

Buying innovation in public procurement: Cross-country learning

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ABSTRACT

Public procurement is a powerful tool to further other policy objectives of governments such as innovation. When countries introduce a policy on innovation through public procurement, they may learn from successes and failures in other countries. This exploratory study aims to investigate the concept of cross-country learning on public procurement on innovation. A threefold methodology was used that consisted of (1) an extensive review of scientific literature complemented by (2) a thorough examination of policy documents and (3) interviews with some leading public procurement experts from 10 countries including both developing and developed countries. The main findings indicate that there is no hard evidence for cross-country learning and that the lessons learned remain largely implicit. This indicates that countries either do not learn a lot from each other or it is not considered appropriate or worthwhile to mention.

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Keywords

Public Procurement, Innovation, Cross-country learning, Public policy

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1. INTRODUCTION

The role that public procurement plays in governmental policy is important, because it is commonly seen as a way to achieve policy goals. According to a report released by the International Research Study of Public Procurement (Knight, Caldwell, Harland & Telgen, 2003), public procurement is no longer solely related to a means of saving money since it is increasingly associated with being a lever of social reform. Moreover, the treaty of Lisbon has addressed the need of incorporating the social and environmental aspects of public procurement (European Parliament, 2010). An example of such a policy goal is innovation, which may lead to value creation for society. Nowadays, innovation seems to be a well-established and a widely accepted policy goal in public procurement.

If policy goals for innovation have been implemented in public procurement, the ways of implementing these policy goals vary per country. Furthermore, not all countries implemented their variant at the same time. This means that there is ample opportunity for cross-country learning: a country can learn from the experiences of other countries (both good and bad experiences). Here, this concept of cross-country learning is investigated by means of two research questions:

- To what extent does cross-country learning exist?
- What are the lessons learned from one country to another?

A research framework was set up in cooperation with a fellow student to address the above-mentioned research questions from two angles in parallel: innovation and sustainability. This study is restricted to public procurement policies on innovation and to cross-country learning.

Theory and practice were combined in this study, which consists of a threefold methodology: (1) an extensive review of scientific literature complemented by (2) a thorough examination of policy documents and (3) interviews with some leading public procurement experts.

This study is structured as follows. First, we analyse the subject of innovation in the context of public procurement. Next, the threefold methodology of our study is treated in depth. Then, we present the results of each of the three parts of the study. We conclude with a discussion on the outcomes of the study for the two research questions.

2. PUBLIC PROCUREMENT POLICY ON INNOVATION: WHY DOES IT MATTER?

This section will outline the relevance of public procurement policies on innovation.

2.1 Buying innovation in public procurement: A conceptualisation

For the purpose of this study, it is important to define the key concept of innovation in public procurement. There seems to be a lack of clarity about the definition and scope of this concept. Public procurement can generally be seen as a form of public spending for works, goods and services. Moreover, innovation includes a sense of novelty. Public procurement on innovation combines these two concepts and can generally be seen as the search for innovative solutions driven by public customer needs (Office of Government Commerce, 2011; PIANOo, 2011; Procurement of Innovation Platform, 2014). The focus of this study is on policies that drive innovation in public procurement.

2.2 The wider impact of public procurement on innovation

The magnitude of the annual budgets spent by governments on public procurement is commonly used as a reason why it is important to engage in public procurement on innovation. In Europe, it was estimated that almost €2 trillion is spent annually on public procurement (Procurement of Innovation Platform, 2014). On a national level, one could look at the Dutch government which spends €57 billion per year on the procurement of goods, services, and works (PIANOo, 2011). Due to this market power, policies that drive demand have become increasingly important as a way to enhance quality and technical development as well as to address socio-economic challenges (Office of Government Commerce, 2011; Rolfstam, 2013; Lember, Kattel & Kalvet, 2014; Procurement of Innovation Platform, 2014).

2.3 A way forward: Benefits of innovation

Public procurement policies on innovation can be beneficial for multiple parties, namely for the national government itself as well as for its suppliers and for the society in a broader sense. However, the focus of this study is on national governments. The implementation of public procurement on innovation can create benefits for national governments in multiple ways. According to a report of the Office of Government Commerce (2011), implementing public procurement on innovation is a way to achieve value for money by optimally combining life-cycle costs and quality to meet public needs. Besides the economic benefits, public procurement on innovation can help national governments to improve their public image (Procurement of Innovation Platform, 2014). These benefits could trigger national governments to 'lead by example'.

2.4 Barriers: Without struggle, there is no progress

Nevertheless, national governments should also consider a number of barriers when implementing public procurement policies on innovations. Some of these barriers seem to be unique, whereas others are more universal. In a report of the Procurement of Innovation Platform (2014), it was stated that public procurement is often perceived to be a purely financial or administrative duty, which is not always aligned with broader policy goals. More specifically, risk aversion, a lack of skills and capabilities, and limited resources are likely to restrain the search for innovative solutions in public procurement (Harland, Bakker, Caldwell, Phillips & Walker, 2005; Procurement of Innovation Platform, 2014).

2.5 Drivers: How to jump hurdles

In order to overcome these barriers, the following drivers have been identified. First of all, Rolfstam (2013) states that the efficient allocation of resources and the coordination of co-operative procurement are success factors. From a more practical view, proposed solutions include retraining, pilot projects, and consortia agreements (Harland et al., 2005). Next to this, Rolfstam (2013) mentions that leadership is important. Therefore, national governments should set priorities to raise awareness for public procurement policies on innovation at an early stage. Furthermore, it was stated that it is important to understand the public procurement process as well as the legislation on public procurement. Lastly, the competence of designing functional specifications is another driver of innovation (PIANOo, 2011).

Having outlined the relevance of public procurement policies on innovation, the next section will focus on the threefold methodology of this study.

3. METHODOLOGY

The purpose of this study is to analyse to what extent cross-country learning exists and to indicate whether there are lessons learned from one country to another. The methodology of this study is threefold and consists of: (1) an extensive review of scientific literature complemented by (2) a thorough examination of policy documents and (3) interviews with some leading public procurement experts. According to Grix (2004), the triangulation of three different methods helps scholars to minimise bias in the findings and to shed more light on the topic from different angles. Therefore, a threefold methodology was chosen, because scientific literature does not provide all information that can be found in policy documents and vice versa. Besides, information that cannot be found in policy documents could be gathered by conducting interviews. Thus, interviews with some leading procurement experts are another way to gain complementary insights in order to combine theory and practice. The threefold methodology will be explained in this section.

3.1 Scientific literature

Our first part of the methodology consists of an extensive review of the scientific literature. The subject of this literature review is *public procurement on innovation*. In order to initiate an effective search strategy, we will use the 12-step framework of Kable, Pich, and Maslin-Prothero (2012). This framework provides us with a structured approach for searching peer-reviewed articles, because it is described in twelve clear steps which make this method convenient to use. The twelve steps are the following:

1. Provide a purpose statement
2. Document the databases or search engines used in your search strategy
3. Specify the limits applied
4. List the inclusion criteria and exclusion criteria
5. List the search terms used
6. Document the search process
7. Assess retrieved articles for relevance
8. Document a summary table of included articles
9. Provide a statement specifying the number of retrieved articles
10. Conduct quality appraisal of retrieved literature
11. Critically review the literature
12. Check the reference list for accuracy

3.1.1 Provide a purpose statement

The purpose of this study was formulated in cooperation with our first supervisor Prof. Dr. Jan Telgen. His research mainly focuses on how public procurement methods can be used efficiently to achieve policy goals effectively.¹ Therefore, the topic of cross-country learning in public procurement on innovation suits his research agenda. The purpose was formulated to find out to what extent cross-country learning exists and to indicate whether there are lessons learned from one country to another.

3.1.2 Document the databases or search engines used in your search strategy

Scopus will be used to identify currently existing scientific literature. We chose for Scopus, because it is the largest database of peer-reviewed literature.² Moreover, Scopus has twice as many titles and over 30% more publishers listed than any other database, such as ScienceDirect.³

3.1.3 Specify the limits applied

Our search strategy focuses on peer-reviewed articles about public procurement on innovation that are published in journals. Peer-reviewed articles serve as a sound indicator of quality since feedback is provided by a selected group of professionals in order to improve the article (Solomon, 2007). Additionally, we only selected peer-reviewed articles that were available in English. Besides, the focus is on peer-reviewed articles that were published since the 1990s, because this is when innovation has become a relevant public procurement policy issue in most countries (Edler & Georghiou, 2007). Finally, there are four broad subject clusters in Scopus from which we selected the cluster Social Science & Humanities, which includes studies on public administration, innovation, and public procurement.

3.1.4 List the inclusion criteria and exclusion criteria

The inclusion criteria of this study are peer-reviewed articles that focus on public procurement on innovation, which are published in journals. Next to this, both single- and multi-country studies are included. On the one hand, multi-country studies refer to those articles that compare two or more countries and are especially valuable for this study, because of the multi-country perspective that is taken. On the other hand, single-country studies can also be valuable, because those studies can be used to illustrate what countries could learn from each other. In both cases, it is important to take into account the country differences in procurement systems, which can lead to unique circumstances under which public policies on innovation are implemented.

The exclusion criteria of this study are peer-reviewed articles that are not available in English and/or do not focus on public procurement on innovation at the country level. For example, peer-reviewed articles published that investigate the concept of innovation in the private sector or at the local government level will be excluded. Another example is e-procurement which is a policy theme that is outside the scope of this study and will, therefore, not be considered.

3.1.5 List the search terms used

It was observed that a wide variety of search terms is used in the field of public procurement on innovation. Therefore, combinations of search terms will be used to cover a broader range of document results. In particular, 4 categories can be distinguished, which are shown in Table 1. The categories show that the focus in public procurement policies on innovation, whereby *government* is used as a variant of *public* and *innovative* as an adjective of *innovation*.

Table 1. Overview of the different categories of search terms

Public	Procurement	Policy	Innovation
• Government			• Innovative

3.1.6 Document the search process

On the 19th of June 2015, we initiated our search process in Scopus, which is documented in Appendix 1A. The first step describes the process of searching for peer-reviewed articles on public procurement based on the Article Title, Abstract, and Keyword, which were published in the field of Social Science & Humanities since 1990. Although a disadvantage of keyword searching is the increased likelihood of getting more irrelevant articles⁴, we did not want to take the risk of omitting potentially

¹ See <http://www.utwente.nl/bms/tms/staff/telgen/>

² See <http://www.elsevier.com/solutions/scopus>

³ See <http://www.elsevier.com/solutions/scopus/content>

⁴ See <http://library.sage.edu/instruction/dbasearch.pdf>

relevant peer-reviewed articles. Therefore, we decided not to exclude any major or minor subject areas. This step resulted in 804 results, which were then narrowed down in the second step. We searched within the results for peer-reviewed articles directed at public procurement on innovation. In total, 216 results were found. However, not all peer-reviewed articles were published in journals or were available in English. After applying these filters, there were 207 peer-reviewed articles left for innovation, which were used to assess the relevance.

3.1.7 Assess retrieved articles for relevance

First of all, we assessed the peer-reviewed articles independently from each other by reading the title and abstract using the inclusion criteria and exclusion criteria. In case of any doubt, both of us skimmed independently through the peer-reviewed articles to decide whether the peer-reviewed article was relevant or not. The process of judging the peer-reviewed articles independently from each other increases the validity of our research. As a second step, we compared the short lists of relevant peer-reviewed articles that were made independently. In case there were any differences, we discussed this in order to come to an agreement on the initial selection of peer-reviewed articles. Afterwards, the notion of back referencing was also taken into account to discover more potentially relevant peer-reviewed articles. In addition, an author search was carried out for the authors who appeared more than once in our overview of peer-reviewed articles. We looked at the publications of these authors in ResearchGate. Only peer-reviewed articles were taken into account and the same inclusion criteria and exclusion criteria applied for both back referencing and the author search. We went through the same approach of making a short list independently from each other and we compared these short lists.

3.1.8 Document a summary table of included articles

Appendix 1B gives an overview of the peer-reviewed articles that were found, which met the inclusion criteria.

3.1.9 Provide a statement specifying the number of retrieved articles

In total, seven peer-reviewed articles were found in Scopus. In case there was no full text available in Scopus, we were able to find the full-text version on the internet. Additionally, zero peer-reviewed articles were retrieved by means of back referencing. This is caused by the relatively scarce amount of literature in public procurement on innovation that met our inclusion criteria. In addition, the author search in ResearchGate did not result in a discovery of more peer-reviewed articles, because the inclusion criteria and exclusion criteria were not met. The authors who appeared more than once in our overview of peer-reviewed articles are Edler and Georgiou. They seem to be active researchers in the field of public procurement on innovation. However, they wrote relatively more conference papers and books in comparison to peer-reviewed articles and not all of their publications were available in English.

3.1.10 Conduct quality appraisal of retrieved literature

Only peer-reviewed articles published in journals were taken into account. Therefore, there was no quality appraisal conducted.

3.1.11 Critically review the literature

All selected peer-reviewed articles were examined thoroughly and special attention was paid to analyse to what extent cross-country learning exists and to indicate whether there are lessons learned from one country to another. If there were any indicators in these peer-reviewed articles that cross-country learning exists, we expected those indicators to be explicitly or implicitly stated in the peer-reviewed articles.

3.1.12 Check the reference list for accuracy

The reference list is up-to-date and critically appraised.

3.2 Policy documents

Our second part of the methodology consists of a thorough examination of policy documents from a variety of countries. These countries were selected based on our sample composition for the interviews, which is explained in section 3.3. We thoroughly examined the policy documents in parallel to conducting the interviews. By this, knowledge acquired on public procurement policies on innovation from the interviewees was used as a supplement for our policy document search and vice versa. Appendix 2A gives an overview of the countries whose public procurement policies on innovation were analysed. We looked at national government websites, because the national governments are the responsible regulator for public procurement. Only national government websites that were available in English were examined. We made a distinction between public procurement rules and regulations, which are mandatory, and policy initiatives such as programs and guidelines, which are voluntary. As a double-check, national procurement associations are expected to provide information, to introduce or to discuss these official policy documents. Hence, the websites of these associations were also analysed. When a specific public procurement policy on innovation was identified, we searched for information on the formation of this policy with regard to cross-country learning. The search terms that were used during the search process in Scopus were also applied to find policy documents. We started the policy document search at the end of May 2015 and this search process lasted till mid-June 2015. This process was executed by each other independently in order to reduce the chance of overlooking relevant policy documents. The policy document results that were found are listed in Appendix 2B. Within these policy documents, we searched on words such as *learn*, *inspire*, *copy*, and *adopt*. In case no policy document results for a country were found or if these policy documents were not accessible due to language difficulties, it was indicated with an 'X'.

3.2.1 Policy analysis method

Public procurement is a relatively new field of research and the study of public procurement policy is still in its infancy. Nevertheless, the "open systems" model can be used to analyse public procurement policies (Snider & Rendon, 2008). Our policy analysis method was inspired by this model, but some adaptations were made to make the model more suitable for the concept of cross-country learning in public procurement. Our model consists of the following components: *national policy influences*, *inputs*, *policies developed & applied*, *effects of the policy*, and *diffusion*. All these elements are subject to changes in the environment. The metaphor of the Iceberg was used to make a distinction between elements that are 'above the surface' and elements that are 'below the surface', which is illustrated in Figure 1. The elements 'national policy influences', 'inputs', 'policies developed & applied', and 'effects of the policy' were seen as explicit in this model and were, therefore, indicated as 'above the surface'. Moreover, the element 'diffusion' was viewed as implicit and was, therefore, marked as 'below the surface'. We perceived cross-country learning to take place at the 'diffusion' stage. The process starts with the 'inputs' that may evolve from 'national policy influences', such as national government objectives, vision, and political views. Besides, there might also be some input from the 'diffusion' stage. Other countries could already have implemented policies and have gained experiences by this. However, it is not clear how, and if, these lessons learned were transferred from one country to another. The inputs could be converted into new policies that can be developed and applied, which may lead to certain effects of

these policies. In turn, these effects can be used as learning opportunities. Nevertheless, it remains unclear how this process unfolds due to the implicitness of cross-country learning. Therefore, the policy documents were examined in order to trace back if the policy documents were formulated in response to national policy influences and/or cross-country learning, which is the main focus of this study.

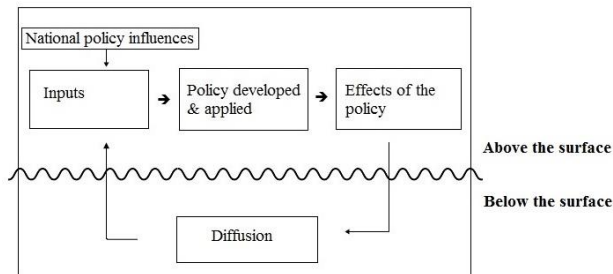


Figure 1. Policy analysis method

3.3 Interviews

Our third part of the methodology consists of some interviews with public procurement experts from different countries. According to Grix (2004), interviewing is a popular method, but it should not be used in isolation. Therefore, we ran the process of conducting interviews in parallel to examining the policy documents in order to complement our overall findings. We chose for semi-structured interviews. An advantage of semi-structured interviews is that they allow for a certain degree of freedom (Grix, 2004). Both predefined questions and questions that we formulated ad hoc were posed. This made it possible for us to ask for further explanations, if needed, to gain more in-depth information. All interviews were conducted via Skype, because of the geographic spread of the interviewees.

3.3.1 Pre-interview

We formulated a set of questions that started broad and gradually narrowed down in order to prevent the interviewees from feeling lost during the interview and to avoid putting words into the interviewees' mouths. The interview transcript that we used can be found in Appendix 3A. After our first supervisor Prof. Dr. Jan Telgen approved our set of questions, we purposefully selected our sample. The method that was used for sampling is called convenience sampling, which is a form of non-probability sampling that is useful for exploratory research (Adler & Clark; 2015). They state that a convenience sample can be seen as a group of people that are readily accessible. In this study, a list of confidential contact information from some public procurement experts was provided to us by our first supervisor Prof. Dr. Jan Telgen. Nevertheless, we took into account that it is important to overcome bias towards a certain subgroup of interviewees within the sample as stated by Ghauri and Grønhaug (2010). Therefore, public procurement experts from both developing and developed countries were included. Furthermore, the requirement of sufficient knowledge of either English or Dutch was another sampling condition.

An e-mail was sent to a number of public procurement experts, which stated the purpose of our study, the estimated duration of the interview, and that we wanted to get in touch with them as soon as possible. In total, we contacted 25 public procurement experts of whom ten were willing to take part in the interview. Table 2 provides more information about the sample composition with regard to each interviewee's function and the country in which each interviewee is situated. The information is ordered

randomly. We decided not to mention any names, because of confidentiality issues. After arranging a day and time, we prepared for the interview by making an interview planning which is important since time should be scheduled properly (Grix, 2004; Ghauri & Grønhaug, 2010). Therefore, we made sure that enough time was scheduled for the interviews. The interviews were all conducted in the first two weeks of June 2015.

3.3.2 The interview

Before asking the questions, we first introduced ourselves. We shortly introduced the content of our research and we promised to keep the answers anonymously and confidentially. Besides, we asked our interviewees if they agreed upon recording the interview. In case of agreement, the Skype interview was recorded by means of Camtasia, which is a computer programme that enables the recording of a screen. All interviews were conducted in English, except for one interview that was conducted in Dutch. During the interview, we kept track of the time and we made notes as a backup in case the recording technology would break down. Keeping track of time is important, because it must be ensured that all questions are answered within a specified time period (Ghauri & Grønhaug, 2010). If necessary, we asked the interviewees to give some further explanations about a certain matter in order to gain more in-depth information. At the end of the interview, we asked the interviewees if they had some questions and/or remarks for us with regard to issues that we might have overlooked. Finally, we thanked our interviewees for their willingness and time to cooperate in this interview.

Table 2. Sample composition

Country	Function
Bhutan	Regional director at Office of Small and Medium Enterprises
Canada	President of Public Procurement Association
Ethiopia	Country coordinator for CIPS
Germany	Head of Research at Central Purchasing Body
Italy	Lecturer on Public Procurement
The Netherlands	Professor of Materials Management
Portugal	Director of Public Procurement Expertise Centre
Sweden	Former Dean at the Faculty of Computing and Management Science
Uganda	Senior Procurement Manager
The United States (US)	Chief Procurement Officer

3.3.3 Post-interview

After the interview was conducted, we listened to the recordings and wrote the interview transcript immediately when the interviews were still fresh in our minds. This is also a recommendation from Grix (2004). *The interviewee transcripts are available upon request.* After a few interviews, we figured out that it would be wise to ask our interviewees if there were any public procurement policies on innovation in their country and whether these policies were published on their national government website. In this way, we could complement our own policy document search with the information gathered by the interviews.

When analysing the interviews, the focus was on analysing to what extent cross-country learning exists and to indicate whether there are lessons learned from one country to another. The analysis will be executed independently from each other in order to enhance the validity of the research.

All in all, this threefold methodology aims to get more insight into the concept of cross-country learning in order to answer the research questions of this study. The next session will discuss our findings and results before we discuss the results and draw a conclusion.

4. FINDINGS & RESULTS

The findings and results of this study are categorised into the following three parts: (1) scientific literature, (2) policy documents and (3) interviews.

4.1 Scientific literature

After an extensive review of the scientific literature in public procurement on innovation, only seven peer-reviewed articles were found (Dalpé, DeBresson & Xiaoping, 1992; Edler & Georghiou, 2007; Rolfstam, 2009; Myoken, 2010; Edquist & Zabala-Iturriagoitia, 2012; Georghiou, Edler, Uyarra & Yeow, 2014; Wan, 2014). This relatively scarce amount of scientific literature was also recognised by scholars (Georghiou et al., 2013; Wan, 2014). The seven peer-reviewed articles include both single-country studies and multi-country studies, which are mainly focused on the European Union (EU). Nevertheless, the multi-country studies were more comparative in nature and none of the articles could explicitly indicate that cross-country learning in public procurement on innovation takes place.

4.1.1 *The European Union*

One factor that may constrain the learning process between countries is the EU regulation which can be seen as a barrier to public procurement on innovation (Rolfstam, 2009; Edquist & Zabala-Iturriagoitia, 2012). Edler & Georghiou (2007) state that the use in public procurement on innovation has declined, because of the strict competition regulation within the EU. According to Edquist and Zabala-Iturriagoitia (2012), these rules constrain collaboration and interaction. Nevertheless, the new directives have opened the doors to make use of functional specifications and to make use of competitive dialogue procedures to stimulate innovative solutions (Edquist & Zabala-Iturriagoitia, 2012). However, it was found that the extent to which these procedures that were introduced in the directives are applied varies across Europe. For example, 80% of the purchases using competitive dialogue took place in the United Kingdom (UK) and France (Georghiou et al., 2014). Therefore, there might be a learning opportunity for national governments when exchanging ideas on how to effectively design procurement rules that do not hinder innovation.

4.1.2 *Frontrunner in public procurement on innovation within the European Union*

There is also an increased awareness regarding public procurement on innovation at the national level within the EU (Edler & Georghiou, 2007). One way to learn from each other could be to look at the countries within Europe that are considered to be best in class. The UK is regarded as having the most systematic and advanced approach (Edler & Georghiou, 2007). According to Myoken (2010), the UK was one of the first European countries to implement a framework-agreement that does not only foster innovation, but also offers better public services. Another example in the UK is the White Paper Innovation Nation, which requires ministries to make a detailed plan of how these ministries would stimulate innovation through expenditure (Georghiou et al., 2014). Austria is one of the countries that have copied this concept of planning that

necessitates departments to outline their needs and intentions to procure innovation (Georghiou et al., 2014). Unfortunately, the article does not explicitly state what lessons Austria copied from the UK when implementing the program and whether this program has been successful in Austria or not. Other countries, besides the UK, that took early initiatives are the Netherlands and Germany (Rolfstam, 2009). The leading status of these countries could highlight their role to 'lead by example'. For instance, the European Commission praised the Netherlands for its knowledge network system in which the governments play a key role in driving innovation (Myoken, 2010). Its exemplary role can be further illustrated by PIANOo which is a Dutch platform for public procurement practitioners where experiences can be exchanged (Edler & Georghiou, 2007; Myoken, 2010). According to Myoken (2010), sharing experiences stimulates knowledge learning, which could enhance cross-country learning.

4.1.3 *The global spread of public procurement on innovation*

Outside Europe, the SBIR (Small Business Innovation Research) program has impacted US competitiveness by providing support for the commercialisation of new technologies in technology-based SMEs (Myoken, 2010). Myoken (2010) explicitly stated that Japan learned from this successful programme in the US, but it was not described what Japan exactly had learned. The implementation of SBIR in Japan, however, has not yet resulted in job creation, an entrepreneurial mind-set, and resurrecting economic actions to the same extent as in the US. Japanese policy makers and analysts argue that the success of the SBIR programme in the US is mainly a result of the support of federal agencies. According to Georghiou et al. (2014), versions of this program also exist in Australia, Belgium, the Netherlands, and the UK, but the lessons learned from each other and how these lessons have affected their version of the SBIR program stay rather implicit.

In conclusion, it seems that the current scientific literature does not explicitly state that cross-country learning takes place. We only found two examples of countries, namely Austria and Japan, that adopted policy initiatives from other countries, but these examples do not illustrate what they learned exactly. Therefore, the lessons learned remain rather implicit. Nevertheless, this does not mean that cross-country learning does not occur at all since the scientific literature does not state that it does not happen either. It merely illustrates that it might be questionable whether cross-country learning in public procurement on innovation is really a research topic that is in the interest of academics or whether it is more a policy-theme. Hence, we aim to complement this literature review by examining policy documents and by interviewing some public procurement experts from a variety of countries.

4.2 Policy documents

Our policy analysis method was used to examine policy documents in order to trace back if these policies were formulated as a response to national policy influences and/or cross-country learning, which is the main focus of our study.

4.2.1 *Public procurement legislation and policy initiatives on innovation*

None of the developing countries have policies for public procurement on innovation, which may show that it is not really high on the public procurement policy agenda at the moment. However, their public procurement laws do not rule out the possibility to take innovative aspects into account during the procurement process. In Europe, there is relatively more room for policy initiatives and the EU seems to become more active in coordinating countries' public procurement on innovation

practices. In these efforts, the focus is more on public procurement on innovation initiatives and programs, which are voluntary in nature, than on ‘hard’ policy instruments. For instance, all three Northern-European countries have established a competence centre where best practices on public procurement on innovation are shared. These competence centres do underline the importance of networking, but there is no hard evidence that they learn from each other across borders. Canada can also be regarded as active in promoting public procurement on innovation. A specific program directed at innovation procurement that was introduced and was perceived to be successful is the Build in Canada Program (BCIP). This program is aimed at procuring and testing late stage innovations within the Canadian government prior to commercialising these innovations. In some ways, it could be argued that this program is quite similar to the US SBIR program that also provides funding to small businesses to conduct R&D. However, we could not find any confirmation that Canada learned from the US in this regard. The Netherlands publicly acknowledged that they were inspired by the US when launching their own version of SBIR in 2004, but they do not mention the specific lessons learned. Initiatives such as the SBIR program are stipulated in the Federal Acquisition Regulation (FAR) in the US, whereas Europe tends to make more use of ‘soft’ policy instruments in promoting public procurement on innovation.

All in all, we did not find any evidence of cross-country learning at all. Hence, it is either not used at all or it is not considered worthwhile or appropriate to mention. This does not mean that cross-country learning does not exist at the policy-making level, but it could illustrate that the lessons learned from one country to another remain implicit at the least. Nevertheless, it might be the case that not all policy documents were found on public procurement on innovation due to the fact that only national government websites that were in English were examined. In order to gain more complementary insights, some interviews were conducted with public procurement experts to find out whether they think that cross-country learning exists and to ask if they could provide hard evidence of lessons learned.

4.3 Interviews

After conducting interviews with ten public procurement experts from different countries including both developing and developed countries, it appeared that the findings could be classified into three categories of countries.

4.3.1 Familiarity with cross-country learning in public procurement

This first section investigates to what extent countries are involved in cross-country learning in the field of public procurement and to whether there lessons are learned from one country to another. The three categories of countries that we distinguished are presented in Figure 2. The *first category* consists of countries that think that cross-country learning exists and were able to give specific examples of lessons learned from one country to another. The *second category* of countries thinks that cross-country learning exists, but they were not able to give such examples. The *third category* is comprised of countries that think that cross-country learning does not take place.

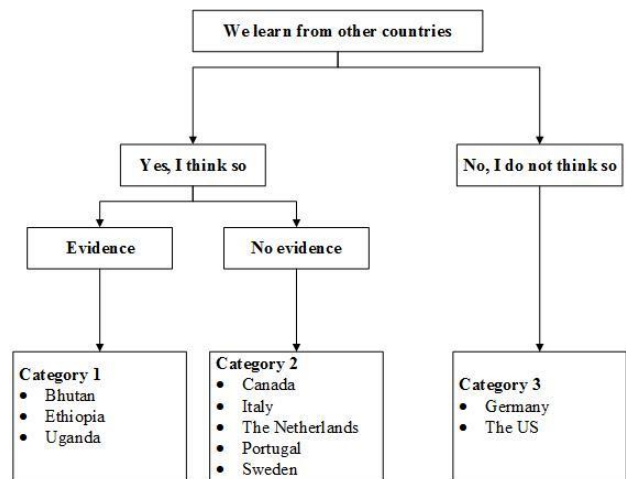


Figure 2. Categorisation of cross-country learning

The first category consists of only *developing countries*, which is quite remarkable. These countries indicated during the interviews that the World Bank is seen as the cornerstone for establishing procurement rules and regulations. For other initiatives, such as e-procurement, they look at both developed and developing countries. This could be explained by the fact that one interviewee indicated that developing countries are active in designing policies, but not in implementing these policies. Therefore, they might be more eager to learn from other countries.

The second category consists of mainly European countries with the exception of Canada. This is not really surprising, because the interviewee from Canada mentioned that its political system is quite similar to that of European countries. It was stated that the European Commission (EC) finances many cross-country initiatives. Besides, countries within Europe have their own national procurement legislation under the umbrella of the European Directives. The policy initiatives may, therefore, not always suit their national contexts which could constrain cross-country learning to some extent.

The third category consists of Germany and the US. The interviewees from these countries mentioned that there are many units of governments, which may limit cross-coordination. Therefore, cross-country learning is to some extent restricted at both the national and the international level.

The other way around, a similar pattern could be observed for the question whether countries were familiar with countries that learned from them. There are only two exceptions. The first exception is Bhutan, which does not think that countries learned from them since their public procurement system is relatively new. The other exceptions are Portugal and Italy, which do have evidence for countries that learned from them. For instance, Portugal already made the use of e-procurement mandatory a couple of years ago, which will now gradually become mandatory in the EU.

4.3.2 Familiarity with cross-country learning in public procurement on innovation

Both developing countries and developed countries indicated that they are not likely to learn from other countries when designing public procurement policies on innovation. First of all, this may be due to the fact that they have their own programs or initiatives tailored to their own countries’ requirements. Secondly, public procurement on innovation was often not seen as the main priority. For example, the interviewee from the US stated that they tend to look at policies from a compliance perspective instead of from an innovation standpoint. As a consequence,

rules are established within a framework which may restrict legislation to be fully innovative.

The other way around, it was quite surprising that *all countries* could not indicate whether they were familiar with countries that learned from them. The only exception was Canada. It was mentioned that there were rumours that countries have looked at the Build in Canada Program (BCIP), but this has never been confirmed.

4.3.3 Cross-country learning opportunities

All countries indicated that they were open to learn more from each other. The majority stated that network activities such as congresses, conferences, and workshops are important in order to exchange experiences and knowledge. Moreover, one of the interviewees stated that sharing practices might even be more useful than policies, because policies are effectuated at the practice level. Therefore, it is important to look at cross-country learning from different angles. The US stated that it is important to look from policy maker to policy maker as well as from practitioner to practitioner.

In conclusion, cross-country learning seems to take place more in developing countries than in developed countries. This may be explained by the fact that they are willing to learn since they want to catch up on good public procurement practices with the rest of the world. Developed countries, however, could not really indicate whether they learned from others when designing public procurement policies and vice versa. On the 'learning' side, countries often perceived cross-country learning to take place, but they could not provide hard evidence. In other words, they could not give specific examples of what and from whom they learned. Therefore, it may be the case that cross-country learning takes more the form of learning in an incidental manner if at all. It could also indicate that the interviewees believe cross-country learning to exist, because it seems logical, but it does not take place in practice. As a consequence, a lot of knowledge may stay rather implicit. As additional evidence on the teaching side, we did not find any hard evidence of other countries that have learned from them.

5. DISCUSSION

The goal of this exploratory study was to investigate to what extent cross-country learning exists and to examine if there are lessons learned on public procurement on innovation from one country to another. A threefold methodology was used that consisted of (1) an extensive review of scientific literature complemented by (2) thorough examination of policy documents and (3) interviews with some leading public procurement experts.

First of all, no hard evidence on cross-country learning in public procurement on innovation could be found in the scarce scientific literature, which could serve as a first indicator of little cross-country learning. Our review of scientific literature was complemented with a policy document search and interviews with ten public procurement experts from both developing and developed countries.

Again, we did not find hard evidence for cross-country learning during our policy document search. The implicitness of cross-country learning was also discussed by means of our policy analysis method, which was inspired by the "open systems". In our model, only the elements 'above the surface' are visible. Hence, policy documents were examined in order to trace back if the policy documents were formulated in response to national policy influences and/or cross-country learning, which is the main focus of this study. Nevertheless, the fact that there was no hard evidence found for cross-country learning at the policy-making level does not mean that cross-country learning does not exist, but it could illustrate that the lessons learned from one country to another remain implicit at the least.

A noteworthy result from the interviews was that developing countries indicated that they learn from each other and that they could also provide evidence for that. Conversely, most developed countries pointed out that they think that cross-country learning takes place, but this could not be confirmed with specific examples. The fact that these countries were not able to provide evidence could indicate that cross-country learning takes place in a more incidental manner that remains largely implicit. It could also imply that they assumed cross-country learning to take place, because it seems straightforward, but it does not happen in reality. Besides, most countries could not really tell whether they think that other countries have copied their policies. This might illustrate that countries do not know the difference between 'learning' and 'teaching' in terms of transferring lessons from one country to another. Coming back to our proposed model, countries could take into account these lessons learned as an input to their policy-making in such a way that there is no need to reinvent the wheel.

6. CONCLUSION

All in all, in this study the concept of cross-country learning was investigated by means of two research questions:

- To what extent does cross-country learning exist?
- What are the lessons learned from one country to another?

Our analysis shows that no hard evidence was found for cross-country learning in either scientific literature or policy documents or interviews. The lessons learned remain largely implicit and this shows that countries either do not learn a lot from each other or it is not considered appropriate or worthwhile to mention.

This exploratory study has a number of limitations. Despite the fact that our sample composition was quite international, we do not have evidence from all continents and not all continents are as well represented as, for instance, Europe in this sample. Our sample distribution is skewed further, because we only examined policy documents that were available in English and conducted interviews with public procurement experts who could speak English. Besides, public procurement experts voluntarily engaged in our interviews which might imply that they already have some kind of interest or are more engaged in cross-country learning than others. Lastly, this study focuses on the country level, but it could also be interesting to analyse the concept of cross-learning among lower governments and among different public sectors. Despite the number of limitations, the analysis of cross-learning among different government levels could be a relevant contribution to the understanding of what kinds of cross-learning opportunities exist in the public sector.

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9. APPENDICES

Appendix 1A: Search process in Scopus

Step	Date	Query	Results
1: Search for articles on public procurement in title, abstract and keywords published in the field of Social Sciences & Humanities since the 1990s	19-06-2015	TITLE-ABS-KEY (public OR government AND procurement AND policy) AND DOCTYPE (ar) AND SUBJAREA (mult OR arts OR busi OR deci OR econ OR psyc OR soci) AND PUBYEAR > 1989	804
2: <u>Search within</u> for articles directed at innovation	19-06-2015	(TITLE-ABS-KEY (public OR government AND procurement AND policy) AND DOCTYPE (ar) AND SUBJAREA (mult OR arts OR busi OR deci OR econ OR psyc OR soci) AND PUBYEAR > 1989) AND (innovation OR innovative)	216
3: <u>Limit to</u> articles in journals available in English	19-06-2015	(TITLE-ABS-KEY (public OR government AND procurement AND policy) AND DOCTYPE (ar) AND SUBJAREA (mult OR arts OR busi OR deci OR econ OR psyc OR soci) AND PUBYEAR > 1989) AND (innovation OR innovative) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SRCTYPE , "j"))	207
4. <u>Select</u> articles on title, abstract (and global overview in case of doubt) based on inclusion criteria and exclusion criteria	19-06-2015	<ul style="list-style-type: none"> An overview of these articles can be found in Appendix 1C 	7

Appendix 1B: Overview of articles

Title	Author(s)	Year	Journal
The public sector as first user of innovations	Dalpe, DeBresson & Xiaoping	1992	Research policy, 21 (3)
Public procurement and innovation – Resurrecting the demand side	Edler & Georghiou	2007	Research policy, 36
Public procurement for innovation as mission-oriented innovation policy	Edquist & Zabala-Iturriagoitia	2012	Research policy, 41 (10)
Policy instruments for public procurement of innovation: Choice, design and assessment	Georghiou, Edler, Uyarra & Yeow	2014	Technological forecasting and Social Change, 86
Demand-oriented policy on leading-edge industry and technology: Public procurement for innovation	Myoken	2010	International Journal of Technology Management, 49 ()
Public procurement as an innovation policy tool: The role of institutions	Rolfstam	2009	Science and Public Policy, 36 (5)
Public procurement of innovation policy: Competition regulation, market structure and dominant design	Wan	2014	Journal of Public Procurement, 14 (4)

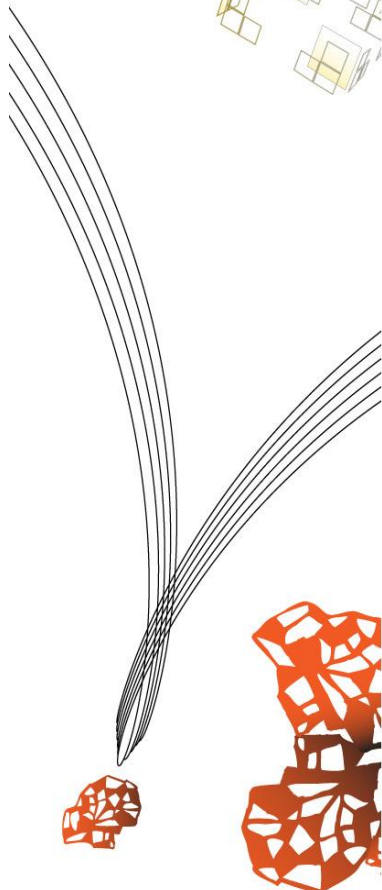
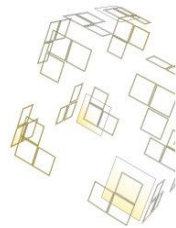
Appendix 2A: Overview of government websites and procurement association

Country	Government website	Procurement association
Bhutan	http://www.pppd.gov.bt/	X
Canada	https://buyandsell.gc.ca/	http://www.scmanational.ca
Ethiopia	http://www.ppa.gov.et/	X
Germany	http://www.bmwi.de/EN/root.html	http://www.bme.de/en/start/
Italy	http://www.consip.it/en/	http://www.adaci.it/
Netherlands, the	http://www.rijksoverheid.nl/onderwerpen/ink-open-door-het-rijk/	http://www.nevi.nl
Portugal	https://www.espap.pt/Paginas/home.aspx*	http://www.apcadec.org.pt
Sweden	http://www.konkurrensverket.se/en	http://www.silf.se/in-english/
Uganda	http://www.pdda.go.ug	http://www.ippu.or.ug
United States, the	http://www.gsa.gov	http://www.nigp.org/eweb

*Not accessible due to language difficulties

Appendix 2B: Overview of public procurement legislation and policy initiatives

Country	Public procurement legislation	Policy initiatives
Bhutan	Procurement Rules and Regulations, 2009 http://www.pppd.gov.bt:8888/EGP/PRR_and_Amendments/Procurement%20Rules%20and%20Regulations.pdf	X
Canada	Key Policies and Directives https://buyandsell.gc.ca/policy-and-guidelines/Policy-and-Legal-Framework/Key-Policies-and-Directives	Build in Canada Innovation Program, 2010 https://buyandsell.gc.ca/initiatives-and-programs/build-in-canada-innovation-program-bcip
Ethiopia	Public Procurement Directive, 2010 http://www.ppa.gov.et/index.php?option=com_docman&Itemid=105&lang=en	X
Germany	X	KOINNO, 2013 by Federal Ministry for Economic Affairs and Energy http://en.koinno-bmwi.de/
Italy	X	X
Netherlands, the	Aanbestedingswet, 2012 http://wetten.overheid.nl/BWBR0032203/geldigheidsdatum_20-06-2015	Inkoop Innovatie Urgent, 2012 by the (Ministry of Economic Affairs, PIANOo (Dutch Expertise, Netherlands Enterprise Agency) http://www.inkoopinnovatieurgent.nl/ SBIR Program http://www.rvo.nl/subsidies-regelingen/overheden-en-sbir
Portugal	X	X
Sweden	Swedish Public Procurement Act, 2007 http://www.konkurrensverket.se/globalassets/english/publications-and-decisions/swedish-public-procurement-act.pdf	VINNOVA is a Swedish government agency, 2011 http://www.vinnova.se/en/Our-activities/Innovativeness-of-specific-target-groups/Innovation-management/Innovation-Procurement1/
Uganda	The Public Procurement and Disposal of Public Assets (rules and methods for procurement of supplies, works and non-consultancy services) Regulations, 2014 http://www.ppda.go.ug/index.php/acts-a-regulations/cat_view/34-regulations/35-cg-regulations.html	X
United States, the	Federal Acquisition Regulation, 2005 https://www.acquisition.gov/sites/default/files/current/far/pdf/FAR.pdf	Small Business Innovation Research Program (SBIR), 1997



Appendix 3A: Interview transcript

Dear interviewee,

Before we are going to ask you some questions, we would like to introduce ourselves. Our names are Shirin Senden and Kimberly Nijboer. We are two International Business Administration students from the University of Twente and we are currently writing our bachelor thesis on cross country learning with regard to sustainability and innovation in public procurement. This is in regards to preparing for the sixth edition of IRSPP (International Research Study on Public Procurement).

The ways in which these sustainable and innovative policy goals have been implemented in public procurement vary per country. Furthermore, not all countries implemented their variants at the same time. This means that there is ample opportunity for cross country learning. Therefore, we would like to ask you some questions to investigate to what extent your country is involved in cross country learning. Before we start, are you okay with recording this conversation? Your answers will be kept confidentially and anonymously.

First of all, are you familiar with any influences or lessons learned from other countries that have helped your country in establishing policies on public procurement? In other words, do you think cross-country learning exists in your country? If so, please give an example. If not, why do you think so?

Secondly, do you know other countries that copied policies on public procurement that have been made in your country? If so, could you give us an example? If not, could you tell us why?

More specifically, we are looking at cross country learning on innovative and sustainable public procurement. Are you familiar with influences or lessons learned from other countries that have helped your country in establishing innovative and sustainable policies on public procurement? If so, could you provide us with an example? If not, could you explain why?

Next to this, do you know other countries that copied innovative and sustainable policies on public procurement that have been made in your country? If so, please give an example. If not, why do you think so?

Do you think that countries can or should learn more from each other? If so, in what ways could countries learn more from each other and why do you think this is important? If not, why do you think so?

Lastly, do you think that cross learning opportunities exist at other levels than the country level? For example, at the local government level? Why do you think so?

Thank you very much for your willingness to cooperate. Once again, your answers will be treated confidentially and anonymously.