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The Revolutionary Digitalization of Taxation in Hungary

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Reviewer: Dr. László Péter Lakatos

Abstract

In my research, I deal with the revolutionary digitalization of the Hungarian tax system, which poses new challenges to the tax office, taxpayers and their support service providers.

The topicality of my choice of topic is given by the fact that version 3.0 of National Tax and Customs Office's (NTCA) latest „miracle weapon", the Online Invoice System, was introduced during my research period, and it was announced that a draft VAT return will be offered to taxpayers. They are the culmination of a decade-long process.

The 21st century has brought new challenges with the development of science and technology, which have fundamentally reshaped our lives, economies and taxation. And the new challenges have also brought about new expressions in our everyday lives. In connection with the digitalization of accounting, taxation and bookkeeping, this process can best be illustrated by performing previously paper-based bookkeeping, invoicing, filling in tax returns, and tax audits using software or automation.

The Hungarian tax authority has been dictating an extraordinary pace of digital innovation in the last decade, which has accelerated even more in recent years, and since July 2018, a real digital revolution has begun in the Hungarian tax system. This is because in recent years the tax authority has fundamentally changed its relationship with taxpayers by fulfilling the obligation to provide immediate information. The immediate analysis of this incoming data has made the selection process for audits more efficient.

As a research question, I examine what digitalization systems the Hungarian tax authority has introduced in Hungarian taxation, for what purposes they have done so, and whether they have achieved or are expected to achieve their objectives. I study especially the latest digitalisation development of the Hungarian tax authority, the Online Invoice System, and I review why the public mentions it as NTCA's latest „miracle weapon". I also examine what further digitalisation efforts are expected in taxation in Hungary in the future.

Keywords: Online Invoice System, „miracle weapon", digitalization, NTCA

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1. Introduction

The Hungarian tax authority has been dictating an extraordinary pace of digital innovation in the last decade, which has accelerated even more in recent years, and since July 2018, a real digital revolution has begun in the Hungarian tax system. According to the interpretive dictionary published by the Hungarian Academy of Sciences, the revolution is a radical turn, a transformation in economic life, technology, science, literature or art. This definition characterizes National Tax and Customs Office's (NTCA) digital aspirations in the transformation of taxation, as the tax authority has fundamentally changed its relationship with taxpayers in recent years by meeting the obligation of providing immediate data. The immediate analysis of this incoming data has made the selection process for audits more efficient, and the transformation has made it possible to provide services on the part of the tax authorities that reduce the administrative burden on companies.

As a research question, I examine what digitalization systems the Hungarian tax authority has introduced in Hungarian taxation, for what purposes they have done so, and whether they have achieved or are expected to achieve their objectives. I study especially the latest digitalisation development of the Hungarian tax authority, the Online Invoice System, and I review why the public mentions it as NTCA's latest „miracle weapon". I also examine what further digitalisation efforts are expected in taxation in Hungary in the future.
My aim with research is to summarize and present the digitization process of the Hungarian tax system in English. In connection with the results of my research, my expectation and assumption is that the introduction of digitization systems will whiten the economy, encouraging taxpayer compliance, reducing administrative burdens and benefits to increase government revenue.

2. Theoretical background

A tax system can be optimal if it distorts the decisions of economic operators the least, if it is fair, and the administrative costs of tax collection are low. The theoretical literature considers taxes on capital income to be the most damaging because they distort savings and investment decisions the most, thus preventing capital accumulation and slowing economic growth. The second tax with the most negative effect on economic growth and employment is the labor tax. If a worker's net wage decreases as a result of a tax increase, they will only be able to maintain their previous level of consumption with more work, resulting in a reduction in their leisure time. According to the literature, the least restrictive taxes on economic growth are taxes on consumption, which also include value added tax. This can be explained by the fact that they do not distort savings and investment decisions and involve lower administrative costs. (Scharle - Benczúr - Kátay - Váradi, 2010; European Commission, 2011; OECD, 2010; Csomós - P. Kiss, 2014)

The Hungarian government took the path of the theoretical literature in spring of 2010, when it began a comprehensive overhaul of the tax system for economic growth. The focus of the reform was on macroeconomic changes in personal and corporate taxes, consumption taxes and the tax burden. The new direction of the tax system shifted the tax burden from income taxes to consumption taxes. As a result, the tax burden on employees and businesses has been reduced, and an increase in revenue from sales tax has created a source of revenue for income taxes. (Szilovics, 2014)

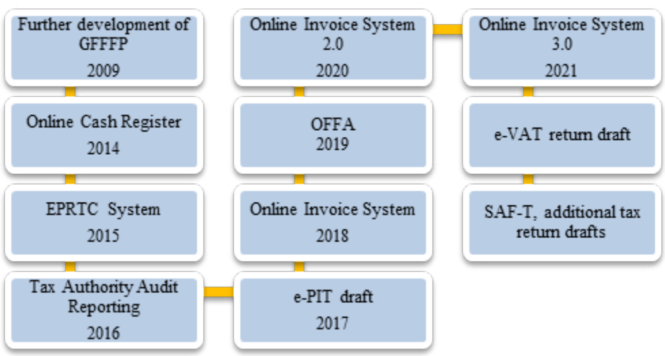
3. Methods

I use the methodology of literature review and source analysis to answer the research questions. Some of the literature used for the paper are book excerpts, journals and publications, and some are articles collected from the internet. When selecting the literature, I first selected the journals related to Hungarian taxation. Due to the novelty of the topic, however, there have been limited articles on it in these journals. Therefore, I also reviewed the content published on the internet. During this review I primarily processed the work written and published by tax professionals. The keywords I was searching for on the internet were 'Online Invoice System', 'digitalization' and 'NTCA'. The data used to illustrate the results were derived from studies collected and published by the European Commission, as reliable data on this topic is not published by another organization.

4. Results

Due to the structural transformation of the Hungarian tax system, the efficient and simple collection of sales taxes and the exercise of greater control over the processes have become more important. The tax authorities have been using software since the early 2000s to support audits, but data from taxpayers was unstructured, so much of the time spent on tax audits was spent converting incoming data into a uniform, analytical software-readable format. In order to speed up this process and make controls more efficient, the tax authority has introduced digital systems that provide data in an appropriate format, unified structure and in real-time. In addition, the digitization systems introduced are further aimed at curbing the black economy, encouraging compliance and reducing administrative burdens. Most of the introduced digital systems are closely related to VAT tax, however, with the preparation of the e-personal income tax (PIT) draft, a revolutionary innovation was also made in connection with the PIT. In the further parts of my research, I describe the process of digitization of Hungarian taxation presented in Figure 1. (Andersen, 2021; NAV, 2012; Kalocsai - Garami, 2018)

Figure 1.: The process of digitization of taxation in Hungary



Source: own editing

Further development of General Form Filling Framework Program (GFFFP) - as of 2009: GFFFP includes various forms that must be downloaded and updated separately.

Online Cash Register – from September 2014: it was an important first step in the fight against the black economy. The purpose of the introduction was to increase VAT revenues, curb sales without invoices, and support the tax authority's audit and selection process. (Salamon - Beke - Teski, 2021; Sárvári, 2019)

The Electronic Road Traffic Control System (EPRTCS) – from 2015: it is against fictitious export sales, transport documents and also tax fraud. This marked another important step in the digitization efforts of the tax office, helping NTCA's audit work, making economic processes more transparent and broadening the range of compliant taxpayers. (EKAER, 2021)

Tax Authority Audit Report – from 2016: this feature can help to standardize audits, allowing data to be provided in a fast and consistent manner for invoices issued by the taxpayer's billing program. This information can only be provided in the context of a tax audit. This also paved the way for the introduction of the Online Invoicing System. (NAV, 2015)

E-Personal Income Tax (e-PIT) draft – from 2017: the NTCA automatically prepares a draft electronic PIT return online for all individuals without prior request. This was an important step towards digitalisation, as it reduced the administrative burden for individuals to complete their tax returns. (Harkai, 2017)

Online Form Application (OFFA) – from 2019: the tax authority intends to use this service and the data already in its register to help taxpayers meet their obligations. An important advantage of OFFA is that the process is entirely online and performs real-time error checking and sends feedback to the user after submission.

In the following, I would like to highlight the Online Invoicing System among the introduced digitization systems. In the field of digitization, the Hungarian tax authority focuses on the value added tax, as it is one of the largest and most significant types of tax in Hungary today.

The immediate antecedents of the Online Invoice System introduction are as follows:

- Preparation of an itemized domestic VAT summary report from 2013 as part of the VAT return. Above certain VAT limits, invoices had to be reported separately ex-post. This was a significant administrative burden.
- As of October 2014, the NTCA was required to report who, from when, which billing program to use.
- From 2016, tax audit data had to be reported to the tax authority. This will help standardize controls and also prepare billing programs for the introduction of an online invoicing system.

The first news about billing programs and NTCA connectivity came out in December 2016. At that time, it was still possible to hear that in 2017 the billing programs would have to be connected to the tax office. Finally, the launch of the system was postponed to July 1, 2018. Arming the system has brought about a revolutionary digitalisation of taxation and has been a major breakthrough for both the tax authorities and taxpayers. Despite the extended preparations, the introduction brought significant changes and challenges for the NTCA, billing programs, and businesses alike.

Norbert Izer, Secretary of State for Taxation at the Ministry of Finance, stated the following about the purpose of introducing the Online Invoice System: "The triple goal system of the Online Invoice System is also exemplary internationally. On the one hand, it helps to curb VAT fraud, on the other hand, it encourages businesses to adopt digital solutions, and on the third hand, once the tax office receives data on virtually all invoices online, the authority will be able to prepare a draft VAT return for domestic businesses." (Index, 2020) This target system is complemented by more efficient risk identification and management by making significant account traffic available to NTCA. (Online Számla, 2021)

In the following, I would like to present the introduction of the Online Invoice System. The first version was introduced on July 1, 2018.

- From then, the data provision of the issuer and the recipient are separated.
- Real-time, immediate, itemized reporting of transactions between domestic taxpayers from the seller's side.
- The reporting obligation applies to invoices with a VAT term of HUF 100,000 or more.
- Recording of a manual invoice within 1 or 5 calendar days. This meant double recording, as the invoice had to be issued manually and then the data had to be entered manually into the system.
- Introduction of an Online Invoicing Program: help entrepreneurs meet their online billing obligations for free. (Czöndör, 2018; Sinkáné, 2018)

The second version was introduced on July 1, 2020. The innovations of this were as follows.

- The amount limit will be abolished, invoices with a VAT period of HUF 100,000 must also be declared.
- The obligation to provide information is extended to cover reverse charge and tax-free transactions.
- The deadline is modified for manual invoicing is 1 or 4 calendar days.
- Data records of incoming invoices have become fully searchable and downloadable: they can play a major role in the invoice processing process.
- Online Invoicing program mobile application development: administrative burden is reduced. (Czöndör, 2020a; NAV, 2020; Nagy, 2020)

The third version was introduced on January 4, 2021.

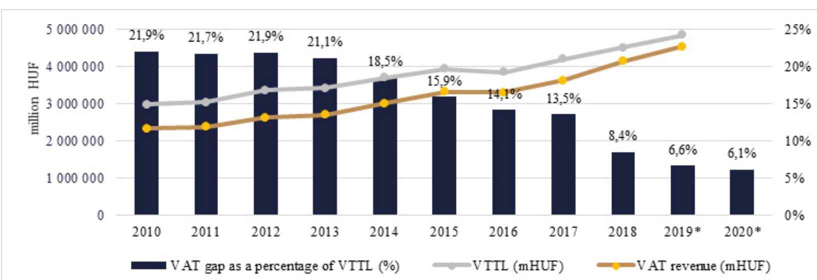
- From then, the obligation to provide information extended to invoices issued to non-taxable persons and to invoices issued to foreign VAT entities. This completes the invoice data service.
- In the case of a private customer, according to the VAT law, the content of the invoice and the data supply are separated in this case. While

the name and address of the buyer must be indicated on the invoice, the provision of data does not cover this data in order to protect the rights of the individual.

- Electronic invoice has been supported: it must be marked as an electronic invoice, you will receive a hash code that ensures the authenticity of the electronic invoice and the unalterability of its data duration. Archiving can also be performed with it, but the tax authority undertakes no obligation to store them.
- The system has reached its limits in the current legal environment. (Czöndör, 2020b; NAV, 2021)

Finally, I present the results and experiences of the operation of the Online Invoice System and examine whether it has achieved its initial objectives. The most important goal was to whiten the economy and reduce VAT fraud, the result of which I would like to show by analyzing the so-called VAT gap. The VAT rate published by the European Commission represents the difference between the expected and actual VAT receipts. Expected tax revenue is defined as VAT Total Tax Liability (VTTL), which is calculated by the European Commission on the basis of final consumption liabilities and macroeconomic indicators. Figure 2. illustrates the size of the expected, ie total and actual VAT revenue, and the value of the resulting VAT gap as a percentage of the total VAT liability between 2010 and 2020. (European Commission, 2020)

Figure 2.: Expected and actual VAT revenue and VAT margin as a percentage of VTTL in Hungary between 2010 and 2020



(Source: own editing based on studies by the the European Commission on VAT)

Based on the available data, we can say that the system has lived up to its promise almost immediately. Thanks to the introduction of the Online Invoice System, there was an outstanding improvement in 2018 in the VAT gap as a percentage of expected VAT Total Tax Liability. Among the European Union member states, the indicator decreased the most in Hungary this year by 5.1 percentage points, reducing the VAT gap to 8.4%. This is when the indicator fell below the EU average for the first time. And based on forecasts, a further decline is expected. Based on the presented data, the Online Invoice System deserved the title of NTCA's latest miracle weapon, and it can be stated that it fulfilled its hopes and achieved its most important goal - even exceeding the plans - which was to whiten the economy and curb VAT fraud.

The second goal of the introduction of the Online Invoice System was to encourage taxpayers to introduce digitization systems. It has become more successful, thanks in part to tax advisors and accountants offering electronic solutions to their clients and of course, the emergence of the coronavirus epidemic also contributed to this. Instead of manual invoicing the invoicing program (2.0) and the support for electronic invoicing (3.0) open new doors for taxpayers. (Online számla 3.0, 2020)

Another goal of the tax authority is to help taxpayers with an e-VAT draft return after version 3.0, when they can see all invoices. Its introduction was originally planned for the second half of 2021 by NTCA. However, it is likely that it will take more time to finalize the improvements and implement the system, so there is no public target date yet.

The objectives are complemented by the fact that data analysis can make risk identification, management and tax control more efficient. This data received through the Online Invoice System and other systems can be done with big data analysis. Applying this makes inspections more efficient, reducing the time and number of inspections. In essence, the number of tax audits decreased from one-third from 2015 to 2019, and tax fines imposed during tax audits increased significantly. In addition, the control strategy of the tax authority has changed and supportive customer management has come to the fore. In the case of compliant taxpayers, the sending of information letters was introduced in order to persuade the taxpayer to correct the mistakes, to pay the arrears, and to behave appropriately. In addition to its efficiency, it is an extremely fast and inexpensive way to collect taxes. (Andersen, 2021; Kalocsai - Garami, 2018)

So in summary we can say that, in the 3 years since its launch, the Online Invoice System has achieved almost all of its goals, contributing to the whitening of the economy, encouraging taxpayers to comply with the law and introducing digital solutions in their businesses. It also helped make controls more effective and targeted by analyzing the big data available.
In the near future, the tax authority plans to introduce a so-called Standard Audit File for Tax (SAF-T), which may facilitate the recommendation of additional draft returns in the future. The Standard Audit File for Tax data format recommendation was developed by the OECD in 2005. The purpose of SAF-T is to reduce the time spent on the tax audit process. In addition to tax audits, this can also help the work of accountants and auditors and contribute to the recommendation of further draft returns. (RSM, 2021; AzÜzlet.hu, 2019; Nyirati, 2020)

5. Discussion and recommendations

In my research I dealt with the revolutionary digitization of Hungarian taxation. From 2010 onwards, the tax burden in Hungary shifted from taxes on labor and capital income to taxes on consumption. In addition, the tax authorities aimed to whiten the economy, encourage taxpayers to comply with the law and introduce digital systems, and reduce administrative burdens. To this end, NAV has introduced digitalisation innovations, dictating an extraordinary pace. The GFFFP was further developed, the Online Cash Register, the EPRTC system, the provision of tax authority audit data were introduced, a draft e-tax return for individuals was proposed and OFFA was made available. The process of innovation has recently accelerated, and since the introduction of the Online Invoicing System in July 2018, a real digitalisation revolution has begun in Hungarian taxation. This system replaced the obligation to declare an invoice issued retrospectively and introduced real-time, immediate reporting, which now applies to all invoices issued by domestic taxpayers, without a threshold.

Overall, all the systems introduced so far have achieved their goal, and the change brought about by digitalisation has been truly revolutionary in Hungary: it has contributed to the whitening of the economy, encouraged tax compliance and introduced digital systems, reduced administrative burdens and made tax control more efficient. In addition to the increase in state revenues, taxpayers' morale has also increased, which also promotes the creation of more equal and fairer competition in Hungary, which has outstanding social benefits.

I hope that with my summary article I was able to provide a comprehensive picture of the past, present and future of the digitalisation of Hungarian taxation.

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