BUSINESS PERCEPTIONS OF E-GOVERNMENT SERVICES IN HUNGARY

András Bojtor¹

DOI: 10.24989/oeg.v341.16

Abstract
The outbreak of Covid-19 pandemic emphasized the importance of electronic governance. Citizens and business actors, two main groups of electronic public administration service users, can effectively and without any personal contacts handle their official duties with public administration bodies. E-governance improves efficiency, transparency and generates economic growth. Perceptions of end-users about services influence their willingness of use, satisfactions and also determine the chosen channel (personal, online, phone) to administer. In general, the main focus of analyzing satisfaction with e-government services is on citizens and business actors are pushed into the background. This paper analyses the satisfaction of business actors with public administration services. Hungarian small and medium enterprises are responsible for the majority of employment in Hungary. Their competitiveness and improving innovation ability are key to break out of the middle-income trap. According to the international comparisons, Hungary is lagging behind in performance of e-governmental services. Based on the survey with 1270 entries, Hungarian businesses are mainly satisfied with public administration services. Further improvements in the quality of public administration services can be carried out based on the evaluation of businesses’ perception.

1. Introduction

The significant volume of public administration developments focuses on the development of e-government. End-users of e-governmental services can be divided in two main categories: citizens and businesses. The preferences of business actors are less frequently discussed; therefore, this paper focuses on them. Majority of Hungarian businesses are small and medium enterprises (SMEs). SMEs play an important role in the Hungarian labour market. The number of SMEs is increasing since 2013. In 2019 more than 800 000 SMEs were active in Hungary, employing majority of employees, more than 3,2 million people.² Their competitiveness and productivity not only depend on their own performance but indirectly also on the circumstances of the wider environment (state-business-citizen relationship). The efficient and capable public administration can significantly improve their competitiveness.

This paper focuses on perceptions of selected Hungarian public bodies in international context. Survey can provide better understandings to the quality of the Hungarian public administration. Executed survey among businesses provides supplementary information to the results of international comparison methods. Licensing (giving permissions and certifications), regulatory controlling and data reporting are some of services provided by public administration bodies.

¹ National University of Public Service, Office of Innovation and Technology, email: bojtor.andras@uni-nke.hu
² According to the latest statistics of the Hungarian Central Statistical Office, available: https://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_qta005.html (downloaded: 30 January 2021)
Frequency of service demands depends on sectoral particularities and legal environment. The most common public administration service is connected to the Hungarian Tax and Custom Authority. Almost every business has regular duties with the Hungarian Tax and Custom Authority. Services of Hungarian Land Office show strong industrial characteristics (main users belong to agriculture). Every business has to register to the Company Registry Courts in Hungary. Perceptions of businesses can provide adequate information about public administration services. Meanwhile, international indicators provide the framework, surveys can provide significant supplemental information revealing the national peculiarities. The devil hides in the details. For evaluating Hungary’s performance international context, several regional countries (Estonia, V4 countries, Romania and Bulgaria) and the EU28 average are selected.

2. Literature review

As a response to the outbreak of the Covid-19 global pandemic (stated by the WHO on 11th March 2020) severe lockdowns and restriction were imposed by governments all over the world at high economic and societal cost[1]. In this environment digital solutions and services are getting emphasized attention. Digital solutions can mitigate harmful economic effects of government interventions to control the pandemics and provide positive effects to public health interests [2]. The digital forms of collaboration have increased rapidly as a consequence of the changed environment [3], making it necessary to public administrations to adopt and at the same time define the technological circumstances by introducing laws, providing the necessary infrastructures (5G availability). The usage of digital public services increased significantly in 2020 [4]. Digital transformation accelerated in the health sector[5] (e.g. using video-visits, mobile phone applications), in pandemic prevention and crisis management[6], also in education where children, teachers and parents[7] were all challenged by digital education. E-government services in a broader definition include any form of information and communication technologies used in public administration[8], providing connection among citizens, among businesses and state agencies and also among state agencies. These services can improve transparency, decrease the level of corruption, positively affect economic growth and increase convenience[9]. The cost saving bases on two pillars (1) the citizens and businesses save time and effort to handle their issues personally in one stop shops of the public administration, (2) less one stop shops need to be maintained because of the smaller number of personally handled cases. There is no need to digitalize the paper-based documents anymore and better data collection are available to the central body of public administration on which evidence-based policy decisions can be issued. Connections among government agencies become also more precise and quicker, government effectiveness improves. State capacity matters in the fight against the Covid-19 pandemic, increased government effectiveness is significantly associated with lower death rates[10]. According to the predictions, new technologies would be significantly adopted in the processes of public administration, like cloud computing, big data analysis, text, image and voice processing, encryption and cybersecurity by 2025 [11]. These developments will also reshape connections between end users and governmental bodies. Citizens and businesses are the main end user groups of e-governmental services. Therefore, not only citizens perception [12][13][14], but also business actors’ perceptions should be examined closer [15][16][17].
3. Methodology

The survey data, used in this paper, comes from a Business survey\(^3\) (collected in 2020) reaching small and medium enterprises (employing 0-250 people) and examining their satisfaction through the main public administration institutions.

![Figure 1: The sectoral distribution of businesses in percentage (prepared by the author from Business survey data)](image)

The sample contains simplified regional, economic sectoral (TEOÁR\(^4\) categories are merged into 9 main groups) and size layers.

![Figure 2: The percentage of companies according to their size in the sample (prepared by the author from Business survey data)](image)

Data collection was executed by computer assisted telephone interviewing (CATI). The mayor form of operating business is limited liability company (57.4%), the ratio of limited partnership is 19%, sole-trader is 17.4% and other form (including foundations and associations) is 6.2%. Data

---

\(^3\) The Business survey was financed as a part of the project “Public Administration and Civil Service Development OP” (PACSDOP-2.1.2-CCHOP-15-2016-00001): Representative big sample data collection about the businesses’ use of public administration services.

\(^4\) The Hungarian activity classification is identical with European, NACE Rev 2. Statistical Classification of Economic Activities in the European Community.
collection was taken place in 2020 after the declaration of Hungarian emergency situation connected to the pandemic Covid-19 (announced on 11 March 2020). Satisfaction of businesses is measured with 5 level scale: very unsatisfied, unsatisfied, satisfied, very satisfied and additional possible answers are not known or not used.

4. Empirical findings

As online form of handling public administration duties is a comparative advantage of businesses, public bodies seek to widen the scope of online available services. Digital public service for businesses indicator of the Digital Economic and Society Index (DESI) measures the available online services for starting a business and for conducting regular business operations through all life events. Hungary’s performance in 2019 is 83,7 under the average score (88,5) of the European Union.5

4.1. General satisfaction with relevant public bodies

The number of services is continuously rising in Hungary. The relevant institutions of public administration provide the possibility of handling duties in online form. In the last decade, huge amount of money was used to improve the e-governmental services in Hungary, inasmuch electronic channels can provide efficiency and transparency both governmental and private actors. It can improve the control and also provide better databases for further evident-based policies. Business users are satisfied or mostly satisfied with the provided services of public administration organs.

![Figure 3: Satisfaction with various public bodies of public administration in handling duties](prepared by the author from Business survey data)

---

5 Data available: https://digital-agenda-data.eu/charts/analyse-one-indicator-and-compare-countries#chart={"indicator-group":"egovernment","indicator":"e_gov_ebus","breakdown":"all_egov_le","unit-measure":"egov_score","ref-area":["AT","BE","BG","HR","CY","CZ","DK","EE","EU","FI","FR","DE","EL","HU","IS","IE","IT","LV","LT","LU","MT","NL","NO","PL","PT","RO","SK","SI","ES","SE","UK"]} (Downloaded 27 February 2021)
4.2. General satisfaction with the chambers and the two levels of governmental public administration services

Business actors use services of local and central government. The chambers appear as a mezzo level between the macro level (state sphere) and the microsphere (businesses) [18]. The mezzo (intermediate) level has to lobby and defend the interests of the microsphere at the state sphere. The mezzo level has to transfer adequate information from the microsphere to the state sphere. Chambers also provide services for private actors (e.g. businesses) of the microsphere. Two relevant chambers (Hungarian Chamber of Commerce and Industry and Hungarian Chamber of Agriculture) are strongly connected to the business sector and collect compulsory contribution from businesses. According to the results of the survey, a significant percentage of companies have negative perception about the chambers: 40 % is unsatisfied or very unsatisfied. This can mean that that the chambers cannot fulfil their tasks as service provider institutions or businesses cannot evaluate efficient their lobbying activity.

![Figure 4: Satisfaction with the levels of governments (prepared by the author from Business survey data)](image)

Satisfaction with local governance is significant. 70,4% of business actors are satisfied or very satisfied with the local government offices. 43,4 % of not know in case of county government offices can originated in the fact that business actors may not draw a strict borderline between the services of county government offices and central public organizations. County government offices are the territorial state administrative organs of central government with more than thousand official competencies and responsibilities. Businesses focus on the duties to be handled and are not interested its origins from which public organ come from. Businesses prefer the personal form of handling their duties in case of local governments, and the online form in case of county government offices in case of requiring permissions or certifications. The later ones are evaluated more modern.

---

6 General description: https://www.kormanyhivatal.hu/download/d/bb/04000/Angol%20tájékoztató.pdf#!Document Browse (Accessed 27 February 2021)
4.3. Satisfaction in specific services in the public administration in the contrast of international rankings

World Bank annually publishes the Report of “Ease of Doing Business” since 2003 ranking the performance of 190 countries on 10 topics. The Doing Business Ranking is widely used as an international benchmarking tool of competitiveness. Three subdimensions (Starting a business, Paying taxes and Registering a property) are chosen to demonstrate Hungary’s performance in international comparisons. Data of the latest available report were collected in 2019. As benchmarking countries, Estonia (as a well-performing country), the V4 countries (Poland, Slovak Republic, Czech Republic), Bulgaria and Romania are selected. Hungary introduced a comprehensive development program for the development of public administration services. Revealing the recent tendencies, 2017 is chosen as a base year. Data of the Business survey focuses on the satisfaction of Hungarian businesses with the services of selected public administration bodies in 2020. The Business survey already implies some of the results of the implemented development program.

4.3.1. Starting a business

Every business has to register to the Company Registry Courts in Hungary. Since 1 January 2018, businesses have to use the “Cégkapu” portal as an electronic channel of public administration. ¾ of businesses choose to comply with their administrative duties with the registry court online and only appr. 25 % of the respondents in person. The majority (89,9%) believes that the procedure time is short or acceptable and 58,8 % is satisfied or very satisfied with the electronic channel. The analysis of international ranking about starting a business dimension in the Doing Business Ranking shows that other factors are taking into consideration by the formulation of the subindex like procedure, time, cost and paid in minimum capital. By procedure the number of days counts and not the form of channels. Hungary’s rank is the 87th from the 190 countries. Its score shows minor development in the recent years. It can be seen that the business actors are satisfied with the public administration service however in international comparisons, it is only hardly found in the first
quarter of the examined countries. By reducing the procedure time, Hungary could reach a significant improvement in the Doing Business Ranking.

![Figure 6. International comparisons of rankings and values in Starting business subdimension of Doing Business](prepared by the author from Doing Business data)

4.3.2. Using tax authority services

All business actors have obligation to request permission and to provide information regularly about their activities to the tax authority. There is a relationship between the tax systems and competitiveness[19]. Next to the tax rates, the tax collection efficiency is also significant part of tax systems. As paying taxes is an element of competitiveness, so it’s a subindex of the international Doing Business Index. The score of subindex measures the payments (number per year, the time (hours per year), the total tax and contribution rate (% profit) and the post filing index (time to comply with VAT refund, time to obtain VAT refund, time to comply with a corporate tax correction and time to complete a corporate income tax correction)7. Paying taxes subindex of Doing Business Index also collects data not only about the fares but also about the procedure complexity through an example of a local middle-size company. Among the 190 countries, ranged in the Paying taxes subindex, Hungary’s rank is the 56th as a result of making paying taxes easier and the internal electronic tax system was developed in the recent years. Hungary’s score improved from 79,2 to 80,6 in 2020. According to the Business survey the perception of SMEs about administrative burden of handling tax and contribution paying, measured on a three-level scale (small (19,6%), acceptable (41,8%), excessive (19,9%), (doesn’t know (18,7%)) in the survey. However, majority believes that it is acceptable, many companies find it still excessive and a significant percentage did not express their opinion.

---

7 Detailed description is available: [https://www.doingbusiness.org/en/methodology/paying-taxes](https://www.doingbusiness.org/en/methodology/paying-taxes) (downloaded: 02 February 2021)
4.3.3. Using Hungarian Land Office services

Registering property is also a subdimension of the Doing Business Ranking which takes into consideration the number of procedures, the days, costs and the quality of the land administration index. Hungary’s rank in this case was 29th from the 190 countries. In the recent year its score does not change (80.1 score). According to the survey, only one out of five businesses obtained permission or certification from the Hungarian Land Office. Mostly the personal channel was used. Only 56% finds it modern and the rest finds it anachronistic. Not surprisingly, in the sectoral division, the agricultural businesses (45.9%) have to use the services of the Land Office. Its services show a strong industrial difference. There is a constant demand for property deeds, land-use documents and the agriculture registration. These documents are necessary for buying or selling lands and for the payment demands of agricultural subsidies.
5. Conclusions

The methodology of international rankings can limitedly adapt to national characteristics. Business survey data help to give a more nuanced interpretation to the public administration service indicators of the broadly recognized Doing Business competitiveness ranking. Survey data show that the overall satisfaction with the public administration services is satisfying in Hungary. The most commonly used services are connected to the Hungarian National Tax and Customs Administration. Its online services are permanently improving. Businesses are satisfied with its services however, they find the tax system still complicated and still not competitive in international comparisons. This finding is also supported by the SME’s survey carried out by the Hungarian Chamber of Commerce and Industry [20] in May 2020. According to the 18% of respondents, the greatest administration burden in their activities is administering taxes and contributions, and 9% says that the permissions and the bureaucracy. However, according to the satisfaction survey, they mostly find the channels modern and are satisfied with services of public administration institutions. It suggests that public bodies can provide their services properly, in spite of the complex legal environment. Their procedures were significantly developed recently. The online channel became generally available and compulsorily for certain duties. Reforms in the legal environment of public administration could further develop the competitiveness of SMEs. These measures could also improve Hungary’s rank in international rankings. We can also announce that the demand for online services has increased even more, and the personal channel declined in the last year as a consequence of the pandemic. The positive experiences with online services can later maintain the demand for them, and could improve the overall efficiency of managing administrative duties. Further research could be carried out to determine the specific causes of satisfaction.

6. References

[1] PUEYO, T., Coronavirus: the hammer and the dance. 2020.

[2] GROVER, V., SABHERWAL, R., Making sense of the confusing mix of digitalization, pandemics and economics. International Journal of Information Management, 55(August), 102234, 2020. https://doi.org/10.1016/j.ijinfomgt.2020.102234

[3] KODAMA, M., Digitally transforming work styles in an era of infectious disease. International Journal of Information Management, 55(June), 102172, 2020. https://doi.org/10.1016/j.ijinfomgt.2020.102172

[4] VASILOPOULOS, A., The digital transformation in public sector as a response to COVID-19 pandemic: The case of Greece The digital transformation in public sector as a response to COVID-19 pandemic: The case of Greece, 2020.

[5] GOLINELLI, D., BOETTO, E., CARULLO, G., NUZZOLESE, A. G., LANDINI, M. P. and FANTINI, M. P., How the COVID-19 pandemic is favoring the adoption of digital technologies in healthcare: A literature review. 2020. https://doi.org/10.1101/2020.04.26.20080341

[6] WIRTZ, B. W., MÜLLER, W. M. and WEVERER, J. C., Digital Pandemic Response Systems: A Strategic Management Framework Against Covid-19. International Journal of Public Administration, 00(00), 1–11. 2020. https://doi.org/10.1080/01900692.2020.1858316
[7] IIVARI, N., SHARMA, S. and VENTÅ-OLKKONEN, L., Digital transformation of everyday life – How COVID-19 pandemic transformed the basic education of the young generation and why information management research should care? *International Journal of Information Management, 55*(June), 102183. 2020. https://doi.org/10.1016/j.ijinfomgt.2020.102183

[8] MOON, M. J., The evolution of E-government among municipalities: Rhetoric or reality? *Public Administration Review, 62*(4), 424–433. 2020. https://doi.org/10.1111/0033-3352.00196

[9] ULLAH, A., PINGLU, C., ULLAH, S., ABBAS, H. S. M., and KHAN, S., *The Role of E-Governance in Combating COVID-19 and Promoting Sustainable Development: A Comparative Study of China and Pakistan. Chinese Political Science Review* (Vol. 6). 2021. Springer Singapore. https://doi.org/10.1007/s41111-020-00167-w

[10] SERIKBAYEVA, B., ABDULLA, K. and OSKENBAYEV, Y., State Capacity in Responding to COVID-19. *International Journal of Public Administration*. 2020. https://doi.org/10.1080/01900692.2020.1850778

[11] WEF, *The Future of Jobs Report 2020*, 2020.

[12] WELCH, E. W., HINNANT, C. C. and MOON, M. J., Linking citizen satisfaction with e-government and trust in government. *Journal of Public Administration Research and Theory, 15*(3), 371–391. 2005. https://doi.org/10.1093/jopart/mui021

[13] COHEN, J. E. (2006). Citizen satisfaction with contacting government on the internet. *Information Polity, 11*(1), 51–65. 2006. https://doi.org/10.3233/ip-2006-0083

[14] RANA, N. P., DWIVEDI, Y. K., LAL, B., WILLIAMS, M. D. and CLEMENT, M., Citizens’ adoption of an electronic government system: towards a unified view. *Information Systems Frontiers, 19*(3), 549–568. 2017. https://doi.org/10.1007/s10796-015-9613-y

[15] LEE, J., KIM, H. J. and AHN, M. J., The willingness of e-Government service adoption by business users: The role of offline service quality and trust in technology. *Government Information Quarterly, 28*(2), 222–230. 2011. https://doi.org/10.1016/j.giq.2010.07.007

[16] TUNG, L. L., - RIECK, O., Adoption of electronic government services among business organizations in Singapore. *Journal of Strategic Information Systems, 14*(4), 417–440. 2005. https://doi.org/10.1016/j.jsis.2005.06.001

[17] REDDICK, C. G., - ROY, J., Business perceptions and satisfaction with e-government: Findings from a Canadian survey. *Government Information Quarterly, 30*(1), 1–9. 2013. https://doi.org/10.1016/j.giq.2012.06.009

[18] FARKAS, Gy., Kamarák és vállalati érdekképviseletek az integrációs felkészülésben. Osiris Kiadó 2000.

[19] NAGY, L., Az adórendszer hatása a vállalati versenyképességre és a tőkebeáramlásra. *Pénzügyi Szemle, 62*(1), 21.2017.
[20] MKIK GVI, *A hazai kis- és középvállalkozások adminisztratív terhei egy kérdőíves vállalati adatfelvétel eredményei alapján*. 2020.