

## LEGAL TAX UNCERTAINTY IN CASE OF SOCIAL SECURITY CONTRIBUTIONS

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### Abstract

In the Czech Republic, social security contributions make a significant part of overall taxation and if we assume that they affect negatively economic growth, as shown by many empirical studies, they seem one of the most problematic parts of labour taxation. It also comes from our previous studies that not only the level of taxation, but also legal tax uncertainty may be seen as problematic when considering possible effects on behaviour of economic agents. Thus, the aim of this paper is to sum up and discuss our results so far in the field of legal tax uncertainty concerning the social security contributions, and to outline possibilities for the future development of our research in sense of its effects on economic growth. We present our indicator of legal tax uncertainty at first and then we present the results and values of the tax uncertainty indicator regarding social security contributions for the Czech Republic in 1993-2016. We show that especially in the periods following economic recovery within the business cycles, the uncertainty is high and is possible to cause distortions in the behaviour of agents.

### Keywords:

Taxation, Uncertainty, Legal Uncertainty, Social Security Contributions

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### I. Introduction

Social security contributions are a very specific form of labour taxation in the Czech Republic. The rates of social and health insurance paid by both employers and employees are relatively high in international comparison, yet the tax mentality of the nation in the Czech Republic is very tolerant of this type of taxation. However, it is evident that changes in these taxes may have a profound impact on labour supply and thus on economic growth.

In our research, we looked at many aspects of taxation and its impact on the economy and the behaviour of economic agents in past. However, in the light of the above, our focus is actually on taxation through social security contributions.

At the same time, our previous research shows that stability is probably more important than the level of taxation in terms of influence on economic behaviour. In other words, frequent changes in the tax burden can lead to distortions in the behaviour of individual economic agents. Frequent changes in the tax burden can then be called nothing but tax uncertainty. Thus, the aim of this paper is to sum up and discuss our results so far in the field of legal tax uncertainty concerning the social security contributions, and to outline possibilities for the future development of our research.

We present our indicator of legal tax uncertainty at first and then we present the results and values of the tax uncertainty indicator regarding social security contributions for the Czech Republic in 1993-2016.

### II. Literature review

First authors to deal directly with this issue of legal uncertainty in general were representatives of the school of Law and Economics in the 1970s (Posner, 1973, Ehrlich and Posner, 1974). In their studies, they looked at various factors that may create legal uncertainty but were

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particularly interested in influencing the effectiveness of law and the legal system. Nevertheless, these and related studies (e.g. Calfee and Craswell, 1984, Damato, 1983 or later Sutton and Dobbin, 1996) laid the foundations for examining the impact of legal uncertainty on the behaviour of economic agents.

Lang's latest work (2017) shows that legal uncertainty can under certain circumstances increase wealth by discouraging activities with low private returns and, on the contrary, encourages activities that bring higher private benefits. However, this view is rather unique. Most other authors agree on the generally accepted conclusions (see e.g. Calfee and Craswell, 1984, or Damato, 1983), who explains how legal uncertainty causes distortions in the behaviour of individual subjects, increasing over time. This position is also shared by other authors from different areas of law, such as Meyer (2016), Afanasyev (2016) or Guenther (2015). There are also studies that investigate the behaviour of individual subjects in a generally uncertain environment (e.g. Bernasconi et al., 2015, or Lawsky, 2013) and in terms of political uncertainty (see Katz and Owen, 2013).

On the other hand, the current literature does not include many articles that directly relate to uncertainty in taxation. The basic literature is already represented by the work of Smith (1776, 1958). According to his tax canons, taxes should be levied with respect to the taxpayer's capabilities, at a minimum cost, and with clear rules that are clear to the taxpayer. They should also be paid at the time or in a way that is most convenient for the taxpayer. It is therefore clear that tax certainty is considered one of the basic principles of taxation. This is also noticed by other authors such as Romano (2002), Morse and Williams (2012), or Brokelind (2014). Interesting paper by Fasora (2009) argues that Smith's concept of the principle of certainty is seen as a requirement for legal excellence and political transparency in the tax system, which is not possible without a significant number of amendments that contradict this position. Failure to meet this requirement opens the door for corruption, lobbying, which can further increase legal uncertainty, distort expectations, increase the administrative costs of taxation and ultimately increase the excessive tax burden.

Considering all the above, it is not surprising that many authors including Eastery et al. (1991), Smith (1996), Edmiston (2001), or El-Shazly (2009) show in their studies that tax uncertainty for different types of taxation affects and changes the behaviour of agents in the legal system, particularly in terms of increased activity in the informal economy, regardless of whether they are individuals or legal entities. Osofsky (2011), who criticizes the deliberate evolution of uncertainty in order to increase tax revenues, also supports these ideas among newer works. He states that such an "artificially" stimulated uncertainty can lead to unpredictable changes in the behaviour of economic agents, in the sense of the rational expectation's theory. Even in this case, however, there are opinions that, on the contrary, claim that the effects of tax uncertainty can be positive, or at least not negative. Such studies include e.g. Niemann (2004, 2011). Interesting is the approach presented, for example, in Lawsky (2013) modelling the taxation process and the consequences of non-payment under uncertainty, but it is a simple model that has no ambition to capture the entire tax system with more sophisticated methods.

Of course, we cannot ignore the fact that there also exist few studies rejecting negative effects of tax uncertainty. If we abstract from the legal explanations, there occurs a possibility that conclusions of such studies may be drawn from methodologically wrongly executed analyses using wrong measure of uncertainty which is mostly based just on volatility of tax revenues. The derivation of the measure based on study of laws is necessary. Such measure may then be used to research the effects on behaviour of agents.

### **III. Tax uncertainty indicator**

As stated within Machová, Kotlán, Skalka (2018), measurement of legal uncertainty may be complicated in many ways. It is possible to use expert surveys to compare significance and frequency of changes of laws in the field of tax law on basis of their relation to similar changes in other fields of financial law or law in general, either within a country or across countries. However, it is necessary to investigate stability of legal system according to the legal force of particular laws. Different demands must be put on laws that make a part of constitutional legal order, different on other laws of higher or lower legal force.

The easiest way of the measurement is to watch the amount of amendments of laws that make a core of substantive tax law, i.e. especially laws that regulate particular types of taxes. It is also possible to watch the amount of amendments of procedural tax laws, or laws in related fields. In more sophisticated form, the analysis may be completed with the analysis of number of changes in particular paragraphs. Regarding the completion of law by courts, it is also useful to watch the consistency and stability, or the existence of the jurisprudence itself. Altogether, this may give at least tentative but still closer overview about stability and predictability of tax law. It is also possible to deal with certain selection of tax laws changes, e.g. to distinguish between essential changes that lead to rectification of a tax branch of law as a whole like recent change in Czech private law, and other changes.

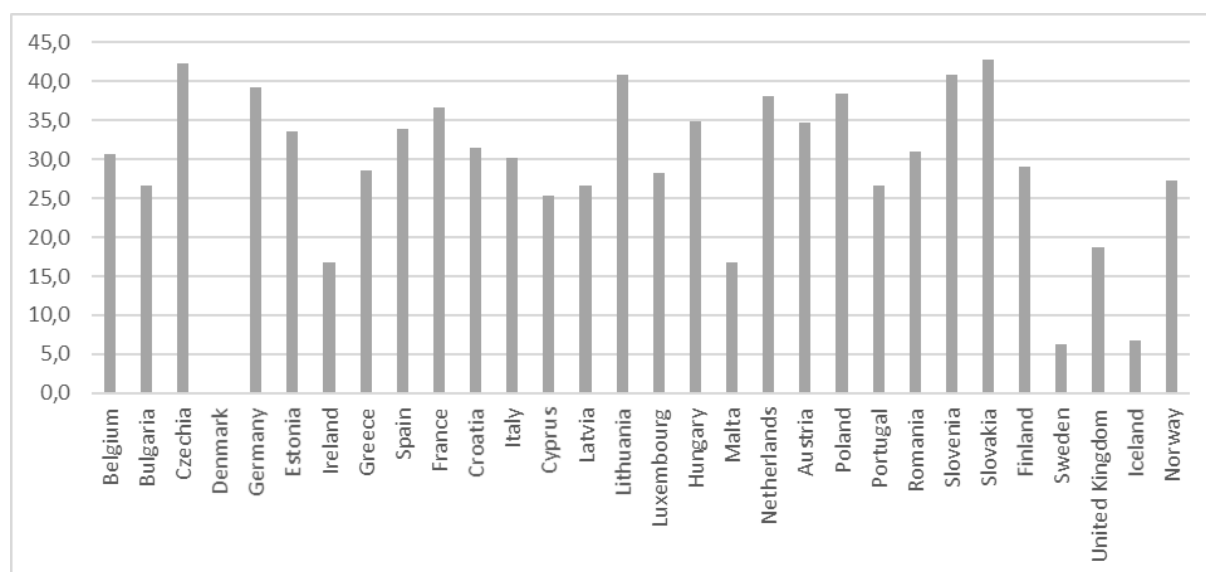
We used more sophisticated approaches to the measurement of tax uncertainty that include both the quantitative as well as qualitative aspect. Our measure includes three key aspects – long-term aspect (systematic), medium-term aspect, and short-term aspect (operational). The systematic aspect is based on expert evaluation and decision if there was a very essential change in tax laws, e.g. similar to the recent recodification of private law, or essential change in related laws. The medium-term aspect covers very important, essential but not crucial changes in tax laws, e.g. those similar to implementation of flat tax rate of individual income tax in 2008, or electronic evidence of revenues in very recent time. The last aspect, operational one, includes analysis of particular substantive or procedural tax or related laws, meaning the number and significance of their amendments.

Every tax change observed within the period 1993-2016 was categorised as general fundamental change, specific fundamental change, or other change (short-term, especially legislatively technical changes). Fundamental change was understood as an amendment that led to the change in law (article, paragraph, etc.) that impacts effective tax rate, i.e. the construction of tax base across particular regulations. This means that it is such change that is typically common e.g. to all laws concerning various types of taxes. For example, it may be a change in statutory tax rate, or the number of allowances and credits, etc. Specific fundamental change is such change, that also affects effective tax rate but is, however, typical just for a certain type of tax.

### **IV. Legal tax uncertainty in case of social security contributions in the Czech Republic**

In the Czech Republic, social security contributions are paid both by the employer as well as the employee, and they include so called social insurance and health insurance. The reason to look at this type of taxation in the Czech Republic is twofold. At first – as already stated within the introduction – this type of taxation in the Czech Republic is relatively very high (within the European Union as well as the whole World). If we easily compare the level of taxation through the social security contributions in the EU countries, we can see that Czech Republic is among the highest values, although the overall taxation is usually considered relatively low. See the Figure 1 below showing the rate of compulsory social security contributions in the EU and related countries in 2018.

**Figure 1 Total actual compulsory social contributions as % of total taxation, EU, 2016**



Source: European Commission (2019)

The second reason why to make a research on social security contributions is their possible significant impact on economic growth and thus the living standard. This – often neglected – part of taxation makes a substantial part of labour taxation and labour costs for employers. See e.g. Macek (2015, 2018). He shows that between economic growth and social security contributions, there exists negative relationship. Despite the social and automatic stabilizer functions of this type of taxation, he claims that in the long-run the social security contributions slow economic growth and welfare of economic agents, and that this fact might be underpinned by the impact of social government spending on economic growth, which is also in long-run negative.

In case of social security contributions uncertainty, the Acts No. 589/1992 Coll., No. 592/1992 Coll., and No. 48/1997 Coll., as amended, were analysed above all.

**Table 1 Number of changes in social insurance, Czech Republic, 1993-2016**

year	social insurance paid by the employee							social insurance paid by the employer						
	general fundamental changes	special fundamental changes	total fundamental changes	other changes (short-term)	weights of other changes	weighted other changes	general fundamental changes	special fundamental changes	total fundamental changes	other changes (short-term)	weights of other changes	weighted other changes		
1993	0	4	4	23	0.18	4	0	3	3	23	0.12	3		
1994	0	1	1	11	0.18	2	0	2	2	11	0.12	1		
1995	1	1	2	23	0.18	4	1	1	2	23	0.12	3		
1996	0	0	0	0	0.18	0	0	0	0	0	0.12	0		
1997	0	1	1	4	0.18	1	0	0	0	4	0.12	0		
1998	0	0	0	0	0.18	0	0	0	0	0	0.12	0		
1999	0	0	0	0	0.18	0	0	0	0	0	0.12	0		
2000	0	2	2	11	0.18	2	0	1	1	11	0.12	1		
2001	0	0	0	1	0.18	0	0	0	0	1	0.12	0		
2002	0	0	0	1	0.18	0	0	0	0	1	0.12	0		
2003	0	1	1	15	0.18	3	0	3	3	15	0.12	2		
2004	0	0	0	5	0.18	1	0	0	0	5	0.12	1		
2005	0	0	0	4	0.18	1	0	0	0	4	0.12	0		

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year	social insurance paid by the employee						social insurance paid by the employer					
	general fundamental changes	special fundamental changes	total fundamental changes	other changes (short-term)	weights of other changes	weighted other changes	general fundamental changes	special fundamental changes	total fundamental changes	other changes (short-term)	weights of other changes	weighted other changes
2006	0	4	4	28	0.18	5	1	4	5	28	0.12	3
2007	1	3	4	14	0.18	3	1	0	1	14	0.12	2
2008	0	1	1	6	0.18	1	0	0	0	6	0.12	1
2009	1	5	6	9	0.18	2	1	2	3	9	0.12	1
2010	0	1	1	8	0.18	1	0	1	1	8	0.12	1
2011	0	6	6	22	0.18	4	0	4	4	22	0.12	3
2012	1	0	1	6	0.18	1	0	0	0	6	0.12	1
2013	0	1	1	4	0.18	1	0	0	0	4	0.12	0
2014	0	1	1	7	0.18	1	0	0	0	7	0.12	1
2015	0	1	1	10	0.18	2	0	0	0	10	0.12	1
2016	0	1	1	1	0.18	0	0	0	0	1	0.12	0

Source: Own computations based on ASPI (2018)

In the Table 1, number of changes in social insurance is shown in the years 1993-2016. In the Table 2, number of changes concerning health insurance in the same period is shown then.

**Table 2 Number of changes in health insurance, Czech Republic, 1993-2016**

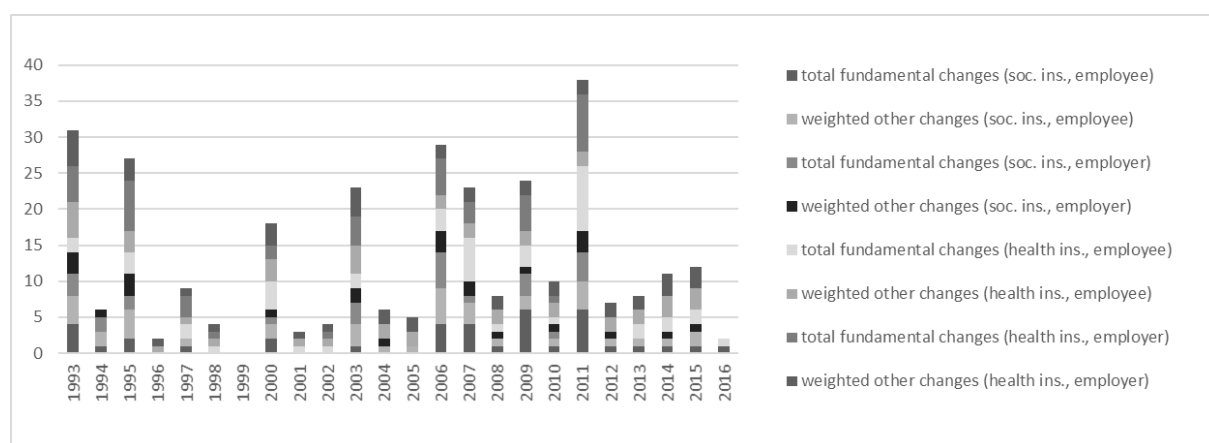
year	health insurance paid by the employee						health insurance paid by the employer					
	general fundamental changes	special fundamental changes	total fundamental changes	other changes (short-term)	weights of other changes	weighted other changes	general fundamental changes	special fundamental changes	total fundamental changes	other changes (short-term)	weights of other changes	weighted other changes
1993	0	2	2	20	0.24	5	1	4	5	20	0.23	5
1994	0	0	0	2	0.24	0	0	0	0	2	0.23	0
1995	0	3	3	11	0.24	3	3	4	7	11	0.23	3
1996	0	0	0	5	0.24	1	0	0	0	5	0.23	1
1997	0	2	2	3	0.24	1	0	3	3	3	0.23	1
1998	0	1	1	3	0.24	1	0	1	1	3	0.23	1
1999	0	0	0	0	0.24	0	0	0	0	0	0.23	0
2000	0	4	4	13	0.24	3	0	2	2	13	0.23	3
2001	0	1	1	4	0.24	1	0	0	0	4	0.23	1
2002	0	1	1	5	0.24	1	0	1	1	5	0.23	1
2003	0	2	2	16	0.24	4	0	4	4	16	0.23	4
2004	0	0	0	10	0.24	2	0	0	0	10	0.23	2
2005	0	0	0	8	0.24	2	0	0	0	8	0.23	2
2006	0	3	3	9	0.24	2	0	5	5	9	0.23	2
2007	0	6	6	8	0.24	2	1	2	3	8	0.23	2
2008	0	1	1	7	0.24	2	0	0	0	7	0.23	2
2009	0	3	3	8	0.24	2	1	4	5	8	0.23	2
2010	0	1	1	8	0.24	2	0	1	1	8	0.23	2
2011	0	9	9	10	0.24	2	0	8	8	10	0.23	2
2012	0	0	0	7	0.24	2	0	0	0	7	0.23	2
2013	0	2	2	10	0.24	2	0	0	0	10	0.23	2
2014	0	2	2	12	0.24	3	0	0	0	12	0.23	3

year	health insurance paid by the employee						health insurance paid by the employer					
	general fundamental changes	special fundamental changes	total fundamental changes	other changes (short-term)	weights of other changes	weighted other changes	general fundamental changes	special fundamental changes	total fundamental changes	other changes (short-term)	weights of other changes	weighted other changes
2015	0	2	2	11	0.24	3	0	0	0	11	0.23	3
2016	0	1	1	2	0.24	0	0	0	0	2	0.23	0

Source: Own computations based on ASPI (2018)

For the sake of clarity, Figure 2 shows the numbers of all changes relating to social security contributions. It is evident that the number of changes is very volatile and, in some years especially in the periods following economic recovery within the cycles, the number of changes is high and can indeed lead to a high degree of uncertainty. Thus, in our future research, we will compute the social security contributions uncertainty index, include it into the DSGE model to show how it influences the behaviour of economic agents, and we will also identify the channel that the uncertainty affects it through at the theoretical level.

Figure 2 Overview of all types of changes in social security contributions, Czech Republic



Source: Own computations based on ASPI (2018)

## V. Conclusion

The aim of this paper was to sum up and discuss our results so far in the field of legal tax uncertainty concerning the social security contributions, and to outline possibilities for the future development of our research in sense of its effects on economic growth. We presented our indicator of legal tax uncertainty at first and then we presented the results and values of the tax uncertainty indicator regarding social security contributions for the Czech Republic in 1993-2016. We showed that especially in the periods following economic recovery within the business cycles, the uncertainty is high and is possible to cause distortions in the behaviour of agents, which may affect economic growth. Thus, in our future research, we will compute the social security contributions uncertainty index, include it into the DSGE model to show how it influences the behaviour of economic agents, and we will also identify the channel that the uncertainty affects it through at the theoretical level.

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