
DIGITAL VAT REPORTING IN THE LIGHT OF THE PRINCIPLE OF PROPORTIONALITY

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Preface

This thesis marks the finishing line of my Master program International Business Taxation, a one-year-long journey through the particularities of the tax world. I would like to thank my supervisor, Dr. Simon Cornielje, for his professional support and ideas on how to improve this thesis. My thanks also belong to my family, friends and classmates, who supported me all the time during my Master studies and the thesis writing process.

Abstract

The 21st century is characterized by digitalization in every aspect of our lives. Thus, it is not surprising that the Value Added Tax is not an exception to this trend. Often, tax digitalization initiatives, characterized by a certain uncertainty for taxable persons, are met with resistance and opposition, even when their benefits are heavily promoted. Tax administrations are challenged with a difficult task of implementing these initiatives. National legislators weight the advantages of such project with its disadvantages and try to achieve a balance, represented by the general principle of proportionality. This thesis aims to outline the actual state of the VAT digitalization projects and subsequently establish a minimum standard for the evaluation of proportionality of such initiatives. In the first part, the importance of big data analytics is presented and the advantages and disadvantages of the use of data analytics in tax administration are evaluated. Furthermore, the joint tax audits are discussed in the light of data analytics. This part concludes with the review of the current and planned VAT digitalization projects in various countries in Europe and the explanation of their aspects. The second part of this thesis first describes the proportionality principle in detail and further proposes the following aspects of VAT digitalization projects that should serve as a benchmark for evaluation whether the project is in line with the general principle of proportionality: penalties, compliance costs (excluding penalties) and data privacy.

Contents

Preface	III
Abstract.....	IV
List of figures.....	VI
List of tables.....	VI
Abbreviations.....	VII
1. Introduction	1
1.1 Research question	3
1.2 Relevance of research question.....	3
1.3 Structure.....	4
1.4 Methodology and delimitation	4
2. Digitalization of VAT reporting	5
2.1 Digitalization and tax data analytics	5
2.1.1 Disruption of VAT reporting and compliance	5
2.1.2 VAT data analytics.....	6
2.1.3 Use of VAT data by the tax administrations.....	6
2.1.4 Advantages and disadvantages of the use of big data in VAT.....	8
2.1.5 Joint audits and the exchange of information	11
2.2 VAT digitalization projects.....	12
2.2.1 Ongoing projects	12
2.2.2 Scheduled projects	13
2.2.3 SAF-T	14
2.2.4 Summary	16
3. Proportionality in the EU VAT law	17
3.1 Principle of proportionality.....	17
3.2 Proportionality principle and the case law	20
3.3 Principle of proportionality with regards to VAT.....	20
3.5 Summary	23
4. Are the VAT digitalization projects proportional?	25
4.1 Penalties and a minimum standard.....	28
4.2 Compliance costs and a minimum standard.....	31
4.3 Data privacy and minimum standard	33

4.4 Summary	36
5. Conclusion.....	37
References.....	40
Bibliography	40
Legislation and case law	43

List of figures

Figure 1: Slovak tax administration: IT systems	8
Figure 2: SAF-T file structures	14
Figure 3: challenges to community measures vs. challenges to national measures	18
Figure 4: Illustration of the tangible elements used to evaluate proportionality of the VAT digitalization projects.....	27

List of tables

Table 1 Advantages and disadvantages of the use of big data	10
Table 2 Summary of VAT digitalization projects.....	16
Table 3 Summary of minimum standards for proportionality	36

Abbreviations

EC – European Commission

EC – European Community

ECJ – European Court of Justice

ERP - Enterprise Resource Planning

EU – European Union

IOTA – Intra-European Organisation of Tax Administrations

ISI – Immediate Supply of Information

JPK - Jednolity Plik Kontrolny (Single File Control/SAF-T)

KOBAK - Külső Online Bejelentő és Adatszolgáltató Keretrendszer (External Online Data Provider System)

MNE – Multinational Enterprise

MTD – Making Tax Digital

OECD - Organization for Economic Co-operation and Development

SAF-T – Standard Audit File for Tax

SDI – Sistema di Interscambio

SII - Suministro Inmediato de Informacion

TFEU – Treaty on the Functioning of the European Union

VAT – Value Added Tax

VIES - VAT Information Exchange System

1. Introduction

The 21st century can be characterized by increased digitalization¹ in all areas of business processes. Tax is not an exception. Specifically, it can be assumed that Value Added Tax is prone to digitalization, mainly due to its nature as a tax on transactions. Because of the volume of transactions, it is less burdensome for taxable persons to record data digitally (cost savings). Moreover, electronic audit is more convenient for the tax authorities. This thesis focuses on Value Added Tax, due to the importance of the indirect taxes as one of the most vital tax revenue generators in the EU. VAT is more stable and contributes more to the tax mix than direct tax². However, the VAT gap is still a serious problem for the national governments as it reduces the overall tax revenue³. One of the drivers of the VAT gap are the information asymmetries⁴. With information asymmetries, non-compliant behavior is possible. Tax authorities are looking for more opportunities to reduce the information asymmetries between them and the tax subjects and the collection and analysis of big data seems to be an excellent opportunity to do so⁵. Big data are often being described as the backbone of the successful digital transformation⁶. New challenge for both tax administrations and for the companies are the internal processes and the legislation. Both are impacted heavily, and the aim of this thesis is to analyze the impact on legislation. One of the biggest sources of big data in VAT in Europe is formed by the real time reporting and electronic filing, since electronic filing is mandatory in the majority of countries⁷.

Currently, VAT digital reporting projects are being created locally, without the coherent aid from the European Union and without a European scope (except SAF-T, the projects are fragmented on per-country basis). The abovementioned reasons result in different compliance standards being implemented in every

¹ In this thesis, “digitalization” shall mean the use of technology and big data. The term “level of digitalization” therefore implies the level of use of technology and big data.

² Eurostat–European Commission, ‘Taxation trends in the European Union. Data for the EU Member States, Iceland and Norway’ [2017].

³ European Commission, ‘VAT gap’ <https://ec.europa.eu/taxation_customs/business/tax-cooperation-control/vat-gap_en> accessed 01 June 2018

⁴ Norman Gemmill and John Hasseldine, ‘Taxpayers Behavioural Responses and Measures of Tax Compliance Gaps: A Critique’ [2013]

⁵ Frank Nellen, ‘Information asymmetries in EU VAT’ (Doctoral dissertation, Maastricht University 2017)

⁶ TechTarget, ‘IT infrastructure transformation: Backbone of the digital revolution’ <<https://searchstorage.techtarget.com/opinion/IT-infrastructure-transformation-Backbone-of-the-digital-revolution>> accessed 05 June 2018

⁷ EY, ‘Global Survey- VAT/GST electronic filing and data extraction’ [2014]

country and with constant digital evolution, the probability of uniting these projects is most likely decreasing.

It is important to note that big data represents enormously large data sets which, without the knowledge of how to analyze them, can be no more than worthless⁸. Proper analysis, trained technicians, IT resources, IT architecture and the use of specialized assets are needed hand in hand to provide a fruitful outcome of the analysis. Nowadays, we live in an exciting time to observe the digital transformation. However, policy makers should bear in mind that the mere *collection* of data is not enough⁹.

In addition, different types of challenges arise for the multinational enterprises (MNEs) in the age of big data. MNEs need to be compliant in every country where they operate and that involves coping with more than one reporting system and numerous audits in different countries at the same time. For these enterprises, VAT digitalization divergence in the EU countries is implying more complex requirements which inevitably result in higher costs¹⁰.

From the 1st of July, specific Spanish entities are required to use Immediate Supply of Information (ISI) system (as determined by Royal Decree 596/2016¹¹). This system implies that companies (large entrepreneurs) with annual turnover larger than 6 million € must provide invoices to the tax authorities in a maximum of four working days. Another project for obtaining the large amount of data is the “Making Tax Digital” initiative in the United Kingdom. Expected to launch in 2019¹² (for VAT purposes), with the goals of including tax in real time and better use of information, it is a pioneering and politically sensitive topic, subject to strong opposition and criticism, as well as often being praised for being visionary. The new initiative of Hungary joins the group of these projects with the “KOBAK” IT system for live invoice data reporting¹³.

The European Union recognizes the different initiatives of its Member States. Also, under Directive 2014/55/EU, a certain minimum standard for electronic invoicing (in public procurement) is mandatory¹⁴. Moreover, in its Action plan on the future of VAT, it highlights the necessity to modernize VAT collection,

⁸ Alexandros Labrinidis and H.V. Jagadish, ‘Challenges and Opportunities with Big Data’ [2012], 2032

⁹ Aleksandra Bal, ‘Big data and taxes – the next big thing or a big mistake?’ < <http://leidenlawblog.nl/articles/big-data-and-taxes-the-next-big-thing-or-a-big-mistake> > accessed 04 March 2018

¹⁰ Allard van Nes, ‘Towards a Single VAT Area?’ (EFS Seminar on the Action Plan on VAT, Erasmus University Rotterdam, February 2018)

¹¹ Royal Decree 596/2016, 2 December, for the modernisation, improvement and stimulus of the use of electronic methods in VAT management, modifying the Regulations of VAT and other tax regulations (Official State Gazette of the 6th of the month).

¹² Finance (No.2) Bill 2016-17.

¹³ Hungarian Ministry for National Economy: proposal amending Invoicing Decree (No. 23/2014).

¹⁴ Council Directive (EC) 2014/55/EU on electronic invoicing in public procurement [2014] OJ L 133.

with benefits for both, public administrations and the businesses (such as building trust and reducing VAT fraud)¹⁵. In its recent proposal¹⁶ and the impact assessment¹⁷, the Commission proposes the use of big data in cooperation, as a tool for projects such as Transaction Network Analysis and joint audits.

1.1 Research question

Currently there is no unified EU VAT digitalization policy, every Member State has a different method for VAT reporting, which can cause discrepancies for MNEs on the EU level. Moreover, with the introduction of the possibility to use big data in tax administration, the tax authorities of the most EU countries aim to collect as much data on taxpayers as possible. VAT is a type of tax that is prone to analysis and data collection, since the invoices provided by the business can reveal the day-to-day operations. The issue at stake is straightforward. The information gathered by the tax administrators can help to identify potential tax fraud and help to prosecute tax evaders. However, the design of the VAT digitalization projects (also called “measures”) is often confusing and burdensome for taxpayers, causing major inconvenience. Therefore, it is questionable whether these initiatives represent a balance. It is natural that the state administration is determined to collect as much information as possible in order to prevent tax fraud, however, by doing that it should not affect the usual operations of a business.

Therefore, with information at hand, we pose the following research question:

“What are the current and future VAT digitalization projects¹⁸ in the EU and what is the minimum benchmark or a best practice for such digitalization project to be in line with the principle of proportionality?”

1.2 Relevance of research question

New advances in the digital era often cause great confusion and inability to keep up to date with them. The aim of this thesis is to highlight the opportunities and challenges that big data bring. Moreover, there is no unified policy on the European level that would provide the certainty for multinational enterprises and decrease the compliance obligations. On the contrary, with each country using the big data potential differently, this can cause great administrative burden for these companies. This thesis analyses what the

¹⁵ European Commission, ‘Communication from the Commission to the European Parliament and the Council on an action plan on VAT’ [2016] COM(2016) 148 final, 7.

¹⁶ European Commission, ‘Proposal for a Council Regulation amending Regulation (EU) No 904/2010 on administrative cooperation and combating fraud in the field of value added tax’ [2016] COM(2016) 755 final.

¹⁷ European Commission, ‘COMMISSION STAFF WORKING DOCUMENT IMPACT ASSESSMENT accompanying the document Amended proposal for a Council Regulation Amending Regulation (EU) No 904/2010 as regards measures to strengthen administrative cooperation in the field of value added tax’ [2017] 428 final.

¹⁸ Projects can be further addressed as initiatives or measures and are further specified as changes in VAT reporting systems (involving the increase in real-time reporting)

VAT digitalization projects need to comply with, to be aligned with the principle of proportionality. Additional feature of the thesis is a summary description of the current VAT digitalization development.

1.3 Structure

This thesis will focus on big data in the European VAT, both their collection and their use by companies and by tax administrations. Moreover, several VAT digitalization projects in various countries will be introduced to represent an example of the collection and use of big data. This thesis starts with the introduction of the design of these projects, together with the explanation of the relevance of data analysis by tax authorities. Subsequently, the proportionality principle is analyzed, stirring from the articles of legal scholars and the case law of the European Court of Justice (ECJ). Case law with regards to the use of proportionality principle in the VAT is further explained in detail, to define the process of reasoning of the court. Chapter four forms the core analysis, answering the research question in detail.

1.4 Methodology and delimitation

Given that the thesis is focused on the developments in the EU VAT, it implies strong focus on qualitative data analysis. Moreover, pure doctrine research would not be sufficient to fully explore such a dynamic and ever-evolving topic. Taking all the factors into account, an interdisciplinary research can serve the needed purpose the best. International dimension of this research adds several valuable sources such as the documents of the OECD, IOTA (Intra-European Organization of Tax Administrations) and the European Union. Primary sources of the EU VAT law are combined with research articles focused on big data, tax data management and VAT compliance. For this research to be successful, it is needed to understand not only the pure concepts of the EU VAT, but also the interrelated fields. One of the aims of this thesis is therefore to combine various areas of interest in a well-balanced analysis.

No research can fully capture the developments in such a dynamic field in depth. Therefore, due to the limited page limit, this thesis will not provide an exhaustive list of VAT digitalization projects and will not follow on technicalities of the specified VAT digital projects. It will focus mostly on the practical and legal issues.

2. Digitalization of VAT reporting

This chapter provides an overview of the general topic, use of big data in VAT analytics, its advantages and disadvantages and at the same time aims to describe the functioning of the current and scheduled VAT digitalization projects. In parallel with the description of these new projects, existing project of SAF-T audit file will be discussed.

2.1 Digitalization and tax data analytics

2.1.1 Disruption of VAT reporting and compliance

The issue of tax compliance has been discussed numerous times in various articles, mainly due to the polarizing nature of the topic. For companies, compliance is often costly and causes a burden, while for tax administrations, compliance of taxable persons is essential for the goal that they want to achieve: obtain tax revenue. According to Barbone, compliance with the rules does not occur effortlessly, but instead, must be overseen by a certain agent¹⁹. The tax administration office was created with the intention to supervise the tax collection and shall have the power to enforce it. Already in 2003, Gascó claimed in her article, that a digital revolution is happening, and the public administration must be prepared for it, in order to benefit²⁰.

Non-compliance is a serious issue for lawmakers in most of the countries in Europe and in the world. It can be characterized by so-called **VAT gap**. VAT gap is the “*difference between the theoretical tax liability and the actual revenue collected*”²¹. One of the most important objectives of the tax administration should therefore be the reduction of the VAT gap.

Majdanska and Schoueri view the access to data of a taxpayer as a very simple measure to improve the compliance of taxpayers. They further distinct the levels of data access on domestic level and on international level²². The authors further discuss how the IT developments improved the efficiency of data collection.

Following the analysis of the authors, it is only logical that tax administrations are exploiting the enhanced possibilities of using the data gained from the taxpayers. However, the actual practicalities can be very problematic and complex for both parties involved. Tax administrations naturally want to obtain these data

¹⁹ Luca Barbone, Richard Bird and Jaime Vázquez Caro, ‘The costs of VAT: A review of the literature’ [2012] 10.

²⁰ Mila Gascó, ‘New technologies and institutional change in public administration’ SSCR 21(1) [2013] 6-14.

²¹ Luca Barbone and others, ‘Study to quantify and analyse the VAT Gap in the EU-27 Member States’ [2013] 23.

²² Alicja Majdańska and Pedro Schoueri, ‘Tax Compliance in the Spotlight – The Challenges for Tax Administrations and Taxpayers’ BIT 11 [2017].

in a unified form, meaning that each taxpayer will have to follow a certain data file/data system. However, this often means that a taxable person is required to switch to a software that is proposed by a tax administration, which can be extremely burdensome especially for small and medium enterprises.

2.1.2 VAT data analytics

Big data, according to Ohlhorst, can be characterized by four dimensions: volume, variety, veracity and velocity²³. **Volume** implies that the amount of big data is immense. **Variety** suggests that the form of big data is not unified, and the data is often unstructured before being processed. **Veracity** indicates that big data can be often misleading and need to be evaluated and analyzed objectively, being aware of many pitfalls that these data can imply. Lastly, **velocity** refers to the fast acquisition and often-changing nature of the data.

Big data are a rich source of information. However, to extract information that is beneficial for the user, data analytics is needed. Data analytics and big data are inseparable. One cannot function without the other. Therefore, to benefit from the use of big data, analytics is needed. It is logical that usually VAT data are collected in first instance, since they are rich in information and they have a transactional nature. According to the briefing of the European Parliament, data analytics entails “*techniques and processes that are applied to data, in particular big data, in order to reveal patterns and correlations*”²⁴.

In its report from 2017, the European Commission advises Member States to continue the digitalization and automation of tasks. Moreover, the EC suggests that the Member States should exchange the data they have. However, the report contains a warning. The warning regards the negative aspects of collecting too much VAT data. It is suggested that the compliance effect may be mitigated by collecting vast amount of data without a sufficient analysis²⁵.

2.1.3 Use of VAT data by the tax administrations

Nowadays, big data are not only a mere part of the IT system, they are a valuable asset. According to the OECD, tax administrations can benefit and often use two different types of data analytics. Predictive analytics helps to form an informed opinion about the future actions. Prescriptive analytics is used to form

²³ Frank J. Ohlhorst, *Big data analytics: turning big data into big money* (John Wiley & Sons, 2012).

²⁴ European Parliament Briefing, ‘Big data and data analytics, The potential for innovation and growth’ [2016].

²⁵ EEC and Euratom, ‘Eighth report under Article 12 of Regulation n° 1553/89 on VAT collection and control procedures’ [2017] COM(2017) 780 final.

a causal reasoning pattern (to reflect on the behavior of the taxpayer)²⁶. In some cases, the abovementioned methods can be combined.

The example of Brazil is often used, to demonstrate a successful use of big data in VAT. According to the report of the OECD, Panama state in Brazil has already implemented electronic invoicing in 2015 and selected taxpayers must provide invoices in the extensible markup language (XLS). Tax authorities will then authenticate the invoice in form of cross-checking with other available information. The length of the verification process is extremely short and can be expressed in seconds²⁷. This system in Brazil generally requires three parties: a client, taxpayer and tax authorities.

The use of extensive IT systems in VAT administration is also popular in China. According to the Chinese tax administration, currently the VAT Administration Information System is representing the six areas of VAT control. Those are: *“invoicing, e-certificate, filing, cross-checking, verification and referral investigation”*²⁸. Similarly, as in many other countries, Chinese VAT Administration Information System is linked with various public administration systems, to verify and cross-check the information. Moreover, since 2015, this system can collect data in both numerical and textual form, resulting in a complete data set. It is also programmed to transfer data in real time.

Even smaller countries are benefiting from big data analytics. One of the examples is the Slovak Republic. To illustrate the functioning of the tax information system, the following infographics is used. Data warehouse system (DWH) is the primary reference point, which comprises mainly from the information gained through the tax returns and tax statements. In parallel, AIS-R system is implemented, cross-checking the information from DWH system against data gained from EUROFISC, VIES and various external databases linked to another public bodies. These two systems are further supported by VAT Control Statement System, which is specifically designed to control irregularities. Various additional databases and IT infrastructure are in place to support the overall robustness of the control²⁹.

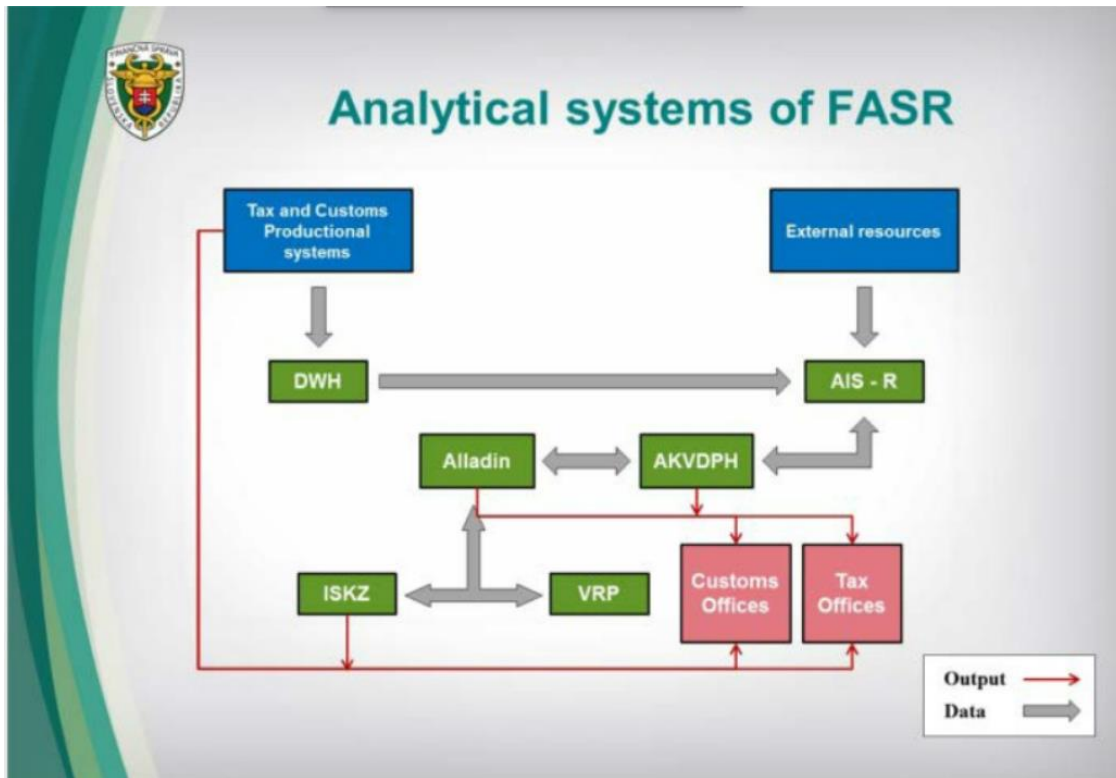
²⁶ OECD, 'Advanced Analytics for Better Tax Administration: Putting Data to Work' [2016] 17.

²⁷ OECD, 'Technologies for Better Tax Administration: A Practical Guide for Revenue Bodies' [2016] 40.

²⁸ Chinese State Administration of Taxation Annual Report 2015, 'Development Strategy-Reinvention to Tax Modernization by 2020' [2015] 72.

²⁹ IOTA, 'Data-driven Tax Administration' [2016] 15.

Figure 1: Slovak tax administration: IT systems



Source: IOTA³⁰

One important feature of big data can be extracted from the abovementioned example. The richness and variety of data enables tax administrations to more **effectively cross-check** the data. Moreover, real-time reporting empowers the tax authorities to cross-check the data with respect to specific transactions in a negligible time distance and therefore more accurately. This is in line with the reasoning of Majdanska and Schoueri, who claim that technology developments and the use of big data can leverage the cross-checking element of control³¹.

2.1.4 Advantages and disadvantages of the use of big data in VAT

Big data entail vast modes of application. However, with such complex datasets, the issue of its management comes to play. It requires a specific amount of skills and costs to operate and manage.

³⁰ Ibid 15-16

³¹ Alicja Majdańska and Pedro Schoueri, 'Tax Compliance in the Spotlight – The Challenges for Tax Administrations and Taxpayers' BIT 11 [2017].

However, big data management process is not effortless. In order for tax authorities to make use of big data, they need to be aware of resources they need (both financial and human)³².

It would be almost impossible to list all advantages that big data provide. Therefore, in the next section we will focus on the most far-reaching and critical benefits. The most critical benefits of big data were highlighted numerous times by the European Commission and by the Member States, for example in its eighth report on VAT collection and control procedures³³. Big data are also essential for Transaction Network Analysis³⁴, a project of uncovering fraudulent VAT transaction in the Benelux countries. The nature of the data allows to cross-check it in-between different systems and to detect suspicious transactions. It is important that the data provided are accurate. Moreover, human intervention is necessary, since the system can only indicate fraudulent transaction, based on before defined parameters. Therefore, big data can serve as a useful tool for prevention and exposure of VAT fraud, however, tax authorities need to proceed with caution. Companies can benefit from the use of big data too. Since the analytics of big data can tackle growing tax complexity, introduction of digitalized and automated invoice processing system can significantly reduce the compliance costs of an enterprise (in short term, however, costs that are incurred with the introduction of big data analytics system are viewed as a disadvantage). The increased use of big data can also help to increase the level of interaction with tax authorities. Moreover, as highlighted by Allard van Nes, Senior Manager Indirect Tax & Customs at FrieslandCampina, the increased use of data provided by taxpayers to tax authorities and increased cooperation between the tax authorities in the Member States in the EU can significantly reduce the frequency of simultaneous tax audits³⁵. This is also reflected in the new proposal of the European Commission³⁶.

One of the problems is the complexity of big data. According to the research of ICAEW (The Institute of Chartered Accountants in England and Wales), complexity is closely related with short term costs. The authors claim that the costs incurred in short term by implementation of big data strategies can be transferred to a customer³⁷. Information overload can cause problems for tax authorities. Moreover, the survey conducted by TDWI Research has revealed that 46% of respondents (significant majority) claimed that

³² Aleksandra Bal, 'Big data and taxes – the next big thing or a big mistake?' < <http://leidenlawblog.nl/articles/big-data-and-taxes-the-next-big-thing-or-a-big-mistake> > accessed 04 March 2018

³³ EEC and Euratom, 'Eighth report under Article 12 of Regulation n° 1553/89 on VAT collection and control procedures' [2017] COM(2017) 780 final, 6.

³⁴ Ibid, 6.

³⁵ Allard van Nes, 'Towards a Single VAT Area?' (EFS Seminar on the Action Plan on VAT, Erasmus University Rotterdam, February 2018).

³⁶ EC, 'Proposal for a council regulation amending Regulation (EU) No 904/2010 on administrative cooperation and combating fraud in the field of value added tax' COM(2016) 755 final.

³⁷ ICAEW, 'Report: Digitalisation of tax: international perspectives' [2016] 13.

their staff lacks relevant skills and/or training³⁸. It is only logical that the training of staff will take a certain amount of time. Therefore, the new initiatives of digital VAT reporting should implement a sufficient testing period to ensure that all employees have required skills and are comfortable with the environment of the system. Naturally, this is also needed for taxable persons which are required to report.

Another concern which arises with the increased use of big data is the issue of data privacy. Generally, this concern is addressed in the national law of the Member States. However, with the increased complexity of data, data leaks are highly probable. The European Union has often shown the involvement, for example in DAC2 (Directive on Administrative Cooperation). This directive stipulates that the reportable person is notified in case of breach of privacy with regards to data exchanged³⁹. Thus, the advantages and disadvantages of the increased use of big data in tax administration are the following:

Table 1 Advantages and disadvantages of the use of big data

Advantages	Disadvantages
preventing VAT fraud	too complex
reducing costs of compliance in the long term	data privacy can be undermined
better interaction with taxpayers	demand for the training of staff

Big data are causing a significant shift in the amount of information that the tax authorities have available. This is referred to as “*information asymmetry shift*”. Nellen defines information asymmetries as a situation when one party has access to a certain information that is not available to the other party⁴⁰. Nellen refers to two types of asymmetries: vertical and horizontal. Vertical information asymmetries occur between taxpayers and tax authorities. Horizontal information asymmetries arise between individual taxpayers⁴¹. Considerable change is taking place with regards to the vertical information asymmetries. In the cases before the initiation of VAT digitalization projects, it was the companies (or taxable persons in general) who had significantly more information than the tax authorities. This is natural, since the nature of these information is internal and usually confidential, therefore not available to the public. However, with the increased use of digitalization, information asymmetries start to shift. More and more information need to be disclosed to the tax authorities. This is observable on the amount of information that is provided by quarterly return and real-time reporting. Quarterly report provides significantly less information than a real-

³⁸ Philip Russom, ‘Big data analytics. TDWI best practices report’ 19(4) [2011] 12.

³⁹ Council Directive (EC) 2014/107/EU amending Directive 2011/16/EU as regards mandatory automatic exchange of information in the field of taxation [2014] OJ L 359, para 3.

⁴⁰ Frank Nellen, ‘Information asymmetries in EU VAT’ (Doctoral dissertation, Maastricht University 2017) 66.

⁴¹ Ibid, 66

time report. Nellen further recognizes the importance of the ERP systems as a main tool for information asymmetry reduction⁴².

2.1.5 Joint audits and the exchange of information

The OECD defines joint tax audit as a process, when several countries form a separate audit team to investigate issues or transactions pertaining to the taxable persons, who perform cross-border activities⁴³. This form of tax audit requires intense cooperation, however, the effectivity (especially regarding VAT MTC fraud) is immense.

Joint tax audits can reduce compliance costs, increase the efficiency of tax administrations and taxpayers, increase the transparency for tax administration and most importantly, reduce cross-border tax frauds⁴⁴. On the contrary, many practical problems arise with the joint audits, ranging from the initial setup of the procedure to cost and language barriers. For example, synchronization of two different countries, speaking different languages and having different cost expectations can be extremely challenging⁴⁵.

According to the survey conducted by the EY, majority of respondents answered that the tax authorities often exchange data with tax authorities of other countries⁴⁶, indicating an increasing trend. The role of data analytics in the tax audit arena is tremendous. The alignment of big data practices in EU countries can significantly reduce the barriers such as the additional costs⁴⁷ or lengthy procedures, which require numerous employees of the tax administration. Electronic audits, commonly known as e-audits are replacing traditional audits. The benefit of an e-audit lies in the leverage of technology and big data, enabling tax administration to perform internal audits or cross-country joint audits more efficiently, without the use of additional and costly resources. This type of audit can be conducted directly from the place of the tax office, without entering the premises of the taxpayer. Baker and Pistone mention that tax audits should be proportional. Thus, no tax audit should require more than what is needed for the purpose of the audit⁴⁸. It is essential that tax audit does not cause an extreme burden to the taxpayer.

⁴² Ibid.

⁴³ OECD, 'Sixth Meeting of the OECD forum on Tax Administration (Istanbul)- Joint Audit Report' [2010], 7.

⁴⁴ Irene Burgers and Diana Criclivaia, 'Joint Tax Audits: Which Countries May Benefit Most?' [2016] WTJ 8(3), 320-321.

⁴⁵ OECD, 'Sixth Meeting of the OECD forum on Tax Administration (Istanbul)- Joint Audit Report' [2010], 50-51

⁴⁶ EY, 'VAT/GST Compliance and Controversy Survey' [2015] 19.

⁴⁷ reduced due to automation as a result of technology use.

⁴⁸ Philip Baker and Pasquale Pistone, 'The practical protection of taxpayers' fundamental rights' [2015] IFA Cahiers, 36-37.

2.2 VAT digitalization projects

This part of the thesis aims to summarize the current initiatives of various European countries in the field of Value Added Tax, further named as “*VAT digitalization projects*”. The general ideology of the projects is similar, with corresponding goals. The current initiative of the European Union named FISCALIS 2020 aims to stimulate cooperation of the Member States in the field of tax IT systems, with the aim of reducing tax fraud⁴⁹.

2.2.1 Ongoing projects

With the evolution of the IT infrastructure, public administration evolves too. However, the pace of progress is rapid and those who were among the first leaders in the field already need to modernize their VAT systems. Nowadays, simple electronic submission of invoices to the tax authorities is taken for granted. Moreover, with the advancement of data privacy laws, policy makers need to be especially cautious. In this part of the thesis, countries with a single VAT digitalization project are introduced. Certain European countries use the combination of SAF-T with their own national digitalization projects.

2.2.1.1 Spain

One of the most famous and landmark projects in VAT digitalization is the ISI (Immediate Supply of Information)/ SII (Suministro Inmediato de Informacion) project which launched in July 2017⁵⁰. Mandatory for companies with annual turnover of more than six million euros and companies which have applied for a monthly VAT return scheme, ISI requires that the invoices need to be submitted to tax authorities in a time span of four days from the issue date of the invoice⁵¹. Penalties for late submission include a fine worth 0.5% of the invoice amount with the minimum of 300 euros and a maximum of 6000 euros. Moreover, non-inclusion of relevant information or errors will be fined with 1% of the invoice amount (minimum 150€ and maximum 6000€)⁵².

⁴⁹ Council Regulation (EC) 1286/2013 of the European Parliament and of the Council of 11 December 2013 establishing an action programme to improve the operation of taxation systems in the European Union for the period 2014-2020 [2013] OJ L 347.

⁵⁰ Royal Decree 596/2016, 2 December, for the modernisation, improvement and stimulus of the use of electronic methods in VAT management, modifying the Regulations of VAT and other tax regulations (Official State Gazette of the 6th of the month).

⁵¹ KPMG, ‘Electronic VAT Books – New “Immediate Supply of Information-SII” system approved with effects as of 1st July 2017’ [2016].

⁵² EY, ‘Spain to require electronic records and submission for VAT books starting July 2017’ [2016].

2.2.2 Scheduled projects

With rapid technology expansion, we expect that increasing number of countries will start to use big data and real-time reporting in the near future. While certain countries still hesitate, in Hungary, Italy and United Kingdom, new projects are becoming a reality.

2.2.2.1 Hungary

July 2018 will be a landmark moment for Hungarian taxpayers and tax authorities. It is expected that the new system for real-time VAT reporting, namely: KOBAK, will be launched⁵³. Businesses will be required to provide tax authorities with B2B invoices (with a value of HUF100 000/320€ or more) within a time limit of 24 hours. Failure to do so will result in penalties, assessed on case-by-case basis, with a maximum amount of HUF500 000/1700€⁵⁴.

2.2.2.2 Italy

Italy has already introduced and launched parts of its Sistema di Interscambio (SDI) VAT project⁵⁵. From 1st January 2019, B2B transactions (and certain B2C transactions) will be required to submit their invoices to the SDI platform. The invoice will be approved by the tax authorities and subsequently transferred to the customer. Penalties for non-compliance and non-issuance of electronic invoices range from 90% to 180% of the invoice amount⁵⁶.

2.2.2.3 United Kingdom

It is common in the UK that the proposal for a new legislation causes a political turmoil. However, the discussions were, and still are, very sensitive with regards to the new plan on Making Tax Digital (MTD)⁵⁷. The MTD project is expected to launch in 2019, when the digital VAT reporting will begin. Taxable persons with annual turnover of more than £85 000 will be required to report under the amended rules. MTD will be voluntary for any other taxpayer. Currently, secondary legislation is in the form of proposals based on primary legislation, the Finance bill⁵⁸. The United Kingdom has a complex system of penalties, which is currently under review. It is expected that after the introduction of the system (from numerous

⁵³ Invoicing Decree (No. 23/2014).

⁵⁴ EY, 'Hungary proposes live invoice data reporting from 1 July 2018' [2017].

⁵⁵ Decree of 3 April 2013, regulation on the issue, transmission and receipt of electronic invoices to be applied to public administrations pursuant to article 1, subsection 213, of Italian law number 244 of 24 December 2007 (Official Journal number 118 of 22 May 2013).

⁵⁶ EY, 'Italian 2018 Budget Law amends VAT Law' [2018] 2.

⁵⁷ House of Commons Debate 24 October 2017, c60.

⁵⁸ Finance (No.2) Bill 2016-17, clause 62.

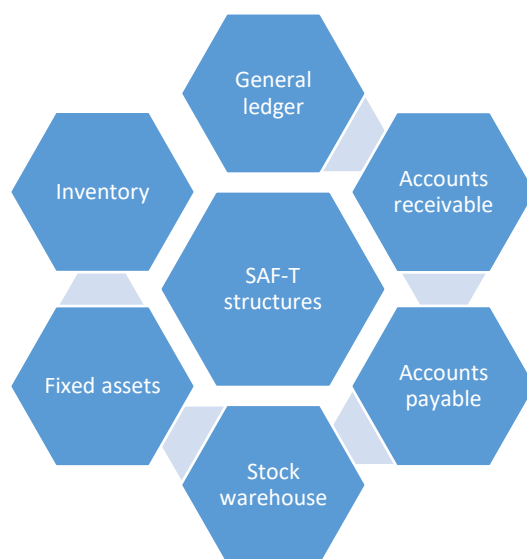
communications of HMRC), penalties will be moderate and flexible. One of the features of the penalty system under MTD is the interest charge⁵⁹.

2.2.3 SAF-T

Another, vastly popular approach to VAT digitalization is the SAF-T (Standard Audit File for Tax). Designed by the OECD, SAF-T is slightly different from the projects introduced above. It is a form of a compliance check, directly linked to the ERP system of a taxpayer⁶⁰. It allows tax authorities to directly perform audits for data from a selected time frame. Taxpayers are required to link the SAF-T file with their own system, allowing tax authorities to obtain data in an easily readable form.

Poland has introduced JPK project, a form of SAF-T. This system was introduced in phases, with regards to the size of the companies. From the 1st of January 2018, all companies, regardless of size are required to report in this format and are required to provide tax authorities with detailed records on warehouse data, bank statements, accounting books and invoices⁶¹. Penalties follow from the fiscal penal code, which reaches beyond JPK (SAF-T) system.

Figure 2: SAF-T file structures



Source: Created by the author, based on Richard Asquith⁶²

⁵⁹ HMRC, 'Making Tax Digital: interest harmonisation and sanctions for late payment' [2017].

⁶⁰ OECD, 'Guidance for the Standard Audit File – Tax' [2005].

⁶¹ PwC, 'Standard Audit File for Tax – the Parliament passed a bill which introduces monthly VAT reporting in a SAF-T data format' [2016].

⁶² Richard Asquith, 'Will EU SAF-T reporting be the death of VAT returns' (International Tax Review, 11 August 2016) < <http://www.internationaltaxreview.com/Article/3577749/Will-EU-SAF-T-reporting-be-the-death-of-VAT-returns.html> > accessed 19 March 2018.

According to the model developed by the OECD in 2010, standard SAF-T should comprise of six structures, or areas: **General ledger, Accounts receivable, Accounts payable, Stock warehouse, Fixed assets and Inventory**⁶³. Accounts receivable and accounts payable sectors contain invoices while the general ledger contains a journal.

SAF-T is a first step in a journey to automated VAT audits. However, SAF-T standard file as developed by the OECD serves only as an indication of a good practice. Countries can introduce and develop their own standards of SAF-T⁶⁴. In the past, data were entered manually into the system, which was extremely burdensome for businesses, due to the time constraints and compliance costs required. Nowadays, semi-automatic, or almost wholly automatic, systems record the data.

⁶³ OECD, 'Guidance for the Standard Audit File – Tax Version 2.0' [2010] 9.

⁶⁴ Ibid, 12

2.2.4 Summary

Table 2 Summary of VAT digitalization projects

Country	Project name	Required to report	Commencement date	Legislation
Spain	ISI/SII	Large businesses (>6 mil. €), VAT groups and businesses registered for REDEME (monthly VAT return) ⁶⁵	07/2017	Royal Decree 596/2016, 2 December
Hungary	Kobak	B2B invoices with the amount of VAT of at least HUF 100 000	07/2018 (delayed)	Invoicing Decree (No. 23/2014)
Italy	SDI	B2B transactions between private businesses, partly B2C transactions	01/2019	Decree of 3 April 2013 (Official Journal number 118 of 22 May 2013)
United Kingdom	Making Tax Digital	VAT registered businesses with a turnover more than 85 000£	04/2019	Finance (No.2) Bill 2016-17
Poland	SAF-T (JPK)	Companies with more than 250 employees, from 07/2018 all businesses	07/2016 ⁶⁶	The Act of November 16, 2016 ⁶⁷
Norway⁶⁸	SAF-T	VAT registered businesses with threshold more than NOK 5 million and businesses with electronic bookkeeping information	01/2020 ⁶⁹	No. 1558 on accounting (bookkeeping regulations) ⁷⁰

⁶⁵ Spanish Tax Agency, 'New VAT management system based on Immediate Supply of Information <http://www.agenciatributaria.es/AEAT.internet/en_gb/Inicio/Ayuda/Modelos_Procedimientos_y_Servicios/Ayuda_a_P_G417_IVA_Llevanza_de_libros_registro_SII_/Informacion_general/Nuevo_sistema_de_gestion_del_IVA_basado_en_el_Suministro_Inmediato_de_Informacion.shtml> accessed 18 March 2018.

⁶⁶ With the exception for the small companies (less than 250 employees). Those companies will be required to submit SAF-T file from 07/2018.

⁶⁷ Polish Ministry of Public Finance, The Act of November 16, 2016 on the National Fiscal Administration.

⁶⁸ Non-EU country used for illustration purposes (beneficial for comparability).

⁶⁹ Avalara VAT Live, 'Norway SAF-T delayed to 2020' (31 December 2017) <<https://www.vatlive.com/vat-news/norway-saf-t-delayed-to-2020>> accessed 19 March 2018.

⁷⁰ Regulation concerning amendments to regulation 1 December 2004 No. 1558 on accounting (bookkeeping regulations) Determined by the Norwegian Ministry of Finance on December 22, 2017, pursuant to Act 19 November 2004 No. 73 on Bookkeeping (Section 16).

3. Proportionality in the EU VAT law

In this chapter, the proportionality principle of the EU law is introduced, together with the case law on the matter, to form a basis for the subsequent chapter and for the core analysis. In order to further analyze the concept of proportionality with regards to digital reporting of VAT, we need to view it in its entirety.

3.1 Principle of proportionality

The principle of proportionality, together with the principles of legal certainty, equality etc. constitute the general principles of EU law⁷¹. According to Hartley, general principles form the legal foundation in situations when written legislation cannot provide sufficient answer for a court question at hand. Among others, these principles are also the source of the EU law and form the basis for the legal grounds of explicit provisions. The reference to the general principles can be observed in the article 220 of the Treaty Establishing the European Community⁷². We can find more specific reference to the general principle of law in the article 288 of the European Community Treaty: “...in accordance with the general principles common to the laws of the Member States...”⁷³. General principles have originally developed from the legal systems of Member States. Courts apply these principles to rationalize their decisions, to display neutrality, objectivity and legitimacy⁷⁴.

It is possible to trace the proportionality principle back to German law, where it has a fundamental importance. It has been essential for German legal system that the intervention of the state has a certain limit⁷⁵. In English law, this principle was non-existent⁷⁶. Rolim mentions that the main objective of the principle of proportionality is fairness, which possesses a direct link with the principle of effectiveness⁷⁷.

According to Craig, the principle of proportionality can be used in different connotations. It can either “*be used to challenge Community action*” or to “*challenge the legality of Member State action*”.⁷⁸ The focus

⁷¹ Trevor Hartley, *The foundations of European Community law: an introduction to the constitutional and administrative law of the European Community* (Oxford University Press, USA 2007) 131-157

⁷² Consolidated Version of the Treaty Establishing the European Community art. 220, (2002/C 325/01): “*The Court of Justice and the Court of First Instance, each within its jurisdiction, shall ensure that in the interpretation and application of this Treaty the law is observed.*” With ‘law’ meaning the general principle of law

⁷³ Ibid, Art. 288

⁷⁴ Tor-Inge Harbo, ‘The function of the proportionality principle in EU law’ [2010] ELJ 16(2), 160-164

⁷⁵ Robert Thomas, *Legitimate expectations and proportionality in administrative law* (Hart Publishing 2000) 78

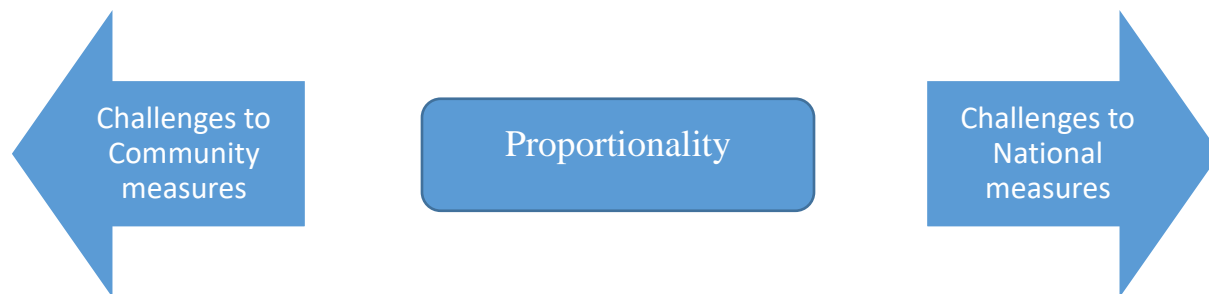
⁷⁶ Ibid, 85

⁷⁷ De Souza Pereira Rolim, João Dácio, ‘The Role of the Rule of Reason, the Standard of Reasonableness and the Principle of Proportionality in Assessing Fair Taxation’ (Doctoral dissertation, Queen Mary University of London 2013) 31

⁷⁸ Paul Craig, *EU administrative law* (Oxford University Press 2006) 655

of this thesis lies on the definition of proportionality as the challenge to the legality of the action of a Member State. Craig further mentions that in its decisions, the European Court of Justice (ECJ) is respectful to national values⁷⁹. This shows that challenging a measure of the Member State does not automatically mean that the measure will be declared disproportional. It may seem trivial and futile to mention; however, it is an important statement to rebuff a common impression.

Figure 3: challenges to community measures vs. challenges to national measures



Source: Created by the author, based on Craig⁸⁰

According to Sauter, four tests can be performed in order to establish whether the measure is proportional: 1.) The measure must be appropriate 2.) The measure must pursue legitimate objective 3.) Least restrictive effective means test (LRM) 4.) Balance test: the measure cannot be disproportionate (costs vs benefits test). However, Sauter mentions that the latter two tests are often “*applied as alternatives rather than complements*”.⁸¹ Based on the reasoning of Sauter, least restrictive means test is applied most frequently⁸².

Almost identical tests are highlighted by Ellis⁸³ and Maliszewska-Nienartowicz⁸⁴. Therefore, we can identify the following criteria in testing proportionality: suitability, necessity and proportionality in narrower sense (*stricto sensu*). These sub-principles (referred further to as “criteria/factors”) do not need to be fulfilled as a whole to declare a measure disproportional. However, the order of the tests is crucial and must be followed⁸⁵.

⁷⁹ Ibid, 706.

⁸⁰ Ibid, 655.

⁸¹ Wolf Sauter, ‘Proportionality in EU law: a balancing act?’ [2013] CYELS 15, 447-448.

⁸² Ibid, 445.

⁸³ Evelyn Ellis, *The principle of proportionality in the laws of Europe* (Hart Publishing 1999) 1.

⁸⁴ Justyna Maliszewska-Nienartowicz, ‘The Principle of Proportionality in the European Community Law-General Characteristic and Practical Application’ [2008] PV 24 (89), 91.

⁸⁵ Michel Rosenfeld, Andras Sajó, *The Oxford handbook of comparative constitutional law* (Oxford University Press 2012) 725.

To further understand the mechanism of the principle of proportionality, these factors need to be further explained in detail. Suitability entails the meaning whether a certain measure is the improvement of the current state without deteriorating the rights of the other party⁸⁶ (in our case without excessively burdening the taxpayer). Therefore, this refers to the **fundamental design** of the measure. Alexy mentions that suitability is usually not the most influential or significant factor, as it is also illustrated by the case law available up to date. This is due to the fact, that the measure is often designed with regards to the aim it needs to achieve⁸⁷. Referring to this design process, it is highly probable that such measure will be deemed suitable, since the given aim can be achieved with it.

Necessity, on the other hand, is often decisive criterion. It goes beyond suitability and implies another condition: comparison. It is a task of the necessity test to question whether a similar measure, which is less burdensome can have a similar effect. Therefore, if a similar measure exists (or a measure with the same aim, but a different design), which causes less burden to the taxpayer, in that case the first measure (the measure that is originally being assessed) is declared disproportional under this test⁸⁸.

Furthermore, *Stricto sensu* test is the most important test⁸⁹. This test implies the proportionality in the narrower sense⁹⁰. It refers to the relation between the benefits that are obtained by the measure and the harm that is caused by the measure. The ratio between the benefits and the harm is an important determinant of proportionality. Alexy classifies this rule as "*The Law of Balancing*". This law states: "*The greater the degree of non-satisfaction of, or detriment to, one principle, the greater must be the importance of satisfying the other.*"⁹¹ According to the mechanism of this law, one must consider the benefits of the measure in strict comparison with the benefits of an alternative measure.

The European Union itself has discussed the elements of the proportionality principle in its working document (COM (2015) 111). This document regards the proportionality test in a sense of a challenge to the community measure, however, certain aspects can also be applied by national legislators and judiciaries with regards to the national measures. In this document, the European Commission, alongside the necessity test, indicates also the issues of simplicity and cost effectiveness⁹². The measure should be as simple as possible and at the same time cost effective. Moreover, the EC clarifies that small businesses should be

⁸⁶ Robert Alexy, 'Constitutional rights and proportionality' [2014] JCTPL 22 (iv.), 53.

⁸⁷ Ibid.

⁸⁸ Ibid, 54.

⁸⁹ Aharon Barak, *Proportionality: Constitutional Rights and their Limitations* (Cambridge Studies in Constitutional Law, Cambridge University Press 2012).

⁹⁰ Robert Alexy, 'Constitutional rights and proportionality' [2014] JCTPL 22 (iv.), 54.

⁹¹ Ibid, 54.

⁹² European Commission, 'Commission staff working document: Better Regulation Guidelines' [2015] COM (2015) 111, 29.

considered first when designing a measure⁹³. It is also important to reassess the measure, taking into account the reduction in compliance costs for small and medium enterprises and any other impact that the measure may have⁹⁴.

3.2 Proportionality principle and the case law

The case of **Solgar Vitamin's France and Others** has indicated that the principle of proportionality has its fixed place in the European legal system⁹⁵. The court has highlighted that the measure must be proportional to the objective it wants to achieve. Moreover, the court established who possesses the burden of proof in similar circumstances. When the measure of a Member State is challenged, the burden of proof lies on the Member State, to prove otherwise. Moreover, the court has established that the assessment should be carried out by the national courts and it should be concluded on case-by-case basis⁹⁶.

3.3 Principle of proportionality with regards to VAT

According to Jans, when the EU law implies only a minimum standard, Member States have the power to adopt more stringent measures⁹⁷. This can cause difficulties with regards to the proportionality of the measure.

The case law of the European Court of Justice (ECJ) on the principle of proportionality in VAT arena consists mostly of preliminary rulings. Definition of a preliminary ruling is to be found in the Treaty on the Functioning of the EU in the Article 267. This article stipulates that the ECJ may grant a preliminary ruling in situations when the interpretation of the treaty is needed and when the interpretation of the acts of the EU is necessary⁹⁸. This is indeed the case with the general principles of the EU law such as the principle of proportionality. However, regular judgements also form a (minor) part of the case law knowledge.

One of the most important preliminary rulings in the field of proportionality of a VAT measure is the Case C-188/09 (**Profaktor**). This Polish case referred to the issue of a breach of obligation to use a cash register and the subsequent refusal of the right to deduct.⁹⁹The Polish court has decided that the obligation at hand was not met (namely to record its turnover by the means of a cash register) and the refusal of the right to deduct was lawful. The ECJ has made a reference to a proportionality principle by claiming that *“the measures which the Member States may thus adopt must not go further than is necessary to attain the*

⁹³ Ibid, 31.

⁹⁴ Ibid, 32.

⁹⁵ Case C-446/08 Solgar Vitamin's France and Others [2010] ECR I-03973.

⁹⁶ Ibid, para 73.

⁹⁷ Jan Jans, 'Proportionality Revisited' [2000] LIEI 2000/3, 253.

⁹⁸ Consolidated version of the Treaty on the Functioning of the European Union [2008] 2008/C 115/01, Art 267.

⁹⁹ Case C-188/09 Profaktor Kulesza, Frankowski, Józwiak, Orłowski [2010] ECR I-07639.

*objectives of ensuring the correct levying and collection of the tax and the prevention of tax evasion. Such measures may not therefore be used in such a way that they would have the effect of undermining the neutrality of VAT, which is a fundamental principle of the common system of VAT”.*¹⁰⁰ It can therefore be observed, from the reasoning of the court that the measures at hand need to attain the objective of the prevention of tax evasion and at the same time should not affect the neutrality of VAT. Therefore, the court is highlighting the fact that the balance is an integral part of the European VAT system and the measures in effect, guided by Member States, should respect this balance. In its judgement, the court specifically mentioned the principle of proportionality¹⁰¹.

Another preliminary ruling which concerns the principle of proportionality is the Bulgarian case of **Maya Marinova**. In this case, the questions asked to the ECJ were concerning a specific matter of absence of the goods in the warehouse, which are presumed to be sold to the third parties, in case when no sale of those goods has been recorded.¹⁰² The ECJ has proclaimed this measure to be proportional (and again mentioned the reasoning that the measure should not go further than necessary to prevent tax evasion).¹⁰³

The court often highlights that measures that are supposed to protect states from tax evasion and tax avoidance should not go beyond what is strictly necessary for achieving the objective¹⁰⁴. The judgement in **Ampafrance Sanofi** again refers to the principle of proportionality with regards to the exclusion of the right to deduct VAT in case of a VAT fraud. The court has stressed that the measure, even when it is directed on prevention of tax evasion, cannot derogate from the VAT directive, unless it is strictly necessary to reach the objective.¹⁰⁵ The court has similar stance in case of **Molenheide**. In this case, concerning the measures related to the right of deduction, it was explicitly mentioned that the goals and objectives to be attained shall not only be in favor of the Member State, but shall also not undermine the principles of the EU legislation.¹⁰⁶

The court is specifically referring to the proportionality of penalties in the case of **Rēdlihs**.¹⁰⁷ In order to determine whether the penalty is proportional, the court claims that *“the nature and the degree of seriousness of the infringement which that penalty seeks to sanction must, inter alia, be taken into account, as must also the means of establishing the amount of that penalty.”*¹⁰⁸ Therefore, it can be seen that when

¹⁰⁰ Ibid, para 26.

¹⁰¹ Ibid, para 50(1).

¹⁰² Case C-576/15 Maya Marinova [2016].

¹⁰³ Ibid, para 51.

¹⁰⁴ Case C-177/99 Ampafrance and Sanofi [2000] ECR I-07013.

¹⁰⁵ Ibid, para 68.

¹⁰⁶ Case C-286/94 Garage Molenheide and Others v Belgische Staat [1997] ECR I-07281.

¹⁰⁷ Case C-263/11 Rēdlihs [2012].

¹⁰⁸ Ibid, para 47.

assessing for proportionality, especially with regards to the proportionality of tax penalties, not only the seriousness of the infringement matters, but also the amount of the penalty needs to be assessed. Moreover, the court mentions that it is the matter of the national court to determine whether the amount/form of the penalty is proportional¹⁰⁹.

In **Vámos**, the court has stated that *“In that regard, it suffices to state that the recovery of the VAT cannot, in principle, be taken into account in the proportionality assessment of the penalty by the national court. Indeed, the requirement to pay VAT for past sales, which are subject to VAT but for which VAT has not been paid, is not a penalty, but merely the recovery of unpaid taxes.”*¹¹⁰ Therefore, it can be assumed that since the recovery is not a penalty, the penalty in itself is supposed to represent an addition to the recovery. The court has again made a reference to the fact that it is on the national court to assess the proportionality of a penalty¹¹¹. Therefore, even in cases when the “penalty” for unpaid VAT seems excessive, it is merely just a *recovery* of VAT that would otherwise needed to be paid. Penalty is not connected to recovery and can be imposed separately from the recovery procedure.

It is important to note that, stirring from case such as **Schoenimport „Italmoda” Mariano Previti**, the general principles (principle of proportionality, principle of neutrality...etc.) cannot be invoked by a taxpayer in the case of a VAT fraud¹¹². Therefore, the taxpayer participating in a tax fraud cannot make the use of, for example, right of deduction.

In the case of **Senatex**, the ECJ referred to the retroactive effect of the correction of the invoice. The Member States can introduce a measure which is intended to penalize the failure to provide requested details¹¹³. The court has again mentioned this in connection with the general principle of proportionality, which was, however, not mentioned explicitly: *“Finally, it must be stated that the Member States have power to lay down penalties for failure to comply with the formal conditions for the exercise of the right to deduct VAT. In accordance with Article 273 of Directive 2006/112, the Member States can adopt measures to ensure the correct collection of VAT and to prevent evasion, provided that those measures do not go further than is necessary to attain those objectives and do not undermine the neutrality of VAT”*¹¹⁴. It is intriguing to see that the court argues on the principle of proportionality in connection with the neutrality of VAT. It can be therefore helpful to assess proportionality in close relation with the principle of neutrality.

¹⁰⁹ Ibid, para 54.

¹¹⁰ Case C-566/16 Vámos [2017], Opinion of AG Wahl.

¹¹¹ Ibid, para 56.

¹¹² Case C-131/13 Schoenimport "Italmoda" Mariano Previti [2014].

¹¹³ Case C-518/14 Senatex [2016].

¹¹⁴ Ibid, para 41.

3.5 Summary

This chapter provides the definitions of proportionality from the perspective of legal theory and from the perspective of the actual reasoning of the court represented by the case law of the ECJ. There are several differences and similarities not only in the definition of the principle of proportionality, but also with regards to the tests applied. It is apparent that the principle of proportionality, as referred to by the European Court of Justice, serves as a mean to rationalize its decisions rather than a complex and robust test. This reasoning stems from the fact that the court often refers to the principle with the words “*should not go further than necessary*” and omits the other parts of the proportionality test such as the suitability of the measure. In certain cases, the suitability analysis is embedded in the reasoning, however, it is often disconnected from the main proportionality aspect. The court often does not pose a question whether a similar measure can have the same effect with less burden caused to the taxpayer and often does not provide alternatives. Moreover, when the court wants to refer to the principle more specifically, it rather refers to the general area of the EU law, without mentioning the concrete steps of the proportionality test (as can be observed in Molenheide case¹¹⁵).

Therefore, contrary to the views highlighted in the legal literature, the court rather assesses¹¹⁶ the measures of the Member States in detail, rather than the measure as a whole. This is de facto given by the nature of the functioning of the ECJ. Moreover, the ECJ only gives opinion on the specific issue at hand, rather than providing or demonstrating alternative solution. This is another aspect of the operational practice of the European Court of Justice. Occasionally, the court mentions that another measure would have less burden on a taxpayer and that a Member State should consider an alternative. However, the alternative should be created by the administrative bodies of the Member State and the ECJ no longer controls whether the measure has been created. Another difference, which is important to note, is the fact that the case law at hand directly refers to VAT, while the opinions of the legal scholars often cover rather broad range of areas when the principle can be applied.

¹¹⁵ Case C-286/94 Garage Molenheide and Others v Belgische Staat [1997] ECR I-07281.

¹¹⁶ As it was specified in various cases, the decision concerning proportionality is made by the national court, the ECJ is only referred to for preliminary rulings.

Since this thesis has already covered new advancements in the VAT digitalization and proportionality principle in general and in the form of case law of the European Court of Justice available, it is now of great importance to integrate these two areas and to establish a minimum benchmark for the lawmakers and judges. Currently, the framework of proportionality principle is rather vague. It can be only abstractedly assumed how it can be applied on the digitalization projects.

4. Are the VAT digitalization projects proportional?

Chapter three has introduced a general principle of proportionality, stirring from the opinion of scholars and case law available up to date. However, in order to apply this principle in practice, a more tangible framework is necessary. This chapter, a core of this thesis, aims to introduce such a reference point for the evaluation of the VAT digitalization projects. It is not only necessary to introduce such a benchmark, but also to establish minimum standard/best practices that should be met by every VAT digitalization project.

Since the ECJ and the national courts often do not assess the measure as a whole, this chapter will focus on identifying the areas of the VAT digitalization projects which may be deemed problematic. This disintegration can determine the basis for the proportionality evaluation. The projects often meet their aim and from a distant look could be defended by the legislators as being proportional. However, following a closer look, it can be occasionally observed that a certain design issue is immensely disproportional. In this chapter, these areas will be identified, and it will be further specified what minimum standard in this area has to be met, in order to pass the proportionality test.

Following from the case law, a certain pattern can be observed. It has been already discussed that the ECJ mainly decides in cases when the rights of taxpayers have been affected. Moreover, its decisions often concern the design of the right of the deduction of input VAT. Significant difference between the legal theory and the case law is the fact that while legal theory allows for assessment of a measure as a whole, it is apparent from the case law that the ECJ mainly evaluates parts of the measures/issues which are deemed problematic by the taxpayers or issues which are directly referred for a preliminary ruling. Therefore, we can doubt whether it is ever necessary for the ECJ to evaluate a whole VAT reporting system of a Member State. The European Court of Justice has respect to the national values and it cannot be expected that it will trigger action towards a robust system of VAT reporting system of a certain Member State. This action would be unprecedented in the field of the EU law.

Moreover, the fight against VAT evasion (which is the main driver of the digitalization projects) is supported by the European Commission itself. In its eighth report on VAT collection and control procedures to other bodies of EU from 18.12.2017, it encourages the Member States to exchange data gained by big data analytics¹¹⁷. Moreover, the European Commission advocates the changes in VAT reporting on the grounds of legislative changes, increase in the number of taxable persons and the digitalization of the economy. Consecutively, tax authorities are required to be efficient and flexible¹¹⁸. It is only reasonable

¹¹⁷ EEC and Euratom, 'Eighth report under Article 12 of Regulation n° 1553/89 on VAT collection and control procedures' [2017] COM (2017) 780 final, 6.

¹¹⁸ *Ibid*, 4-5.

that data of the taxpayers need to be accessed by the tax administrations in a certain way. Since the VAT digitalization projects target the acquisition of data, it can be hardly assumed that the European Union would attempt to stop these initiatives or openly fight against this way of data acquisition. It can be assumed that these projects stir from the actions of the European Union and the substantial source of inspiration for these projects is again the European Union¹¹⁹.

As the outcome, not the nature of these projects should be evaluated, it is worth to research the design of the measure itself. Following this analysis, we will examine the specific dimensions of the digitalization projects. These dimensions represent the areas, which are affected by the digitalization projects.

To transform the proportionality concept into a tangible evaluative framework, three areas of impact were identified and the minimum threshold to pass the proportionality principle test will be determined, with the use of these criteria. These minimum criteria are mostly referred to as the “best practice approach”. The areas are:

1. Penalties

2. Compliance costs (excluding penalties)

3. Data privacy

Penalties are one of the most discussed elements in the case law regarding the proportionality principle. Disproportional penalties are often challenged by taxpayers. In France, the law for the real-time VAT reporting, which required electronic reporting for all sales, has been declared unconstitutional because the penalty for non-compliance was decided to be disproportional¹²⁰.

The debate on the compliance costs delves into the most fundamental principle of the EU VAT law, the principle of neutrality. Every digitalization initiative (project) introduces the cost of a basic software/hardware and the training of staff to be able to operate it. It is, however, important to keep in mind that in the long term, the overall costs of reporting of a business will decline.

Businesses are/will be required to submit detailed information on their day-to-day processes, which naturally comes with the risk of revealing sensitive knowledge. Tax authorities need to ensure that not only their control processes are properly executed, but also the aura of trust shall be preserved. With the

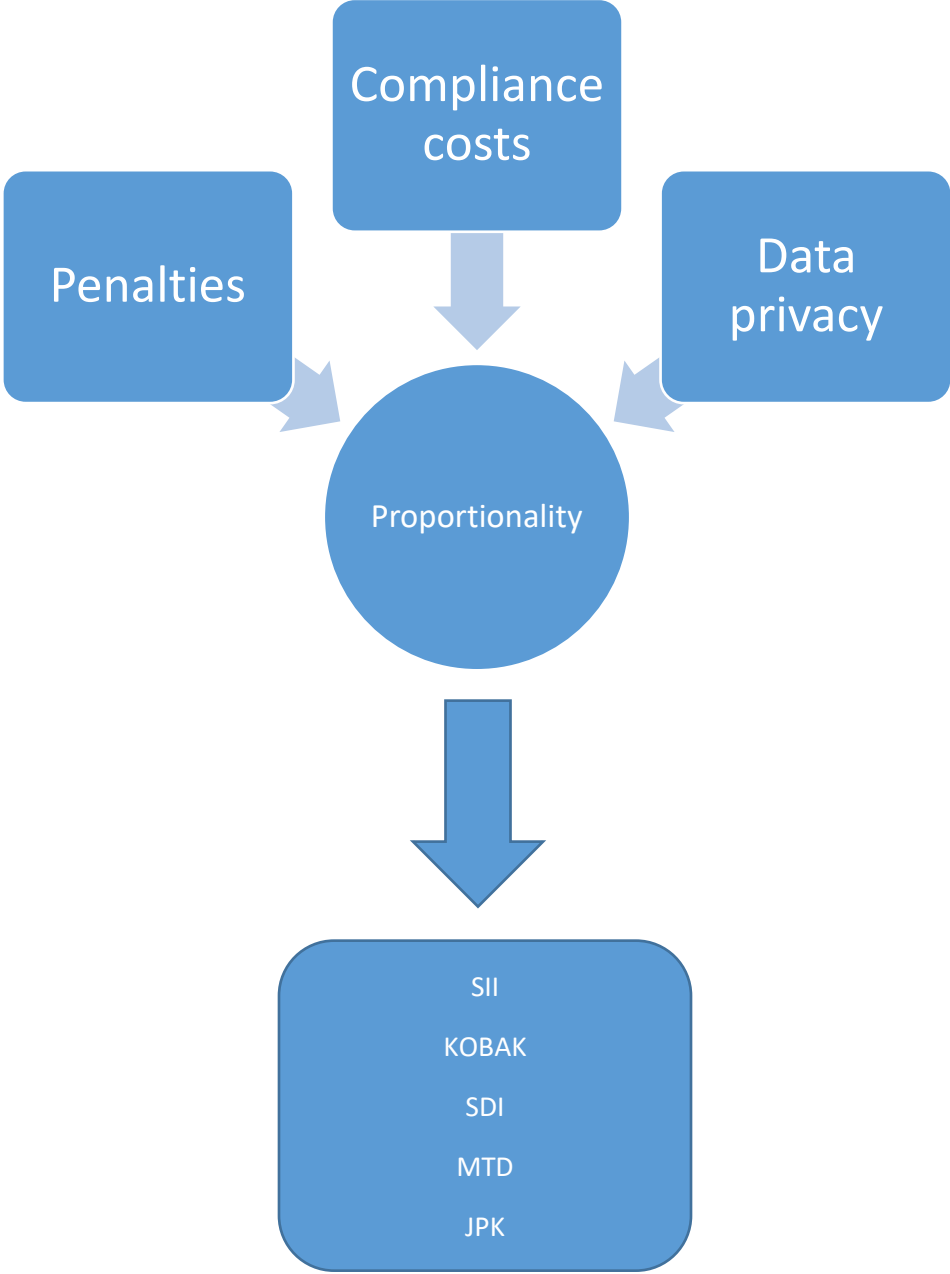
¹¹⁹ Ibid, 6.

¹²⁰ Deloitte Academy Seminar, ‘From e-Audit files upon demand to real-time reporting. Are you ready for SAF-T?’ [2017] <

<https://www2.deloitte.com/content/dam/Deloitte/be/Documents/tax/PPT/Deloitte%20Academy%20Seminar%2020170616.pdf>> accessed 5 May 2018.

information asymmetry shift, we are entering a new era. New VAT digitalization projects need to have a robust data protection framework embedded in their design.

Figure 4: Illustration of the tangible elements used to evaluate proportionality of the VAT digitalization projects



Source: created by the author

4.1 Penalties and a minimum standard

Tax penalties can be effectively divided into two types: criminal penalties and administrative penalties. Criminal penalties stem from the unlawful acting of the taxpayer such as tax evasion (or participation in tax evasion) or tax fraud. Generally, in most of the European countries such as the UK, Poland, Austria and Germany, tax authorities can perform the investigation in cases of tax evasion¹²¹. Typical criminal penalties are vastly different from the administrative penalties. These penalties are included in the tax code; however, the procedures belong to the criminal law area¹²².

Administrative penalties are on the contrary imposed by the tax administrators. These penalties are less punitive than criminal penalties and their main aim is to restore the damage made by a mistake or carelessness of a taxpayer¹²³.

Several components of a penalty can be introduced, arising from national law and case law available on the VAT issues. These components are: 1.) recovery of unpaid tax (in itself not part of a penalty¹²⁴) 2.) penalty 3.) interest. It is important to observe that in order for this system to be in line with the principle of proportionality, all the components should be complementary to each other and the unpaid tax amount should serve as the benchmark in determining the other components.

The first component of our proposed minimum standard for proportionality of the penalties should be the recovery of unpaid tax. Recovery according to the ECJ is in itself not a penalty and exists separately from the penalty¹²⁵. This reasoning seems to be rational and legitimate. If a penalty has a punitive nature, it cannot only reverse the damage made on the level of unpaid tax, it also needs to restore the damage made to the tax authorities and/or to punish the behavior of a taxpayer. By recovering the unpaid tax, the wrongful act of the taxpayer is reversed into the beginning state.

The next step is to penalize the taxpayer for the wrongdoing and the damage that may have been caused. Another reason to penalize the taxpayer is the equal treatment. By not paying part of a tax, it can be assumed that this taxpayer gained an advantage in comparison to other taxpayers who paid their fair share of tax. The aim of the penalty is therefore to punish the taxpayer for taking this advantage and to reverse the harm

¹²¹ Roman Seer and Anna Lena Wilms, 'Surcharges and penalties in tax law' (EATLP Congress, Milan, May 2015).

¹²² *Ibid*, 7.

¹²³ This however depends on the Member State and in some countries administrative penalties have the same punitive nature as criminal penalties (See Seer 2016).

¹²⁴ Recovery of unpaid tax is in itself not a penalty; however, it needs to be included in our proportionality standard. This is due to the fact that the amount of unpaid tax is essential in determining the components of a penalty. Moreover, this depicts a complex image of the mechanics of proportionality.

¹²⁵ Case C-566/16 *Vámos* [2017], Opinion of AG Wahl.

which has been done with respect to the other taxpayers. The reason is to preserve the neutrality of VAT¹²⁶. The question is therefore how much the penalty should be, for it to be in line with the principle of proportionality. Suitability test and the necessity test would not be helpful in this instance since every penalty which aims to punish the wrongdoing mentioned above would be acceptable. Necessity test only provides an indication and does not fully delve into the amount of the penalty. Therefore, the cost and benefits test should be used to determine the right amount of the penalty. The cost and benefit approach or balancing approach should be used by a legislator in order to establish the amount of the penalty. This test, combined with the notion of the neutrality principle, should be sufficient to determine the proportional amount of the penalty. Following this line of reasoning, the amount of penalty should not be higher than 100% of the amount of unpaid tax. The aim is to penalize the taxpayer; however, the punishment should not be detrimental for small taxpayers. Moreover, charging the amount higher than the unpaid tax would not be in line with the principle of competition, legal and economic neutrality of VAT¹²⁷.

100% is, however, the maximum level of the penalty. Any percentage below this maximum level would be proportional. Any percentage level above this threshold would increase the probability that the fine is not in line with the principle of proportionality. To determine the percentage amount, it is needed to recognize the seriousness of the wrongdoing. In the United Kingdom, four types of seriousness of the mistake are recognized in the penalty system in the area of VAT: mistake while taking reasonable care, error due to not taking reasonable care, deliberate mistake which has not been concealed and a deliberate error which was concealed¹²⁸. The percentage of the penalty are increasing with each type of the error, marking the seriousness of it.

The last step is to include the interest. The interest component in itself should not be a penalty. It should only represent the time value of money. Seer defines the interest component as having a “*purpose of absorbing liquidity benefits and therefore secure the real value of tax claims or refunds across different time periods (compensation function) and aim at securing timely payment of taxes or refunds*”¹²⁹. Using interest is a common practice in tax penalty systems in Europe. Moreover, to maintain interest as a neutral

¹²⁶ According to the lecture of Prof. Dr. Gert-Jan van Norden from 06. September 2017 named “Indirect Tax in Cross-Border Situations: Basic underlying principles & instruments of EU legislation”, the principle of neutrality can be divided into several types. Competition neutrality represents the fact that VAT should not distort competition, while the economic neutrality means that VAT cannot harm economic interest. Moreover, legal neutrality suggests that the tax should be proportional to the price.

¹²⁷ It is probable that the taxpayer would transfer the amount of penalty onto the final consumer which would affect the principle of economic neutrality.

¹²⁸ Rita de la Feria and Parintira Tanawong, ‘Surcharges and penalties in UK tax law’ [2015] 13.

¹²⁹ Roman Seer and Anna Lena Wilms, ‘Surcharges and penalties in tax law’ (2015 EATLP Congress, Milan, May 2015).

component of the system, it should be either fixed or determined at a market rate at the time, when the tax obligation has arisen.

Therefore, the proportional penalty system for a typical VAT digitalization project should resemble the following equation:

$$\textit{Proportional penalty} = (\textit{recovery of unpaid tax} + \textit{interest}) + \textit{penalty (surcharge) determined at a maximum of 100\% of the unpaid tax}$$

This suggested proportionality equation considers the decision of the ECJ in case *Vámos*, which provides strong indication of the fact that the recovery of unpaid tax is not a penalty¹³⁰. Therefore, the penalty must form an addition to the recovery. The second part of the equation reflects the court's decision in the case of *Rēdlihs*. The ECJ has ruled that the penalty should consider the seriousness of the offence¹³¹. It can be assumed from the court's decision that the penalty proportionally penalizes the wrongdoing and not affected the business as such, especially in the cases of negligence.

The current design of the VAT digitalization projects resembles the system above, however, there are seldom design flaws. In order to illustrate a design flaw, we will introduce the example of Spanish penalties in the SII system. Penalties for late submission include a fine worth 0.5% of the invoice amount with the minimum of 300 euros and a maximum of 6000 euros. 0.5% on the first instance does not resemble an extreme measure. However, following a closer look, the minimum and maximum levels can cause a fine to be disproportional. For instance, if an invoice amounts to 50 euros, according to the percentage system, the penalty would be 25 cents. However, since the minimum of the penalty is 300 euros, taxpayer needs to pay this amount and not the amount of 25 cents (0.25 euros). This penalty system is therefore not entirely proportional. With a system developed in the equation, the amount of penalty would be proportional to the amount of the unpaid tax.

One could argue that the system of penalties for SII has its grounds in the administrative simplification and the costs of the administration process for the tax administration. However, the same effect could be achieved with the introduction of the proportional penalty. When evaluating the Spanish system for the

¹³⁰ Case C-566/16 *Vámos* [2017], Opinion of AG Wahl.

¹³¹ Case C-263/11 *Rēdlihs* [2012].

issue of proportionality, the necessity test would most probably not be met, since a less harmful alternative exists¹³².

4.2 Compliance costs and a minimum standard

According to the OECD, compliance costs consist of several components. It recognizes the implementation costs, direct labor costs (such as wage costs and non-wage costs), overhead costs, equipment costs, material costs and external service costs¹³³. The OECD also recognizes enforcement costs as part of the compliance costs, however this was already covered under the penalties in the previous section. For the taxable persons, with regards to the new VAT digitalization projects, implementation costs, costs of equipment and labor costs will be the most burdensome. Moreover, it is expected that the consulting services will be used by the taxable persons, which will as a result have an impact on the external service costs. In the UK, the HMRC has issued an impact assessment where it identifies the following areas of compliance costs with regards to the transition under the MTD project: 1.) training costs 2.) hardware costs 3.) agent/accountancy costs 4.) software costs¹³⁴. The OECD in its guidance note mentions the balance test, which closely resembles the proportionality test (*stricto sensu* subtest). According to this test, the costs of the businesses impacted by the legislation should be in balance with the costs of the tax administration¹³⁵.

It is often the case that voluntary compliance is introduced alongside the measure. This is observable for example in case of the SII system in Spain. Taxable persons who do not fall into the scope of the measure can voluntarily participate. It is believed that the voluntary compliance has beneficial effects for the costs of the tax administration¹³⁶. Increased trust in tax authorities results in enhanced voluntary compliance¹³⁷.

The case of *Solgar Vitamin's France and Others* establishes the burden of proof which, in similar situations, lies on the Member State¹³⁸. This reasoning can already indicate the fact that the court aims to relieve taxpayers from excessive compliance costs. Moreover, in general, the following proportionality standard takes into account the reasoning of the court in cases *Profaktor*¹³⁹ and *Maya Marinova*¹⁴⁰, when the criteria for the proportionality test are not mentioned in detail.

¹³² To be more concrete, *proportional* alternative (e.g. the minimum standard proportional penalty proposed in this thesis).

¹³³ OECD, 'OECD Regulatory Compliance Cost Assessment Guidance' [2014] 11.

¹³⁴ HMRC, 'Making Tax Digital for Business (MTDfB): Updated Impact Assessment' [2016] 7.

¹³⁵ OECD, 'Guidance on Tax Compliance for Business and Accounting Software' [2005] 8.

¹³⁶ *Ibid*, 8.

¹³⁷ Erich Kirchler, Erik Hoelzl and Ingrid Wahl, 'Enforced versus voluntary tax compliance: The "slippery slope" framework' [2008] JEP 29(2), 213.

¹³⁸ Case C-446/08 *Solgar Vitamin's France and Others* [2010] ECR I-03973.

¹³⁹ Case C-188/09 *Profaktor Kulesza, Frankowski, Jóźwiak, Orłowski* [2010] ECR I-07639.

¹⁴⁰ Case C-576/15 *Maya Marinova* [2016].

Therefore, the following standard of proportionality of compliance costs has been introduced:

Proportional compliance costs standard

1. *Conduct a detailed impact assessment including the calculation of compliance costs divided into costs types and the types of taxpayers*
2. *Evaluate whether the measure is necessary for small businesses*
3. *If the measure is necessary for the small businesses evaluate whether it is possible to decrease these compliance costs for them*

Impact assessment is an important step in ensuring that the measure is proportional. It demonstrates the fact that the suitability test has been met and that the measure is viable in targeting its aim. Moreover, in a traditional *ex ante* impact assessment¹⁴¹, various alternatives are presented, which gives the ground to the application of the necessity test (comparison between several viable alternatives). The amounts of the expected compliance costs should be included in the assessment alongside the detailed calculation by the type of the taxable person.

It is often the case that the measure designed is only for taxable persons above a certain turnover. The SII in Spain is the most extreme example of the threshold level (only businesses with an annual turnover of more than six million euros are required to report). Certain other countries have also introduced thresholds, but these thresholds are lower than in the case of Spain¹⁴². On the contrary, Poland requires all taxable persons to report digitally. The typical “threshold design” assures that the compliance costs will not be burdensome for the small businesses.

This reasoning is rational, because compliance costs can be extremely burdensome for small taxable persons and can cause that the taxable person will cease to exist. However, in the research of Slemrod and Blumenthal we find the evidence that the larger the business, the larger compliance costs it has. On the contrary, the research of Eichfelder and Vaillancourt found that large firms have smaller compliance burden compared to small firms due to the fact that the large businesses benefit from economies of scale¹⁴³. Their

¹⁴¹ Ex ante impact assessment refer to the analysis conducted prior to the introduction of the measure.

¹⁴² The UK has introduced a threshold of 85 000 pounds, while Hungary has introduced thresholds by the invoice amount, which needs to be more than approximately 318 euros.

¹⁴³ Sebastian Eichfelder, François Vaillancourt, ‘Tax compliance costs: A review of cost burdens and cost structures’ [2014] 27.

research suggests that the burden for small taxpayers can often exceed the amount of tax due¹⁴⁴. In addition, the research suggests that these costs are ultimately borne by final consumers.

Nevertheless, it is often the small businesses who participate in tax evasion. Companies that quickly disappear, after the Missing Trader fraud is committed, often only exist for a limited period of time and usually have a narrow economic activity. If the small taxable persons are excluded from the measure, it may be the case that the VAT digitalization project will lose its relevance¹⁴⁵. Moreover, when treating all taxable persons equally, the principle of equal treatment is preserved.

To conclude, exclusion of small businesses only to easily maintain the compliance costs proportional is not the right way to proceed with the introduction of VAT reporting digitalization.

Therefore, if it is necessary to include small businesses in the scope of the measure, the compliance costs should be limited for them since the resources for this type of business are restricted. In the UK, as a part of the Making Tax Digital project, small taxpayers will receive free software¹⁴⁶. Moreover, additional consultancy should be offered. The governments should also make sure that the new measure is simple and effective and does not impose extreme burden on taxpayer¹⁴⁷. Communication of the requirements should be an essential tool when introducing a new measure. According to the survey on Making Tax Digital project, seven in ten respondents were not aware that the use of a software will be required¹⁴⁸. In this survey, the majority of the respondents has claimed that the financial advice is not the most important type of support¹⁴⁹. On the contrary, the most important type of support is the guidance on how to prepare for the new requirements¹⁵⁰.

4.3 Data privacy and minimum standard

In 2017, the Dutch Tax Authority has admitted that a major data leak has occurred. Confidential data of two million companies were not sufficiently protected for a long period¹⁵¹. Incidents such as this should never happen, especially not in the future, when the tax authorities will have access to an immense amount

¹⁴⁴ Ibid, 28.

¹⁴⁵ VAT digitalization projects are often introduced and supported because of the idea that they can reduce VAT fraud and tax evasion by using big data analysis.

¹⁴⁶ HMRC, 'Making Tax Digital for Business (MTDfB): Updated Impact Assessment' [2016] 6.

¹⁴⁷ Simplicity of the measure can serve as a way of positively influencing proportionality.

¹⁴⁸ HMRC, 'Making Tax Digital for Business: Survey of small businesses and landlords Research report for HMRC' [2017] 7.

¹⁴⁹ 40% claimed guidance on the new requirements is the most important support, while only 14% of customers responded that financial advice is the most desired type of support.

¹⁵⁰ Ibid, 42.

¹⁵¹ NL Times, 'Tax Authority data mismanagement: Details of thousands of Dutch leaked' (October 19 2017) <<https://nltimes.nl/2017/10/19/tax-authority-data-mismanagement-details-thousands-dutch-leaked>> accessed 13 April 2018.

of business records, gathered after the implementation of VAT digitalization projects. Leak of such closely held information can lead to a cessation of the business¹⁵². Therefore, it is disputed how should the ideal protection of these information look like and what should be the minimal standard. Digitalization projects, which does not meet the minimum standard, should be not declared proportional, since the measure in that case can endanger the business environment in the whole country. Currently, the national law of every country gives the minimum standard. Every country mentioned in chapter two has a national law protecting the privacy of tax information. Moreover, to enforce these laws, the effective penalty system must be in place.

Tax information should be protected on all levels. Not only on the level of the physical records¹⁵³, but also on the level of employees of the tax authority and the access to the buildings where this information is handled¹⁵⁴. Staff should be properly trained and should regularly undergo background checks. Moreover, the employees should be held accountable in case when a breach occurs.

Currently, accountability aspect is receiving a lot of attention in connection with the new digitalization projects. The role of a data protection officer is increasing tremendously¹⁵⁵.

Another aspect, which is required to be included in the minimum standard, is the restriction of access to tax information. According to the report of Baker and Pistone, only the tax officials who are authorized may inspect the information of the taxpayer¹⁵⁶. This measure is complementary to the accountability principle, since it is simplifying the identification of a person who may have been responsible for the breach in a situation when such a breach occurs. Another aspect of the control of access is the encryption of the data or only allowing access with a specific access key (for example password or another access validator).

¹⁵² In case when a competitor obtains this information.

¹⁵³ and the digital records.

¹⁵⁴ OECD, 'Keeping it safe: Joint OECD/Global Forum Guide on the Protection of Confidentiality of Information Exchanged for Tax Purposes' [2012] 23.

¹⁵⁵ Ibid.

¹⁵⁶ Philip Baker and Pasquale Pistone, 'The practical protection of taxpayers' fundamental rights' [2015] IFA Cahiers, 29.

Hence, the minimum standard for the proportionality of the data privacy provision of the VAT digitalization projects should be as follow¹⁵⁷:

1. *National law on privacy of tax information should exist (applicable to VAT information)*
2. *Effective enforcement system including the identification of the accountability in cases of breach should be in place*
3. *Access to the information should be allowed only for authorized persons*

Data privacy cannot be undermined and deserves a separate minimum standard with regards to proportionality. Even in cases of prevention of tax evasion, the measure is expected to be proportional¹⁵⁸, which also implies that data privacy shall be considered in similar circumstances. However, it is important that proportionality principle cannot be invoked in cases when tax fraud has been committed¹⁵⁹. This reasoning implies that in the case of a VAT fraud, the abovementioned standard shall not apply. Nevertheless, EU legislation still applies¹⁶⁰.

This minimum standard should be also applicable in situations, when joint audits are executed and when information are being exchanged. During the data manipulation period, the risk of the leaks is increasing. Concerning the exchange of information, accountability should be always a priority for the countries involved. Clear division of responsibilities is essential.

However, the abovementioned should represent only a bare minimum standard. To effectively protect taxpayers in the new digital age, more measures are needed, with respect to the effective control of tax privacy. The best practice framework for tax data privacy should include detailed guidelines at each stage of data manipulation¹⁶¹ and multi-level passwords to access the records by both taxpayers and by the tax authorities. This would prevent impersonation (on the level of taxpayer) and would establish the responsible person at the tax authority who would be able to access the records using the unique.

Anonymization of the records (with the ability to link it with the appropriate taxpayer at a later stage) are also a very viable option and arise with the advance of blockchain-type solutions. This example of anonymization would prevent data leaks; however, it requires complex technological solution, which can be costly for the governments¹⁶². Another best practice is the appointment of data protection officers for

¹⁵⁷ Baker and Pistone further mention that minimum standard of electronic communication should include preventive measures to avoid impersonation.

¹⁵⁸ Case C-177/99 Ampafrance and Sanofi [2000] ECR I-07013.

¹⁵⁹ Case C-131/13 Schoenimport "Italmoda" Mariano Previti [2014].

¹⁶⁰ Case C-286/94 Garage Molenheide and Others v Belgische Staat [1997] ECR I-07281.

¹⁶¹ collection, storage, use, transfer and retention of data.

¹⁶² Mostly in terms of employee costs, regarding the proper training.

every tax office, who would oversee the flow of information and would be the first contact point in the case of a breach. Moreover, the accountability would be concentrated in the person of data protection officer¹⁶³.

It is important that taxpayers are always informed in cases, when there is a significant manipulation with their data. This is for example in cases of joint audits or in cases when the breach occurs.

4.4 Summary

Table 3 Summary of minimum standards for proportionality

Aspect of a digitalization project	Minimum standard of proportionality
Penalties	<p><i>(recovery of unpaid tax + interest) + penalty (surcharge) determined at a maximum of 100% of the unpaid tax</i></p>
Compliance costs	<ol style="list-style-type: none"> 1. <i>Conduct a detailed impact assessment including the calculation of compliance costs divided into costs types and the types of taxpayers</i> 2. <i>Evaluate whether the measure is necessary for small businesses</i> 3. <i>If the measure is necessary for the small businesses evaluate whether it is possible to decrease these compliance costs for them</i>
Data privacy	<ol style="list-style-type: none"> 1. <i>National law on privacy of tax information should exist (applicable to VAT information)</i> 2. <i>Effective enforcement system including the identification of the accountability in cases of breach should be in place</i> 3. <i>Access to the information should be allowed only for authorized persons</i>

¹⁶³ Philip Baker and Pasquale Pistone, 'The practical protection of taxpayers' fundamental rights' [2015] IFA Cahiers.

5. Conclusion

The definitive aim of this thesis was to outline the use of big data analytics in VAT reporting and to solve the question of whether a certain minimum standard can be established, for VAT digitalization projects to be in line with the principle of proportionality. In the second chapter, the relevance of big data and the leverage of technology for tax administration were discussed. It is truly essential to understand that the new challenges and opportunities appear with the rise of digitalization in the tax sector. Moreover, it is necessary to understand what these challenges and opportunities are, in order to recognize the potential of these initiatives. Moreover, data gathered by tax authorities are often exchanged across the border of countries, which implies additional complexity. Furthermore, the current and future projects regarding the digitalization of VAT reporting were discussed. A sample, representing the most innovative projects was selected and used to demonstrate the use of big data in tax administration in practice.

In the third chapter, the principle of proportionality, regarding the second part of the research question, was introduced. The principle was presented using the views of prominent scholars. Suitability, necessity and *stricto sensu* tests were recognized as the most important determinants of whether the measure is in line with the principle of proportionality. Additionally, to introduce a practical aspect, this principle was identified in case law from VAT sphere and the landmark cases were introduced to the reader. We can observe a difference with regards to the case law of the European Court of Justice on this matter and the opinions of the scholars. Often, the ECJ omits the supplementary parts of the proportionality test and focuses on the balancing act (balancing of costs of the measure versus the benefits of the measure). The European Court of Justice uses the test to rationalize its decisions as it often refers to the proportionality principle to be a general principle of the EU law.

In the last chapter, the question of how to determine whether the digitalization projects are proportional is discussed. It is not practical to evaluate the measure as a whole, however, it is possible to identify areas which can be analyzed, in order to answer the abovementioned question. The three areas identified in this thesis are: penalties, compliance costs (excluding penalties) and data privacy. Studying the design of these areas in a specified project can provide indication of whether the project is proportional, or (in case of disproportionality) what can be changed. To aid the legislators and judiciaries, minimum standard for each area was proposed. A minimum standard is a benchmark, which indicates what the line between proportionality and disproportionality is. Conforming to the minimum standard would almost immediately establish the proportionality of a VAT digitalization project. In the case of penalties, this minimum standard was determined to be the recovery of unpaid tax, including interest (representing time value of money), plus the actual penalty. The actual penalty should not be higher than the hundred per cent of the amount of the unpaid tax. In the area of compliance costs, the minimum standard is complex (due to the various

components of compliance costs) and step-based. The steps involve conducting a detailed impact assessment, to determine the amount of costs, the evaluation of whether the measure is necessary for small businesses (which often bear excessive compliance costs). In cases when the measure is necessary for the small businesses, it is crucial to explore the possibilities of how to help these businesses to comply with the new rules. Lastly, the area of data privacy was explored. According to our analysis, this field is in need of minimum standard too. The standard proceeds as follows. To begin with, national laws on privacy of tax information should exist (ideally, these laws should entail the provision of the treatment of the new VAT digitalization project). Moreover, effective enforcement system shall be in place to implement the laws (including the accountability provision). Furthermore, the access to tax information should be strictly limited.

One can question the potential advantages of these projects for the taxpayer. It might be the general belief that these initiatives only cause burden for a taxpayer and only benefit the tax administrations. However, this is not a truthful depiction of the situation. These projects are developed not only with the prevalent aim of reducing VAT fraud and evasion, but also to simplify the tax administration for taxable persons and to comply with the digital economy environment. Moreover, these projects will bring concrete benefits for the taxpayers. The increased use of big data gathered from these projects will enable the tax authorities to conduct less burdensome tax audits (due to increased automation). Multinational companies can benefit from joint cross-country audits, instead of having multiple audits at the same time in various countries. Additionally, in the long term, the time and resources needed for tax obligations will be reduced significantly. With the automation of tasks, which is enabled by VAT digitalization projects, use of time and resources spent on compliance obligations decrease significantly.

For tax authorities, these projects simplify the path to a greater goal: reducing the tax fraud and tax evasion, by means of having more supervision over the transactions of taxpayers, often in real time. This, however, brings many challenges¹⁶⁴ that were highlighted in chapter two and which were the underlying inspiration for this thesis. Tax authorities need to tackle not only the internal change processes, but also to ensure that the transition is uncomplicated for the taxpayers. However, these changes are not only inevitable in today's world, but also sustainable in a long term. With right processes at place and with trained employees, who are responsible and proactive, the transformation to become a tax administration of the 21st century can be achieved rather painlessly. Of course, it is also the attitude of the legislators of a Member State, that determines whether they support the digitalization and whether they provide the resources needed.

¹⁶⁴ Such as information overload, increased complexity and lack of adequately trained staff.

SAF-T and the other similar projects mentioned in this thesis can signal the end of a typical tax return and tax audits in their current form. Automation of tasks is inevitable and crucial in today's world. To fulfill the objectives of the proposal for administrative cooperation in the field of VAT and to sustain in the digital economy characterized by the automation of tasks, it is important for the Member States to pursue and maintain VAT digital reporting projects. These initiatives are desired by both, the European Union and the Member States. Our analysis has indicated that the proportionality test of the projects as a whole is not viable. Instead, in the proportionality evaluation, the focus should lie on the specific aspects of these digitalization initiatives. Moreover, the design of certain projects should be reevaluated due to the particular design flaws, which can be deemed disproportional under the national laws of individual states¹⁶⁵. The problems are concentrated within the lack of data privacy, unfeasible system of penalties and excessive compliance costs.

¹⁶⁵ For instance, the system of penalties in Spain, or micro entrepreneurs in Poland, who are also required to report electronically under SAF-T.

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