Innovatiepolitiek: Een reconstructie van het innovatiebeleid van het ministerie van Economische Zaken van 1976 tot en met 2010
Velzing, E.

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: http://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.
Summary

Innovation Politics

A reconstruction of innovation policy from the Dutch Ministry of Economic Affairs from 1976 to 2010

The main research question of this study was: How did the innovation policy from the Ministry of Economic Affairs in the period from 1976 to 2010 develop? By investigating the innovation politics in this period I was able to identify stakeholders who influenced innovation policy, shifts in agenda setting, and the degree in which a statement may be made about its effectiveness.

In order to analyse the development of innovation policy I carried out an extensive document analysis and interviewed more than eighty experts. I used three perspectives to study the different factors and stakeholders that influenced innovation policy. The reason of this particular approach is the expectation that not only the minister, who is assumed to be a rational actor, determines the course of policy, but that internal and external stakeholders as well as organisational dynamics will influence the policy making processes too. I was inspired to adopt this approach by a study from Graham Allison and Philip Zelikow, who showed that different perspectives are essential to understand the exact course of history – in their case the 1962 Cuba crisis. The objective of their approach was not to identify the best perspective to consider the course of history, but to get a better understanding of history by applying different perspectives. In chapter 2, The Methodology, I explained the theoretical background of the three perspectives and constructed an analytical framework for each:

1. The rational-actor perspective, considers the facts as being rationally thought-out by one person. In this study the rational agent is the Minister of Economic Affairs who makes the decisions, which subsequently will be executed by public officers.

2. The organisational behaviour perspective, focuses on studying standard operating procedures of the involved institutions. In this study the institution is the Ministry of Economic Affairs and thus the internal relationships between departments and staff members are scrutinized.

3. The political actor perspective, illustrates how different external stakeholders influence decisions.
Four different periods

In the thirty-five year time frame covered in this study, I distinguished four different periods. I typified these as: (1) Stagnation, Crisis and the Road to Innovation Policy, (2) Technology Policy, (3) Knowledge and Cooperation, and (4) Back to Specific Policy? Each of these periods are analysed from the abovementioned three perspectives. In the period 1976-1983 (chapter 3, Stagnation, Crisis and the Road to Innovation Policy), the predominantly defensive-oriented industry policy transformed into future-oriented innovation policy. The first policy document that handled this subject was the Report on Economic Structure from 1976, followed by the Report on Innovation in 1979. In 1980, the Dutch Scientific Council for Government Policy (WRR) presented an illustrative study in their report Industry in the Netherlands: Its Place and Future, in which they advocated specific investments in currently strong and upcoming sectors. Based on the recommendations that followed from this report, the Advisory Council for Industry Policy (Wagner Committee) was installed in 1981. The Wagner Committee was assigned the task to construct new, future-oriented policy. Although the theme was given a lot of attention, innovation policy did not get a real impulse until after the devastating conclusions from a parliamentary inquiry on the pursued policy to support the Rijn-Schelde-Verolme (RSV) shipyards. This inquiry, known as the RSV-crisis, exposed and magnified the deficiencies of the defensive-oriented industry policy from the 1970s. Therewith it implied an end to the old industry policy, yet also cut off the road to future-oriented specific policy, as recommended earlier by the WRR.

Technology Policy was the main topic in the period 1984-1990 (chapter 4). This orientation meant a technology push-approach that was primarily oriented on stimulating Research & Development (R&D). However, this particular focus caused the Ministry of Economic Affairs to neglect other relevant aspects of stimulating innovation. When studying innovation policy, a distinction is made between generic and specific innovation policy measures which involves the handling of a contrast. On one side there are macroeconomically-oriented policy makers, who advocate for a government restriction on economic policy in order to provide favourable macroeconomic conditions. On the other side there are policy makers that are in favour of specific innovation policy based on evolutionary economic arguments, or are used to sector specific industry policy. In line with the (neo)liberal discourse and the outcome of the RSV-crisis, the first group eventually had most influence. Therefore, since the second half of the 1980s, innovation policy instruments focused on promising new fields of technology, instead of supporting promising strong economic sectors.

Another major change was that the Ministry of Economic Affairs disentangled the making and execution of policy. This was not a new subject, but the RSV-crisis made clear that the relations between public servants and companies had been too close. In 1988, the division of making and executing policy lead to the establishment of StiPT. From that moment onwards, this agency arranged more transparent execution of the innovation policy measures. At the same time, the Ministry of Economic Affairs increasingly asked external advisory committees to assess submitted project proposals. Eventually, the agency got bigger and changed its name to Senter, SenterNovem and AgentschapNL respectively after several merges.
In chapter 5 I discussed the period 1990-2002: Knowledge and Cooperation. Similar to the previous decade, a major influence of the (neo)liberal paradigm remained during this period. From a policy makers point of view the (neo)liberal paradigm was primarily represented by the staff division for General Economic Policy (AEP) from the Ministry of Economic Affairs and by the major Confederations of Industry and Employers, VNO and NCW. Due to their influence, innovation policy focused on generic stimulations of R&D. Additionally, attention for innovation-oriented cooperation increased. In the second half of the 1990s, the Ministry of Economic Affairs tried to encourage cooperation between companies as well as knowledge institutions, and to stimulate the latter to become more market-oriented.

Over time, the relationships between the Ministry and companies diminished. Remaining relationships were largely limited to bigger companies, especially to those that experienced financial difficulties. These companies argued that their interests were similar to public interest, a situation favoured by the directorate-general for Industry, because it allowed them to work out policy measures to support these companies. However, after Fokker’s bankruptcy, government facilities to support these companies were further restricted. Moreover, additional executive tasks were assigned to Senter. Because of this, the Ministry increased its focus on political accountability. Initially, communication between Senter and the Ministry of Economic Affairs appeared to be difficult, though it improved in the 2000s.

Lastly, in chapter 6 (Back to Specific Policy?) I examined the period 2003-2010. Based on reports from the Advisory Council for Science and Technology Policy (AWT) and the Innovation Platform, the Ministry of Economic Affairs implemented a ‘backing winners’ approach. In addition, more and more means from natural gas revenues were invested in knowledge infrastructure. The procedures to assess the financed projects improved over time, and compared to other measures these procedures were among the better. Also, the Ministry of Economic Affairs presented its innovation policy as a combination of basic and specific instruments. This apparently coherent approach was characteristic of the increasing coherence within the department, which was later reflected in the existence of one big directorate-general for Entrepreneurship & Innovation, founded in 2004.

Seven outlines

In chapter 7 I conclude that the methodology of three supplementary perspectives used in this study allowed me to reconstruct the development of Dutch innovation policy between 1976 and 2010. The organisational behaviour and political actor perspectives complemented the rational actor perspective, which provided insight into the emergence of the Ministry of Economic Affairs’ innovation policy. Overall I found more support for the hypothesis that innovation policy is influenced by both internal and external stakeholders, rather than the hypothesis that the potentially most beneficial option is chosen, as proposed by the rational actor perspective. Thus, innovation policy is not selectively based upon rational and coherent considerations by the Minister of Economic Affairs. Yet, since the Dutch international competitiveness has always
been strong, it does not seem justified to conclude that previous policies were irrational or irresponsible.

Based on the three perspectives, I identified seven outlines that characterise Dutch innovation policy from the Ministry of Economic Affairs between 1976 and 2010:

1. The emergence of innovation policy.
2. Dominance of technologically oriented R&D policy.
3. Debate on the ratio between generic and specific policy.
4. Lobby influence on identifying strong fields.
5. An increasing emphasis on cooperation.
6. A growing division between making and execution of policy.
7. Attempts to make innovation policy more transparent.

1. The emergence of innovation policy

From chapter 3, it shows that the defensively oriented industry policy from the 1970s did not solve the economic problems of that time. Therefore, innovation policy was implemented as a more future-oriented offensive approach. Initially, there was considerable support for a specific approach, but this was not coherent with the principally (neo)liberal vision within the head of the Ministry of Economic Affairs. The real policy transition only occurred after the parliamentary inquiry on the RSV shipyards, which discredited the complete industry policy. Consequently, the Ministry of Economic Affairs implemented a generic innovation policy, initially known as technology policy. Between 1976 and 2010, this policy evolved into an increasingly important domain of the Ministry.

2. Dominance of technological oriented R&D policy

The Dutch innovation policy can be characterized by its focus on stimulating technologically oriented R&D. In the thirty-five years covered in this study, the different Ministers of Economic Affairs spent 10,5 billion euros (in 2012 euros) on this type of policy, even though these measures did not lead to a higher percentage of R&D in GDP. The fascination for R&D figures can be explained by its representative character, which can be used to legitimize policy action on an international level. Transaction and execution costs of generic policy instruments are also generally low. Furthermore, the most important external stakeholders who were representing companies from different sectors had no interest in making specific choices. And finally, the generic R&D policy was in line with the general zeitgeist and with the dominant (neo)liberal trend within the Ministry.

The question is whether efficient instruments are useful in case they lack effectiveness. Generic R&D instruments do not account for the different characteristics of sectors, and also cannot anticipate on other relevant aspects of innovation such as social-organisational innovation, service innovation and transaction innovation.
3. Debate on the ratio between generic and specific policy

There was no perfect policy mix of generic and specific policy instruments, but rather a constant debate on a generic versus a specific approach. Policy instruments aimed at improving the innovativeness of companies, and advising and informing companies, were mainly generic. However, parallel to this ‘free market’ discourse, the Ministry of Economic Affairs also executed specific innovation policy. These instruments traditionally consisted of financial contributions to the Netherlands Organisation for Applied Scientific Research (TNO) and the so called Big Technological Institutes (GTIs). In the beginning of the 1980s, the Ministry also stimulated the innovation capacity of companies based on specific technological areas. However, this approach became more generic in the years that followed. This trend continued until 2003, when the dominant generic discourse was partly reorganized due to the ‘backing winners’ approach the Innovation Platform presented. This approach was based on key areas characterized by a feasible competitiveness.

When considering the whole period 1976-2010, the distinction between generic and specific policy is incomprehensive. A distinction between three types would be more appropriate. Therefore I distinguish (1) generic innovation policy for all types of companies, (2) specific innovation policy focused on stimulating innovation in certain sectors or types of companies, and (3) generic innovation policy that results in specific effects, in other words instruments that are principally accessible to different kinds of companies, but are directed by the governments’ specific choices. Most specific innovation policies belong to the last category.

4. Lobby influence on identifying strong areas

Lobbyists had a lot of influence on the development of innovation policy. The dominant focus on generic policy can be partially explained by the influential representation of the Confederation of Industry and Employers VNO-NCW. In addition to that, certain companies and sectors managed to defend specific interests. The best example comes from the pharmaceutical sector. In comparison to its relatively limited economic importance, this industry laid a disproportionate claim on the means for innovation policy. This shows that existing procedures could not always prevent that lobby activities obtained the lead over objective considerations.

The consequences were that specific innovation policy was not always invested in the (potentially) most competitive clusters, but instead invested in those sectors that represented their interests best. In those cases innovation policy could be characterized as ‘backing lobbies’. Considering themes and areas that benefited from specific innovation policy and generic innovation policy directed at specific investments, we can conclude that: (1) there was no clear specification of subsectors; (2) names of the policies changed, but the focus mostly remained identical; (3) there were investments in themes that were never identified as being strong; and (4) areas that were initially not identified as being strong, later got a similar profile anyway.
5. An increasing emphasis on cooperation

The Ministry of Economic Affairs had four objectives to stimulate cooperation: (1) stimulate companies to invest more in R&D, (2) improve the market-oriented focus of knowledge institutes, (3) increase shared knowledge between companies and knowledge institutes, and (4) give rise to stronger clusters and networks. Policy that focused on cooperation started around the 1980s. Initially, the Ministry of Economic Affairs experienced reservations about stimulating cooperation, being hesitant to stimulate cartels. Gradually however, this attitude changed, and more and more attention was given to stimulating cooperation between companies, and between companies and knowledge institutes. Due to this policy, knowledge institutes got more involved in innovation policy and increasingly tried to represent their interest.

6. A growing division between making and executing policy

By the end of the 1980s, the Ministry of Economic Affairs parted the making and execution of policy. This was done because contact between public officers and companies was often too close in former situations. This separation lead to a situation in which the Ministry tried to support companies that had little perspective. The new agency – StiPT, and later Senter – had to prevent situations like these. The executing agency was assigned an increasing number of tasks and grew bigger, eventually forming an ‘executing department’ with almost 1500 employees in 2010.

Consequently, this caused a sharp separation of civil servants that made policies and those that executed policies. For a long time the communication between the Ministry and its agency was poor. This gradually improved over time, even though the Ministry predominantly focused on the political accountability of policy plans.

7. Attempts to make innovation policy more transparent

The Ministry of Economic Affairs tried to make innovation policy more transparent. This lead to clearer procedures that gave smaller companies easier access to available instruments. The Ministry and its agency also used external advisory committees to assess project proposals. Even though these assessments were thorough, the procedures could not always prevent that decisions were still being influenced by internal and external stakeholders. On the other hand the procedures led to an increasingly juristic policy.

The Ministry of Economic Affairs increasingly tried to guarantee objective policy by means of evaluations. These policy evaluations got an impulse in the 1990s, when parliament got more interested in the subject. At the end of the decade the parliament even decided to introduce a yearly Accountability Day. Yet, my analysis of the most important policy instruments showed that it is difficult or impossible to determine their effectiveness. Often there was not enough data available for a proper evaluation; in most cases the causal influence on economic growth could not be determined; and most evaluations were executed too short after initiation of a particular
policy instrument. Moreover, the Ministry of Economic Affairs tended to use evaluations for politically defending its policy. This shows that improvements can be made.

Overall, a mixed conclusion can be drawn about the policy in the thirty-five years between 1976 and 2010. On one hand, the execution of innovation policy instruments improved: procedures got more transparent. On the other hand, the foundation for innovation policy was only slightly related to knowledge about sectors and lacked a long-term focus. What is more striking is the limited focus on generic stimulation of R&D. However, based on results from this study I conclude that a specific approach is more effective, especially when it fits specific characteristics of a sector and aims to make concrete improvements in proven competitive sectors ('backing winners'). In such a case, innovation policy is more than lowering taxes, or ‘repairing’ generic market failures. Of course, a condition for this approach are precise assessments of the different options. Otherwise, there will be a high risk that a directed approach does not strengthen the economy, but instead strengthens lobby activities. Importantly, this kind of ‘backing winners’ approach will need to take new developments into account.

Finally I recommended how a Minister could improve its innovation policy. It is essential to develop a long-term vision and a consistent policy, and I advise the Minister to:

1. Provide for continuity.
2. Build upon experiences with innovation policy.
3. Consider other fields beyond just R&D.
4. Adopt specific instead of generic policy.
5. Do not pursue incident-driven politics, but anticipate on incidents.
6. Improve transparency and accountability.
7. Avoid problem solving in panic.

The Minister of Economic Affairs will need to take responsibility for a permanent and well-founded long-term policy. The department of Economic Affairs is the Ministry for ‘the economy’ and for ‘innovation’, and works in service of business and industry. In a mixed economy the government has a clear task. For specific innovation policy, this task is not only limited to stimulation of research and development. Therefore, knowledge about the economy and companies is indispensable. Moreover, a Ministry for Economic Affairs should be economic, and therefore invest its means as effectively as possible. By choosing a future oriented approach, develop and stimulate proven strong sectors, and select based upon proven quality, an active and smart government will be able to create an innovation momentum.