

FLOW OF GOODS ACROSS CUSTOMS TERRITORIES

Pretok blaga preko meja carinsko-administrativnih območij

Marko Cedilnik

Poslovni sistem Mercator, d.d., Ljubljana
Univerza v Mariboru, Fakulteta za logistiko, Celje
marko.cedilnik@mercator.si

Abstract

Purpose – The purpose of this paper is to explore systemic relationships within supply chains, which are created as a result of passing goods between customs territories. Specifically, this research focuses on how business entities can reduce the time consumed for the execution of mandatory customs controls at border crossings by applying the voluntary implementation of certain legally standardized institutes—in this case, the status of authorized economic operator (AEO).

Design/methodology/approach – The study hypotheses were tested at two levels. The fundamental hypothesis was tested using a survey of participants' subjective perceptions. To verify the supporting hypothesis, the survey was carried out using numerical techniques (i.e., an analysis of the queuing systems).

Findings – The research results show that acquisition of an AEO certificate can facilitate the acceleration of the flow of goods across customs territories. To achieve the optimum reduction of time delays caused by interruptions in the flow of goods resulting from controls conducted by authorities, it would be necessary to adapt the road infrastructure at the border crossings.

Keywords: authorized economic operator (AEO), customs clearance, road transportation, flow of goods, supply chain management, meta-system

Izvleček

Namen. Članek je rezultat raziskovanja medsistemskega odnosov v oskrbovalnih verigah, ki nastanejo kot posledica prestopa blaga prek meja carinsko-administrativnih območij. Konkretno se raziskava nanaša na proučevanje vprašanja, ali lahko poslovni subjekti s prostovoljnimi uvajanjem določenih zakonsko standardiziranih institutov, npr. statusa pooblaščenega gospodarskega subjekta (AEO), skrajšajo čas izvajanja obveznih carinskih kontrol na mejnih prehodih.

Načrt, metodologija, pristop. Raziskovalne hipoteze smo preverjali na dveh ravneh. Pri preverjanju temeljne raziskovalne hipoteze smo na osnovi metode anketiranja s stališča subjektivne percepцијe vseh sodelujočih deležnikov ugotavljali, ali imetništvo instituta AEO resnično vpliva na višjo hitrost procesnega pretoka blaga. Za preverjanje podporne hipoteze pa je bila opravljena raziskava na osnovi numerične tehnike, tj. analiza množične strežbe, pri čemer je bil predmet analize prikaz vpliva infrastrukturnega omrežja na delovanje carinskih postopkov in s tem povezanega procesa cestnega pretoka blaga.

Ugotovitve. Rezultati raziskave kažejo, da pridobitev potrdila AEO pripomore k pospešitvi pretoka blaga prek meja carinsko-administrativnih območij. Za doseganje optimalnega skrajšanja zamud zaradi prekinitev blagovnega toka kot posledice kontrol, ki jih opravljajo lokalni organi, pa bi bilo treba prilagoditi cestno infrastrukturo na mejnih prehodih.

Ključne besede: pooblaščeni gospodarski subjekt (AEO), carinski postopek, transport, pretok blaga, upravljanje oskrbovalnih verig, metasistem

Prejeto/Received:

December 2012

Popravljeno/Revised:

December 2012

Sprejeto/Accepted:

Januar 2013

Naše gospodarstvo / Our Economy

Vol. 59, No. 1–2, 2013

pp. 13–24

DOI: 10.7549/ourecon.2013.1-2.02

UDK: 658.7:336.41

JEL: F150, L980, L920

this status actually delivers all of the promised benefits. It would be interesting to see whether the systems that have not been or will not be included in the meta-system of the AEO program achieve a lower level of efficiency and performance in terms of time consumption in the operation of supply chains in comparison to the economic operators with the AEO certificate. Wasting time is determined as an economic failure. Economic performance presents a mandatory requirement in the survival of business systems and, thus, the entire modern society.

6 References

1. Bizjak, B. (2008). Uporaba merskih lestvic v raziskavah v turizmu. *Academica Turistica*, 1(3–4), 49–55.
2. Bolhöfer, C. E. (2008). Trade facilitation—WTO law and its revision to facilitate global trade in goods. *World Customs Journal*, 2(1), 31–40.
3. Burgermeestre, B., Hulstijn, J., & Tan Y. H. (2010). Towards an architecture for self-regulating agents: A case study in international trade. In J. Padget, A. Artikis, W. Vasconcelos, K. Stathis, & V. Torres Da Silva (Eds.), *Proceedings of the 5th international conference on coordination, organizations, institutions, and norms in agent systems* (COIN'09) (pp. 320–333). Berlin, Heidelberg: Springer-Verlag.
4. Cloud, D. J. & Rainey, L. B. (Eds.). (1998). *Applied modeling and simulation: An integrated approach to development and operation*. New York: McGraw-Hill. PMCid:105759
5. Collier, D., & Elman, C. (2008). Qualitative and multi-method research: Organizations, publications, and reflections on integration. In J. M. Box-Steffensmeier, H. E. Brady, & D. Collier (Eds.), *The Oxford handbook of political methodology* (pp. 779–795). Oxford: Oxford University Press. <http://dx.doi.org/10.1093/oxfordhb/9780199286546.003.0034>
6. Crone, M. (2006). Are global supply chains too risky? A practitioner's perspective. *Supply Chain Management Review*, 5(1), 28–35.
7. den Butter, F. A. G., Groot, S. P. T., & Lazrak, F. (2007). *The transaction costs perspective on standards as a source of trade and productivity growth* (Tinbergen Institute Discussion Papers 07-090-3). Retrieved from <http://ideas.repec.org/p/dgr/uvatin/20070090.html>
8. den Butter F. A. G., Liu J., & Tan Y. H. (2012). Using IT to engender trust in government-to-business relationships: The authorized economic operator (AEO) as an example. *Government Information Quarterly*, 29(2), 261–274. <http://dx.doi.org/10.1016/j.giq.2011.05.004>
9. European Union, European Commission Directorate-general Taxation and Customs Union. (2007). *Authorised economic operators guidelines* (TAXUD/2006/1450). Retrieved from http://ec.europa.eu/taxation_customs/resources/documents/customs/policy_issues/customs_security/AEO_guidelines_en.pdf
10. François, C. (1999). Systems and cybernetics in a historical perspective. *Systems Research and Behavioral Science*, 16, 203–219. [http://dx.doi.org/10.1002/\(SICI\)1099-1743\(199905/06\)16:3<203::AID-SRES210>3.0.CO;2-1](http://dx.doi.org/10.1002/(SICI)1099-1743(199905/06)16:3<203::AID-SRES210>3.0.CO;2-1)
11. Gordhan, P. (2007). Customs in the 21st century. *World Customs Journal*, 1(1), 49–55.
12. Hausman, W. H., Hau, L. L., & Subramanian, U. (2005). *Global logistics indicators, supply chain metrics, and bilateral trade patterns* (World Bank Policy Research Working Paper 3773). doi:10.1596/1813-9450-3773 <http://dx.doi.org/10.1596/1813-9450-3773>
13. Heylighen, F., & Joslyn, C. (2001). Cybernetics and second-order cybernetics. In R. A. Meyers (Ed.), *Encyclopedia of Physical Science & Technology* (3rd ed.) (pp. 155–169). New York: Academic Press.
14. Hudoklin-Božič, A. (1999). *Stohastični procesi*. Kranj: Moderna organizacija.
15. Jere, M., & Podbregar, I. (2009). Status pooblaščenega gospodarskega subjekta in varnost podjetja. In T. Pavšič Mrevlje (Ed.), *Varstvoslovje med teorijo in prakso: zbornik prispevkov / 10. Slovenski dnevi varstvoslovja*, Ljubljana, 4-5. Retrieved from <http://www.fvv.uni-mb.si/dv2009/zbornik/clanki/Jere.pdf>
16. Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in Action. *Administrative Science Quarterly*, 24(4), 602–611. <http://dx.doi.org/10.2307/2392366>
17. Kimmerskollegium National Board of Trade. (2010, September). *Mutual recognition of AEO programmes: Supply chain security and trade facilitation—progress report fall 2010*. Retrieved from <http://www.kimmers.se/upload/Analysarkiv/In%20English/Trade%20facilitation/Report%20Supply%20chain%20security%20and%20trade%20facilitation%20-%20progress%20report%202010.pdf>
18. Mikuriya, K. (2007). Supply chain security: The customs community response. *World Customs Journal*, 1(2), 51–61.
19. Ministrstvo za infrastrukturo in prostor Republike Slovenije. (2010). *Pilotni projekt merjenja pretočnih časov tovornega prometa na mejnem prehodu Obrežje*. Ljubljana: Ministrstvo za infrastrukturo in prostor Republike Slovenije.
20. Nordas, H. K., Pinali, E., & Geloso Grossi, M. (2006). *Logistics and time as a trade barrier* (OECD Trade Policy Papers, No. 35). doi:10.1787/664220308873 <http://dx.doi.org/10.1787/664220308873>

21. Pilotno poročilo o pooblaščenih gospodarskih subjektih. (2006). Retrieved from http://ec.europa.eu/taxation_customs/resources/documents/customs/policy_issues/customs_security/AEO_pilot_report_sl.pdf
22. Regulation (EC) No 648/2005 of the European Parliament and of the Council of 13 April 2005.
23. Rushton, A., Croucher, P., & Baker, P. (2010). *The handbook of logistics & distribution management* (4th ed.). London: Kogan Page.
24. Stalk, G. (1988). Time—The next source of competitive advantage. *Harvard Business Review*, 66(Jul–Aug), 41–51.
25. Subramanian, U., Anderson, W. P., & Lee, K. (2005). *Measuring the impact of the investment climate on total factor productivity: The cases of China and Brazil*. (World Bank Policy Research Working Paper 3792). doi:10.1596/1813-9450-3792 <http://dx.doi.org/10.1596/1813-9450-3792>
26. Toš, N., & Hafner-Fink, M. (1998). *Metode družboslovnega raziskovanja*. Ljubljana: Fakulteta za družbene vede.
27. Waters, D. (2009). Supply chain management: *An introduction to logistics* (2nd ed.). New York: Palgrave Macmillan.
28. Widdowson, D., & Holloway, S. (2009). Maritime transport security regulation: policies, probabilities and practicalities. *World Customs Journal*, 3(2), 17–43.
29. Wiener, N. (1948). *Cybernetics or control and communication in the animal and the machine*. Paris: Hermann.
30. Wolfgang, H. M., & Natzel, J. M. (2011). The authorized economic operator in the European Union. *Customs Scientific Journal, Pilot edition*(1), 23–39.
31. World Customs Organization. (2007, January 12). *WCO SAFE framework of standards*. Retrieved from http://www.wcoomd.org/files/1.%20Public%20files/PDFandDocuments/SAFE%20Framework_EN_2007_for_publication.pdf
32. Zamani-Gallagher, E. M. (2011, November 3). *Evaluating with small sample sizes*. Retrieved from http://evalu-ate.net/downloads/resources/ZAMANI-GALLAHER_challenge_handout.pdf



Marko Cedilnik has been executive director of logistics in Mercator d. d., one of the biggest Slovenian companies, since 1989. He has 20 years of professional experience in logistics and supply chain management and has deep theoretical and practical knowledge in the fields of business process re-engineering and change management. He holds a master's degree in logistics engineering and a bachelor's degree in law. Since 2006, he has been a lecturer at the Faculty of Logistics at the University of Maribor, where he is responsible for the courses Logistics Documentation and Commercial and Warehousing Operations. He has published several articles in the area of logistics and is the co-author of a manual for effective logistics.

Marko Cedilnik je izvršni direktor logistike v Mercatorju, d. d., enem največjih slovenskih podjetij, v katerem je zaposlen že od leta 1989. Ima 20 let strokovnih izkušenj s področja upravljanja logistike in oskrbovalnih verig ter poglobljeno teoretično in praktično znanje s področja prenove poslovnih procesov in upravljanja sprememb. Po izobrazbi je magister inženir logistike in univerzitetni diplomirani pravnik. Od leta 2006 je habilitiran za predavatelja na Fakulteti za logistiko Univerze v Mariboru, kjer je nosilec predmetov Logistična dokumentacija ter Trgovinsko in skladisčno poslovanje. Je avtor več strokovnih in znanstvenih člankov s področja logistike in soavtor Priročnika za učinkovito logistiko.