What specific actions can public sector buyers take to make their procurement process more appealing to SMEs?

Author: Frodo Damavandi University of Twente P.O. Box 217, 7500AE Enschede The Netherlands

ABSTRACT

This research investigates the essential strategies that public sector buyers can implement to encourage small and medium-sized enterprises (SMEs) to supply goods and services. The involvement of SMEs in public procurement is crucial for stimulating contributors to overall economic growth. Despite their critical role, SMEs face numerous challenges, stopping their participation. This study aims to identify strategies that can make public procurement more accessible and appealing to SMEs. Exploring the perspectives of SMEs currently engaged in and those refraining from public sector procurement. The research makes use of qualitative methods, including interviews and literature reviews, to gather insight into the experiences and barriers faced by these enterprises.

Graduation Committee members:

Prof. dr. L.A. Knight S.M.D. Borobia

Keywords

SMEs, public sector buyers, procurement, economic growth.



1. INTRODUCTION

Encouraging small businesses to partner with public sector buyers is crucial for boosting local economies, especially for innovative startups in the tech sector (Walker & Preuss, 2008). For small businesses, such engagements not only unlock new markets and opportunities for growth but also support their credibility and reputation, enhancing their competitive edge across all sectors (Karjaleinen & Kemppainen, 2008). From the perspective of public sector buyers, collaboration with small enterprises introduces innovative solutions and agility into public projects, addressing complex challenges with new innovative approaches. Cooperation with Small and Medium-sized Enteprises (SME) not only means encouraging an 85% job creation percentage against 15% of large firms, but also doing business with firm sizes that account for 56% of GDP creation when looking at companies in the EU-27(Garcia-Martinez, 2023). This synergy not only encourages local economic development by supporting job creation and community upliftment but also secures the supply chain (Walker & Preuss, 2008). A diverse and resilient supply chain, enriched by the inclusion of small businesses, ensures stability and sustainability, vital for the economy's overall health and resilience. In essence, the cooperation between small businesses and public sector buyers provides a more dynamic, innovative, and robust economic landscape.

However, forging these partnerships can be challenging. Public sector buyers often hesitate to work with small businesses due to concerns about their capacity to handle large-scale projects and navigate the complex tendering process. Conversely, small businesses might be overwhelmed by the intricate and lengthy procedures involved in public sector bidding, leading them to view these opportunities as less appealing compared to more straightforward engagements in the private sector. The challenges of SMEs as buyers have been explored, but there is little research on the obstacles that SMEs encounter as suppliers (Karjaleinen & Kemppainen, 2008).

1.1 Research objective and question

This situation highlights a significant question: What steps can public sector buyers take to become more attractive to small businesses and encourage them to supply goods and services? By examining the issue from various perspectives, including the experiences of businesses that have both engaged and refrained from working with the public sector, we can identify effective strategies. Especially analyzing and distinguishing small businesses that are either enjoying supplying public sector buyers or/and would like to supply the public sector, and SMEs that are hesitant in supplying public sector buyers and/or have stepped down supplying the public sector. Addressing this question is vital for stimulating economic growth and innovation. Small businesses are key drivers of job creation and innovation, making their involvement in public sector supply chains essential. These strategies could facilitate better collaboration between small businesses and public sector buyers, ultimately leading to a more dynamic economy and improved public services. Therefore, the research question follows: "What specific actions can public sector buyers take to make their procurement process more appealing to SMEs?"

With the following sub research question:

"How do SME perceptions of public procurement barriers affect their willingness to participate?"

1.2 Academic and practical relevance

The academic relevance of this research is to add to the existing literature of SMEs by doing an abductive approach by linking the procurement process of public sector buyers to SMEs. This research adds to the existing literature, and the results can be used for further research on these topics.

After the research is done, possible outcomes may be proposed on how public sector buyers can encourage SMEs to supply goods and services to them, which can be used by public sector buyers wanting to participate with SMEs.

2. LITERATURE REVIEW

2.1 Challenges from SMEs' supplier perspective

In the challenging world of public procurement SMEs face several challenges that prevent them from obtaining advantageous contracts with public sector buyers. This issue is concerning not only because SMEs represent a significant portion of economic activity and employment but also because their increased involvement could bring more innovative, flexible, and cost-effective solutions to government needs (OECD, 2018).

Loader (2015) examined the difficulties SMEs face in the public procurement process in the UK. This study utilized data from an online feedback facility to explore perceptions of SMEs regarding the obstructive nature of these processes. The main subjects identified from this are:

- The complexity of the public procurement process as experienced by SMEs
- The specific barriers that SMEs face
- The effectiveness of government initiatives aimed at facilitating SME participation
- Recommendations for policy improvement to make procurement more accessible and equitable for SMEs
- The impact of procurement challenges on the economic health of SMEs

The process for SMEs to get involved in public procurement is often complicated by a lot of bureaucratic steps that require a lot of paperwork and strict rules to follow, that can be too much for smaller businesses that don't have the staff or knowledge to handle these requirements (Garcia-Martinez, 2023). Understanding the complex rules of procurement means spending a lot of time and resources that could instead be used for growing the business and making operational improvements (OECD, 2018).

Additionally, the cost to enter public procurement is very high. SMEs often spend a lot when preparing bids, securing bid bonds, and providing performance guarantees. These financial demands can be too much, stopping smaller businesses that have limited cash flow from participating because they can't afford to have their money tied up or risk losing bid securities (OECD, 2018). This situation is made worse by the costs that come with not winning the bid, which can discourage SMEs from even trying to enter the market (Celotti et al., 2021).

These challenges are worsened by the lack of clear information. SMEs often have trouble finding clear and up-to-date information about procurement opportunities, how selection is done, and how awards are given out (Saastamoinen et al., 2017). This can lead to an uneven playing field, where larger firms or those with insider knowledge may have an advantage.

The size and complexity of public contracts make them harder to access. These contracts are usually big and complex, made for larger companies, leaving out smaller businesses that can handle only smaller parts but can't compete on such a large scale (Celotti et al., 2021). As a result, many SMEs are either kept out of the

bidding process or are unable to compete against bigger, wellestablished companies (MacManus, 1991).

Beliefs that contracts are given out based on favoritism or corruption can also create major challenges. Public procurement reaches such an institutionalized level, where there are many requirements and complex procedures that it becomes difficult to enter (Woldesenbet & Worthington, 2018).

In situations where bigger companies might be unfairly preferred because of their long-term connections with public officials or through dishonest practices, SMEs may see the procurement market as closed off and unfair. This not only keeps them from taking part, but it can also reduce their trust in the entire procurement system, the public sector (OECD, 2018).

Lastly, the problem of delayed payments presents a serious challenge. SMEs with their limited financial capabilities, are especially at risk of cash flow problems. When public authorities are late in making payments, it can stretch the operational abilities of SMEs too far and put them in risky financial situations (MacManus, 1991). For many small businesses that operate with little cash in storage, not knowing when they will get paid is a big risk and can threaten their financial security (Celotti et al., 2021).

Therefore, SMEs tend to work more Business to Business (B2B) instead of Business to Government (B2G). Regulatory constraints including transparency, bureaucracy and guidelines, lack of long-relationship building due to the government's cyclical 'fair' nature and its discouragement of innovation because of minimizing risk are (Purchase et al., 2008). On the other hand, B2B offers more flexible, long relationships to secure a reliable supply chain and leverage volume discount, emphasize more on achieving business goals and gain competitive advantage by innovating (Purchase et al., 2008).

2.2 Response to the challenges faced by SMEs

Tackling the challenges faced by SMEs in public procurement requires a multifaceted approach to change procurement practices, making them easier to access, more transparent, and fairer. Steps such as simplifying processes, reducing financial demands, ensuring fairness, breaking up large contracts into smaller, manageable pieces, and guaranteeing prompt payments are crucial for creating a fair environment (Saastamoinen et al., 2017). These changes not only benefit governments by harnessing the innovation, flexibility, and competitive pricing that SMEs offer, thereby improving the quality and efficiency of public services (Celotti et al., 2021), but also enhance supplier satisfaction, which is critical for sustaining long-term partnerships.

The concept of supplier satisfaction, as explored in the study by Vos, Schiele, and Hüttinger, emphasizes the importance of creating relationships that are mutually beneficial (Vos et al., 2016). Supplier satisfaction in the public sector can be significantly enhanced by addressing growth opportunities, reliability, and profitability of the relationships. By integrating these elements, public sector buyers can make their procurement processes more appealing to SMEs, thereby increasing their willingness to engage and invest in these opportunities.

Celotti et al. (2021) further emphasize the need for a more supportive system that reduces these problems and promotes a more inclusive procurement environment where SMEs can not only participate but also grow. This includes making procedures simpler, increasing transparency, making contracts smaller to be more manageable, ensuring timely payments, and creating a procurement atmosphere that supports rather than causes problems for small and medium-sized businesses (OECD, 2018).

Analysis of the SMEs' participation in public procurement and the measures to support it (Bas et al., 2019) identifies a variety of practices and conditions that significantly influence the effectiveness of support measures for SMEs. One of the primary success factors highlighted is the comprehensive understanding of the specific needs and conditions of SMEs in different sectors and regions. Tailoring support measures to address these specific needs, such as reducing administrative burdens, simplifying the bidding process, and ensuring transparency and fairness in the procurement process, are crucial for fostering an environment where SMEs can compete effectively.

Bas et al. (2019) points out various practices and conditions that really affect how well support measures work for SMEs. A key factor for success is fully understanding the needs and conditions of SMEs across different sectors and regions. Customizing support to meet these specific needs, like for example reducing paperwork, making the bidding process easier, and ensuring transparency and fairness in the procurement process, is essential for creating an environment where SMEs can compete successfully.

Additionally, the implementation of e-procurement systems can be seen as a response to enhancing operational excellence by making the procurement process faster and more accessible for SMEs, thus reducing geographical and physical barriers to entry (Bas et al., 2019). This not only aids in simplifying the bidding process but also contributes positively to supplier satisfaction by reducing the complexity and uncertainty that often discourages SMEs from participating. Cutting the contracts into smaller parts is also emphasized as a significant solution, allowing SMEs to bid for portions of a larger contract that aligns with their production capacity and expertise (Bas et al., 2019).

Encouraging pre-tender interaction is another method that aligns with enhancing relational behavior. This interaction allows SMEs to engage with buyers and influence the procurement specifications before the tender process officially begins (McKevitt & Davis, 2015). Such early engagement can help SMEs feel more informed and involved, significantly enhancing their satisfaction and perceived fairness in the process.

Creating clear, transparent, and easy-to-understand guidelines and providing training and help for SMEs are crucial steps that can make it easier for SMEs to navigate the public procurement process. Additionally, ensuring timely payments and offering financial assistance such as advance payments or covering the costs of preparing bids can mitigate financial pressures on SMEs during the procurement cycle (Bas et al., 2019). These actions together form a supportive framework that not only makes public procurement more accessible for SMEs but also ensures their involvement and success in this competitive field.

This comprehensive approach to creating and implementing support measures, rooted in a thorough understanding of the unique challenges SMEs face, is essential for effectively integrating these businesses into the public procurement market (Bas et al., 2019).

2.3 Current policies and initiatives

In the literature on public procurement, especially from the perspective of SME suppliers, the concept of Purchasing Process Models (PPMs) emerges as a critical framework. These models serve as schematic representations that systematically outline the sequence of activities involved in the procurement process (Bäckstrand et al., 2019). This is particularly important in educating new practitioners and aligning standard operations within organizations.

PPMs are categorized based on their focus on either tactical, operational or strategic decision-making processes, reflecting

their application in day-to-day procurement activities or broader strategic planning, respectively. This distinction is crucial in understanding how SMEs can navigate public procurement more effectively, as strategic models often emphasize alignment with corporate strategies, which can influence SMEs' approaches to public procurement bids.

PPMs are important in clarifying the unclear and complex procurement process for SMEs, which frequently struggle with bureaucratic complexities and the high costs of entry. By implementing PPMs that are not only descriptive but also prescriptive, public-sector organizations can aid SMEs in understanding exactly what is required at each step of the procurement process, potentially enhancing their satisfaction and willingness to engage in public procurement activities.

This integration of PPMs into the procurement education and practice not only aids in the standardization of procurement activities but also supports SMEs in overcoming some of the fundamental challenges they face, such as navigating the bureaucracy and high entry costs mentioned in earlier studies (OECD, 2018; Garcia-Martinez, 2023). The clear, structured pathways outlined by PPMs could serve to clarify the procurement process, making it more accessible and less daunting for smaller enterprises that do not have the resources to engage in complex bidding wars.

Nielsen et al. (2017) explores different preferential procurement models that help support SMEs. These models include basic principles that ensure transparency and efficiency, specific reforms to create an equal playing field, and direct assistance targeted at SMEs. The basic principles aim to improve integrity, accountability, and value for money in the procurement process. Reforms focus on making the application process simpler and using e-procurement to gain more access and decrease problems for SMEs. SME-specific assistance involves financial support, marketing help, and changes to performance guarantees, all designed to make it easier for SMEs to enter and remain in public procurement. In addition, simplifying procedures and reducing the size of contracts to match the capabilities of SMEs could help SMEs enter the market better and have a better chance of supplying the public sector (Hoekman & Tas, 2020). By minimizing the complexity of the application processes and reducing paperwork required, public sector entities can encourage more SMEs to participate, mitigating the costs associated with entering public procurement (Celotti et al.,

A clear example showing the problem of complexity is a recent study analyzing the well-known Preston Model (2023). It shows a good insight on how a wealth-building strategy focused on leveraging local economic activities and resources to benefit the community. It involved redirecting the procurement of local institutions (like universities and hospitals) towards local businesses, promoting fair employment, and encouraging economic participation that retains and improves the wealth within the community. However, the integration of its community wealth-building strategies with the existing economic structures and practices of local institutions turned out to be inconvenient. Overcoming the entrenched procurement practices that often involved larger, non-local companies, thus making it difficult to redirect spending towards the local businesses. The local businesses were not ready for the complexity of the fixed procurement practices (Prinos & Manley, 2022).

The study by Nielsen et al. (2017) finds that the effects of policies favoring SMEs show mixed results. Although there's a clear positive relationship between SME-specific incentives and the ease of doing business with governments, these incentives don't

always lead to higher SME participation rates. This suggests that while these policies may improve conditions, they don't ensure SME involvement. The research from various countries points out that SME engagement tends to rise with reforms like e-procurement and transparency, especially when combined with training and improved technology access.

South Korea is an example of effective implementation. The country has implemented a comprehensive set of measures, including a strong e-procurement system (KONEPS), timely payment reforms, and financial support programs. These actions have significantly increased SME participation in public procurement, with SMEs securing many contracts thanks to these policies (Nielsen et al., 2017).

Nevertheless, Kim Loader (2007) concludes that while the government has made efforts to support small businesses through procurement policies, there is a significant challenge in balancing the pursuit of value for money while also providing opportunities for small businesses. Often larger companies that can offer lower costs and meet the extensive requirements of government contracts more effectively are chosen to do business with. Although there are initiatives for increasing small business participation, such as simplifying the tender process and holding 'meet the buyer' events, these measures have not significantly made an impact yet. More effective policies and practices are needed to support small businesses in public procurement, without compromising on the quality and cost-effectiveness essential to public sector procurement objectives.

In another research Loader (2011) describes two initiatives. The framework agreements involve setting up an agreement with several suppliers under set terms and conditions without specifying exact quantities or timings for delivery. This can be both an opportunity and a barrier for SMEs. They provide a chance to be part of a pool of approved suppliers, but the unpredictability of actual work and the dominance of larger firms within these frameworks can limit the opportunities for smaller companies. However, McKevitt et al. (2013) describe that apart from being guaranteed only a minimum amount of work, it does provide a minimum risk when spreading the work among the suppliers for the buyers, as well as it provides multiple businesses an opportunity while also increasing the competition and therefore quality. Secondly, local and SME-friendly initiatives are implemented in some regions. These procurement policies are specifically designed to enhance SME participation, such as setting aside contracts exclusively for local or smaller suppliers. These initiatives are generally positive for SMEs, increasing their chances of securing government contracts. However, they need to be well-designed to ensure that they do not exclude capable SMEs due to too strict criteria or fail to provide enough support to help these businesses scale up to meet government requirements and grow from there onwards (Loader, 2011). Introducing smaller contract lots is one of the emerging beneficial strategies. By breaking larger contracts into more manageable segments, SMEs can bid for projects that align with their capabilities without the overwhelming financial strain of larger contracts. This segmentation not only increases SME participation but also enhances the diversity of solutions available to the public sector (European Commission, 2021).

An innovative approach that SMEs and the public sector can adopt is the shared risk model. Granat (2017) conducted research on the shared risk approach, focusing on the concept of equitable risk allocation among partners in supply chain, specifically from the perspective of the SMEs. This model distributes risks between parties based on their ability to manage them effectively. The study revealed that this approach encourages

collaboration and strengthens fairness and mutual benefits among the parties involved.

3. METHODOLOGY

3.1 Research Design

In order to collect unbiased data that is relevant to the research of what public sector buyers can do to encourage SMEs to supply them, the already existing literature on this topic has been reviewed. This provides a prior knowledge and understanding of the topic. Building on these insights, the interview method was applied to collect data. After these interviews, the findings from both researches were compared and previous hypotheses were compared to the outcomes of the interviews. This means qualitative research is the approach. The reason for this approach is that it suits the research question as this is quite a sensitive theme. To understand these smaller SMEs, gaining the key information from their perspective, it is important to not lose this info when gathering data. Often the opinions and experience of these small firms are overlooked and not taken seriously. These typically include interviews, focus groups, observations, and document reviews. These methods are used to gather rich, narrative data. The analysis of qualitative data involves identifying patterns, themes, and relationships within the data, which can provide insights into underlying reasons, opinions, and motivations (Saunders et. Al, 2009).

This approach is particularly useful when the researcher aims to explore how individuals interpret their experiences, construct their realities, and understand phenomena in a specific context. It is highly effective in obtaining detailed information about human behaviors, social processes, and cultural norms.

Thus, qualitative research is characterized by its ability to provide complex textual descriptions of how people experience a given research issue. It provides insights that are not typically available through other quantitative methods, allowing researchers to understand the nuances and dynamics of social life (Saunders et al., 2009).

The approach for this qualitative research consists of a mix of the deductive and inductive approach, an abductive approach.

This research approach has several benefits. First, it promotes the discovery of original theory in understudied domains. While there is a lot of information from the public buyers' perspective, there is significantly less on the supplier's side when focusing on small- and medium-enterprises. Therefore, gaining more information on the issues, expectations and recommendations from the SME suppliers suits this approach well. Second, the method encourages broad, boundary-expanding exploration, hence, has the potential to propose original theories that encompass a large set of relationships (Janiszweski & van Osselaer, 2021). This qualitative approach includes 11 questions where in some cases extra in-depth questions are asked to provide more context behind reasoning as well as to get a better understanding of the recommendations of the participants. In addition, this iterative approach in abductive reasoning essentially filters out the quirks and leaves behind a theory that is strong, reliable, and more likely to be true in various settings, not just under specially constructed conditions (Haig, 2005). Also, when possibly criticizing the public sector, it is therefore important that the approach is anonymous, so the participant feels most comfortable to fully sharing their experience without feeling constraints.

3.2 Conceptual framework

This study is driven by the need to understand how public sector procurement can be optimized to enhance participation by SMEs. The primary research question is "What specific actions can public sector buyers take to make their procurement process more appealing to SMEs". This is underpinned by a subquestion: "How do SME perceptions of public procurement barriers affect their willingness to participate?".

The central element of the conceptual framework is SME participation in public procurement. This framework is assisted by the dependent variable SME participation rate. The independent variable which leads directly to SME participation is government initiatives. Several government initiatives that have come forward in the literature review were the simplification of processes such as PPM, and transparency.

The mediating variable affecting the relationship between the government initiatives and the SME participation rate is SME perceptions. Perception of SME that might influence the relationship, are perceptions of the fairness, complexity and transparency of the procurement process.

The moderating variable that influences the strength of the impact of the government initiatives on the SME participation rate are the SME characteristics. In this research SME are identified based on having employees between 10-250, other characteristics are if an SME is already working with the public sector, working with the private sector or working with both.

The theoretical foundation influencing all variables is based on two theories. First, the Resource-Based View (RBV) which focuses on the resources and capabilities of SMEs that enable them to compete in public procurement markets, and how these can be enhanced through government interventions. And, the Stakeholder Theory, which examines the relationships between public sector buyers and SME suppliers, emphasizing the importance of managing these relationships to enhance SME participation and satisfaction.

The theoretical foundation is explained by both moderating and mediating variables specific to SMEs. Based on the literature review and interviews done with SMEs, possible interventions are proposed to mitigate challenges.

After the research was done, possible recommendations were proposed on how public sector buyers can encourage SMEs to supply goods and services to them.

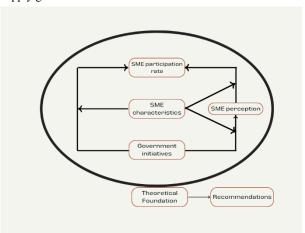


Figure 1. Conceptual framework

3.3 Development of Interview Questions

The interview questions were developed based on the findings and insight from Loader (2015), which examines the difficulties

SMEs face in the public procurement process in the UK. The main topics of the interview questions were

- Challenges
- Financial barriers
- Accessibility
- Complexity
- Transparency
- Implementation

The full set of interview questions can be found in Appendix A.

3.4 Data Collection

3.4.1 Literature Review

This paper's main purpose is to provide public sector buyers with more insight and information on what startups to medium-sized suppliers require and/or desire from the buyers to establish cooperation. The aim of the literature reviews was to get an overall overview of SME suppliers and gain insights on key terms of these suppliers' satisfaction. To conduct this literature review, which is part of the secondary data collection, a multiple sourcing method is used. The literature review is done by analyzing journal articles, business papers and government publications. This data collection method is used to understand the main concepts and insights of the situation.

The literature review is the starting foundation for the research, where first an analysis was made on the already existing literature. Followed by a conclusion on what useful insights there currently are from the suppliers' perspective, what the public sector currently is doing to encourage collaborations and what key issues lead to the demand and supply from supporting and benefitting from each other. Based on the information gained through this literature review, a qualitative research design is developed considering prior knowledge and understanding.

3.4.2 Interviewing Framework

The interviewing framework is the semi-structured interview approach. This includes a structure where specific questions are asked in the same way for each participant, based on the literature reviewed beforehand on the procurement process for SME suppliers and the public buyers (Jamshed, 2014). However, based on the situation, a more thorough explanation can be asked and/or a follow-up question based on the response of the participant, which suits the qualitative research style (Saunders, 2009). The questions are based on the information from the secondary data collection, made before the interview procedure. The questionnaire is designed to answer the research question and sub research questions.

3.4.3. Interviewing sampling

This paper is focused on Dutch SMEs and the focus is to evaluate the suppliers' perspective, what the public sector currently is doing to encourage collaborations and what key issues lead to the demand and supply from supporting and benefitting from each other. Due to time considerations, the focus is to collect data from 9 different SMEs, which is only a small sample of the population of SMEs. For the sampling method, non-probability sampling is used. This method of sampling is based on the subjective judgment of the researcher rather than random selection (Wolf et Al., 2016). For this research, a judgmental technique is chosen, as the samples have been chosen based on own knowledge gained from the secondary data collection.

For the sampling, there is a focus on different characteristics. The interviewees are seen as working for a SME when the company has between 10-249 employees. There is much discussion about the criteria for a SME, but taking strictly into account all the criteria of definition is statistically not possible (Center for Strategy & Evaluation Services, 2012). The threshold of 250

employees, however, is not subject to any change since several studies have already pointed out that it should not be raised (Center for Strategy & Evaluation Services, 2012). There has also been looked at the SME characteristics on whether an SME already works with public sector, or works with only private sector, or is working with both, has different outcomes. This characteristic might lead to different results, which has been analyzed in the results and discussion.

3.5 Data analysis

After conducting the interviews, the automatically generated transcripts during the online interview were reviewed and improved to filter out any major spelling or grammar errors. This is to prevent misinterpretations during the analysis stage. When these transcripts were finalized, they were uploaded to ATLAS.ti, a coding software where a research license is provided by the University of Twente. In this software program, each answer to the question is labeled with a code that suits the context of the quotation. For coding the Grounded Theory is applied, explained by Delve at al. (2022). The first step was open coding, where the data collected as transcripts is broken down into parts where each relevant have a code assigned. After coding all answers to the questions, they have been grouped to categorize the data, labeling them with terms like 'accessibility', 'transparency' and 'complexity', which is axial coding. That way the final method of the Grounded Theory is used, selective coding. The content of the interviews is analyzed per group, making it also easier to statistically see which and how many participants have similar experiences. The re the categories are integrated and refined into the themes relevant for this research study. This is explained and concluded in the results.

3.6 Data protection

Data protection aims to guarantee the participants' right to privacy. Its framework is designed to ensure that personal data are safe from unforeseen, unintended or malevolent use (European University institute, 2022). When conducting the interviews, several actions are taken to ensure the participants' privacy. Every participant of the research has been asked for informed consent when conducting the interview. Informed consent was made sure by providing the necessary information by using plain and clear language, so that it is understandable to the potential participants. None of the personal details of the participant or its company is used in the paper. Furthermore, the program used to transcribe and analyze the outcomes of the interview have well defined privacy terms to protect the collected data.

4. **RESULTS**

4.1 Identification

The 9 interviews have been conducted and are defined by their SME characteristics, specifically to what sector they supply. This in order to investigate another dimension within this research, creating more valuable information on possible difference of themes between the target sectors of the SME partaking in the interviews. SMEs that supply to the public sector only are indicated as PSPx; Public Sector Participant, those that supply to the private sector only are named PRPx; Private Sector Participant. The participants that supply both sectors are named BPPx; Both Public and Private Sector Participant. The symbol x stands for a randomly distributed SME within the concerned category.

4.2 Accessibility

4.2.1 Budget, deadlines and features

In the interviews conducted, accessibility was a main constraint, holding back the smaller enterprises from entering the procurement process and preparing for the tender. BPP2 explained, the public buyer places emphasis on the right amount of money spent, making a specific deadline and participating enterprises should be functional on multiple areas. PSP2, PSP1, BPP4, BPP3 and BPP2 expressed their frequent obligation to withdraw or refrain from the tender process as these indicators are not suitable for collaboration with a smaller enterprise in contrast to bigger companies. SMEs do not have the resources or the desired cost of work for the full project, while they are experts in some specific segments of the project. This results in public buyers being inclined to negotiate with contractors from bigger companies who can cover more segments, neglecting the quality a SME can provide.

4.2.2 Unsuited tender documentation

PSP4, BPP3, BPP2 & PSP3 raise the awareness of inadequate or even unapplicable tender documentation that does not suit the description or use of the product, resulting in either inaccessibility or loss of quality. PSP4 mentions that when there is a tender for a product or service in a certain segment, there are cases where all kinds of conditions are stated that pertain to a different type of product within that segment and does not apply to the needed product at all. As these are not applicable, SMEs like these want the inadequate conditions to be removed from the entire procurement process because otherwise they must provide something they don't have, takes extra time to process, which ultimately would prevent them from participating. BPP1 states that for their SME to participate in the procurement processes, public buyers should subdivide their necessities into multiple specific processes to get a more specialized team on the issue and boost the involvement of SMEs in the procurement process of public buyers overall. This could result in upscaling and reduction in average unit cost of production which will translate back in a better price for quantity for public buyers (OECD, 2019). BPP2 noticed that when tenders are issued, they often include many requirements and codes. However, these are not always applied consistently so BPP2 gets informed by another party about a tender that they expected to see on the list but completely missed. SMEs like these do not have the resources for a team designed to find tenders like bigger companies have. As the tender is not written appropriately for the product desired, SMEs are overlooked in their specific segment while they might be the best option.

4.2.3 Overlooked circularity

PRP1 & PSP3 mentioned the importance of the public sector looking for circularity. The government of the Netherlands has set its goal of having a circular economy by 2030(Kishna et al., 2019), therefore it is an important way of doing business with the suppliers too. PRP1 mentioned that there are improvements on this going on now, but there are no major conditions yet. These conditions might give SMEs a better chance to present their innovative and sustainable products to improve sustainability and circularity. In addition, PSP3 experienced a situation where while being in the tendering process, a competitor asked if an alternative material could be used for the product to make it cheaper. This was allowed by the contractor, while the reduction of quality was overlooked, which was specifically important for this product. This meant there would be more service costs over the coming years, leading to more waste and costs. This could all have been prevented if the public buyer had invested more in circularity which pays out in the long term and contributes to sustainability.

4.3 Complexity

As presented in the literature on several occasions, complexity during the tender procedure is a recurring topic for SMEs. All 9 interview participants discussed complexity before and during the tender process.

4.3.1 Complexity in tender documentation

8 out of 9 participants (exception of PRP1) indicated to have recurrent negative experiences with tender documentation due to complexity. PSP4, PSP1, BPP2 & PSP3 indicated that the bureaucratic approach resulted in a negative feeling towards collaboration with the public organizations, as the value of a solid collaborative culture is not supported. PSP4 & BPP3 specified that the public buyers mix up projects which makes it difficult to comply with all the terms and conditions, while they have expertise and are specialized in a specific segment of the project. General insurance- and turnover-requirements block the smaller entities from entering the tender processes while they might be very suitable for segments within the project.

PRP1 spoke in for the complex tender documentation as they realized it is hard for the public sector to describe what they specifically want, especially when practicing with public money.

4.3.2 The share of the purchasing intermediary

Governmental entities leave the tender process evaluation to procurement professionals, assigning them to choose the most suited supplier for the order. PSP4, BPP1, BPP3, BPP4 & PSP3 expressed problematic cases this caused, as they have different expertise and motivation behind the evaluation. PSP4 mentioned that the professional buyer is specifically focused on the implementation of support or on providing a strategical report but does not have knowledge of the unique product itself. Therefore, the documentation contains conditions and terms suitable for the working field but not their buying product resulting in excessive and unnecessary paperwork for the supplier. BPP1 & PSP3 admitted to this situation causing a considerable cost on their small entity. BPP1 indicated that there are also cases of the mediating firm demanding a lower price than what the public buyer essentially agreed on in the first place, possibly to gain a better margin for the mediating party. PSP3 and BPP4 discovered that the professional buyer in some cases does not understand the importance of quality, agreeing to a cheaper alternative presented by the competition which therefore has an advantage, while the loss of quality is overlooked, leaving the qualitatively better option out.

4.4 Financial barriers

Financial barriers emerge as a significant concern for SMEs participating in public procurement processes. Financial barriers were discussed in all 9 of the interviews.

4.4.1 Financial barrier caused by fixed price

In 3 interviews (PSP4, BPP3, PRP2, BPP2), the pressure from public sector buyers to accept fixed price bids was discussed. This pricing model can especially be problematic for service-based SMEs whose costs are not easily predictable. Also, the challenge of having to provide high volumes at competitive prices was mentioned, which is often not feasible for smaller enterprises focused on specialized products. This requirement forces SMEs to either take on unsustainable financial risk or opt out of bidding entirely.

4.4.2 Cost of compliance with bidding requirements

4 out of the 9 interviews (PSP4, BPP1, BPP3, PSP3) mentioned problems due to the cost of compliance with bidding requirements. Complying with diverse and sometimes "strange" demands for documentation and contract terms, which deviates from standard industry practices, results in significant

administrative costs. These requirements consume time and resources that could otherwise be allocated to other business developments. Specialized knowledge or external consultants to navigate these compliance issues adds to the costs, this stops SMEs from participating.

4.4.3 Financial barrier caused by delays

Another critical issue mentioned is delayed payments. Payment delays were discussed in six of the interviews (PSP4, PSP1, PRP1, BPP3, PSP3, BPP4) regarding the impact on cash flow and financial planning. SMEs, which often do not have large financial buffers, are vulnerable to cash flow disruptions caused by late payments from public sector clients. BPP4 noted that they felt put into an awkward position as they do not want to penalize the public buyer as this will damage their business relation, which specifically is important for SMEs, causing the feeling of being powerless. This can jeopardize their financial stability and ongoing operations.

Besides payment delays, a critical point mentioned by interviewees (PSP4, PSP1, BPP2, PSP3, BPP4), is overall delays in tender processes. These delays can lead to increased administrative and operational costs. But also delays in tender decisions force businesses to hold resources in reserve, potentially missing out on other opportunities. Due to their size and resource constraints, they cannot bid on multiple projects simultaneously.

4.5 Transparency

Problems with transparency were further discussed in six of the nine interviews (PSP4, PSP1, BPP2, PSP3, BPP4). Issues such as unclear criteria, biases, and perceived favoritisms during the bidding processes. This indicates a concern among the participants about how open and fair the tendering process appears to be, impacting their trust and willingness to participate in public sector bidding.

4.5.1 Perceived bias and favoritism

Some participants (PSP4, PSP1, BPP2, PSP3, BPP4) felt that the tender processes could be biased, favoring certain companies over others. This was caused by experiences where the criteria seemed adapted to specific providers or when the tender process did not consider smaller or less well-known firms despite their capabilities.

4.5.2 Limited feedback and communication

Several interviewees (PSP4, BPP2, PSP3, BPP4) discussed concerns about the lack of effective communication and feedback during or after the tender process. Enterprises often find it difficult to get direct responses to their questions, which can lead to misunderstandings and a lack of clarity on what is expected from them. Even after the decision in a tender process, there is not always an explanation or clear feedback on why a certain decision was made. BPP4 stated in some cases the yardstick did not fit the innovative character of the product, therefore making it more difficult especially for SMEs, while the decision making was done behind closed doors.

5. DISCUSSION AND RECOMMENDATIONS

5.1 Discussion

5.1.1 Challenges

This thesis aimed to explore effective strategies public sector buyers can explore to make their procurement processes more appealing to SMEs. The findings have highlighted that while there are initiatives aimed at simplifying and opening procurement opportunities to SMEs, barriers still exist. These findings reflect the complexities discussed in the literature

review and the empirical data collected through interviews with employees in SMEs.

The process for SMEs to get involved in public procurement is often complicated by a lot of bureaucratic steps that require a lot of paperwork and strict rules to follow, that can be too much for smaller businesses that don't have the staff or knowledge to handle these requirements (Garcia-Martinez, 2023). Understanding the complex rules of procurement means spending a lot of time and resources that could instead be used for growing the business and making operational improvements (OECD, 2018).

Consistent within the literature, SMEs face multiple barriers, including complex regulatory requirements, lack of transparency in the procurement process, and several financial burdens. These barriers often come back in the interview responses. The tender processes are complicated, with strict rules. Understanding these complex rules takes lots of time and resources (Garcia-Martinez, 2023) and (OECD, 2018). 7 of the interviews emphasized this challenge, stating the complexity of the tender process making it difficult competing against larger corporations. Also shown during the interviews, that general tender processes are not aligned with SMEs. Thus, making it harder to adjust and understand the tender process.

This challenge is worsened by the lack of clear information about how selection is done and how awards are given out. Making it an even more uneven playing field (Saastamoinen et al., 2017). Interviewees expressed concerns over perceived bias in tender processes, suggesting that requirements of the tender process are adjusted accordingly, so that a predetermined party has a significant advantage. This perception of bias underscores the need for more transparent procurement practices. A suggestion from the interviewees/the field is that public sector entities could provide detailed feedback on decision-making processes to enhance transparency and trust among SMEs. This mistrust was also found in the literature, Woldesenbet & Worthington (2018) stated in their research that SMEs have beliefs that contracts are given out based on favoritism or corruption, creating major challenges.

Additionally, found as a main barrier are financial burdens. Not only are costs to enter very high, but the costs also that come with not winning the bid discourage the SMEs from even trying (OECD, 2018) & (Celotti et al., 2021). SMEs with limited cash flows can't afford to have their money tied up. Public authorities that are late in making payments put the SMEs in risky financial situations (MacManus, 1991) and (Celotti et al., 2021). Financial burdens come back in all the interviews. Another barrier that came forward in the interviews but was not mentioned in the literature, is that public institutions hold on to a fixed price. This fixed price undermines the quality difference for a higher price that SME deliver in contrast to big enterprises. With this low fixed price, SMEs are forced to not enter the bidding process.

Common among accessibility challenges that SMEs face when engaging in public procurement processes, is the focus on budget, deadlines and functionality across projects. Interviewees find themselves unable to meet these demands set by public buyers, as they are better suited to larger enterprises with broader operational scopes and deeper financial resources. This restricts SME participation but also potentially stops the specialized skills and quality that smaller enterprises could bring to public projects.

5.1.2 Responses and implementations

The literature suggests multiple approaches to improve procurement practices, including simplifying processes, enhancing transparency, and ensuring fairness, all intended to create an environment helpful to SME participation. In practice, however, interviews with SME representatives revealed several

challenges. Although approaches such as e-procurement systems have been initiated, the complexities and bureaucratic nature of procurement processes continue to discourage SME engagement. This difference points to a gap between the ideal outcomes expected from theoretical models and the real-world experiences of SMEs.

A critical discussion point is the barriers to effective implementation of proposed improvements. The findings underscore the necessity of not only designing inclusive policies but also ensuring their effective implementation. For instance, while Purchasing Process Models (PPMs) are designed to streamline procurement processes, SMEs often struggle with the bureaucratic complexities and high costs of entry, as mentioned in the literature review. These models need to be not only descriptive but also prescriptive, providing clear, actionable steps that are realistic for SMEs to follow.

Another significant aspect discussed in the literature is supplier satisfaction, which is crucial for long-term partnerships. The research findings indicate that despite efforts to enhance supplier engagement through early interaction and simplified bidding processes, there remains a lack of satisfaction among SMEs regarding transparency and fairness. This aspect is critical as it directly impacts SMEs' willingness to participate in public procurement.

5.1.3 The effect of the SME characteristic on their participation

After analyzing the challenges and opportunities from the perspective of the SME suppliers, categorizing them in the three groups of Public, Private and Both Public Private Sector Participants created more data on the possible difference in the problems faced. For accessibility, the PSPs frequently had to withdraw from tenders due to budget, time and functional requirements that favored bigger companies, causing considerable damage, while BPPs faced unsuitable tender documentation and conditions, which did not apply to their product in some cases, causing inaccessibility and having a preference of supplying to the private sector. PRPs did not explicitly have accessibility issues.

For transparency PSPs reported that there was unclear criteria and perceived bias affecting their trust and willingness to engage, while PRPs mentioned having possibly fewer issues with transparency in the private sector relations. BPPs admitted to experience of bias and unclear criteria especially in the public sector area. Complexity is encountered by PSPs through tender documentation and bureaucratic hurdles causing them to be more unwilling to participate in some cases. On the other side, PRPs acknowledged the complexity of the tender documentation but viewed it as necessary as the public sector has the accountability of public spending. BPPs experienced differences in insurance requirements and mixed-up projects, preferring the private sector more on the theme of complexity.

PSPs discussed several financial barriers like fixed price pressure, high compliance costs, delayed payments and a delayed process overall which increased the costs. PRPs face financial barriers too but less detailed compared to PSPs and BPPs. The BPPs experienced the similar issues of PSPs where the costs were not feasible for their business scale, therefore preferring supplying the private sector in some cases.

In conclusion, PSPs appear to experience significantly more challenges across all four themes, especially in complexity and financial barriers where PRPs encounter less issues according to the respondents which is caused by less strict and complex requirements the private sector involves in. BPPs face challenges from both sectors however especially in the public sector when addressing complexity and accessibility. Interesting to conclude

from the data collection is that engagement in both sectors does not necessarily ease the challenges faced in public procurement.

5.2 Recommendations

Public sector procurement processes are often criticized for their complexity and bureaucracy, which affects SMEs. To address this, it is recommended that procurement entities streamline application and compliance requirements to reduce the administrative burden on SMEs. Simplifying documentation, reducing the number of required certifications, and providing clear and concise tender documents can help lower the barriers to entry for smaller businesses.

The main issue in accessibility turned out to be public buyers demanding certain procedures that do not fit the innovative specialized SMEs. Prices, deadlines and features that cannot be met as well as the unsuited tender documentation that rather blocks SMEs from participating, as they are unable to cover multiple segments or sectors, then shows the expertise and quality they have on a specific segment. Therefore, public buyers should be encouraged through governmental policies to buy more circularly and especially to invest more in conversations beforehand. This will be very insightful as the SMEs can present what makes them the right candidate for (part) of the project, how the procurement process should be designed so that it is less complex, including less paperwork and irrelevant conditions and requirements, and to provide the public buyer with more knowledge on how quality and specialization may be an improvement to bigger companies. These simplifications will add to encouragement of SMEs participating in procurement processes (Hoekman & Taş, 2020).

Transparency is crucial in building trust and encouraging SME participation. Public sector buyers could improve the transparency of their procurement processes by regularly publishing detailed information on upcoming opportunities, evaluation criteria, and feedback on award decisions. Establishing a feedback mechanism where SMEs can receive constructive feedback on their bids could be helpful to understand the decision-making process and improve future proposals.

This not only simplifies the bidding process but also contributes positively to supplier satisfaction by reducing the complexity and uncertainty that often discourages SMEs from participating. Cutting the contracts into smaller parts is also emphasized as a significant solution, allowing SMEs to bid for portions of a larger contract that aligns with their production capacity and expertise (Bas et al., 2019).

To reduce the financial burden on SMEs participating in public procurement, a policy for faster payment terms could be introduced, to ensure that SMEs do not face cash flow problems due to delayed payments. Government policies could be adjusted to encourage SME participation, such as setting aside a specific percentage of contracts for SMEs.

Accelerating the adoption of user-friendly e-procurement platforms can simplify the entire procurement process. These platforms should be designed to reduce physical and geographical barriers, making public procurement more accessible to SMEs from different regions. E-procurement systems should include features that allow for easy submission of documents, tracking of application status, and communication with procurement officials. This would also encourage the participation rate as SMEs can bid on smaller portions of a contract, aligning with their capacity.

The shared risk model could also help SMEs and the public sector, working together by spreading out the risks involved in a

project, making it safer for both parties. This is helpful for small businesses because they often do not have many resources to handle big losses. By sharing risks, SMEs can try new, more innovative ideas and take on bigger projects without worrying too much about failing. The public buyer is more certain that the project will go through and that there will not be a loss of quality over the lack of finances. This model also makes it easier for SMEs to manage their finances and plan for the future, also avoiding serious financial problems when unexpected costs occur. It builds stronger relationships between small businesses and government agencies, leading to more trust and bigger potential projects together. Overall, the shared risk model not only makes things less risky for small businesses but also supports them in growing and working effectively with the public sector, who gains from the innovation and specialization brought by the SMEs (Zhang, Z., & Xing, Y. (2023).

6. LIMITATIONS AND FURTHER RESEARCH

While the research provides valuable insights into the procurement process of public sector buyers perceived by SMEs, it also has some limitations that should be considered. These limitations highlight areas where further research is needed.

6.1 Sample size and scope of interviews

The interviews taken were limited to a relatively small number of SMEs and were concentrated in the Netherlands, this might limit the generalizability of the findings. A larger or more diverse sample could potentially yield different insights.

6.2 Temporal constraints

This paper represents just a 'frozen photograph' of the current state of public procurement processes, which are subject to continuous change. Public procurement policies evolve, and new strategies are regularly implemented, which could change the relevance of these findings over time. Further studies should consider longitudinal approaches to provide a more comprehensive view of the trends and their impacts on SME engagement in public procurement.

6.3 Bias in data interpretation

This study utilized qualitative interviews, which can introduce subjectivity, in how participants express their experiences but also in the interpretation of this data. This method provided depth and detailed understanding, meaning the conclusions might be biased by the respondents or the researcher.

7. APPENDIX

7.1 Interview questions

- What are the main challenges you face when participating in public procurement processes?
- Can you describe your experiences with the transparency of public tenders?
- Why would you prefer to establish a business-tobusiness relationship rather than engaging with a public sector buyer?
- What improvements would you suggest making the tender documentation clearer or more accessible?
- How does the current bidding process impact your decision to participate in public sector tenders?
- What are your views on the qualification criteria set by public bodies? Are they fair and reasonable for SMEs?
- How could public purchasers better support SMEs during the bidding process?
- What financial pressures do SMEs face when engaging in public contracts and how can these be alleviated?

- In what ways do you think public procurement policies could be adapted to better suit the needs of SMEs?
- How do payment terms of public contracts affect your cash flow and financial planning?
- What kind of support or information would you find most helpful from public bodies before, during, and after the bidding process?

8. REFERENCES

Ali, H. and Birley, S. (1999), "Integrating deductive and inductive approaches in a study of new ventures and customer perceived risk", Qualitative Market Research: An International Journal, Vol. 2 No. 2, pp. 103-110.

Awuzie, B. and McDermott, P. (2017), "An abductive approach to qualitative built environment research: A viable system methodological exposé", Qualitative Research Journal, Vol. 17 No. 4, pp. 356-372. https://doi.org/10.1108/QRJ-08-2016-0048

Bäckstrand, J., Suurmond, R., Van Raaij, E., & Chen, C. (2019). Purchasing process models: Inspiration for teaching purchasing and supply management. Journal of Purchasing and Supply Management, 25(5), 100577. https://doi.org/10.1016/j.pursup.2019.100577

Center for Strategy & Evaluation Services. (2012). Evaluation of the SME definition: final report. Publications Office of the EU. https://op.europa.eu/en/publication-detail/-/publication/5849c2fe-dcd9-410e-af37-1d375088e886

David McKevitt & Paul Davis (2015) How to interact, when and with whom? SMEs and public procurement, Public Money & Management, 35:1, 79-86, DOI: 10.1080/09540962.2015.986897

Delve, Ho, L., & Limpaecher, A. (2022c, February 8). How To Do Open, Axial, & Selective Coding in Grounded Theory. Practical Guide to Grounded Theory. https://delvetool.com/blog/openaxialselective

European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Bas, P., Hausemer, P., Kruger, T. et al., Analysis of the SMEs' participation in public procurement and the measures to support it – Final report, Publications

Office, 2019, https://data.europa.eu/doi/10.2873/417621

European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Celotti, P., Alessandrini, M., Valenza, A. et al., *SME needs analysis in public procurement - Final report*, Publications Office, 2021, https://data.europa.eu/doi/10.2873/86199

European University Institute. (2022). GUIDE ON GOOD DATA PROTECTION PRACTICE IN RESEARCH. https://www.eui.eu/Documents/ServicesAdmin/DeanOfStudies/ResearchEthics/Guide-Data-Protection-

Research.pdf#:~:text=URL%3A%20https%3A%2F%2Fwww.eui.eu%2FDocuments%2FServicesAdmin%2FDeanOfStudies%2FResearchEthics%2FGuide

Fee, R., Erridge, A. and Hennigan, S. (2002), "SMEs and government purchasing in Northern Ireland: problems and

opportunities", <u>European Business Review</u>, Vol. 14 No. 5, pp. 326-334. https://doi.org/10.1108/09555340210444176

Galván Granat, M. E. (2017). Risk sharing in supply chain partnerships: An SME perspective. In Delft University of Technology, Delft University of Technology [Thesis].

Haig, B. D. (2005). An abductive theory of scientific method. Psychological Methods, 10(4), 371–388. https://doi.org/10.1037/1082-989x.10.4.371

Hoekman, B. M., & Taş, B. K. O. (2020). Procurement policy and SME participation in public purchasing. Small Business Economics, 58(1), 383–402. https://doi.org/10.1007/s11187-020-00414-z

Janiszewski, C., & Van Osselaer, S. (2021). Abductive Theory construction. Journal of Consumer Psychology, 32(1), 175–193. https://doi.org/10.1002/jcpy.1280

Karjalainen, K., & Kemppainen, K. (2008). The involvement of small- and medium-sized enterprises in public procurement: Impact of resource perceptions, electronic systems and enterprise size. Journal of Purchasing and Supply Management, 14(4), 230–240. https://doi.org/10.1016/j.pursup.2008.08.003

Kim Loader (2011) Are public sector procurement models and practices hindering small and medium suppliers?, Public Money & Management, 31:4, 287-294, DOI: 10.1080/09540962.2011.586242

Loader, K. (2015). SME suppliers and the challenge of public procurement: Evidence revealed by a UK government online feedback facility. Journal of Purchasing and Supply Management, 21(2), 103–112. https://doi.org/10.1016/j.pursup.2014.12.003

Kim Loader (2007) The Challenge of Competitive Procurement: Value for Money Versus Small Business Support, Public Money and Management, 27:5, 307-314, DOI: 10.1111/j.1467-9302.2007.00601.x

Kishna, M., Hanemaaijer, A., PBL Planbureau voor de Leefomgeving, Rietveld, E., Bastein, T., TNO, Delahaye, R., Schoenaker, N., & CBS. (2019). Doelstelling circulaire economie 2030 (Beeldredactie PBL & Uitgeverij PBL, Eds.) [Policy Brief]. PBL Planbureau voor de Leefomgeving. https://www.pbl.nl/sites/default/files/downloads/pbl-2019-policy-brief-doelstelling-circulaire-economie-2030-3551.pdf

MacManus, S. A. (1991). Why Businesses are Reluctant to Sell to Governments. PAR. Public Administration Review/Public Administration Review, 51(4), p 328. https://doi.org/10.2307/976748

McKevitt, D., Flynn, A., & Davis, P. K. (2014). Public buying decisions: a framework for buyers and small firms. International Journal of Public Sector Management, 27(1), 94–106. https://doi.org/10.1108/ijpsm-11-2012-0144

Nielsen, W., Business Environment Working Group, World Bank Group, Donor Committee for Enterprise Development, White, S., Hegazy, F., Widmer, A., Meijer, J., Springorum, S., Ghossein, T., Saliola, F., Belayachi, K., Reyes, D., Grava, L., Wille, J., Kusek, P., Clark, M. L., Delehanty, P. E., Held, A., . . . Martin, S. (2017). Policies that Promote SME Participation in Public Procurement. In A. Marusic (Ed.), Business Environment Working Group.

OECD (2018), SMEs in Public Procurement: Practices and Strategies for Shared Benefits, OECD Public Governance Reviews, OECD Publishing, Paris. https://doi.org/10.1787/9789264307476-en

OECD (2019), *OECD SME and Entrepreneurship Outlook 2019*, OECD Publishing, Paris, https://doi.org/10.1787/34907e9c-en.

Public procurement and small businesses: estranged or engaged? Journal of Small Business Management, 57(4), 1661–1675. https://doi.org/10.1111/jsbm.12442

Puschmann, T., & Alt, R. (2005). Successful use of e-procurement in supply chains. Supply Chain Management, 10(2), 122–133. https://doi.org/10.1108/13598540510589197

Saastamoinen, J., Reijonen, H., & Tammi, T. (2017). The role of training in dismantling barriers to sme participation in public procurement. Journal of Public Procurement, 17(1), 1–30. https://doi.org/10.1108/jopp-17-01-2017-b001

Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students: Pearson education.

The Preston Model: Economic democracy, cooperation, and paradoxes in organisational and social identification. Sociological Research Online, 28(3), 627–643. https://doi.org/10.1177/13607804211069398

Walker, H., & Preuss, L. (2008b). Fostering sustainability through sourcing from small businesses: public sector perspectives. Journal of Cleaner Production, 16(15), 1600–1609. https://doi.org/10.1016/j.jclepro.2008.04.014

Wolf, C., Joye, D., Smith, T. J., & Fu, Y. (2016). The SAGE Handbook of Survey Methodology. In SAGE Publications Ltd eBooks. https://doi.org/10.4135/9781473957893

Vos, F. G., Schiele, H., & Hüttinger, L. (2016). Supplier satisfaction: Explanation and out-of-sample prediction. Journal of Business Research, 69(10), 4613–4623. https://doi.org/10.1016/j.jbusres.2016.04.013

Zhang, Z., & Xing, Y. (2023). Impact of entrepreneurial orientation and risk sharing on organizational performance influencing role of news media and public opinion. Frontiers in Psychology, 14. https://doi.org/10.3389/fpsyg.2023.1126743