

## Patent Box in Slovakia – success or failure?

Branislav Kováč<sup>1</sup>

<sup>1</sup> VGD SLOVAKIA s.r.o.,  
University of Economics in Bratislava, Faculty of Business Management, Dolnozemska cesta 1,  
Bratislava, 852 35 Slovak Republic

branislav.kovac@vgd.eu

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**Abstract:** The aim of the paper is the analysis whether the introduction of the patent box in Slovakia as from 1/1/2018 was effective or not and if it is a useful tax incentive to support the investment into R&D.

**Keywords:** patent box, software, tax incentive, corporate income tax

**JEL classification:** F21, H25, H73

### 1 Introduction

The patent box has been introduced in Slovakia since 1/1/2018. The aim of this article will be the analysis whether this new tax incentive for those having patents, utility models or inventing software was a success or failure. In order to define whether the introduction of this tax incentive can be deemed to be success we should first look at the website of the Slovak financial administration ([www.financnasprava.sk](http://www.financnasprava.sk)). In line with the Slovak Income Tax Act<sup>1</sup> (further only SITA) one can find there the data on the taxpayers who have made use of the patent box pursuant to Art. 13a and 13b of the respective Act. You can find there following disastrous picture:

**Table 8.** Taxpayers making use of the patent box in line with the §13a SITA in 2020  
(Source: <https://www.financnasprava.sk/sk/elektronicke-sluzby/verejne-sluzby/zoznamy>)

ATLANTIDA- Dom seniorov, n.o.	Chorvátsky Grob	90025	Na pasienku 1/A	SK	602519.09
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<sup>1</sup> Act No. 595/2003 Coll. Income Tax Act as amended

ILYO Taekwondo Zvolen	Zvolen	96001	E. M. Šoltésovej 2139/26	SK	489.01
Myslím - centrum kultúry Nepočujúcich	Bratislava - mestská časť Ružinov	82108	Jelačičova 4	SK	27926.28
O DUŠU - psychologická pomoc a podpora duševného zdravia	Žilina	1001	Nám. gen. M. R. Štefánika 894/13	SK	3145.00
OBEC Veľké Dvorníky	Veľké Dvorníky	92901	190	SK	13.89
Podniková odborová organizácia OZ PBGN SMZ, a.s. Jelšava	Jelšava	4916	Jelšava	SK	1470.81
Poľovnícke zdrúženie KLÍŽSKA NEMÁ	Klížska Nemá	94619		SK	2550.00
Poľovnícky spolok Dedinka Dolný Štál	Dolný Štál	93010	Mostová 33/6	SK	1550.00
RESCO spol. s r.o.	Bratislava - mestská časť Ružinov	82109	Mlynské nivy 5	SK	688828.53
Slovenská komora iných zdravotníckych pracovníkov	Bratislava - mestská časť Ružinov	82658	Drieňová 27	SK	46249.94
Spoločenstvo vlastníkov bytov J. Alexyho 5 Bratislava	Bratislava - mestská časť Dúbravka	84101	J. Alexyho 5	SK	900.00
Sygic a. s.	Bratislava - mestská časť Ružinov	82109	Twin City C, Mlynské Nivy 16	SK	186544.05
Telegrafia, a.s.	Košice - mestská časť Staré Mesto	4001	Lomená 7	SK	508110.91
Tob-Top, s.r.o.	Svidník	8901	Gen. Svobodu 684/12	SK	2414.76
Zdrúženie vlastníkov lesných pozemkov PS Liptovské Revúce	Liptovské Revúce	3474	Liptovské Revúce 116	SK	1.12

If you look closer you will find only 3 or 4 companies which have really made use of the patent box. The remaining entries are errors (for examples NGOs, which have made use of the general exemption from the corporate income tax in line with SITA). If the first form of patent box (the easier one to make use of) has been used only by 3 companies, then this measure is a clear failure. In our contribution we will analyze the reasons for this status quo and will try to make few recommendations to improve the legislation or the implementation of this tax incentive.

It makes very much sense that the Slovak Ministry of Finance had come to the idea to introduce this kind of a tax incentive. If this had not happened the research and development would never be shifted to Slovakia or the outcome of the research and development made in Slovakia would be marketed/sold in other jurisdictions where the patent box had been introduced in past.

However, we should bear in mind, that it is not enough to introduce such a measure without thinking of the pragmatic and practical impact it will have and the way how it is regulated in the law. In case of the Slovak patent box it seems that the intention was brilliant, however the legislative regulation and conditions are too difficult for companies to fulfill. This unpleasant situation is the reason for preparation of this contribution and we hope to provide good points to reshape this tax measure. Before starting with the analysis, let us give you some international and local theoretical background on this issue.

## **2 Theoretical background**

### **2.1 International context**

According to the latest official statistics for research and development (R&D) as indicated in the OECD Main Science and Technology Indicators database which was published recently on 18 March 2021 the data show that prior to the onset of the COVID-19 pandemic, R&D expenditure in the OECD area grew in real terms by 4% in 2019 (OECD MSTI database, 2021). OECD R&D intensity (domestic expenditure on R&D expressed as a percentage of gross domestic product (GDP)) rose from 2.4% in 2018 to nearly 2.5% in 2019. After stagnating between 2013 and 2016, R&D intensity in the OECD area has been steadily rising. In fact, the OECD area has not seen comparable growth over a three-year period since the mid-1980s. The highest growths have been observed in the US, Germany, Israel and Korea with more than 3 % growth. the EU27 area experienced only a more modest increase to 2.1%.

R&D investment is an important source of long-term productivity and economic growth. Below you can find an overview of the effective tax rate on R&D in the OECD countries in the year 2020 (OECD MSTI database, 2021).<sup>2</sup>

**Table 2.** Effective Average Tax Rate for R&D in 2020, Source: [https://stats.oecd.org/Index.aspx?DataSetCode=MSTI\\_PUB](https://stats.oecd.org/Index.aspx?DataSetCode=MSTI_PUB)

Year	2020		
Effective Average Tax Rate for R&D			
Country	(%)		
Australia	22,69	Latvia	18
Austria	14,53	Luxembourg	22,87
Belgium	12,3	Mexico	25,94
Canada	17,88	Netherlands	15,92
Chile	9,45	New Zealand	17,33
Colombia	14,85	Norway	9,41
Czech Republic	6,69	Poland	4,18
Denmark	16,2	Portugal	7,59
Estonia	18	Slovak Republic	-6,47
Finland	18,28	Slovenia	6,59
France	11,59	Spain	8,41
Germany	18,48	Sweden	14,03
Greece	8,47	Switzerland	19,44
Hungary	-1,49	Turkey	15,78
Iceland	3,31	United Kingdom	11,46
Ireland	-3,15	United States	20,12
Israel	21,07		
Italy	15,83		
Japan	19,29		
Korea	24,04		
Lithuania	-2,59		

<sup>2</sup> [https://stats.oecd.org/Index.aspx?DataSetCode=MSTI\\_PUB](https://stats.oecd.org/Index.aspx?DataSetCode=MSTI_PUB)

Slovakia seems to have the most favorable and effective rate to tax R&D. If this were the case, there would be much more companies opting to make use of the patent box. On the other hand there is not only the patent box, but more likely the brilliant points can be achieved in Slovakia due to very entrepreneur-friendly policy when it comes to R&D deduction. The possibilities to deduct cost for R&D are up to 3 times.

The latest analysis of the European Commission called Annual Report for Taxation in Europe for 2021 gives an overview what kind of tax R&D incentive is provided in the EU countries. Surprisingly Slovakia offers all 4 kinds of tax incentives, however with very varying success for each kind of tax R&D benefit. Here is the respective overview:

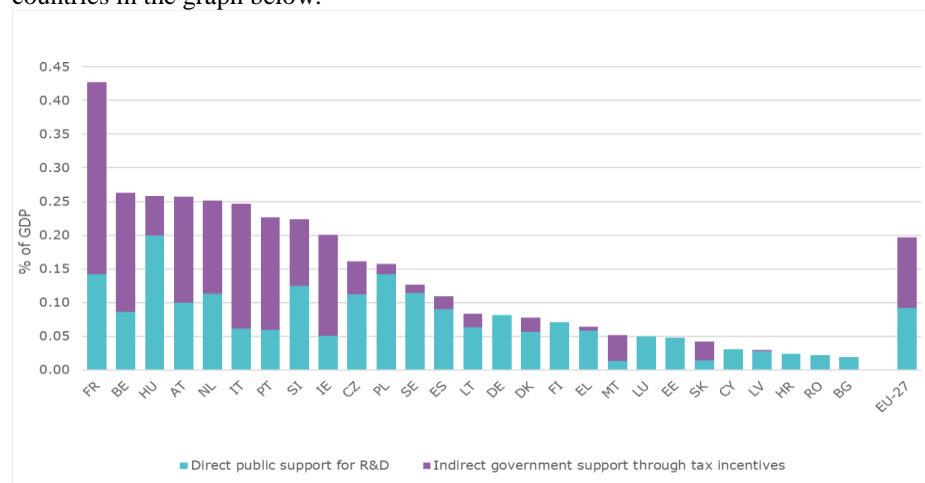
**Table 3.** R&D Tax Incentives by Member state (2019), Source: EC Annual Report on Taxation 2021

Total	Patent box	Tax credits	Enhanced allowance	Accelerated depreciation
EU-27	14	17	14	19
BE	•	•	•	•
BG				•
CZ		•	•	•
DK		•	•	•
DE		•		•
EE				
IE	•	•		•
EL			•	•
ES	•	•		•
FR	•	•		•
HR			•	
IT	•	•	•	•
CY	•			
LV			•	•
LT	•		•	•
LU	•	•		•
HU	•	•	•	•
MT	•	•	•	
NL	•	•		•
AT		•		
PL	•		•	•
PT	•	•		
RO			•	•
SI		•	•	
SK	•	•	•	•
FI				•
SE		•		

Evidence suggests that patent/IP boxes do not necessarily stimulate R&D and can be used as a profit-shifting instrument. Overall, patent/IT boxes seem likely to be an ineffective, inefficient way of supporting R&D (CPB, 2014). This was the conclusion of the abovementioned study financed by the European Commission in 2014. Since

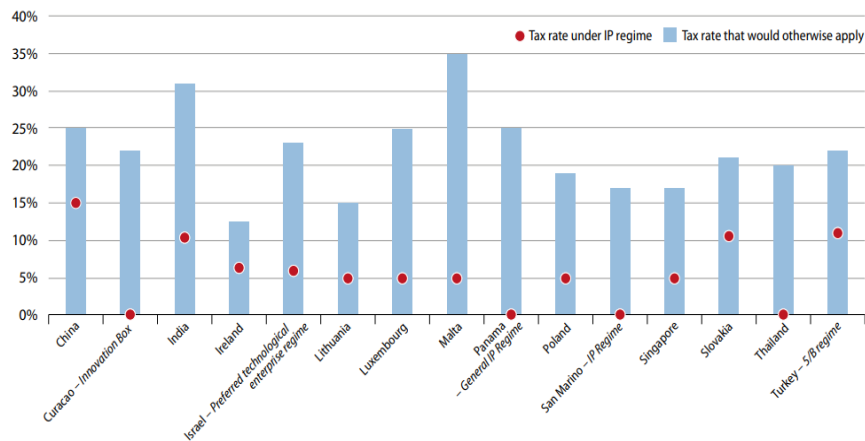
then there have been a lot changes in terms of finetuning the patent box system across Europe. Particularly the issue of own patents (not purchased IP) has been a topic and for the moment a requirement, if a patent box does not want to be deemed as aggressive tax planning (ATP). From the table no. 3 you might recognize that Slovakia has introduced all 4 kinds of tax incentives. While the R&D deduction has become a very solid and effective tax instrument, this is not the case for the patent box.

The R&D state support can be executed in principle in two ways, namely through direct public support and then through tax incentives. In Slovakia the tax incentives are the preferred way by the Slovak government. You can learn the figures for other countries in the graph below.



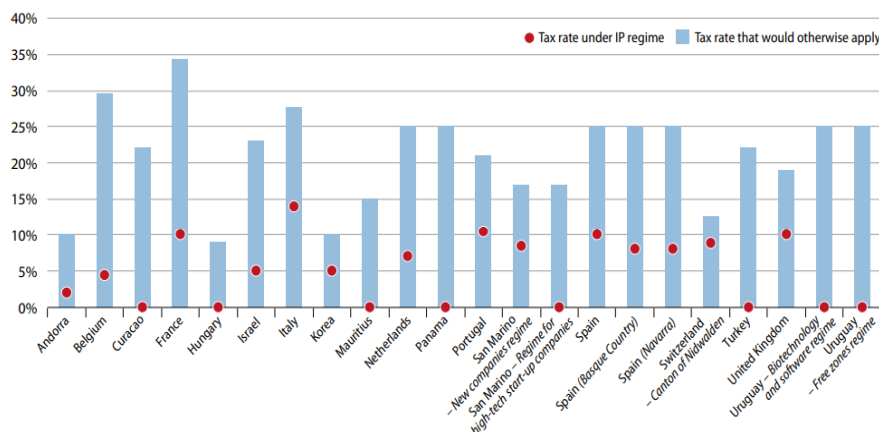
**Fig. 10.** Division of the state aid between direct public support for R&D and indirect government support through tax incentives (Source: EC Annual Report on Taxation 2021)

When analyzing the effectivity of various patent boxes, it is needed to stress, that in several countries, the IP incentive like the patent box have undergone already a long journey. OECD is trying to continuously look at the different preferential IP regimes in different countries and is trying to identify which of them are harmful for the tax competition in the world. The important criterion when any IP regime is deemed to be harmful is in cases, when the IP (patent, software) is not produced/created within the company but is purchased from a third party. OECD has forced countries to amend their legislations accordingly in order to comply. This approach had been recommended by the BEPS 5 Action on harmful tax practices which has introduced the nexus criterion. The OECD Corporate Tax Statistics, Third Edition (2021)<sup>3</sup> summarizes that there were 37 IP regimes under review, out of which 36 were not deemed being harmful, one is considered to be harmful (Jordan). All of them allow the special treatment to patent, 26 offer benefit to copyrighted software and 11 to third allowed category of assets (applicable with SMEs). The tax rates with the special IP regimes varies between 0 % (10 jurisdictions) to 18,75 % in 2020. In the graphs below we present the outcome of the OECD study.



**Fig. 2.** Reduced rates under non-harmful intellectual property regimes, 2020 (Source: OECD Corporate Tax Statistics: Third Edition, 2021)

<sup>3</sup> <https://www.oecd.org/tax/tax-policy/corporate-tax-statistics-third-edition.pdf>



**Fig. 3.** Reduced rates under non-harmful (amended) intellectual property regimes, 2020 (Source: OECD Corporate Tax Statistics: Third Edition, 2021)

## 2.2 Slovak context

After the implementation phase of the ATAD and ATAD 2 a new rule which could be favorable for companies in Slovakia was to follow. Patent box has been chosen as a good example, which is widely accepted within the EU, would not harm the common EU market and is in place in many of other European countries. Moreover it supports the R&D which is the future of a prosperous economy (Balco, 2016). This idea was executed via the art. 13a and art. 13b of the SITA, regulating two types of patent boxes: (1) exemption from corporate income tax in the amount of 50 % of the revenues generated from payments for use of patents, utility forms and software and (2) exemption from corporate income tax in the amount 50 % for sale of products, where during the production process patents or utility models have been used.

The first category is more used among the Slovak companies, as it is easier to fulfill. The exemption is meant only for legal persons with seat in Slovakia or for permanent establishments of foreign companies in Slovakia. There are many conditions to be fulfilled as well as many restrictions which reduce the total amount of the exemption to be applied. First of all the patents and utility forms, that generate revenues have to be registered with the respective authority. Software, which has been developed and is subsequently marketed has to be subject to Act on Authors (Strapec, 2018). The restrictions which apply are above all the condition for the IP to be developed by the company on its own (no subcontractors – if so, the amount of the exemptions is diminished according to a formula). The next restriction is in case, if the company is merged or wound-up without liquidation. If there are more companies developing the same IP together, the exemption will be divided between more companies in relation to their R&D cost. Another condition for the patent box in Slovakia is that the R&D cost have to be activated (capitalized) onto the balance sheet. The exemption can be applied during the period of the amortization of the IP. If the R&D cost are capitalized only in



subsequent periods, there is a special formula which decreases the amount of the possible tax exemption.

The exemption under art. 13b is even more difficult to apply. The exemption which also amounts to 50 % of the revenues related to sale of products where patent or utility form has been used, however, those are not 50 % of the total sale price, but the amount of the exemption is determined via a complicated calculation formula which is based on cost accounting calculation of the price of a product. Due to this very complicated method of determination, this kind of exemption was used only by 1 company in Slovakia in 2019. Moreover there are other restrictions with this second form of patent box. The subcontractors restriction and the pro-rata division of patent box is valid also for this second type of the patent box. In addition the merger restriction and the usage of this exemption in case of an additional capitalization of the IP cost are also in place with this kind of tax incentive.

### **3 Research Design and Methodology**

The object of the research is the patent box as regulated in Slovakia as of 1/1/2018. The methodology is the analysis of the drawbacks and difficulties with the application of the regulation in place.

### **4 Results of the Research**

When analyzing the patent box legislation and trying to conclude why so few of Slovak companies make use of it, it is worth to concentrate on restrictions which were introduced with good faith into the legislation, however, make the life and usage of this IP tax incentive very difficult to happen. First it should be noted that the law regulation is quite vague and there is no jurisprudence up to now. Therefore our first result of the research is the uncertainty when applying the patent box in Slovakia, which could cause additional financial burden for Slovak companies if tax authorities may have adverse opinion during the tax inspection in the future (the statutory period in Slovakia for the tax to be levied by tax authorities/for the possibilities of the tax administration to check the use of patent box is 6 years in Slovakia).

Our second result of the research is the difficult application of the art. 13b (second type of the patent box) which requires a very broad and sound revision, due to its administrative difficulty and zero applicability. In your cost calculation you have to prove what was the saving due to the introduction of a patent or a utility form. In the reality this is almost a show-stopper. Our next observation is that the Slovak patent box model is out-of-date, as we accept only invoicing of license fees, whereas nowadays the model like in-app purchase or software as a service is more than common. One of the main obstacles (as analyzed by us) is the condition of the IP capitalization. In countries where this condition is not present, we can observe a wider use of this tax incentive. One of our next observations is the condition of own R&D or the ban of the subcontractors. We understand that this is an OECD-wide condition in order for the

countries to have the patent box accepted in the tax community as not tax harmful. However, the Slovak version is much more severe, whereas we have to stress that it is very common primarily in the IT industry, that the companies do not employ ordinary employees but have freelancers as subcontractors. Therefore our observation and recommendation at the same time would be to loosen this condition in favor of new forms of work arrangements.

Our next result of the analysis is to define more precisely what it means to purchase any IP from a third party. In particular it should be clear if this relates to any kind of purchases, like for consumption material, auxiliary material, auxiliary services, etc. This could be regulated e.g. with a detailed regulation provided by the Ministry of Finance or by the tax administration. Our main finding, however, is the uncertainty connected to two tax areas, which are (1) additional/amending tax returns in connection with tax box and (2) the issue of so-called modernization/upgrade of software. First point is important for companies, when defining the strategy for the future. Let us take an example. The company had not decided to make use of patent box in the past, however after the introduction of a new management they have decided to change the strategy and have made the choice to go back with the tax returns (through additional/amending tax returns) and decided to exempt taxwise their license revenues from the past. There is no clear guidance at the moment, if this approach would be acceptable by the tax administration and thus without any risk for the Slovak companies. As far as the second issue with the upgrades is concerned, we have analyzed the best practices in the IT sector and it is very common, that software is developed continuously and IT firms have cost for development of upgrades/updates. For the moment it is not clear, if the approach to make use of patent box only in case when previously (with the basic software) no patent box had been applied, however now with the amortization of the cost for the upgrades the company decides to make use of the patent box.

## **5 Discussion and conclusions**

It is apparent from our results of the analysis, that the Slovak patent box rules are ambitious, however very restrictive. Therefore it is very rarely used by Slovak companies. It is sad, because the introduction of a “dead law” is just waste of energy and time for all the participants. To make this tax incentive attractive, we recommend first (1) changes/amendments in the SITA and (2) introduction of specific guidelines prepared by the Ministry of Finance or by the tax administration. The concrete amendments and new regulations have been described in the paper under the Results of our research.

We think that it is a very important for the civil servants from the Ministry of Finance or tax administration to closely monitor the use of tax incentives. Because politicians will do it only very rarely. However, after a precise analysis it is then the role of the

politicians to adopt/support new rules which should motivate people to be much more active in the field of R&D in order to make the economy more digital and more environmentally friendly<sup>4</sup>. This is the best way how to stop the so-called middle class income trap which we can be observing in Slovakia in the recent 10 years (Bařo, 2020)

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## References

1. Annual Report on Taxation 2021, Review of Taxation Policies in the EU Member States, <https://op.europa.eu/sk/publication-detail/-/publication/db46de2a-b785-11eb-8aca-01aa75ed71a1/language-en>, last accessed 2021/08/14
2. Balco, T.: Patentový box – výzva pre Slovensko. Dane a účtovníctvo v praxis (1), 1-7 (2016).
3. Bařo, R.: Ako skapal tatranský tiger (Ekonomické dejiny ponovembrového Slovenska). 1<sup>st</sup> edition. Premedia. Bratislava (2020).
4. A Study on R&D Tax Incentives, Final Report, Study commissioned by the European Commission, CPB (2014), [https://ec.europa.eu/futurium/en/system/files/ged/28-taxud-study\\_on\\_rnd\\_tax\\_incentives\\_-\\_2014.pdf](https://ec.europa.eu/futurium/en/system/files/ged/28-taxud-study_on_rnd_tax_incentives_-_2014.pdf), last accessed 2021/08/14
5. OECD Corporate Tax Statistics: Third Edition 2021, <https://www.oecd.org/tax/tax-policy/corporate-tax-statistics-third-edition.pdf>, last accessed 2021/08/14
6. OECD MSTI database 2021, [https://stats.oecd.org/Index.aspx?DataSetCode=MSTI\\_PUB](https://stats.oecd.org/Index.aspx?DataSetCode=MSTI_PUB), last accessed 2021/08/14
7. Recovery and Resilience Plan for Slovakia 2021, <https://www.planobnovy.sk/kompletny-plan-obnovy>, last accessed 2021/08/14
8. Strapec, T.: Počítačový program (softvér) a uplatnenie výhod patent boxu. <https://www.epravo.sk/top/clanky/pocitacovy-program-softver-a-uplatnenie-vyhod-patent-boxu-4505.html>, last accessed 2021/08/14
9. Webstránka finančnej správy, <https://www.financnasprava.sk/sk/elektronicke-sluzby/verejne-sluzby/zoznamy>, last accessed 2021/08/14.

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<sup>4</sup> Recovery and Resilience Plan for Slovakia, 2021