

THE GLOBAL CRISIS, GOVERNMENT CONTRACTS, LICENSING AND CORRUPTION

Halil D. Kaya,  ORCID: <https://orcid.org/0000-0002-7535-9857>

Department of Accounting and Finance, College of Business and Technology, Northeastern State University, USA

Corresponding author: Halil D. Kaya, E-mail: kaya@nsuok.edu

Type of manuscript: research paper

Abstract: *This paper summarizes the arguments and counterarguments within the scientific discussion on the issue of corruption. The main purpose of the research is to examine the impact of global economic/financial crisis on corruption. We focus on manufacturing firms in the EECA region and examine their activities including bidding for government contracts, applying for an operating license, and applying for an import license. Systematization of the literary sources and approaches for solving the problem indicates that bribes got significantly smaller after the crisis ended. The relevance of this scientific problem decision is that governments' efforts to improve the overall business environment when facing an economic/financial crisis help reduce corruption. Investigation of corruption in the paper is carried out in the following logical sequence: First, the size of bribes for securing government contracts is examined. Then, the prevalence of bribery during import license application process is examined. Finally, the prevalence of bribery during operating license application process is examined. Methodological tools of the research methods were non-parametric tests that compare the years of 2007 and 2010-2014. The research object is manufacturing firms in the EECA region because they were included in the BEEPS IV and BEEPS V manufacturing surveys. The research empirically confirms and theoretically proves that governments' actions during an economic or financial crisis affect the size and prevalence of bribery. The research results can be useful for government officials that plan on reducing corruption in their region or country.*

Keywords: corruption, bribe, bribery, contract, licensing.

JEL Classification: L24, N4.

Received: 16.09.2023

Accepted: 7.11.2023

Published: 31.12.2023

Funding: There is no funding for this research.

Publisher: Academic Research and Publishing UG, Germany.

Founder: Academic Research and Publishing UG, Germany; Sumy State University, Ukraine.

Cite as: Kaya, H.D. (2023). The global crisis, government contracts, licensing and corruption. *SocioEconomic Challenges*, 7(3), 1-11. [https://doi.org/10.61093/sec.7\(4\).1-11.2023](https://doi.org/10.61093/sec.7(4).1-11.2023).



Copyright: © 2023 by the author. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

In this study, focus on the illegal side of corruption, which is bribery. We investigate whether manufacturing firms in the region had to pay bribes when securing government contracts or when applying for licensing. As an additional dimension, we examine whether corruption was more common or less common after the 2008-2009 Global Crisis.

There are countless studies on corruption, but the research on the impact of a global crisis on corruption is very limited. As far as we know, these few studies mainly focus on the general incidence of bribery before and after the Global Crisis, rather than focusing on government contracts or on specific types of licensing (i.e. import license, operating license, etc.). For example, Kaya and Engkuchik (2021a) examine bribery by wholesalers during and post-crisis. Kaya and Engkuchik (2021b) examine the overall incidence of bribery by manufacturing

firms during and post-crisis. Similarly, Kaya and Engkuchik (2021c) examine the overall incidence of bribery for retailers during and post-crisis. None of these studies delve deeper.

In this current study, we try to find the frequency of bribery before and after the global crisis. We investigate bribery with respect to contracts, and with respect to licensing. For which bureaucratic processes was bribery more common and which type of bribery was more affected by the global crisis?

The paper proceeds as follows: After going over the literature, we explain our data and methodology. After that, we show our empirical results. The final section includes our conclusions.

2. Literature review

Corruption can be separated into two groups: “bribery” which is counted as an illegal activity and “lobbying” which is accepted as legal. Campos and Giovannoni (2007, 2008), Kaufman and Vicente (2011), Bennesen et al. (2009), and Harstad and Svensson (2011) argue that lobbying and corruption are different. Bennesen et al. (2009) link the prevalence of corruption to firms’ interest in large government contracts. Campos and Giovannoni (2007, 2008) argue that while small firms tend to be involved in corruption, large firms tend to lobby, which is generally seen as legal.

In this current paper, we focus on the illegal side and test for bribery by manufacturing firms in the EECA region. We examine the prevalence of bribery by this group, as well as the size of bribes when they try to secure a government contract.

Many papers including Pellegrini (2011), Anokhin and Schulze (2009), Glaeser (2006), Aidt (2003), Mauro (1998), and Drury (2006) define corruption. According to Leite and Weidmann (1999), Kronenberg (2004), Kapur and Vaishnav (2013), Osei-Tutu et al. (2010), Tanzi and Davoodi (1997), and Henderson and Kuncoro (2004), it is more common in developing countries. Svensson (2003) shows that firms’ need to deal with government officials is positively correlated to the likelihood of bribery.

Mbaku (1996) argues that firms bribe and/or lobby politicians to increase their profits. This, in turn, supports the firms with the most resources/power while hindering smaller firms, thereby creating an impediment to entrepreneurship and firm development. Mauro (1998) explains that government intervention and restrictions in various bureaucratic processes including imports/exports, subsidies, price controls, etc. increases the incidence of bribery in a region. Tonoyan et al. (2010) supports this argument by suggesting that corruption is more common in countries with centralized economies where there are various governmental restrictions and interventions. Mehnaz et al. (2001) argue that profitable companies are more prone to bribery. Ngunjiri (2010) and Bardhan (1997) argue that corruption is detrimental to a society because it is an impediment to entrepreneurship. On the other hand, Gould and Amaro-Reyes (1983) suggest that corruption may have benefits as well. They suggest that the expedited process due to bribery creates a more efficient environment. The processes are done faster and the party who has the most resources (i.e. the most successful firm) tend to offer the highest bribe and beat its competitors. This can be seen as the survival of the fittest, i.e. natural selection. Jain (2001) and Svensson (2005) support this view and argue that when corruption increases, growth increases. Dreher and Gassebner (2013) argue that corruption may actually be helpful to firms that are just starting to operate.

This current paper investigates how 2008 Global Crisis affected corruption by manufacturers in the EECA region. The paper specifically focuses on government contracts and licensing, and on bribery by manufacturing firms in the region. A few other papers focus on the impact of the Global Crisis on bribery in general (not government contracts or licensing). For example, Kaya and Engkuchik (2021a) show that, overall, the incidence of bribes went down post-crisis. Kaya and Engkuchik (2021b) show that, the overall incidence of bribes went down significantly for manufacturers, and Kaya and Engkuchik (2021c) show that, the incidence of bribes went down significantly for retailers.

The next section explains our data.

3. Data and methodology

In this study, we examine how manufacturing firms’ activities like securing government contracts, applying for an import or operating license had changed after the global crisis. We use the BEEPS IV and V survey results. We use nonparametric tests to compare the periods before and after the crisis. The surveys asked questions on whether they tried to get a government contract over the previous year, the size of the bribe to get a contract, whether they applied for an operating or import license over the previous two years, the time it took to get the license, and whether they were forced to pay a bribe to get that license.

4. Empirical results

Table 1 compares the percentage of manufacturing firms that either secured or attempted to secure a government contract before and after the crisis. There is no significant difference ($p=0.8071$) between the two periods. At the onset of the crisis, 19.87% of manufacturers received a government contract. The corresponding percentage for the post-crisis period is 19.69%.

Table 1. Received a Govt Contract?

Variables	Pre-Crisis		Post-Crisis	
	N	%	N	%
Yes	986	19.87	1,258	19.69
No	3,976	80.13	5,132	80.31
Total	4,962	100%	6,390	100%
Statistic	df	Value	Prob	
Chi-Square	1	0.0596	0.8071	

Source: Author’s own work.

Table 2 compares the size of the bribe paid by manufacturing firms in the two periods. Our MWW test shows that the two periods are significantly different. While the average bribe was 2.3952% of the contract value at the onset of the crisis, after the crisis ended, it was 2.3626% of the contract value. In other words, we are seeing that bribes got smaller after the crisis.

Table 2. Bribe as a Percent of the Value of the Contract

Variables	Pre-Crisis			Post-Crisis			Mann-W.
	N	Mean	Std	N	Mean	Std	p-value
Bribe (% of contract value)	792	2.3952	7.0944	979	2.3626	7.8458	0.0074

Source: Author’s own work.

Table 3 compares the size of the bribe (as a percent of annual sales) paid by manufacturing firms in the two periods. Our MWW test shows that the two periods are significantly different ($p<0.0001$). While the average bribe was 3.2174% of annual sales at the onset of the crisis, after the crisis ended, it was only 0.6925% of annual sales. The bribes got smaller after the crisis.

Table 3. Percent of Annual Sales Paid as Bribe?

Variables	Pre-Crisis			Post-Crisis			Mann-W.
	N	Mean	Std	N	Mean	Std	p-value
Bribe (% of annual sales)	883	3.2174	6.3332	4,960	0.6925	3.6227	<0.0001

Source: Author’s own work.

Table 4 compares the percentage of manufacturing firms that applied for an import license in the two periods. There is a significant difference between the two periods ($p=0.0321$). At the onset of the crisis, 9.76% of manufacturers applied for an import license. This dropped to 8.60% after the crisis. Overall, we are seeing a significant decline in import license applications.

Table 4. Submitted Application to Obtain an Import License?

Variables	Pre-Crisis		Post-Crisis	
	N	%	N	%
Yes	484	9.76	552	8.60
No	4,473	90.24	5,868	91.4
Total	4,957	100%	6,420	100%
Statistic	df	Value	Prob	
Chi-Square	1	4.5934	0.0321	

Source: Author's own work.

Table 5 compares the time it took to get the import license in the two periods. Our MWW test shows that the two periods were similar ($p=0.1737$). While the average number of days needed was 16.435 days at the onset of the crisis, after the crisis ended, it was 17.104 days. The number of days needed did not change significantly.

Table 5. Numbers of Days to Obtain the Import License

Variables	Pre-Crisis			Post-Crisis			Mann-W.
	N	Mean	Std	N	Mean	Std	p-value
Days	425	16.435	27.879	491	17.104	48.225	0.1737

Source: Author's own work.

Table 6 compares the percentage of manufacturers who were forced to pay a bribe to get the import license in the two periods. There is no significant difference between the two periods ($p=0.9632$). At the onset of the crisis, 7.11% of manufacturers stated that a bribe was expected. The corresponding percentage for the post-crisis period is 7.03%.

Table 6. Was a Bribe Expected or Requested?

Variables	Pre-Crisis		Post-Crisis	
	N	%	N	%
Yes	30	7.11	36	7.03
No	392	92.89	476	92.97
Total	422	100%	512	100%
Statistic	df	Value	Prob	
Chi-Square	1	0.0021	0.9632	

Source: Author's own work.

Table 7 compares the percentage of manufacturers that applied for an operating license in the two periods. There is a significant difference between the two periods ($p=0.0006$). At the onset of the crisis, 18.43% of manufacturers submitted an application to obtain an operating license. This dropped to 15.99% after the crisis. There was a significant drop in operating license applications after the crisis ended.

Table 7. Submitted Application to Obtain an Operating License?

Variables	Pre-Crisis		Post-Crisis	
	N	%	N	%
Yes	918	18.43	1,028	15.99
No	4,064	81.57	5,402	84.01
Total	4,982	100%	6,430	100%
Statistic	df	Value	Prob	
Chi-Square	1	11.8035	0.0006	

Source: Author's own work.

Table 8 compares the time it took to get an operating license by manufacturing firms in the two periods. Our MWW test shows that the two periods were similar ($p=0.3644$). While the average number of days needed was 40.428 days at the onset of the crisis, after the crisis ended, it was 40.330 days. The number of days needed did not change significantly.

Table 8. Numbers of Days to Obtain the Operating License

Variables	Pre-Crisis			Post-Crisis			Mann-W.
	N	Mean	Std	N	Mean	Std	p-value
Days	869	40.428	103.85	943	40.330	77.01	0.3644

Source: Author’s own work.

Table 9 compares the percentage of manufacturers who were forced to pay a bribe to get an operating license in the two periods. The two periods were similar ($p=0.1279$). At the onset of the crisis, 14.74% of manufacturers were forced to pay a bribe. This dropped slightly to 12.26%.

Table 9. Was an Informal Gift or Payment Expected or Requested?

Variables	Pre-Crisis		Post-Crisis	
	N	%	N	%
Yes	120	14.74	116	12.26
No	694	85.26	830	87.74
Total	814	100%	946	100%
Statistic	df	Value	Prob	
Chi-Square	1	2.3173	0.1279	

Source: Author’s own work.

5. Conclusion

This paper examines corruption in the EECA region before and after the global crisis. We focus on manufacturers and examine their activities like securing government contracts, applying for the operating license, and applying for the importing license.

First, we examine corruption in government contracts. Did manufacturers have to pay larger or smaller bribes post-crisis? Post-crisis, the average bribe size went down, which is an indication of an improvement in this aspect of the business environment.

Later, we examine corruption in licensing. Did more or fewer manufacturers have to pay bribes in order to get an import license? Our results show that the frequency of bribery in dealing with an import license did not change significantly. Our results also show that the time it took to get this type of license did not significantly change as well. However, we find that fewer manufacturers applied for an import license, and this might be due to the worsening economic conditions around the world.

Finally, we investigate corruption related to the applications for an operating license. Our results show that the frequency of bribery in dealing with an operating license did not change significantly. Our results also show that the time it took to get this type of license did not significantly change as well. Like the import license applications, fewer firms applied for an operating license after the crisis. This may be due to the tough economic environment which discouraged entrepreneurs from applying for an operating license.

Overall, we are seeing the effects of the deteriorating environment. On the bright side, we are seeing that the corruption issue, at least in the case of government contracts, has become less significant. This improvement in corruption might be due to governments’ efforts to improve the overall business environment.

Author Contributions: Conceptualisation: H.D.K.; methodology: H.D.K.; project administration: H.D.K.; software: H.D.K.; investigation: H.D.K.; data curation: H.D.K.; formal analysis: H.D.K.; validation: H.D.K.; visualization: H.D.K.; writing-original draft preparation: H.D.K.; writing - review & editing: H.D.K.

Conflicts of Interest: Author declares no conflict of interest.

Data Availability Statement: Not applicable.

Informed Consent Statement: Not applicable.

References

1. Aidt, T. S. (2003). Economic analysis of corruption: A survey. *The Economic Journal*, 113(491), 632-652. [\[Link\]](#)
2. Anokhin, S., and Schulze, W. S. (2009). Entrepreneurship, innovation, and corruption, *Journal of Business Venturing*, 24(5), 465-476. [\[Link\]](#)
3. Bardhan, P. (1997). Corruption and development: a review of issues, *Journal of Economic Literature*, 35(3), 1320-1346. [\[Link\]](#)
4. Bennedsen, M., Feldmann, S. E., and Lassen, D. D. (2009). Strong firms lobby, weak firms bribe: A survey-based analysis of the demand for influence and corruption, *EPRU working paper series 2009-08*, Department of Economics, University of Copenhagen. [\[Link\]](#)
5. Campos, N. and Giovannoni, F. (2007). Lobbying, Corruption and Political Influence, *Public Choice*, 131(1), 1–21. [\[Link\]](#)
6. Campos, N., and Giovannoni, F. (2008). Lobbying, Corruption and Other Banes, *CEPR Discussion Paper No. DP6962*. [\[Link\]](#)
7. Dreher, A., & Gassebner, M. (2013). Greasing the wheels? The impact of regulations and corruption on firm entry. *Public Choice*, 155(3-4), 413-432. [\[Link\]](#)
8. Drury, A. C., Kriekhaus, J., and Lusztig, M. (2006). Corruption, democracy, and economic growth, *International Political Science Review*, 27(2), 121-136. [\[Link\]](#)
9. Glaeser, E. L., and Saks, R. E. (2006). Corruption in America, *Journal of Public Economics*, 90(6), 1053-1072. [\[Link\]](#)
10. Gould, D. J., and Amaro-Reyes, J. A. (1983). The effects of corruption on administrative performance. *World Bank Staff Working Paper No. 580*. [\[Link\]](#)
11. Harstad, B. and Svensson, J. (2011). Bribes, Lobbying and Development, *American Political Science Review*, 105(1), 46-63. [\[Link\]](#)
12. Henderson, J. V., and Kuncoro, A. (2004). Corruption in Indonesia, *NBER Working Paper 10674*, National Bureau of Economic Research. [\[Link\]](#)
13. Jain, A. K. (2001). Corruption: A review, *Journal of Economic Surveys*, 15(1), 71-121. [\[Link\]](#)
14. Kapur, D., and Vaishnav, M. (2013). Quid pro quo: Builders, politicians, and election finance in India. Kapur, Devesh and Vaishnav, Milan, Quid Pro Quo: Builders, Politicians, and Election Finance in India, *Center for Global Development Working Paper No. 276*. [\[Link\]](#)
15. Kaufmann, D., & Vicente, P. C. (2011). Legal corruption. *Economics & Politics*, 23(2), 195-219. [\[Link\]](#)
16. Kaya, H. D. and Engkuchik, E. N. S. (2021a). Did Corruption Decrease Post-Crisis? The Case of Wholesalers across Less-Developed Economies, *Revista de Management Comparat International*, 22(4), 570-578. [\[Link\]](#)
17. Kaya, H. D. and Engkuchik, E. N. S. (2021b). The Impact of the 2008-2009 Global Crisis on Corruption: Evidence from Manufacturers in Central Asia and Eastern Europe, *Annals of Constantin Brancusi University of Targu-Jiu. Economy Series*, 3, 4-14. [\[Link\]](#)
18. Kaya, H. D., and Engkuchik, E. N. S. (2021c). The perception of corruption among retailers in central Asia and eastern Europe during and after the 2008 crisis, *SocioEconomic Challenges*, 5(2), 70-80. [\[Link\]](#)
19. Kronenberg, T. (2004). The curse of natural resources in the transition economies. *Economics of Transition*, 12(3), 399-426. [\[Link\]](#)
20. Leite, C., and Weidmann, J. (1999). Does mother nature corrupt? Natural resources, corruption, and economic growth, *IMF Working Paper No. 99/85*. [\[Link\]](#)
21. Mauro, P. (1998). Corruption: causes, consequences, and agenda for further research, *Finance and Development*, 35(1), 11-14. [\[Link\]](#)
22. Mbaku, J. M. (1996). Bureaucratic corruption in Africa: The futility of cleanups, *The Cato Journal*, 16(1), 99-118. [\[Link\]](#)
23. Ngunjiri, I. (2010). Corruption and entrepreneurship in Kenya, *Journal of Language, Technology & Entrepreneurship in Africa*, 2(1), 93-106. [\[Link\]](#)

24. Osei-Tutu, E., Badu, E., and Owusu-Manu, D. (2010). Exploring corruption practices in public procurement of infrastructural projects in Ghana, *International Journal of Managing Projects in Business*, 3(2), 236-256. [\[Link\]](#)
25. Pellegrini, L. (2011). *Economic analysis of corruption*, in *Corruption, Development and the Environment*, Netherlands: Springer, 13-27. [\[Link\]](#)
26. Safavian, M. S., Graham, D. H., and Gonzalez-Vega, C. (2001). Corruption and microenterprises in Russia, *World Development*, 29(7), 1215-1224. [\[Link\]](#)
27. Svensson, J. (2003). Who Must Pay Bribes and How Much? Evidence from a Cross Section of Firms, *Quarterly Journal of Economics*, 118(1), 207-230. [\[Link\]](#)
28. Svensson, J. (2005). Eight questions about corruption. *The Journal of Economic Perspectives*, 19(3), 19-42. [\[Link\]](#)
29. Tanzi, V., and Davoodi, H.R. (1997). Corruption, Public Investment, and Growth, *IMF Working Paper No. 97/139*. [\[Link\]](#)
30. Tonoyan, V., Strohmeier, R., Habib, M., and Perlitz, M. (2010). Corruption and entrepreneurship: How formal and informal institutions shape small firm behavior in transition and mature market economies, *Entrepreneurship Theory and Practice*, 34(5), 803-831. [\[Link\]](#)