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The Public Law Procurement System and its Macroeconomic Effects in Germany and in the Czech Republic Regarding its Compliance with EU Law

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Summary: As one of the essential parts of government administration public procurement system utilizes a significant share of GDP. The purpose of public procurement system is to award timely and cost-effective contracts to qualified contractors and to keep safe that buying of goods and services in the public authorities is done in the legal manner. Furthermore, public procurement should generate the intended development and economic growth. The principal aim of this research is to conduct a comparison of macroeconomic effects of German and Czech public procurement system. Equally, the study intends to assess both similarities as well as outcomes. Based on the available studies, it is estimated that public procurement entails 15 % of GDP in Germany and 14 % in Czech Republic. The study utilizes secondary research methods to generate data which is analyzed with help of quantitative techniques. The most notable similarities include; the types of public procurement contracts and use of e-procurement to enhance efficiency and transparency. Moreover, some divergences were found,

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where the German procurement system seems to be more efficient compared to the Czech Republic.

Keywords: procurement system, macroeconomic effects, similarities, divergences, efficiency

1. Introduction

Public spending an important part of shaping a country's economy and this is the reason why every state has a formally designed public procurement system to enable it exploit the opportunity. Studies indicate that public spending in most countries accounts for approximately 15 to 20 percent of the national GDP while in the developing and emerging economies, governments spend an estimated value of 25 to 30 percent of their GDP according to OECD statistics[1]. In Europe, public procurement in most countries accounts for approximately 14 percent of the GDP and it ranges to procurement of small things such as stationery to large government contracts such as construction of infrastructure[2]. One of the traditional goals of public procurement process is to build an economy by providing the necessary procedures for acquisition of public goods and services to ensure funds are utilized for the benefit of state while ensuring there is economic growth[3]. Essentially, the philosophy of economic growth through public procurement system is that an efficient system plays a major role in cost reduction and ensuring the products and services procured are of best quality and significant benefit to the economy.

The purpose of this paper is to conduct a comparison on the economic impact of public procurement systems between Germany and the Czech Republic with the aim of identifying any similarities and divergences. Both countries belong to the European Union, which means they have a lot of similarities in terms of their policies and spending of public funds. However, being separate nations with different government administrations, it is highly likely that their systems have significant divergences based on local policies and strategies of ensuring individual economic growth. Some of the items that will be analyzed in the paper include

[1] BUDAK, J. & RAJH, E. 2014. *The Public Procurement System: A Business Perspective*. EIZ Working Papers, pp. 1–29.

[2] GRANDIA, J., MEEHAN, J. 2017. Public procurement as a policy tool: using procurement to reach desired outcomes in society. *The International Journal of Public Sector Management*, vol. 30, no. 4, pp. 302–309.

[3] KUNZ, P., POSPÍŠIL, R. 2017. Has European public procurement law improved the competitiveness of public procurement?. European Studies. *The Review of European Law, Economics and Politics*, vol. 4, 2017, pp. 111–112.

efficiency in public procurement system and percent of total public spending on the total GDP to identify any similarities and differences. Before analyzing the individual countries, the paper will conduct a review of each country's public procumbent process to provide the basis of understanding the similarities or disparities in the data collected as well as for discussion of findings.

1.1. Overview of Public Procurement System in Germany

In Germany, the public procurement system is comprised of approximately 30,000 contracting authorities who range from government agencies to universities and pension insurance institutions. These contracting authorities perform more than 2.4 million contractual procedures per year whose annual volume according to the Federal Government of Germany estimates amount of 280-360 billion Euros per year. These volumes account for between 10-15 % of the country's GDP per annum which is within the estimation of most European Union countries[4]. Since the country is a federal state made up of various local governments, the structure of public procurement system is decentralized with each level having its contracting authority. However, every level of the government is expected to ensure a high level of efficiency with the federal level handling only 12 % of procurements while the regional and municipal/local levels handle 30 % and 70 % respectively[5]. The countries regulations on the public procurement system are that all levels should always give priority to the most economically advantageous tender (MEAT) for the awarding of any public contract.

1.2. Overview of Public Procurement System in Czech Republic

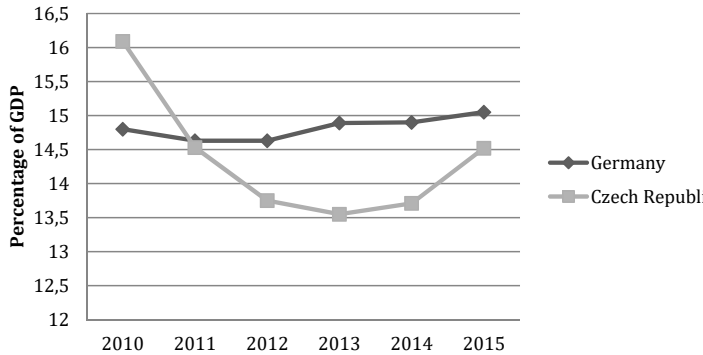
The structure of public procurement system in the Czech Republic is decentralized since the contracting authorities in every level of the system are independent of the central government. Moreover, they have the powers to process their individual procurement without central coordination. However, in spite of lack of central procurement body at the national level, the government ensures that efficiency in procurement process where there efforts to increase aggregate procurement demand in all levels. In ensuring that the public procurement

[4] SOLBACH, T. 2018. Public Procurement in Germany: Workshop on the Public Procurement Strategy Package – Panel 2. Brussels: Federal Ministry for Economic Affairs and Energy, pp. 1–19.

[5] dtto as above.

system in the country contributes to economic growth, the parliament passed a public procurement reform with the main objective of increasing efficiency and improving the country's public confidence in the procurement process. According to the country's report public procurement is a significant contributor to economic growth and plays above average role in building of the economy. The country's public procurement accounts for 14 % of the total GDP with an amount of 21.4 million Euros being spent on procurement every year[6], as shown in the figure bellow.

Figure 1. Trends in Public Procurement as Percentage of GDP



Source: own processing

1.3. Research Problem

To determine the similarities and divergences in the public procurement system in Germany and Czech Republic.

1.4. Research Statement

a) To assess the contribution of the public procurement system in each country's GDP.
b) Identify any similarities in the procurement process and how they affect the overall outcome.

[6] EUROPEAN UNION 2014. Public procurement – Study on administrative capacity in the EU: Czech Republic Country Profile. European Union.

c) Identify any divergences in the two countries procurement process and how they affect the outcome.
d) Assess efficiency in the procurement process to identify similarities or divergences in time wasted.
e) Assess public perception or confidence in public procurement systems in the two countries.

2. Methodology

The objective of this paper is to conduct a comparison on economic impact of public procurement system in both Germany and Czech Republic. The specific goal of the chapter is to describe the approach that has been used throughout the paper and in addressing the research question to achieve the aims and objectives. The chapter explain the rationale behind every criteria used in data collection and analysis in fulfilling the research objective. The research was conducted in the criteria discussed below.

2.1. Research Setting

The research entails a comparing of procurement systems between two countries; hence, it was important to have a clear understanding of the procurement process in each country. The research conducts an analysis of public procurement systems in both Germany and Czech Republic to gain an insight on their procurement process and their contribution to the respective country's economic growth. Subsequently, based on the individual analyses the findings are then compared to identify and similarities and divergences which are recorded in the results part and discussed in details in the discussion part of the paper. The main focus in conducting the analysis is anything to do with cost and efficiency in the public procurement systems.

2.2. Research Method

This research was conducted using secondary research method as it has a wide scope that would be a challenge to achieve using primary research method. This method involves use of information from other sources for previous studies or data from census to help in fulfilling the research objectives[7]. It is more

[7] JOHNSTON, M. P. 2017. Secondary data analysis: A method of which the time has come. *Qualitative and Quantitative Methods in Libraries*, vol. 3, no. 3, pp. 619–626.

efficient than primary research method in case the scope of research is too big such that it is a challenge to collect raw data and the researcher can assess materials from various databases. The main advantage of this method is that it is cheaper than primary method and less time consuming since the information as the researcher can access data from other studies without having to visit the field which sometimes can be hectic and might take a lot of time to cover. Besides, information from secondary sources are usually themed which means it is easier for the researcher to easily identify the area that contains the data they want easily unlike in primary research where coding has to be done by the researcher themselves requires a lot of expertise and knowledge on research. Other than saving time, secondary research is also advantageous as it helps in accessing a lot of data from one source hence it is easy to conduct a comparison without having to employ a lot of logistics. In other words, it is a convenient method of carrying out comparative studies which is what this research is all about.

Efficiency is one of the methods used in the data collection to assess how fast the system processes any contracts to ensure that they process as many as possible and contribute to the economic growth. The following formula is used to calculate the efficiency in public procurement system for the two countries.

Where *e* stands for efficiency, stands for total and stands for total time taken to process the procurements.

Similarly, this research relied heavily on secondary method where information and data collection was done using various sources available in search databases. The reason for using the method is because data collection on economic impact of the public procurement system in the two countries would require a lot of field visits which are highly costly since they are two different countries with independent systems. Also, the fact that the research involves an analysis of a complicated process which is public procurement system, it would be a challenge to access all information pertaining the procurement and the information obtained might too large and vague making it hectic for the researcher to narrow down and get what they want. The language barrier is also another problem as primary research would require interaction with the officials from the systems in the two countries which speak different languages hence the researcher will have to be conversant with both of them or high a translator which is an additional cost. Secondary research method makes it easier as the materials accessed from the search databases are translated into the desired language.

2.3. Research Approach

Depending of the purpose of research, there are two approaches that can be taken in fulfilling the objective and they include qualitative and quantitative research approaches. For this study, the most appropriate research approach identified is quantitative as it specifically deals with numbers and this research requires comparing facts and figures in procurement systems of the two countries to identify any similarities or divergences. There various advantages of this approach which makes it appropriate over qualitative method. First, it deals with facts and figures hence eliminate the problem of emotions in data analysis. Besides, it is easier to conduct multiple datasets to see if the tally and eliminate any suspicious information which could be varying significantly from the rest of the sources. Also, the researcher can automate data analysis in case there is huge data to be analysed making it faster than qualitative research approach.

In case of this study, quantitative approach was identified to be more appropriate due to a number of reasons. First, the objective of this study is to conduct a comparison of economic impact of the two countries which means the data collected will mainly be in form of figures such as time taken to complete a procurement process or volumes of procurements completed in each country per year among others. It is from these figures that the research will discuss the findings making the approach more appropriate for the study. One of the main challenges of this approach to this study is that it does not address behaviors and it will be difficult to understand how people's attitude on the public procurement systems for their respective country affects economic outcomes.

2.4. Research Population

The research is a comparison between systems in two countries to identify any similarities or divergences which are conducted through secondary research method. Consequently, unlike many studies where there is large number of research population, there are only to subjects in this study which will form the basis for research analysis in the result part of this paper. In other words, the countries have been treated as the research subjects and not the people who work in those systems.

2.5. Data Collection Procedure

As indicated above, this study will use secondary research methods in collecting data as it is considered more convenient in terms of time and less costly. Due

to limited resources concerning public procurement systems in both countries, huge amount of data collected in this research was accessed from country reports from European Union in which both countries belong. The materials or sources used in the research were mainly accessed from internet databases but only published and reliable sources were considered. Also, in spite of the two countries belong to the European Union, only information about procurement system in the specific country was considered and any information that was general about the EU nations was disregarded.

2.6. Inclusion and Exclusion Criteria

The information used in the result recording was accessed by searching through various databases where words such as public procurement system in Germany/ Czech, economic impact of public procurement in Germany/Czech and country reports for Germany and the Czech Republic were used to search for available information. The information that was considered for this study had to be either a published report or academic journals as these were considered to be more reliable as opposed to other publications such as blogs and social media posts. The first criteria for inclusion was any source that provided comprehensive data about procurement in both countries that is not more than five years old as any source more than five years old was considered to be our dates and does not present the true picture. Also, references in which the source got information was important to avoid people's personal opinion and deal only with verifiable information. Any report or resource from European Union was given a priority as it keeps tracks and reports of each country in the region and any information contained in these reports is credible and verifiable.

2.7. Evidence of Validity Trustworthiness

Establishing trustworthiness and validity of a research is crucial as it provides the basis for replicability of the research by future researchers who would be interested in similar topic or anyone who would like to expand one of the objectives in their study[8]. Unlike in qualitative research where trustworthiness is based on researchers' judgment on the quality of information used[9], quantitative research requires the researcher to ensure that the figures used are based on facts and can

[8] COPE, D. G. 2014. Methods and meanings: credibility and trustworthiness of qualitative research. *Oncology nursing forum*,vol. 14, no.1, pp. 89–91.

[9] LEUNG, L. 2015. Validity, reliability, and generalizability in qualitative research. *Journal of family medicine and primary care*, vol . 4, no. 3, pp. 324.

be confirmed through reports and other source documents. In the case of this study, evidence of trustworthiness is established through a number of factors which include referencing of sources where the figures used were accessed from as well as confirming reliability and credibility of the sources.

2.7.1. Reliability

The methods used for data collection are crucial in assessing reliability of the research where a different researcher can used similar methods of data collection to arrive at the same results. In most cases, reliability is assessed by replicating a research using same study population[10]. In this research, the study was done using to countries which means there is no study group but the systems in the two countries form research subjects. However, the study was carried out using secondary research methods. This research is based on facts about public procurement in the two countries hence it was crucial to ensure that any source where the data was collected was correctly referenced. In addition to inserting in-text citation on any idea that is not primarily from the research, a reference page of all the materials used is attached as the last page of the paper such that it is possible for any person interested in the research to confirm their correctness. The materials referenced are not from any blogs or media sources which could have some bias based on the attitude of the publisher.

2.7.2. Dependability

Dependability is another criterion that is used to establish consistency and reliability of the results to confirm trustworthiness of the research methods as well as the outcomes[11]. Using the dependability criteria, any auditor who is conversant or an expert in research can identify any irregularities or lack of them there confirming whether the information from the findings can be replicated in future studies[12]. In establishing dependability, this research outlines the study methods used as well as the study approach including the reason why the methods were used as opposed to various other study methods. Also, in the introduction, the study provides the formula used to calculate the results for the user of the researcher to understand the steps they need to follow to arrive at similar outcomes.

[10] AMANKWAA, L. 2016. Creating protocols for trustworthiness in qualitative research. *Journal of Cultural Diversity*, vol. 23, no.3.

[11] MUNN, Z., et al. 2014. Establishing confidence in the output of qualitative research synthesis: the ConQual approach. *BMC medical research methodology*, vol. 14, no. 1, pp. 108.

[12] CONNELLY, L. M. 2016. Trustworthiness in qualitative research. Medsurg Nursing, pp. 435.

2.7.3. Credibility

Credibility is important as it ensures that the information in the study can be relied upon and replicated by other researchers[13]. Similar to the referencing section, credibility in this research was establishing by ensuring that the data collected is from reliable sources which include reports and academic journals[14]. The reports are important as they provide the audience with opportunity to confirm any figures from the sources to assure them that the study was based on facts and not predictions. Also in ensuring correctness of the figures used, comparison between different reports and sources were done and any information that varied from more than three other sources was not used in this study as it was considered unreliable or erroneous. Also, in ensuring credibility, the study used sources that are not more than five years as any information older than five years was considered outdated and might not represent the true picture of public procurement systems in the two countries. World is changing and each day new strategies to increase efficiency are being implemented hence it is important to ensure that the information used is as current as possible.

2.7.4. Transferability

Transferability of a research is important is important as it provides the basis for further studies or provides other researchers with information crucial for identifying research gap that needs to be addressed[15]. In addressing this issue, any formula used in arriving at the results is adequately explained to help the audience understand how the results and conclusions were arrived at. Also, the methodology purpose is explained in this paper to ensure that any interested party will have an idea of how the results were reached at and can use similar methods to reach at the same conclusions.

2.7.5. Confirmability

Confirmability is one of the crucial criterion of establishing credibility, especially in qualitative research approach[16]. Though this study is conducted using

[13] MacCOUN, R. J. 2018. Enhancing research credibility when replication is not feasible. Behavioral and Brain Sciences, pp. 41.

[14] LINCOLN, Y. S., GUBA, E. G. 2017. In all the above, triangulation is naturally vital in confirming the credibility of qualitative research outcome in multiple-case holistic studies. Triangulation, or cross-examination between multiple points (in spite of the "tri" meaning at least two po. Case Study Strategies for Architects and Designers: Integrative Data Research Methods, pp. 70.

[15] NOBLE, H., SMITH, J. 2015. Issues of validity and reliability in qualitative research. *Evidence-Based Nursing*, vol. 18, no.2, pp. 34–35.

[16] TONG, A. & DEW, M. A. 2014. Qualitative research in transplantation: Ensuring relevance and rigor. Transplantation, vol. 100, no. 4, pp. 710–712.

quantitative approach, confirmability is considered to be useful as there paper is based on secondary research method which means there is need to confirm the information provided to ensure that they are correct and they are not based on assumptions[17]. Consequently, in establishing credibility different sources addressing public procurement system in German and the Czech Republic were analysed and information that was consistent in more than one study was included in this research. In addition, all the sources where the information was accessed from are reference to provider the user of this with proper evidence as they can search the references from various databases and confirm their existence.

2.8. Ethical Issue

In most cases, ethical issues are considered to be most crucial in primary research data collection method especially where respondents are human beings since they have to give consent before being included in the research. However, ethical issues are also crucial in secondary research as there are some aspects of research that need to be considered[18] which includes avoiding plagiarizing of other people's work. Specifically, ethical considerations ensure that the research followed the laid down guidelines of ethics and privacy in carrying out the study[19]. In ensuring that there was not plagiarism in this research, any information that is not the original idea of the researcher is correctly referenced using in-text citations to recognize the efforts of the primary data collector and publisher. Also, there was no copy pasting of information and most of all, any source that is used for this research was reviewed to ensure there are no restrictions on replication of ideas.

2.9. Data Analysis

This is the process where the researcher gathers and organizes data collected into meaningful information that will help them deliver findings and conclude on the results[20]. The analysis of any research is crucial as the researcher records the

[17] EGERTON, T., et al. 2017, Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Osteoarthritis and cartilage*, vol. 25, no. 5, pp. 625–638.

[18] TAVERNE, B. 2018. Elements of Ethical Practices for Scientific Research Conducted in Resource-Limited Countries. French National Research Institute for Sustainable Development, pp. 24–27.

[19] VAYENA, E., et al. 2016. Elements of a new ethical framework for big data research, vol. 72, no. 5, pp. 1–24.

[20] PEERSMAN, G. 2014. Overview: Data collection and analysis methods in impact evaluation. UNICEF Office of Research-Innocenti, pp. 1–10.

data collecting to help them in discussing information in the finding and make interpretation that is relevant to the study. In this research, data collection and recording of the results was based on various themes that were considered crucial in determining the economic impact of public procurement system for the two countries in question. The themes used in the study recording the results include:
(1) Total procurements done in each country in a year
(2) Number of days taken to make decisions of contracts
(3) Percentage of corruption in the system
(4) Number of contracting authorities in the country

3. Results

The results presented below are based on reports from EU as both countries belong to the Union and the body monitors the performance of its member countries and published the respective reports. The information is based on a report that was published in 2014 from data collected in previous year. However, in the case of percentage procurement of the total GDP information from OECD is incorporated as it contains figure for both 2014 and 2015 in addition to the ones for 2013. As mentioned in the methodology part, data collected was recorded according to themes which are identified below.

3.1. Percentage public procurement of the total GDP

According European Union reports Germany total procurement for the year 2013 amounted to 401.7 billion Euros which was approximately 15 % of the country's GDP. Of the total tenders handled by the public procurement system, 8 % were from a national level while 43% were from local and regional level[21]. In addition 20 % were from bodies governed by public law while 29 % were from other tenderers (European Union, 2014). Tenders in Germany were divided into works 44 %, services 29 %, supplies 27 % and framework agreement 13 %[22]. In the case of Czech Republic the total procurements for the year 2013 according to European Union report amounted to 21.48 billion Euros which was 14 % of the total GDP. Of the total tenders awarded 25 % were at the national level, 25 % at the regional level while 24 % were for body governed by public law and 26 %

[21] SOLBACH, T. 2018. Public Procurement in Germany: Workshop on the Public Procurement Strategy Package – Panel 2. Brussels: Federal Ministry for Economic Affairs and Energy. pp. 1–19.
[22] Dtto as above.

were for others[23]. The contract type in the country was divided into 33 % services, 17 % works, 50 % supplies and 8 % framework agreement[24]. The next table gives the survey of public procurement in Germany and in the Czech Republic.

Table 1. Overview of Public Procurement System in Germany and in the Czech Republic

Overview	Germany	Czech Republic
Total Procurement	401,730,000,000€	21,480,000,000€
Procurement % of	15%	14%
2013 GDP	2,809,480,000,000€	156,932,600,000€
Contracting Authorities	30,000	1,989
No of Days Decision	104.2	57.9

Source: own processing

The table indicates that the Germany public procurement system in 2013 amounted to a total of 401.7 trillion Euros, which is an estimated 15 % of the country's GDP the same year. As indicated earlier, the country has a total of 30,000 procurement authorities which are decentralized that spread across all public institutions including, government agencies and education institution.

3.2. Number of days taken to make decision of contracts

In terms of efficiency in making decisions, Germany proved to be more efficient as it took an average of 57.9 days to make decision about a tender and award a contract. A total of 20,734 contract awards were awarded by the contacting authorities. The number of contracts awarded is lower than the number of contract notices issued or published which was 24,960[25]. On the other hand, Czech took longer days than Germany in making decisions as it took an average of 104.2 days to give feedback about a tender or issue a contract award. A total of 5,951 contracts were awarded in by the contracting authorities. The number of contracts awarded is high against the number of contract notices issued which was 5,376[26].

[23] EUROPEAN UNION 2014. Public procurement – Study on administrative capacity in the EU: Czech Republic Country Profile. European Union.

[24] Dtto as above.

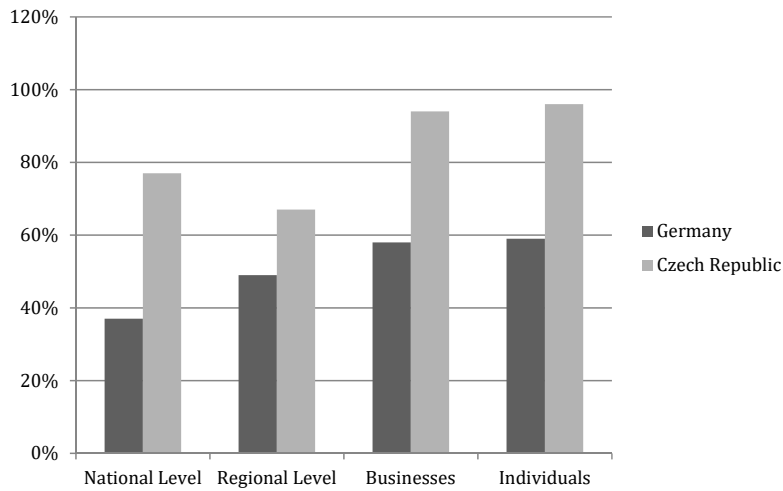
[25] EUROPEAN UNION 2014. Public procurement – Study on administrative capacity in the EU: Czech Republic Country Profile. European Union.

[26] Dtto as above.

3.3. Percentage of corruption in the system

The figures under this theme are a perception based on assessment by European Union and other transparency bodies. In Germany public procurement process, transparency requirements are fully met in the issuance of tenders or contracts and e-notifications are mandatory as well as e-submission. The corruption in the system at the national level is perceived to be 37 % while at the region level is at 49 %. In the case of Czech Republic, transparency is fully met as well and e-notification is mandatory. However, e-submission is partially mandatory. Also, in Germany's procurement process, EU rules are fully met while in the Czech Republic they are partially met. Corruption in the system at the national level is perceived to be 77 % and 67 % at the regional or local level. The overview of the corruption in Germany and in the Czech Republic at four different levels gives the next figure.

Figure 2. Corruption in the Procurement System



Source: own processing

3.4. Number of contracting authorities

Germany has a total of more than 30,000 contracting authorities which are spread across all sectors and levels of the decentralized federal government[27].

[27] SOLBACH, T. 2018. Public Procurement in Germany: Workshop on the Public Procurement Strategy Package – Panel 2. Brussels: Federal Ministry for Economic Affairs and Energy, pp. 1–19.

Though each level or institution is responsible for procurement procedures in their specific region with minimum interference for the national government, there is a central body that ensures the correct procedures are adhered to and transparency is guaranteed. On the other hand, the Czech Republic has a total of 1,989 contracting authorities which are also decentralized and spread at every level of the economy[28]. The country however has no central body at the national level which oversees the overall functions and effectiveness of public procurement system.

4. Discussion

4.1. Similarities

(1) From the results, both countries' public procurement system contributes significantly to the economic development of the country. Though the figures for Germany might seem high in terms of monetary contribution of public procurement, the percentages between the two countries is almost the same and the difference can be interpreted as a result of difference in size of the economy where Germany has a bigger budget than the Czech Republic.
(2) The other similarities are that both countries have decentralized the public procurement system which issue tenders and award contracts in their respective levels. The tenders vary from supplies and works to services and framework agreement. These tenders and contract awards are aimed providing the necessary economic development for their respective countries. Without these tenders that are handled by the contracting authorities in these countries, the country's economy might become stagnant as there is no mechanism of ensuring that the right people are handed the job.
(3) The other similarity is that the public procurement systems are responsible for ensuring that there is transparency in the awarding of contracts in the respective countries. Besides, it is the duty of the public procurement system in the two countries to ensure that the contracts are awarded to the most economic advantageous tenders. These systems ensure that tenders meant for economic development and public welfare are not handed to unqualified personnel who might not deliver the expected outcomes but to those who will create economic impact and more the country towards the right direction.

[28] EUROPEAN UNION 2014. Public procurement – Study on administrative capacity in the EU: Czech Republic Country Profile. European Union.

4.2. Divergences

(1) Though both countries' public procurement systems are decentralized, the governing of the two institutions are totally different which could be one of the main reason for their difference in performance. While the Germany's system has a central governing body, Czech Republic's has no central body. Consequently, there is divergence in the efficiency of delivery of decisions where it takes 57.9 days to make a decision in Germany and on the other hand, it takes 104.2 days to make the decisions. This is a huge difference and it shows that the central governing body in the Germany procurement is efficient in ensuring contracts are no delayed and they are processed as fast as possible to contribute to the economy. Delay in processing of contracts in the system lie in the case of the Czech Republic slows the growth of the economy.

(2) In spite of reports indicating that there is perceived corruption in both systems, the problem is much higher in Czech Republic's system where data shows the extent of corruption at the national level is estimated 77 % while at the regional level is at 67 % compared to Germany's 37 % and 49 % at the national and regional levels respectively. Corruption is usually dangerous and a barrier to economic growth as resources that are meant for development and delivery of services usually end up looted and in the pockets of the chosen few[29]. Though the level of corruption is still high in the German system, the country seems of be tackling it much better that in Czech Republic. This could be the reason why public procurement in Germany contributes a higher percentage to the total GDP the in Czech Republic. The level of corruption among other factors could be the main reason why procurement as a percentage of GDP has declined sharply in Czech Republic while it has been rising in Germany. Also corruption can affect efficiency in delivery of decisions and it could be the reason why Czech Republic takes more days to deliberate about contract awards than Germany[30]. Efficiency in this cases is considered to be the average number of days taken in processing tenders. Though on may argue that Germany has huge number of contracting authorities as a reason for efficiency in delivery, it also handles more procurements that Czech Republic.

(3) Lastly, the other divergence noticed is in the form of meeting the requirements in e-procurement adoption. Fully adopting e-procurement is important

[29] IONESCU, L. 2014. The adverse effects of corruption on growth and development. *Economics, Management and Financial Markets*, vol.9, no.4, pp. 125.

[30] RANDRIANARISOA, L. M., et al. 2015. Effects of corruption on efficiency of the European airports. Transportation Research Part A: Policy and Practice, pp. 65–83.

as it minimizes the chances of corruption in the system that is made easier through manure handling of procurement process[31]. In the case of the Czech Republic, though e-notification in mandatory, e-submission is partial which means some of the procurements and submission of tenders are handled manual. This partial e-submission is a loophole for lack of transparency and perpetration of corruption that is hurting the economy. On the other hand, in case of Germany, both e-notification and e-submission are mandatory which could be the reason for lower levels of corruption in the system[32].

5. Conclusion and Recommendations

In summary, both Germany and the Czech Republic are countries within EU and most of their activities are according to the guiding principles of the Union. However, this paper focuses at the individual similarities and divergences on their contribution on the economic impacts of their public procurement systems. The research uses secondary research method as it is challenging to collect primary data from the two systems in terms of time and cost. Besides, secondary research has been credited as the most appropriate method of carrying our comparative analysis as it is what this paper is about. The paper also uses quantitative analysis as it is easier to identify using statistical data the economic impact of each system in their respective system. The results of the paper are that some of the similarities in the system is that they contribute almost similar percentage of GDP and the system is used to award all contracts aimed at increasing economic growth in their respective countries. Some of the divergences include higher corruption levels in Czech Republic system than in Germany and also higher efficiency in terms of processing tender in German system than in Czech Republic.

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