at up until and during that specific time and the writer's perspective on the future.

At the end of each Stage the results of the analysis of each document is summarized. After Stage 2 and 3, the summaries also point to the changes that have happened from the previous stage. In this way, the research can provide an adequate assessment of how the relationship between innovation and the districts have evolved over the past 17 years.

The analysis will be somewhat superficial. It do not delve deep into each one, the questions above are answered and then lines are drawn between the different results. The method is qualitative because the researcher has to interpret the contents of the documents, and then place the interpreted findings in a bigger picture. The researcher's ability to extract the relevant points from the documents, decipher them, and present them to the reader, becomes a source of error that the reader should be aware of. Bearing that in mind; The writing and formulation of the findings have strived to be as objective as possible in the next chapter. It does not eradicate the risk for error or make the results free of subjectivity - however that is not a goal in itself with qualitative research.

Nevertheless, it should strive to be both verifiable and credible. The steps taken in this research and the documents used are easily verifiable - they are official documents. Hopefully the limitations presented above also give a picture of what information and which elements have been deemed irrelevant and not included in this thesis. Whether this is credible or not is down to the reader's judgement of the presented limitations.

3.6 Discussion on Alternative Methods

Previously it was explained that the research could have been conducted through a qualitative method or a quantitative one. I could have conducted interviews with stakeholders, i.e. actors from Innovation Norway, innovation scholars and someone with the interests of the districts at heart. This would have provided specific insights from a select few, which would help paint a picture of the districts' role in the eyes of innovation. It would probably give much information on contexts, specific developments, and maybe someone would have provided me with direct opinions. Such a thesis exploring the research question through a qualitative method would have been both interesting and relevant. But its results would have different characteristics. The choice of interviewees would dictate the possible results (as they would present their individual views based on their personal knowledge and context), and it would be hard to extract something that resemble objective findings out of the subjective nature of interviews.

In turn, a quantitative method would give great insight into how Innovation Norway manage the funds that they are allocated. It would show a numerical development in funds distributed to areas considered to be “the districts”, and projects considered to contribute to their development. For instance, the percentage of Innovation Norway’s resources that found its way to the districts at any given moment in time, would say something about how important the authorities deem the countryside to be. Two factors is the main reason for why this method was not chosen:

- 1) This breakdown of Innovation Norway’s funds has been done before, as is natural given that the authorities own the organ and
- 2) It is not interesting to the reasercher whether the districts get money or not. This thesis examine if they are allocated stratetic focus by those providing Innovation Norway with the power and responsibility to develop the districts.

So. This thesis have use mix of these two genres. It is qualitative because it “reads between the lines” and tries to extract contexts and meanings that go beyond the actual words in the documents. At the same time it is quantitative because it is easily verifiable and testable, which is one of the perks with quantitative research. Using the document analysis method to study this topic, the thesis has a foundation designed to capture the essence in the strategic documents behind and regarding Innovation Norway, and be easy for other researchers to analyse. If the findings, discussions and points are interesting to academic fields, either in innovation or districts, it is easy to dispute it and/or build upon this thesis.

3.7 Summary

The research for this thesis is conducted based on Asdal & Reinertsen’s How To Do Document Analysis (2020). The data collection and analysis is divided into three stages: the time around the inception of Innovation Norway, 4-6 years into its existence, and present day. Within this time frame documents either directly regarding Innovation Norway, or district and innovation generally, have been analysed.

The analytical framework is based on a series of questions, who, what, when, why, and how. The subsequent answers is interpreted and compared, and then lines between the stages are pulled. This

is the basis on which this thesis will describe the evolution of the relationship between innovation and the districts.

4.0 Empirical Findings

The previous chapter outlined the reasoning behind choosing document analysis and explained the steps in collecting data. The analytical framework consists of exploring these questions:

who, what, when, why, and how.

The analysis is divided into three stages. Each Stage begins with a short description of the context at the given time and finishes with a brief summary that highlights the main results. The big lines can be followed throughout the chapter, and can be read in short in the summary at the end.

Ten documents within four different genres will be analyzed below. The first one is a proposition for a bill, a genre that outlines the structural and juridical aspects of a new law. The second genre is a report to the Storting (often called white paper), which contains the government's strategy and plans for the immediate future. These lead to hearings and decisions in the Storting. The third and fourth genres are closely linked. A NOU is a report on a topic compiled by a group decided by the government, while an external report is created by an external actor at the request of the government.

4.1 Stage 1: Inception of Innovation Norway

4.1.1 Context to Stage 1:

The documents from this Stage was written by or for Kjell Magne Bondevik's second government. The government was made up of the Conservative Party (H), the Christian Democratic Party (KrF), and the Liberal Party (V). Erna Solberg (H), the future prime minister, was the Minister of Local Government and Regional Development, while Ansgar Gabrielsen (H) was the Minister of Trade and Industry. Thus the two ministries were controlled by representatives from the same party.

4.1.2 Document 1: About Law on Innovation Norway

The first document I analyzed was the proposition to Parliament regarding the proposed organ for innovation, Innovation Norway (Prop. 14 LS, (2003-2004)). It is classified as a proposition for a new bill and was written by the Ministry of Trade and Industry, and presented to the Storting at the end of 2003.

The document contains what the new organ is going to be, its political instruments, the characteristics of the organization, and an overview of the existing organs that were going to be merged into Innovation Norway. The 22-page document finishes with a written proposal for a bill regarding this new organ. The rhetoric is matter-of-factly and do not attempt to build an argument. The document focuses on the bill's practical implications, both for the incumbent system that is being restructured and for the new system that is being introduced. It is obvious that the document is written on the basis of a previous political agreement - the list of contents, the wording, and the rhetoric shows that the writers expect the bill to be passed.

The document's structure suggests that they do not anticipate it to be heavily debated, and the first line of the first chapter shows us why. Before it says anything else, it refers to the proposition on political instruments for innovative industries (Prop. 51 (2002-2003)) and its subsequent parliamentary resolution. The proposition speaks about how the district-based offices from The State Business and District Development Fund (The Norwegian appreciation "SND" will be used from this point) will be organized within the new organ. As the proposition is based on a longer and more thorough argumentative document, which - as we will see - includes the initial goals for Innovation Norway, this document does not go into detail on the role of the districts.

As implied, Prop. 51 (2002-2003) has to be analyzed to further understand the districts' role and position in the discussions leading up to the creation of Innovation Norway.

4.1.3 Document 2: Political Instruments for Innovative Industries

This document has the same sender as document 1 - the Ministry of Trade and Industry - and received by the Standing Committee on Business and Industry at the Parliament in April 2003. It serves as the basis for document 1 and contains all of the arguments that its successor did not mention.

The document's structure is still formal, but the tone of voice is more argumentative, as this is a proposition that the government c/o the Ministry of Trade and Industry wants the majority of Storting to agree with. The first chapter is an intro and a summary, where the main background, arguments, and proposals are laid out. They then go on to provide a reasonably extensive backdrop for the proposition. This chapter is the second-longest, only beat by chapter 6, on how the new organ should be organized.

The first sentences of chapter 1 reveal which goals this document wants to contribute to reaching; The main goals in the government's economic politics are work for all, development of the Norwegian welfare state, fair distribution and sustainable development. Strong and competitive businesses are a prerequisite for achieving these goals (Prop. 51 (2002-2003), p. 5). When the government wants to change how the existing system of policy instruments is organized, it implies that it is not functioning at a satisfactory level. With this proposition, they seek to enhance the support system for value creation to sustain the welfare of the country's inhabitants. They want to narrow down the number of different instruments and create a central portal focused on innovation. (Prop. 51 (2002-2003), p. 9) The proposition cites the EU's Lisbon Strategy from 2000, which states that it wants the EU to be the most competitive and dynamic knowledge-based economy in the world by 2010, as the trigger for this process. This strategy had an impact on the Norwegian economy through its participation in the European Economic Area.

Chapter 3 - Goals and Target Groups (Prop. 51 (2002-2003), p. 19) - is the most important of the document. It contains Innovation Norway's "why" - its mission. Here the authors present which activities they think are essential to boost the country's value creation. The main target of Innovation Norway is that they shall contribute to increased innovation in industries all over the country (Prop. 51 (2002-2003), p. 8).

At this point, it makes sense to repeat some definitions from chapter 2.

There are two definitions of the word "district." One points to an area with specific geographical and demographic attributes, the other points to areas outside the big cities. The two are used interchangeably in this text. For instance, they state that companies in most industries and districts are experiencing tougher competition than before, also in the domestic markets (Prop. 51 (2002-2003), p. 9). By wording this sentence in this way, they seem to convey that the competition is everywhere, no matter which industry or where the company is located, and thus the word "district" could have been replaced by "region." Later, they use the expression "district and foreign offices" in a way that signifies that these offices are located outside the main office. However, later when they write that this contributes to strengthening businesses in the districts (p. 27), it seems like they mean the scarcely populated areas of the country.

The document uses the word "district" 34 times, and in approximately half of the instances, it is

used as a synonym for “region”. On the other hand, “region” is mentioned 88 times, and it is unequivocally used as it was defined. This might seem like nitpicking, but it can have implications. When the goal of Innovation Norway is to contribute to increased innovation in industries all over the country, do they mean in all of the country’s regions or in all of the country’s districts and regions?

So, we know that “development in the districts” (Innovation Norway, 2020) (unclear which definition they use here) are part of Innovation Norway’s mission and responsibility. We also know that the two documents that form the basis for the organ use the word “district” somewhat liberally - do they mean districts as in regions that might contain cities or districts as in areas with few people? As shown in chapter 2 of this thesis, Innovation Norway is the continuation of SND, which was the continuation of several instruments aimed at aiding the regions and districts outside of the big cities. To understand the political arguments behind incorporating SND into Innovation Norway and the districts' ruling political goals, we have to look outside of documents regarding Innovation Norway directly.

4.1.4 Document 3: Effects and Effectiveness

We begin with two “Norwegian Official Report” (NOU from here), from 2004. The first NOU resulted from a three-year process conducted by the “Efficiency Group” (a group of researchers from institutions like SSB, Norut Finnmark, and Møreforskning). The group was tasked with increasing the knowledge about the effects of various types of government efforts for regional development and district policy goals (NOU 2004: 2, p. 9). In the introduction, they point to the difference in the definition of “districts” that was described earlier: Regional policy involves a holistic approach, in which cities and districts are seen as a whole. The narrow regional policy is the additional effort made with a view to business development and living conditions in the districts (NOU 2004: 2, p. 9). They made this distinction based on the EEA Agreement, which forbids state aid to enterprises unless they are located in regions with lower GDP per capita than the Europe average, and in the weakest regions nationally. These areas go under the district policy-umbrella, and, according to the document, in the early 2000s approximately 25 % of Norway’s population lived in these areas. (NOU 2004: 2, p. 102)

Since the seventies, the main target for regional- and district policies have been to maintain the settlement patterns. Different governments have interpreted this differently from one another.

However, Kjell Magne Bondevik's second government, who was in office during the initiation of Innovation Norway (and when this report was written), defined it as population growth in all parts of the country (NOU 2004: 2, p. 41). This is the pinnacle of the developments that started in the previous decade; policies sought to plan the settlement patterns, now they seek to control the markets through the market failure approach, and the policy instruments became geared towards handling market failure. (NOU 2004: 2, p. 104-105) The writers say that the process with this document, and NOU 2004: 19 (analyzed below), are expressions of dissatisfaction with regional policies. (NOU 2004: 2, p. 58) It is clear that the existing policy instruments, including SND, became outdated during the nineties. The goal of maintaining settlement patterns persisted, but a combination of directions from the EEA and a not-fit-for-purpose policy framework meant that the regional- and district policies had to go through a revitalization process.

4.1.5 Document 4: Viable Districts and Regions

This was commissioned by the Government c/o Ministry of Local Government and Regional Development (KRD from here)), and carried out by the District Commission (consisting of a series of politicians and representatives from industry). Their mission was to review the entirety of district and regional policy and present its recommendation (NOU 2004: 19, p. 3). It was initiated by a parliamentary representative for the Socialist Left Party in an attempt to get a new perspective on the scope and direction of the district policy. This was the follow-up to document 3.

One of the recommendations from the commission is this:

The policy framework conditions and -agencies should strengthen its role as an active facilitator for interaction between individual actors, especially concerning smaller business actors in the districts, among other things by establishing a more targeted collaboration with other companies and relevant competence environments, including in the cities. The apparatus can here function as an important intermediary and a proactive coupler (NOU 2004: 19, p. 121).

This recommendation is in line with the general regional- and district policy. It instructs the apparatus to be an active facilitator in the innovation systems in both the districts and the cities to generate value creation all over the country. They say that the apparatus within the narrow district and regional policy have been proven to be effective in promoting innovation in districts and regions (NOU 2004: 19, p. 111). The focus on innovation and distancing from subsidization (NOU 2004: 19, p. 104) shows that the writers want the new policy to be offensive and future-oriented.

They want the regions to become more robust innovation systems and encourage businesses located in the districts to become competitive within expanding sectors (NOU 2004: 19, p. 104) to create domino effects, after which the general prosperity and living conditions increases.

4.1.6 Summary of Stage 1:

In this Stage, four documents have been analyzed: the proposition for establishing Innovation Norway and one report to the Storting written by the Ministry of Trade and Industry, and two NOUs regarding the district- and regional policy.

The first document was matter-of-factly and was mainly filled with organizational aspects with Innovation Norway. It referred to document 2 as being the ground on which the proposition was built. Document 2 was written by the same ministry and laid out its main arguments for creating Innovation Norway. It said that the Norwegian economy's primary goal is to provide work for all and develop the welfare state - and competitive businesses were seen as the key to reaching that goal. Thus the primary target for Innovation Norway became to help increasing innovation all over the country. While this does not directly say “districts”, the diffusion of innovation to all parts of the country is implied.

Nonetheless, we have seen that document 2 are indecisive when using the term “district”. It is used both to point at the regions outside the big cities, as well as scarcely populated areas. In approximately half of the times, the term is used as a synonym for “region”.

Document 3 was written by the Efficiency Group, designed by the Ministry of Local Government and Regional Development, and containing mostly researchers. Unlike the first two documents, this was decisive in its use of “districts” - they quickly established a broad understanding of “region” that included cities and a narrow understanding that followed a set of criteria. They also established what the general goal has been for the district- and regional policy, and what it was at the time; the overall goal is and have been to maintain the settlement pattern (i.e., decentralized population), and the specific goal for the Bondevik’s Government was to have population growth all over the country.

Document 4 was the follow-up to document 3, was ordered by the same ministry, and was carried out by the District Commission. This commission was in large made up of politicians from the

complete spectrum. Like document 3, document 4 was dissatisfied with the policy up to that point. They wanted Innovation Norway to facilitate network formations that included the districts and be a proactive agency that helped evolve the policy instrument to become more than subsidization.

4.2 Stage 2: Midway Point of Innovation Norway

4.2.1 Context to Stage 2:

By the time we arrive at the second Stage, there had been a change in governments. Bondevik's government was replaced by Stoltenberg's, consisting of the Labour Party (AP), the Socialist Left Party (SV), and the Centre Party (SP). While the business-oriented Conservative Party led the previous government, this was led by the social-democratic oriented Labour Party. The district oriented Centre Party (formerly known as Farmers' Party) was a part of this coalition.

The Ministry of Local Government and Regional Development was controlled by SP, while AP was in charge of the Ministry of Trade and Industry. Both ministries had several changes of ministers during the second Stage.

4.2.2 Document 5: An Innovative and Sustainable Norway

This was the first report to the Storting with a sole focus on innovation. It was delivered in December of 2008 and written by the Ministry of Trade and Industry. They start the report by describing innovation as a means to achieve societal goals:

The government wants a society where the welfare is among the best in the world. We want a society with competitive companies all over the country. Moreover, we want a society where we meet our needs in a way that does not ruin the country for future generations. Innovation and change will be key to achieving this (Meld. St. 7 (2008–2009), p. 5).

This echoes all the previous analyzed documents' sentiments - innovation is vital to achieving increased value creation in the whole nation to maintain welfare and living conditions.

The report function as a status report for the work on innovation in the country, both generally speaking and for the State's role and its politics. It refers to an evaluation carried out by OECD (Organisation for Economic Co-operation and Development) that The Norwegian system of innovation essentially meet all requirements for international best practice (Meld. St. 7 (2008–2009), p. 32). The general tone of voice is one that is happy with the innovation policy until that point, something they underline in the introduction: The Government will continue the main lines of

the innovation policy pursued during the period, but will also implement concrete improvements in several areas.

The government's vision for innovation policy is:

- An innovative and sustainable Norway (Meld. St. 7 (2008–2009), p. 5).

Even though innovation was deemed essential to revitalize the districts and maintain the settlement pattern, and Innovation Norway was charged with the task, the word “district” is mentioned 14 times throughout the 143-page document. It is mentioned in connection with “Skattefunn” (tax deduction for R&D costs) being more effective in the districts than central areas. It is mentioned in an argument (reproduced by the writers, rather than being their views) on how innovation measures in central areas can affect the districts. District-oriented seed funds are mentioned (NyVekst (new growth) are only available to companies located in the districts). Tourism is also branded as a district industry that contributes to attractive communities and settlement (Meld. St. 7 (2008–2009), p. 76). This is not a document solely regarding the work of Innovation Norway, that must be emphasized, but it might seem like the districts were only a minor factor when the country’s innovation policies were evaluated and the strategies for the coming years formed. This does not necessarily mean that the districts are discarded or neglected, but it is not an explicit focus on exploiting the inherent benefits and resources located in these areas.

4.2.3 Document 6: Evaluation of Innovation Norway

In 2010 an external evaluation of Innovation Norway, on behalf of its owner NHD, was published. The evaluation was carried out by the companies Econ Pöyry, Agenda Kaupang, and Damvad. In the summary of their evaluation, they say that Innovation Norway has achieved all their goals to some degree. Innovation Norway has contributed to increasing innovation in Norwegian industries, contributed to increased internationalization, and positively affected both the branding of Norwegian business and tourism. Nevertheless, even though Innovation Norway has allocated resources to achieve this goal, the evaluation says that the geographically conditioned target has not increased innovation in the districts. (Econ Pöyry, 2010, p. 3)

The document describes how the rural development funds (BU-funds form here) constitutes 40 percent of the grants dedicated to the sub-goal of business development based on regional prerequisites throughout the period (Econ Pöyry, 2010, p. 143). The number of resources allocated to development in the regions had been substantial until that point, so the evaluation does not

indicate that the regions have been financially neglected. Nevertheless, they find that the funds distributed on geographical conditions are not necessarily distributed to scarcely populated areas. The writers state that the BU-funds do not substantially contribute to innovation, and its goal is not to contribute to business development in non-central areas (Econ Pöyry, 2010, p. 5).

They write about how BU-funds dedicated to agriculture might lead to increased investments, but that it is a paradox that the increased investment led to less employment. Due to the protection of the Norwegian agricultural market, there is no room for a significantly increased total turnover in Norway, which means that increased investment results in reduced employment (Econ Pöyry, 2010, p. 143).

Innovation was supposed to boost business in the districts - as in the definition of being scarcely populated and within the area for district policy - to maintain the settlement patterns. The evaluation does not look at this policy behind it, but they state that the goal for Innovation Norway regarding the geographically conditioned target should be to develop industries in the regions in such a way that they can compete with the rest of the country for dynamic resources. (Econ Pöyry, 2010, p. 130) At this point, the funds directed at the regions did not reach the districts and did not lead to increased innovation in the region, which did not make the business within the region competitive. The writers recommend that funds should not be earmarked geographically and that business development in regions and districts should be a general consideration rather than a sub-goal. (Econ Pöyry, 2010, p. 5)

4.2.4 Document 7: Local growth and optimism for the future

In April 2009, 16 months before the evaluation of Innovation Norway arrived, the government published its report on its regional- and district policy. It is called Local growth and optimism for the future. The title implies that the writers do have hope for a positive future for the districts and regions and that the report will not be scathing on either the status quo or the views for the future.

The writers repeat the overriding goal for the regional- and district policy. The government wants the country to utilize all its resources, independent of where they are located, and maintain the settlement pattern's main lines to continue and further develop the diversity of history, culture, and resources that lies in this. (Meld. St. 25 (2008–2009), p. 7) This was also mentioned in the equivalent report from 2005 (which was based on the document 3 & 4), but then it was put

relatively deep in chapter three. In 2009 it was placed in the very first paragraph of the first chapter. It does not necessarily represent a policy change, but now the agenda is to not only develop the regions and districts for value creation purposes but also for preservation purposes. The settlement pattern exists not only to give people freedom of choice and maintain equal welfare independent of location but also to preserve, and build upon, history. If this change has had an impact beyond the rhetorical is not for this thesis to discuss, but it shows that these policies are multi-faceted, and some of the facets might be in conflict - just like with the BU-funds that actually contributed to developing systems in agriculture that reduced its need for employment.

The report has a significant focus on innovation, where several chapters are dedicated to the topic. This is in line with the findings from stage 1 - regional- and district policy view innovation as very important to achieve the overriding goals. It states that companies in less central areas report as many innovations as companies in cities. The R&D institutions are still mostly located in cities, but the collaboration and interaction with industries in less central areas function well. (Meld. St. 25 (2008–2009), p. 19) The government wants to build on the environments for value creation in the big cities to promote innovation all over the country. (Meld. St. 25 (2008–2009), p. 23) Business development and innovation are the main challenges in the work to achieve the goals of the district- and regional policies (Meld. St. 25 (2008–2009), p. 47).

In 2010 the County municipalities took 49 % ownership of Innovation Norway. They had been the principal client until then, but now they were able to participate in the formation of strategies within Innovation Norway and acquire a holistic view of Innovation Norway's instruments. (Meld. St. 25 (2008–2009), p. 48) The document states that district and regional policy are closely linked to innovation policy (Meld. St. 25 (2008–2009), p. 100), and the change in ownership of Innovation Norway consolidated relationship. The role of innovation in the revitalization of the decentralized areas is further elaborated; Local businesses are dependent on dynamic resources like human capital, and human capital is dependent on attractive opportunities to establish themselves, or stay, in the area. (Meld. St. 25 (2008–2009), p. 100) The district and regional policies are dependent on innovation to achieve this. On the other hand, innovation policies seek to gain the greatest possible overall value creation for the Norwegian economy (Meld. St. 25 (2008–2009), p. 100), and the country's different districts' potential value creation should be maximized in order to achieve this.

More innovation in a region means more growth companies - innovative companies positively

affect other actors in the same region. (Meld. St. 25 (2008–2009), p. 102) The government emphasizes the need for these innovative environments to interact with other innovative environments in the country and focus on internationalizing and involving companies located outside the environment's center. (Meld. St. 25 (2008–2009), p. 104) While this is in line with the evaluation of Innovation Norway in the sense that they want the infrastructural barriers between the different systems to be lessened, the evaluation is clear on their recommendation to have this as a general concern, rather than a goal itself. The Ministry of Local Government and Regional Development want their funds to promote longterm value creation, and employment (Meld. St. 25 (2008–2009), p. 110) in the districts, but the evaluation say that their funds do not promote innovation and, in the case of the BU-funds, can contribute to reduced employment.

4.2.5 Summary of Stage 2

Not much has changed since stage 1. We had a change in government and a global financial crisis, but the big lines in the relationship between innovation and the districts seem to be at a stand-still. We got the first-ever innovation report, which was very favorable toward the creation of innovation in Norway. It echoed documents 1 and 2 when it repeated that innovation leads to increased value creation, which helps to maintain and develop our welfare state. Nevertheless, the districts are hardly mentioned at all.

With the arrival of the first external evaluation of Innovation Norway, we can see some relational developments. The evaluation states that the agency has more or less reached all its targets, except for contributing to increased innovation in the districts. According to the evaluation, the districts have been allocated resources, but they have not led to more innovation. This is the first time in the analysis that someone presents a substantial critique of the two policies' relationship.

On the other hand, the districts put as much emphasis on innovation as in Stage 1. They dedicated several topics in the district report to innovation and stated that business development and innovation were crucial for the districts' positive development. The report focuses on the fact that the county municipalities were going to take a 49 % stake in Innovation Norway, solidifying the relationship between innovation and the district- and regional policies.

One small change that occurred in the transition from stage 1 to stage 2: the main target of maintaining settlement pattern was continued, but now that was also to preserve and develop country's the histories and cultures. This point was moved from deep within a chapter in the previous equivalent report, while it was put in the first paragraph of this one. Now, it seems, the settlement goal is not only about exploiting resources and providing equal welfare but also about preserving the intangible goods that is history and culture.

4.3 Stage 3: Present day

4.3.1 Context to Stage 3:

Stoltenberg's government was replaced by the Erna Solberg-led coalition, consisting of the Conservative Party (H) and the Progress Party (FRP). From 2018 it consisted of the Conservative Party (H), the Christian Democratic Party (KrF), and the Liberal Party (V). The Ministry of Local Government and Regional Development were rebranded the Ministry of Local Government and Modernisation, and are and have been in the control of the conservatives since the change of government.

The Ministry of Trade and Industry also changed its name, from 2014 it was called The Ministry of Trade and Fishing. The Conservative Party lead this ministry until the Liberal Party took control in 2020.

Since the government's report from 2008, An Innovative and Sustainable Norway, there have been no reports dedicated to innovation. There have been reports on the relationship between cities and districts, there have been reports on industry's role in developing the districts, there have been NOUs on value creation and productivity, and in June of 2020 a report on innovation in the public sector was presented to the Storting. However, no report is dedicated to general innovation in the country.

This Stage will not be as comprehensive as the above since the documents are more angled towards how innovation can contribute to reaching specific goals rather than the innovation itself. Thus it is hard to analyze the districts from the innovation standpoint and have strong results. Therefore this part will be a short analysis of documents linked to innovation and development of the districts.

4.3.2 Document 8: Sustainable Cities and Strong Districts

This District Report from 2017 largely echoes the previously analyzed documents. Norway wants to maintain settlement patterns and lay the foundation for equal welfare and living conditions independent of location. In order to achieve this, they have to secure good utilization of resources, through high employment and high productivity in well-functioning labor markets (Meld. St. 18 (2016–2017), p. 12). They emphasize the need for companies and industries that create jobs and innovate. (Meld. St. 18 (2016–2017), 2017, p. 6)

They proclaim that the districts, with its natural resources, have had growth in the previous years and contribute to knowledge-intensive industries in the cities. (Meld. St. 18 (2016–2017), p. 6) The government wants the districts, with their unique characteristics, to be more important in the regional systems of innovation. The lack of will or ability to collaborate and take part in the clusters (systems), is the reason for badly developed business environments. (Meld. St. 18 (2016–2017), p. 46) To solidify the clusters in the regions and districts and incentivize the creation of new ones, two policy instruments have been created, this time by the Research Council: FORKOMMUNE (for municipality) (Meld. St. 18 (2016–2017), p. 18) and FORREGION (for the region) (Meld. St. 18 (2016–2017), p. 47). Both were established to stimulate the use of research and boost innovation outside of urban environments, and signifies the focus on innovation in order to help the districts that fall short.

4.3.3 Document 9: Thriving Communities for the Future

This document is also branded as the District Report. They start the report by repeating the overriding goals, as described numerous times above. The Government wants thriving societies and growth all over the country (Meld. St. 5 (2019–2020), p. 7), and to achieve this there is a need for innovation and change in the districts that in turn will lead to increased employment, which is what generates welfare and living conditions of the local area. The change in rhetoric for this part of Norwegian politics is not new, and the analysis show consistency throughout three different governments (Bondevik II, Stoltenberg I, and Solberg).

Yet, they acknowledge that the rural - as in non-urban - is threatened by developments in other countries. (Meld. St. 5 (2019–2020), p. 8) The government wants city and countryside to exist in tandem and co-dependency, even though the tendency is, and has been for decades, that cities get stronger and non-central areas weaker. The urgency of the developments globally (approximately 70 % of the world's population will live in cities by 2050), pushed the government to create a District

Report two years after the previous one. In contrast, the only report dedicated to innovation policy was released in 2008. The focus is not just on innovation, but the main lines are linked to it: the report speaks about helping businesses thrive, utilizing natural resources, provide access to knowledge and labor, and create an infrastructure that gives increased mobility. Innovation will help businesses thrive and maximize the potential for utilization of natural resources, but to do that the districts need adequate infrastructure to attract knowledge and labor.

4.3.4 Document 10: The Importance of Business for Thriving and Sustainable Local Communities

The NOU from 2020, *The Importance of Business for Thriving and Sustainable Local Communities*, find that urbanization and centralization are mainly down to the demographic wave where young people choose to settle in central areas rather than in the districts. It seems like the availability of jobs is not enough in itself to attract young people. (NOU 2020: 12, p. 170) This is the first of the analyzed documents that are explicit in their view on this specific topic. Instead of recommending a focus solely on innovation in business, they believe the patterns of settlement preferences should be studied closer. The document does not elaborate further on this particular topic.

4.3.5 Summary of Stage 3:

It seems like the issues surrounding the districts increase in intensity. Document 8, the district report from 2017, repeated the policy's main goals but did not put history and culture front and center like document 7. They emphasize developing the district's position in systems of innovation. However, only two years later, the government compiled another district report. Document 9 repeats the same goals, but acknowledges that the trend outside of Norway poses a threat to maintaining the settlement patterns. They want to tie the city and countryside together in a co-dependent system. The main point of both these documents is that innovation and increased value creation is needed to turn the tide. Nevertheless, the last document hints at the need to expand this view on what the solution is - jobs and economic possibilities are not enough to attract people.

4.4 Final remarks

This analysis shows that the relationship between innovation and the districts has evolved, but the changes have been subtle. Throughout the three stages, district- and regional policy have considered innovation to be the key to maintaining the countryside as a life form. This has been a constant aspect of the policy throughout three changes in government. Mainly, development and growth in

the districts have been a means of maintaining a welfare system that is acceptable independent of where people live. The culture and history-aspects were added in stage 2, but it can be discussed if that was to preserve for preservation's sake or extract maximum value from them. Nonetheless, it was not heavily featured in neither stage 1 nor stage 3. Document 10 hints at innovation not being the sole solution to the depopulated districts, and whether that will trigger a change in narrative for the district- and regional policies remain to be seen.

Innovation did not focus on the districts in any of the stages. The evaluation from 2010 showed that Innovation Norway did not deliver increased innovation in the countryside, and it was recommended that the districts were changed to a general consideration rather than a target. Nonetheless, in 2010 the districts became indirect owners of Innovation Norway when the county municipalities got 49 % stake in the agency.

The fact that the district report has been released twice in two years, even without a change in government triggering it, can hint at the threats to the districts' future increasing and intensifying. At the same time, the last innovation report was released 12 years ago. The lack of new reports can hint at innovation policy being healthy and that most stakeholders are happy with the development.

There has been an attempt to combine district- and regional policy with innovation policy. They have been married in a shared policy agency for 16 years, but where innovation has had a positive development without focusing on the districts, the districts have had a negative development regardless of their focus on innovation. It can seem like the marriage was one of convenience, not love.

5.0 Discussion

This thesis has tried to provide an answer to the following research question:

How has the relationship between the district and innovation policies evolved since the inception of Innovation Norway?

The analysis of the documents in chapter 4 shows that the relationship has been dynamic, but they have not grown closer. Instead, it seems that innovation is and has been in good health since the inception of Innovation Norway, while the districts have followed the declining path it was on even before the creation of the agency. In the following part, the relationship will be discussed in light of the concepts presented in chapter 2.

5.1 Logic Behind Linking The Districts To Innovation

The overriding goal for the economic policy in Norway is jobs and equal opportunities for all its inhabitants. We need economic stability and prosperity to fund our welfare system so that we can take care of the ones in need. To do that, we need to have people in jobs, wherever they live. The districts have been in decline for years, caused by changes in industries, depopulation, and weak repopulation. To unlock the maximum potential of the country's value creation, the districts need to be utilized as well. This firmly positions the districts within the sphere of economic policy.

As Schumpeter said, innovation is the factor that pushes an economy from one equilibrium state to another. One could argue that the equilibrium the districts had existed in until the early 2000s required innovation to switch to another one that functioned to a satisfactory level. Depopulation made it harder to maintain social services within reasonable distances, and thus, in reality, access to welfare became somewhat dependent on location. From a socio-economic perspective; The more economic prosperity in the specific area, the more people settled in it, and the easier it became to establish more welfare systems there. In theory, innovation could push district economies from one equilibrium that was a declining spiral to one of prosperity.

The overriding goal of the district- and regional policies have been the same for years - to maintain the main lines of the settlement patterns (i.e., a decentralized population) - and with the

decentralized population in decline, the need for innovation has been apparent. Some of the predecessors of Innovation Norway have had specialist tasks of turning the ship around; “The Development Fund for Northern Norway” was one of them, which in turn became the “District Development Fund.” The importance of innovation and the need to stimulate change in non-urban areas have been linked to innovation for decades. Innovation has been seen as a vital instrument to achieve economic goals on the road to reaching the overriding targets of district policy.

The districts' position in innovation policies and Innovation Norway makes sense from the perspective of the districts. Innovation has been seen as essential to the districts' development for years, and one of the organs that were merged into Innovation Norway was originally aimed solely at the districts. It is easy to understand the link between the two, seen from the districts' perspective. Nevertheless, it is harder to grasp how vital the districts have been for innovation.

When the policy instruments' framework was mapped out in the years leading up to the establishment of Innovation Norway, the diffusion of innovation was a topic. They did not want it to be one-size-fits-all; they wanted different regional and local situations to dictate how the instruments were used. The county municipalities were given freedom but also the responsibility to develop businesses in their area. The goal? It should be good to live and work in all parts of the country (Prop. 51 (2002-2003), p. 6). The first goal the report on the policy instruments mentioned was knowledge and education. The second was that life should be equally good wherever people live - a goal that mimics the overriding target for the district- and regional policies.

In many ways, the modern Norwegian innovation policy is influenced by policies aimed at reinvigorating the districts. When the Ministry of Trade and Industry carved out the innovation policy in the early 2000s and created its policy instruments, they used a mold from the district- and regional policies. Innovation Norway was the continuation of The Norwegian Business and District Development Fund (SND), and the former carried on much of the office structure from the latter (which was the continuation of the aforementioned district-focused funds). Innovation Norway also included the districts in its primary goal: The political instruments shall contribute to increased innovation in industries all over the country (Prop. 51 (2002-2003), p. 8). The phrase “all over the country” implied that the instrument should contribute from Nordkapp in the north to Lindesnes in the south. Innovation Norway was built on instruments focused on the declining regions and districts, and the formulation of its main goal alluded to them. The relationship at this point is

relatively open: innovation (though not under that moniker) had been integral to the system surrounding the districts, and when innovation was getting its own genre of policy, it was in part built on that system.

5.2 Different uses of the word “district”

While innovation and districts have a shared past and are married through Innovation Norway, there are still unclear aspects. One such aspect is how the documents written from the innovation perspective use the word “district.” In the regular speech, and at times in the bureaucracy, “districts” address specific areas under certain jurisdictions. It can also be used as the areas that are outside of Oslo and other large cities. With these definitions in mind, it makes sense that Innovation Norway speaks of “district offices” - they are located outside of the main office, after all. When they use “districts” they use it in loose terms - as in areas that are located outside of Oslo. That can include scarcely populated areas as well.

The documents from the side of the district- and regional policy, on the other hand, were unambiguous when using the term. The word's definition was somewhat flexible from document to document, but each document dedicated space to explain what they meant. As of such, they were all clear on the fact that “districts” is not necessarily a synonym for “region.” To them, districts had distinctive characteristics, specific issues, and unique goals.

It can appear to be nitpicking, and of course, it might just be that, but this study shows that documents within the same genre (white paper) with different senders use the word very differently. When the Ministry of Local Government and Regional Development (KRD) uses the word, it points to the specific areas and the specific challenges that relate to it, and which policies can be implemented to overcome them. There can be little or no doubt about what they mean. On the other hand, Innovation Norway’s ambiguous use leaves room for interpretation. Do “the whole country” mean regions, cities, and villages around the country, or does it indirectly imply the districts, in the sense KRD would use the term? This shows that the two policies place different amounts of importance on the concept of districts and, in extension, their value for the country's total value creation.

The lack of focus on the countryside within innovation policy and its unambiguous use of the districts-term from the innovation policy perspective implies that the geographical and

demographical entity that is the district plays a marginal role in systems of innovation - if it plays a role at all. Some sectors that are traditionally seen as rural, like fishing, are mentioned in some innovation documents but not as district-specific. As shown in chapter 2, the Norwegian innovation policy builds on the system approach. Fagerberg said that a system of innovation consists of all factors that influence the creation and diffusion of innovation (2013, p. 14-15), and Innovation Norway exists as the policymakers tool designed to control the factors in the system to its best ability. A prerequisite for policymakers is that they must have in-depth knowledge and understanding of Norway's different systems and its components. If they do not devote time and focus to the districts, they do not deem the countryside to be a relevant part of the system.

5.3 Districts in Systems of Innovation

The marriage between innovation and the districts seem to have been out of convenience - as SND and its predecessors were aimed at the districts - and to help the countryside reinvent itself and become economically sustainable. The policymakers wanted to trim the number of instruments, and naturally, a new agency had to be a merger of instruments not previously aimed at innovation. Also, it makes sense to extend the infrastructure from the previous organization into the new - even if one could argue that more of the same input will lead to more of the same output. The thought process behind using the new agency to help the districts can also make sense. Knowledge flows are a significant part of any system, and knowledge spillovers are positive externalities that can be used as a resource by the environment. In theory, if the districts' stakeholders spoke with the same agency as the innovative businesses, it could provide a knowledge flow from innovation to the districts, which would help businesses in the districts to innovate.

Nevertheless, the documents that argue for the creation of Innovation Norway, and the innovation report from 2008, do not see the districts as a resource that can help generate innovation. They devoted financial resources to the districts, but that was more aimed at helping the districts become sustainable rather than helping the districts contribute to the creation of innovation. Besides, the geographically conditioned financial support can be counter-productive. Innovation can lead to heightened productivity, which can lead to fewer employees needed to get the same economic output as before. If Innovation Norway helps farms applying technology that increases automation, it contributes to the farm becoming economically sustainable, but it can also decrease employees. The evaluation of Innovation Norway showed that the BU-funds contributed to decreased employment. There seem to be a conflict of interest, not only between innovation and the districts

but also within the districts themselves. The ultimate goal of a system of innovation is to boost economic growth through the creation and subsequent diffusion of innovation. The ultimate goal of district policy is to maintain the settlement patterns by making them economically sustainable. A system of innovation can help make the districts sustainable, but the generic system approach cannot steer the innovative activity exclusively toward outputs that create more jobs.

In chapter 2, it was established that one rationale for political intervention was system failure. If one or more nodes, or the connection between them, were dysfunctional, policy would have to intervene. Innovation Norway is the agency that is supposed to build an extensive knowledge base, and thus be able to identify system failure, diagnose it, and eventually fix it. If the system works, i.e., it has innovative behavior, it works. So, the principal goal of Innovation Norway is to increase generic innovative behavior in the systems it governs; this implies that the district issue only becomes a systemic issue if the system does not function properly. Let us for a moment make the positive development of districts the principal goal of Innovation Norway. Then, regardless of whether the different systems function as expected or not, the lack of economic- and population growth in the districts becomes a systemic issue that warrants political intervention. This points to the district issue being exogenous to the system approach - the systems function, the creation of innovation in Norway is good, and the districts are somewhat sidelined.

The evaluation of Innovation Norway stated that the districts' development should be a general concern rather than a goal. The risk of the district issue falling into complete oblivion would be high if so. They started with a dedicated policy agency in 1961 and would end up without any support directly aimed at them. The natural conclusion, taking the theoretical contribution and empirical findings into account, would be to divide the district issue and innovation and end the marriage. The relationship was not balanced from the start, and it seems they have not had mutual benefits of the arrangement in the form it has been.

Nevertheless, this conclusion would undermine the goal of maintaining the settlement patterns and providing welfare to everyone regardless of where they live. This goal, especially the latter, which is a consequence of the former, is a significant societal value. With the districts' development as a general concern rather than a goal, the districts could descend into oblivion. The population patterns all over the globe points relentlessly in the direction of increased urbanization, and if repopulation of the districts is not a designated goal, it will never be just that - repopulated.

5.4 Mission-Oriented

If leaving the districts to its own devices is not a viable alternative, and the current method shows little proof of functioning, there might be time for a change of pace. In chapter x, the concept of mission-oriented policies was introduced. These policies build on the system approach, but rather than leaving the systems to develop and change in more or less random directions; they attempt to direct the creation of innovation. A mission is an all-consuming target that, if achieved, will be a significant benefit for society. UN has 17 such goals - or missions - that they believe will provide “a better and more sustainable future for all.” (United Nations, 2020) If policymakers commit to creating missions, they might be able to implement policies that push systems of innovation towards creating solutions that will help achieve one or more of such goals.

The mission-oriented approach elevates what might have been “general concerns” to overall goals that apply to policies in different fields. Mazzucato says that such missions should be well defined, trigger a multitude of projects and processes in multiple sectors, and result in implementable policies. (Mazzucato, 2017, p. 9) To some degree, the positive development and reinvigoration of the districts have been a mission all along. The goal has been defined (maintaining settlement patterns to provide equal welfare) and mostly consistent through decades - the mission has just been tacit and marginalized. Expressing and highlighting the need for sustainable districts as a mission, and creating or tweaking the policy instruments to incentivize investment and work towards reaching the mission, can create a sustainable future for the countryside.

Making the districts a mission, would imply changing the narrative. At the time being, district policy sees innovative activity in the districts as the primary means to reach economic sustainability, while innovation policy hardly sees the districts at all. Making the district issue a mission, would entail that systems of innovation were incentivized to find solutions to the issue, while the focus on innovative activity in the districts was lowered. This would extract the districts from the systems of innovation, as the evaluation of Innovation Norway indirectly implied, but instead of making it subordinated, it would put it high on the agenda.

The mission-oriented approach is a tool with which policymakers can perform some kind of control over systems of innovation. It can be likened to a company’s vision - it is a guiding star that the big lines should lead towards. That means policies must be designed so that they push the systems

towards contributing to reaching the mission. As with a company's vision, it almost more a way of thinking and a moral compass than it is a goal that is supposed to be reached. Applying this approach to innovation policy, and placing the positive development of the districts as a mission, might not result in immediate goal achievement, but it can place the districts in a more advantageous position for both the field of innovation and the future of the countryside.

6.0 A New Future For The Countryside

In the introduction, Rem Koolhaas's stance on the future of the countryside was explained. He considers the countryside to be “an ignored realm” (Koolhaas, 2020, p. 2). He also states that “the dialectic between city and countryside fundamentally defined the meaning of each. Today, we have neither a dialectic - a real, mutual relationship - nor a definition” (Koolhaas, 2020, p. 2). He believes that the countryside must be reinstated as a place to live. “Enthusiastic human presence must reanimate it with new imagination” (Koolhaas, 2020, p. 2).

Koolhaas explores the countryside and its relationship with the city - this thesis has explored the evolution of the relationship between the countryside and innovation. The findings appear to be similar. The Norwegian countryside has been and is in decline. It might not be out of the political scope, in fact, two district reports in two years point to it being high on the agenda, but its destiny has been in the hands of a field that does not see it as a vital resource. The political instruments aimed at the countryside have gone from being independent and focused agencies dedicated to the cause, to be incorporated under an innovation umbrella. The relationship between innovation and the countryside is real, yes, but it is not very mutual. The districts know their definition - innovation does not see the entity nor its definition as important. From the dawn of the shared agency, Innovation Norway, and to 2020, the relationship has remained one-sided.

What the future holds for the Norwegian countryside remains to be seen. Urbanization will probably continue, but it is not inevitable that it should be at the districts' expense. Nonetheless, something has got to give. Innovation might be the key to the future of the countryside, but it seems like its position has to change for it to open the door.

7.0 Literature

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