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Which of our Taxes Should be Flat-rate Tax?

Tax Structure Diagnosis: VAT and PIT

Summary: The article seeks to find an answer to how sharply taxation principles contrasted with practice in the case of VAT and PIT for the last 18 years in Hungary. After a comparison with historical and nearby countries, it comes to the conclusion that there was a role change of sorts occurring in our case. A (near) flat-rate system was used where a progressive system (VAT) would have been more efficient and an over-complicated version of progressive taxation was enforced until 2009 instead of a clear, flat-rate system which would have also been able to fulfil the task in question (PIT). There was a change to one of the tax categories in 2012 (PIT). There are signs indicating that there may also hope of a major adjustment for the other tax category as well.

Keywords: taxation, value added tax (VAT), personal income tax (PIT),
JEL codes: H 20, H 24, H 26

The article analyses how sharply taxation principles contrasted with practice for the last 18 years in Hungary and what changes in the tax system were brought about by this contrast down the line. The issue of taxes is topical because growth has started, and falling interest costs and the whitening of the economy bring extra revenues[1] which can reduce excessive tax levels. In doing so, we need to know where the shoes pinch most – that is, the reduction of which taxes is the most pressing. In my article, I also compare Hungarian taxes with the taxation of other countries in the region. Finally, I will briefly explain how competitiveness is influenced by Hungarian VAT and PIT.

METHODOLOGY

I based my analysis on the logic that in the case of the main taxes established in Europe, it is possible to demand an account of the explicit or unspoken principles in the tax policies of each country. Although the policy also creates strong expectations in some cases,[2] the main contours of taxes are largely shaped by annual budgets. These are often created in a state of emergency and may differ materially from the rational or publicly disclosed principles.

It helps to understand the changes in each tax category if there is a standard to which Hungarian burdens can be compared. I considered the Western European countries as a measure regarding VAT. In terms of PIT,

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in addition to the progressive taxation of Western Europe, I also assessed the Eastern European countries that introduced flat-rate PIT as a possible alternative. I follow the main junctions of the 29-year history in Hungary of the two tax categories – as part of which I examine the specific tax rates in both tax categories. During the regional comparison, I relied on studies on the tax structure, written in English. The data were derived from the Eurostat, HCSO database, and the database of the OECD website for tax wedges.

Due to volume constraints, I did not deal with other tax categories in detail, although there are conclusions to be drawn from analysing flat-rate vs. progressive taxes or social security deductions and gains tax, as presented, for example, by *Giday* in the case of social security deductions (2012).

FACTORS INFLUENCING THE STRUCTURE OF TAXATION AND THE EXTENT OF TAX BURDENS IN NEIGHBOURING COUNTRIES

Weight of the grey economy

If the weight of the grey economy is high, then a more moderate load is appropriate for whitening in the case of burdens on labour. However, with the taxation of consumption, income from the grey economy can be partially involved in state funding as well. A good example is Croatia, but in part Romania as well.

Wage levels

In this respect, Slovenia is markedly distinct from other countries. Due to higher wage levels, Slovenes are more tolerant of progressive tax rates. This is partly true in Croatia due to the average salary of EUR 1,000–1,100 that has been stable for one and a half decades – for those who have a job.

Economic structure

In the case of the significant role of tourism, foodstuffs being subjected to standard tax rates can also bring in a lot of money (Croatia, Bulgaria). If the weight of individual sectors that are more difficult to tax is high, then greater emphasis is placed on the taxation of consumption.[3] If the ratio of the processing industry is high, the grey economy is smaller, so there is no need for high excise taxes (Czech Republic).

Percentage of those working in the West

If many people are working abroad, then a higher level of tax on consumption is common in the sending countries, because they also want to tax money brought home.[4]

Indebtedness

Where a state is heavily indebted, the real interest burden justifies higher tax revenues. In Hungary, due to the Kádár heritage, in Croatia, due to the war and the motorway construction, the GDP-to-state interest burden ration exceeds that of the other countries of the region by about 1.5 per cent. If someone were to translate this difference into the language of VAT rates, then VAT rates about 5 percentage points higher would be needed.

The country's advertising tool

Some small, newly born countries have also used taxation to raise awareness of their existence. In this regard, it is "newsworthiness" that really counts, not economic content.

> Of course, this also requires a target audience. For Baltic countries, this was Russia. It was a special feature of Slovakia that it had invented a triple flat-rate tax.[5] The "project" was successful, affecting the EU (after 5 years they were admitted to the euro zone), foreign direct investment rose.

PERSONAL INCOME TAX

Taxation principles

Fair sharing of public dues

This principle does not have an exact definition, but it is generally accepted that account must be taken of the taxpayer's position and their ability to pay. However, this does not contradict the fact that all employees pay some tax (that is, their first forints are also taxed) – because this way they can see that "it is them who are supporting the state" (and not vice versa).

Children, family

It is important that burdens are less for those raising children. Many countries use apply this principle, easing the burdens if the spouse (life partner) has a lower income.

Uniformity

Tax is uniform (namely, it applies to everyone equally), and the tax category subject to annual settlement is the PIT (i.e. no monthly tax).

Wage competition

In the Visegrád region, a new aspect must also be taken into account as of 2011. Namely, the wage competition with the West. It is desirable that the burdens on wages prompt job searches in the West as little as possible. This is especially important for those who are more mobile in this regard – they are more talented in their profession and also speak foreign languages. In a significant proportion, this is precisely the circle that would be subject to by higher-than-average progressive PIT. This is why the boomerang effect can also come into play.

> Today, one tenth of working Hungarians enrich the country that hosts them with their taxes, resulting in fewer resources of support to the poorer in their home country (as a result of their departure).

The purpose of reducing taxes on labour could be well linked with social security fiscalisation[6], which could be first effected in healthcare.

The structure of the PIT tax rate considered to be relevant

There have been two examples in the past 3 decades.

❶ In the second half of the 1980s, the example to follow was essentially set by continental Europe. Here, the outcome of the regulations by alternating social democratic and right-wing governments was a powerfully progressive tax. However, this did not bring about very high burdens. They did not because, by way of tax allowances, they encouraged the consumer structure that they considered to be correct. For example, housing, education, etc. were priority objectives. However, the image of Western European progressive tax is only complete if we note that:

- where it was used for about 3 decades, money was typically stable and there were inflation periods for only 2–3 years,[7]
- there were 1–2 decades after the war (still before the high progression) when anyone who wanted to and was able to do so could acquire the adequate wealth by complying with tax rules. In essence, stronger progressivity was introduced after a capital accumulation period. (In addition to the fact that they did not take away their fortune as they did in our case in 1948).

Since then, this model has been "tamed", and in contrast with previous, disturbingly high upper rates of 60–80 per cent, even rates of 50 to 55 per cent are seldom seen or are applied only above a very high income. At the same time, the scope of tax allowances has narrowed on the other side.

❷By the mid–1990s, a new PIT model emerged in some countries of the former Eastern Bloc compared to the Western European tradition. It was introduced in the Baltic States (1994) and was only really noticed when Russia also adopted it (2001). This tax is a flat-rate tax, and breaks with the progressive nature of taxation. They believe it is important that taxation become generally accepted (the previous regime has not even heard of it) and the new tax apparatus be able to handle the situation brought about by millions of new taxpayers.

The reader may wonder why I do not just consider Western countries as examples. The answer is simple: every tax is worth as much as the funds collected from it. For the former socialist countries, the acceptance of taxation is a more important aspect than complying with a more abstract principle (often advocated by external actors). From this point of view, of course, a moderately two-rate tax could also be considered. The only problem with this is that it is quite hard to find such an example in our surroundings. Most of the two-rate taxes currently applied in our region can be considered, using a simple term, to be "seemingly two-rate" systems.[8] The highest rate only applies in case of 2–3 times the average income, and as such only affects 2–7 per cent of taxpayers. On the other hand, what I would regard as a civilised two-rate system is one that would represent a higher burden for 15 to 20 per cent of taxpayers, but only moderately (where, for example, the tax on income in the upper tax bracket is at the most 7–9 per cent higher than the lower tax rate).

Hungary

Deviation from the principles after introduction

In Hungary, PIT was introduced from 1988 (well before other countries in our region). Its special feature was that wages were mandatorily grossed beforehand. So it did not impose a major additional burden on taxpayers in the first year. At the time, 13 per cent of income was deducted on average, with revenue-to-GDP being 3.5 per cent. Another aspect at the time of introduction was that in 1988–1992:

- social security and other burdens were high from the outset, over 50 per cent, in proportion to wages, and the PIT burden was added to the tax wedge that was 40 per cent to begin with,
- the administration managing wage increase as one of the major threats (such as those responsible for former wage regulation) still had a perceptible influence.

In 1989–1990, the tax schedule was not pushed up significantly by inflation, but only moderated here and there. For this reason, the tax burden doubled in 3–4 years. Soon, even those at the average earnings level slipped into the upper tax bracket of around 40 per cent as well, which means that the marginal tax wedge reached over 70 per cent for a wide stratum (due to 40–50 per cent of social security burdens on wages).

In this inflation period, earnings only retained their real value if wages were raised yearly by substantially more than the increase in prices because the progressiveness of tax took away increasing amounts of money. Thus, labour costs were increased by PIT to such an extent that inflation itself became one of the most important spin-offs in our country in the 1990s.

Only 2 out of 20 years were milder as to their inflationary nature – because average income had not yet slipped into a tax bracket of around 40 per cent. One such year was 1993 (the rate was 30 per cent), but this was all at the expense of the VAT system. (The 0 per cent VAT on foodstuffs had risen to 9 per cent). The other such year was 1999 (32 per cent rate), but that was the time when the

health care contribution value burdening employment as head tax was increased.

In 1995, the child allowance was discontinued, and from 1996 onwards, uniformity also fell. A dual tax schedule was introduced: tax was different for employees and for entrepreneurs.

The function of PIT can only be adequately evaluated if we know how much social security burdens were in the same period. The effect of Hungarian income tax led to distortions (also) because the value of contributions and other non-tax burdens compared to wages was 55–60 per cent up until 1998, but did not fall below 45 per cent in the following decade either.

PIT was more complicated than necessary for two reasons:

- due to the "lowering" of employee benefits,[9]
- the highest tax bracket was introduced well below the average income.

The reasons behind these two factors can be well illustrated by mathematical correlations. If one wants to collect 15 to 20 per cent of earnings (i.e. 7.5 per cent of GDP) while maintaining a tax-free status on approx. half of the total wage, the average tax rate must be 35 to 40 per cent. The latter can be reached with a higher rate that is still presentable (say not reaching 50 per cent) if the lower tax rate applies only in a narrow bracket and gives way to the highest rate. But even then, the tax authorities still have to rely on the significant income they can achieve by lowering employee benefits.[10] So, naturally, the system became complicated. Due to the enforcement of the employees' allowance, in the event of a change in jobs, a certificate from the previous workplace had to be presented on the amount of earnings, and what was deducted therefrom and what was not.[11] In spite of the formally two tax rates, for example, in 2008, in fact, the rate of burdens differed in 7 income ranges.

The hunger for revenues of the fiscal authorities was also enforced. For example, following the principle "next year you must prove that you were entitled to lower burdens", the highest tax rate has been levied on other sources of income.

If we examine who had vested interest in inflationary high burdens and those promoting grey economy after 2002, for example, the following can be said. The high tax-free bracket (from 2003) was beneficial for low earners.[12] The application of the upper tax rate at a low income level and the burden lowering employee benefits was important because of the revenues. This way they hoped to avoid an increase of the pension contribution (due to the 13th month's pension, higher widow's pensions, etc.). It is worth mentioning that progression was beneficial for the influx of foreign capital: this way there was less concern about competition from the strengthening middle classes. In addition, finding the coverage for interests payable to foreign lenders, etc. was also an aspect.

> The IMF is a good example of this. During the crisis management of the past 8–9 years, in respect of many of the countries in trouble, the IMF only wanted to provide funds if the given country was willing to abandon flat-rate PIT (Ukraine, Romania, Latvia, Serbia). In many cases it was unable to achieve this.

The flat-rate PIT in Hungary

The Hungarian measure (of 2012) was unique in the sense that a significant reduction in revenues was also among its goals.[13] In other countries, the scope of the upper rates was decreased in a way that still left the mass of revenues relatively unchanged. Another unique feature of the Hungarian system is that all income is taxed and only amounts retained for the raising of children are exempt from tax.

The flat-rate PIT was an answer to the complicated system prevailing for 7–8 years before. Critics of the flat-rate tax emphasise two things. One is that the wealthier people have a substantial amount left at the transition. The other is merely a critique of principle (those who are more affluent, should pay more). The former is a fact.[14] The problem regarding the latter is that tax is paid not in principle, but on the basis of specific tax schedules. That is, criticism should only be considered if it can be formulated in a tax schedule that has no striking downsides.[15] Of course, this is only possible if the lower tax-free bracket is not wide and/or no more than 3.5–4 per cent of GDP is intended to be collected by this tax category (for example, VAT is increased instead).

Tax wedge

The attached *Figures 1 and 2* show the trend of average and marginal tax wedges from 2000 in the case of persons earning 100% of the average wage in 4 countries.

In Hungary in the mid–2000s, the average tax wedge was also well above the others, and the approximately 70 per cent value of the marginal burden rate was significantly higher (by 15–25 percentage points) than that of the other countries.

In the other Visegrád countries, the difference between average and marginal rates was also only 4–7 percentage points in the years after 2000. This was less inflationary. Thus, inflation died down more quickly there than in Hungary. In addition, in the years after 2004, their PIT systems were reorganised:

- they either used a system where tax rates resulting in high tax wedges are only applied well above the average income level (Poland)
- or they switched to flat-rate tax (Czech Republic, Slovakia).[16]

In our case, a major change took place only years after the others, with the transition to the flat-rate system in 2012.

The PIT systems of the other Visegrád countries are well characterised by examining what their application in Hungary today would result in. For further information, please refer to *Tables 1–2.*[17]

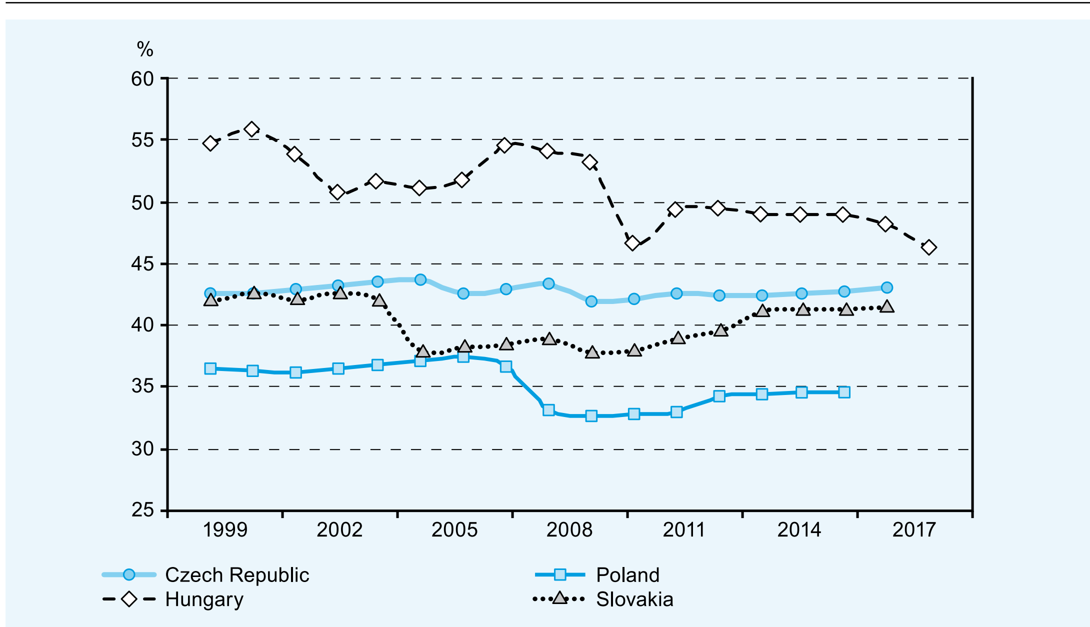
- If we took over the Slovak tax schedule, the income would be half of what we have today. Because of the lower tax-free income, almost half of the tax base would be lost. The somewhat higher lower tax rate[18] would compensate only a for small part of this, and the amount of the additional tax due to the upper tax rate would only represent moderate revenues (HUF 80 billion/year).
- In the case of the Czech PIT chart, the revenue would also drop to 50%. Here again, a large item would be removed from the tax base due to the HUF 100,000 monthly tax-free income, and this would be replaced only by a small fraction by the surplus due to higher tax rates.[19]

In the case of a transition to the PIT of the two Czechoslovak successor states, the amount of money received by those not raising children would increase by 15,000 per month (due to the high tax-free band). As this would be received by everyone, burdens would only be higher than the current level above an earnings level of HUF 500,000 (Czech Republic) and HUF 950,000 (Slovakia) per month, despite the somewhat higher tax rate.[20] The latter value would be HUF 1,200 thousand/month in case of a transition to the Polish tax. In other words, those who favour the concept of equation would not really be able to "ransom" the more affluent. Another flaw of the possible application of the two countries' PIT systems would be the necessity to raise already high Hungarian VAT by about 3–4 percentage points to replace lost revenue.

With the use of Polish PIT, the tax burden

Figure 1

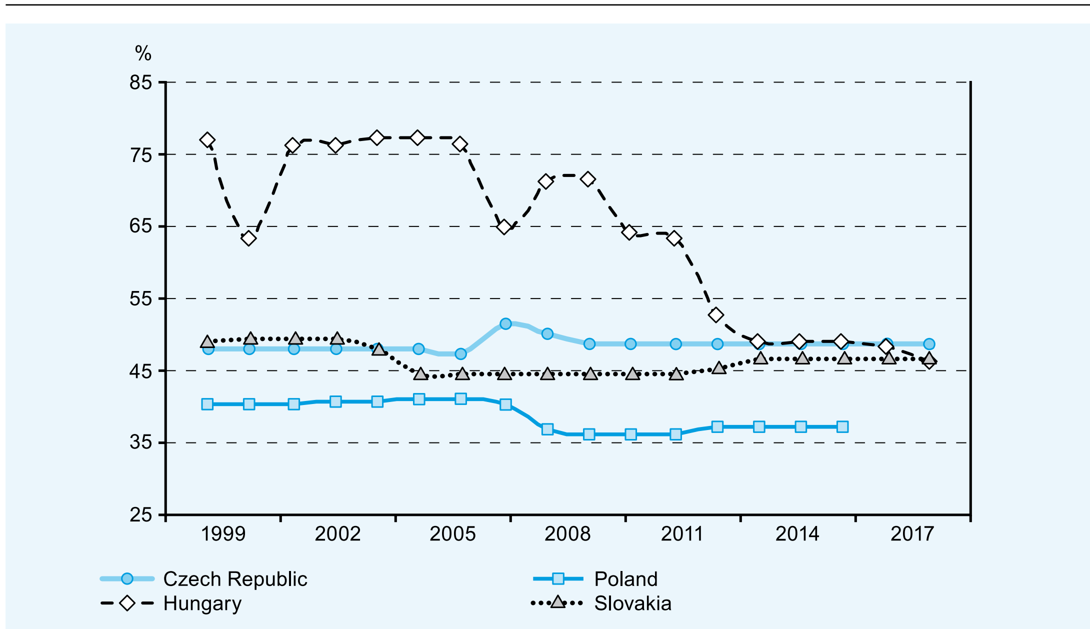
COMPARISON OF AVERAGE TAX WEDGES IN 4 COUNTRIES, FOR PERSONS WITH AVERAGE EARNINGS, AND WITH NO CHILDREN



Source: OECD, own calculation

Figure 2

COMPARISON OF MARGINAL TAX WEDGES IN 4 COUNTRIES, FOR PERSONS WITH AVERAGE EARNINGS, AND WITH NO CHILDREN



Source: OECD, own calculation

Table 1

DIFFERENCES IN PIT SYSTEMS

	Hungarian, progressive rate PIT	Hungarian, flat-rate PITs	Other flat-rate
Tax-free band	High	None	Yes
Intention to reduce taxation at the time of transition		Yes (2–2.5% of GDP)	Only to a small extent at most
Marginal tax wedge on average income	Between 63% and 77%	46%*	Does not exceed 50%
Marginal tax wedge at 167% of average income	Above 60%	46%*	Does not exceed 50%
Is it required to pay other taxes within PIT beyond the tax rate?	No	No (Similar to CZ, SK)	Many of the non-Visegrád countries gradually "dialled down" the lower tax allowance
Can the pension-purpose contribution be deducted from the tax base?	No	No (similar to CZ)	Generally yes
Does it burden pension?	No	No	In Poland, yes, and among the non-Visegrád countries: RO, SL, CR
How much revenue does the tax bring in?	7% of GDP	5% of GDP	2.5–3.5% of GDP
Allowance after children	Only from 3rd child**	Yes	Yes

Note: *2017 value, ** Not for just 1 or 2 children

Source: own editing based on OECD and Tax guidelines data

Table 2

MAJOR VALUES OF TAX SCHEDULES (V4)

Country	Lower tax rate	Upper tax rate	Lower tax rate band	Upper tax rate band	Child discount
	%	%	HUF thousand/ month	HUF thousand/ month	HUF/child/month
Czech Republic	15–(20)	22 (28)	115–900	900–	11–15 (19)
Hungary	15	15	everywhere		10–15 (33)
Poland	18***	32****	20–510	510–	7
Slovakia	19*	25**	105–900	900–	7

Notes:
- In the Czech Republic, value projected to gross wages in brackets
- Virtually *16.5% and **22%
- Comparable with the Hungarian system, a burden of only about ***8% and only about ****20%

Source: own editing based on OECD and Tax guidelines data

would be reduced by half for earners of less than HUF 510 thousand per month (primarily because of the items deductible after social security contributions, the lower deductible items per person would increase this). Payments would be about 5 percentage points higher than the present Hungarian 15% tax after the part of income in excess of HUF 510,000 HUF per month, but they would only reach the value of the Hungarian tax burden at the HUF 1,200,000 monthly level. Family tax allowance would be reduced to half on average. At the same time, with the Polish system, it would also be necessary to pay PIT for pensions.

In my opinion, for the sake of future public financing, instead of the fiery PIT arguments, it would be advisable to operate PIT for a few years without any drastic changes, to have it "rest" for a while. Because there may be a different possibility of taxation if the (declared) net average income is already around 900 euros[21] and the system of income placed in pockets is driven back. Once we become accustomed to this, then it may be worth thinking about a change. Until then, the tax system will be largely determined by low national wage levels – as our calculations have shown.

VAT

The example

VAT is a witty form of taxation, invented by a French expert and introduced in his country in 1954. It represents a start of a new era in taxation, just as double-entry bookkeeping in corporate accounting. Its elegance is illustrated by three characteristics. Firstly taxpayers check each other instead of being checked by tax collectors (because they request invoices from their suppliers). Secondly, those who do not pay VAT still pay the tax for inputs. Thirdly, the accumulation of tax is impossible in the system. Following its application in the common market, it was introduced as the cornerstone of turnover taxation worldwide. VAT would also deserve the Nobel Prize in Economics. The fact that this has not happened thus far could have two reasons. On the one hand, it has not been adopted in the US, a dominant player of the economy.[22] On the other, globalisation and the financial mafia has targeted the Achilles heel of VAT – the tax refund for exports.

For a country just trying to break away from socialism, it seemed only practical to follow the VAT of continental European countries in turnover taxation. In these countries, in contrast to the relatively higher rate imposed on normal goods, foodstuffs were only subject to half or third of the rates, and the tax rate on medicines, accommodation services and press products was low as well. A significant portion of the services also ended up here.[23]

VAT in Hungary

Our country introduced VAT far sooner than the other countries of the region, in January 1988. The system applied on the continent was viewed as the example to follow.

The introduction of the tax category also had an impact on the reduction of consumer price supplements in place until then, and the massive subsidies to meat and milk (and their derived products) ceased. As a decrease of large-scale taxation of profits was calculated with, the normal tax rate was high (25 per cent). The basic foodstuffs were either not subject to VAT or the tax rate was 0 per cent.

In Hungary, the VAT on foodstuffs has been raised again and again in the last two and a half decades. As a result of the Bankruptcy Act (1 January 1992), which may also be referred to as "hara-kiri", a quarter of the econ-

omy was subjected to bankruptcy or winding-up proceedings, with state revenues falling to a significant extent. For this reason, VAT was levied on foodstuffs as well in 1993, with a tax rate of 6 per cent initially (January) and then 10 per cent (August). Subsequently, as a prelude to the Bokros programme, this burden was further increased from January 1995, this time to 12 per cent.

In the early and mid–2000s, the other big misalignment occurred. In order to cover allowances for the 13th month, in 2004 the VAT on foodstuffs was raised, with the rate of burdens this time raised to 15%. In January 2006, the standard rate was reduced to 20 per cent. It quickly became clear that the tax reduction effort was not really effective, with only half of the VAT cuts reaching consumers.[24] After the election, the VAT of foodstuffs was raised from 15% to 20% in September. In addition, following the speculative attack on the country, in order to reduce the deficit, the excise tax rate had to be increased in 2009, bringing the standard rate once again to 25 per cent. At that time, they made the slight concession regarding foodstuffs that the tax rate on bread and milk and dairy products was reduced to 18 per cent.

Analyses performed in the 1990s suggest that the lower VAT rate on foodstuffs was beneficial for lower earners. Due to the Hungarian VAT increases, the weight of foodstuffs in the consumer basket remained high. In this price-sensitive medium, multinational shopping malls used certain food items products to attract customers, often from imports.[25] For this reason (as well), several waves of liquidation (e.g. in 2004 and then in 2009) swept through our food industry.

VAT revenues were severely reduced by the error of the simplified business tax ("EVA") that VAT was reclaimable thereafter by companies accepting invoices of EVA companies (first 20 per cent and then 25 per cent). In 2007, for example, the gross revenues from EVA amounted to HUF 140 billion, but only a third of that was actual effective revenue.[26] The need for revenues of the pre–2010 government is well indicated by the fact that in 2008 the EU had to force this government to allow companies to only pay VAT on actually received revenues.

At the time of the repeated downturn wave of the "W" shape of the recent crisis, the government raised the standard rate to 27 per cent (meaning that this also applied to the vast majority of foodstuffs). The situation was made even more difficult by the government's introduction of a transaction tax in its battles with the banks (2014), which the latter, for the most part, passed on to their customers. So nowadays, this also burdens turnover by tax, and its value of HUF 160 billion per year[27] is about the same as the impact of the 1.5% to 2% VAT.

The outcome of the process is that

- on the one hand, Hungary has the highest VAT on the continent (27 per cent).
- on the other hand, VAT has almost become a flat-rate tax.[28]

This was all the result of ad hoc financial decisions – with actually none of the political trends claiming, neither in principle nor as a programme, that high VAT should be imposed on the sale of foodstuffs. Not to mention that the high burden imposed on foodstuffs resulted in a 30 per cent increase in non-declared turnover.[29]

From 2015, the government begun to narrow the tax rate for some products and services.[30] VAT revenues were significantly increased by the introduction of online cash registers linked to the National Tax and Customs Administration (by HUF 150–200 billion in 2014 according to the Ministry of Economy[31]) (the role of this in the whitening of the economy is emphasised by *Varga* [32]), followed by the use of the Electronic Public Road Trade Control System (EKÁER) in transport.

VAT structure in neighbouring countries

Flat-rate vs progressive rate

At the time of the introduction of VAT, many Western experts visited the countries of the region. What fell on deaf ears at home, they were able to say here. For example, how nice it would be if VAT was a flat-rate tax. This misleading propaganda did have its consequence down the line: when Slovakia wanted to show that it was no longer part of Czechoslovakia, they even made VAT a flat-rate tax to get themselves noticed (2004).

If we look at who benefits from flat-rate VAT in the region, importers and large stores should be mentioned first and foremost. If people save on expensive food, they can be better persuaded to purchase electronics, etc. devices, inferior quality Chinese clothing and household items.

The EU stipulates that the standard VAT rate should be at least 15% and expects there not be a large number of tax rates. The introduction of preferential VAT rates should be agreed in advance with the EU. After a lengthy internal debate, the EU wants to move on to a new practice as far as the 0% export rate is concerned. The essence of this new system is that VAT on export can only be retransferred to the given company once the foreign buyer has already paid the VAT content of the purchase price.

One measure of the efficiency of taxation is the proportion of the grey economy. For VAT, the EU annually estimates the size and proportion of unpaid VAT. *Table 3* shows the ratio of uncollected VAT in neighbouring countries.[33] Hungary is in the mid-range of the pack and in 2014 there was a significant improvement.[34] The percentage of uncollected VAT is high in Romania and Slovakia. A study by the Slovak Ministry of Finance[35] estimated a couple of years ago that uncollected VAT could be reduced to half by more efficient tax collection. The surplus VAT revenue generated by our programme launched has reached 1% of their GDP. It is important to emphasise the relatively effective VAT collection activity of the Western Balkan countries. In order to

Table 3

RATIO OF UNCOLLECTED VAT, PER CENT

	2013	2014
Bulgaria	16.23	19.83
Czech Republic	19.80	16.14
Croatia		8.67
Latvia	25.69	23.42
Lithuania	38.61	36.84
Hungary	22.24	17.95
Poland	25.38	24.60
Romania	34.49	37.89
Slovenia	6.57	8.30
Slovakia	32.80	29.97

Source: Study (2016), p. 70

tax tourism in Croatia, which is a key sector of the country, Zagreb is doing everything in its power,[36] so there is little hidden VAT. Slovenia's indicator is also excellent, and does not exceed 10 per cent for Serbia either. In Bulgaria, the system of online cash registers was introduced a few years prior to the introduction in Hungary, and it slightly improved the situation. The deterioration of the Polish indicator is surprising.

Table 4 shows the internal structure of the VAT system of the EU 27 in 2014. The rate gap shows what percentage of the total VAT base is represented by goods that are taxed at a lower tax rate than the standard rate. The actionable exemption gap shows what percentage of the total VAT base is represented by goods that are exempt from VAT in addition to the absolutely necessary exemption.

The weight of goods with a tax rate lower than the normal tax rate in the older continental Member States was 12 per cent, while in France and Germany it was 10 per cent and 9 per cent, respectively. In fact, of the oldest EU–15 countries only Denmark applies flat-rate tax, and of the new ones these are Estonia, Slovakia (1.7%) and Bulgaria (2.8%). Nearly flat-rate is Hungary[37] (3.3 per cent) and Croatia (4.1 per cent), but the Czech Republic (5.8 per cent) is not far from this either. For foodstuffs, there is no discounted VAT rate applied at all in Denmark, Lithuania, Bulgaria, Estonia and Slovakia.

The second column in the table shows the scope of exemptions granted beyond the VAT exemptions viewed as strictly justified by EU experts.[38] In this respect, the differences are smaller. In the Visegrád countries (with the exception of the Czechs), their ratio is slightly above the average.

It is worth mentioning that a significant part of the VAT revenues (30 per cent) is not derived from consumption. Within this range, the ratio of taxes on purchases of VAT-free activities[39] and VAT on public, retail, etc. investments is roughly 60:40. In other words, nearly one-third of the revenue is generated by the state's own taxation [this is a relatively high ra-

Table 4

VAT WEDGES, 2014

	Rate gap	Difference exemptions
Bulgaria	2.84	4.60
Czech Republic	5.82	5.03
Croatia	4.09	7.82
Hungary	3.34	11.25
Poland	15.86	12.60
Romania	2.88	6.04
Slovakia	1.65	10.47
Slovenia	11.30	9.37
Germany	9.07	7.24
France	9.97	8.30
EU27	5.32	9.53

Source: Study (2016), p. 53

Table 5

CONSUMPTION OF FOREIGNERS IN HUNGARY, 2015

	not for tourism purposes			for tourism purposes			All travels
	One-day trips	Multi-day trips	Total travel	One-day trips	Multi-day trips	Total travel	
	HUF billion	HUF billion	HUF billion	HUF billion	HUF billion	HUF billion	HUF billion
Food, beverages	69	8	77	13	64	78	154
Other articles	127	13	140	18	160	178	318
Total consumption	**295**	**78**	**373**	**91**	**1,145**	**1,235**	**1,608**

Source: HCSO

Table 6

OUTBOUND TRAVELS, 2015

	for one day travels HUF billion	for several days travels HUF billion	Aggregate HUF billion
Total expenditures	103	354	457
of which: Food, beverages	*24*	*31*	*55*
Other articles	*51*	*93*	*144*

Source: own editing

tio, which is due to a significant level of public investments, see Giday (2015)].[40] It may be noted that one fifth of the VAT collected for retail consumption is collected in the Treasury for goods for which other taxes are also levied by the budget (fuels, spirits, tobacco products, goods subjected to 'chips' tax)[41]. A further seventh is for goods where pricing is strongly influenced by the state (medicines, energy, water supply, etc.)

Consumption subject to VAT competition

Table 5 shows how much of the total amount of foreigners' consumption of about HUF 1,600 billion was spent on foodstuffs, beverages and other goods (the latter does not include fuels) in 2015. The HUF 154 billion of food consumption they purchased gave 4.2 per cent of domestic turnover, while for other goods the weight of their HUF 318 billion spending was[42] 13.4 per cent. Among these foreigners, one-day travellers for non-tourism purposes are familiar with the price conditions of another country and on account of travelling by car they also have space to buy products. They provide 2/5 of the above-mentioned 4.2 per cent and 13.4 per cent turnover ratios, i.e. they generate purchases worth HUF 200 billion per annum. If we add the money spent during one-day trips of outbound Hungarians (*see Table 7)*, then domestic VAT and foreign VAT are strongly competing with each other to the extent of the amount of HUF 275 billion per year. For about the same amount of turnover, one additional aspect for buyers is whether the product is more expensive at home or abroad.

Due to VAT, Hungarian spending is now at a disadvantage, which means reducing taxes would increase turnover, thereby taxes, trade margins, and food production as well.

The disadvantages of today's high VAT:

- attracts the underworld of international tax evasion,
- encourages cross-border shopping in the neighbouring country,
- high VAT on foodstuffs is one of the reasons for the sharp decline of our food industry and the stagnation of agriculture,[43]
- the liquidity of companies is burdened by the fact that they have to find coverage for VAT under reclaim.

Hopefully the state will also divert a significant part of surplus resources arising from growth and the whitening of the economy to the reduction of VAT, for foodstuffs in particular. This would also help ensure that today's wage increases do not lead to a jump in the inflation rate. If the VAT rate was reduced to 5 per cent for basic foodstuffs, it would result in a HUF 200 billion gross revenue loss, but one third of it would be recovered on account of reduced tax evasion. The measure would thus cost HUF 130 billion net.[44]

The situation is further complicated by the fact that the 27 per cent rate is also extraordinary, and should also be reduced (not to mention the transaction tax). The return to the 25 per cent value could be resolved from HUF 110 billion. Each VAT reduction of one percentage point only results in a government revenue loss of about HUF 55 billion in retail spending if we disregard these basic foods and assume that the state neutralises the impact of VAT cuts on products affected by other taxes (or subsidies) and in the circle affected by price regulation.[45]

Combating international tax evasion makes it difficult to reclaim VAT. Individual national tax offices must consult with each other. For this reason, the NTCA sets compliance with a VAT reclaim application at 75 days. From 2017 onwards, for companies featured on the "positive list" this was dropped to 45 days.

ASSESSMENT OF COMPETITIVENESS

Csaba Lentner points out that in the course of taxation, an important factor to consider is for high burdens not to cause the ceasing of activities.[46] The two tax categories I have analysed play a significant role in the overall trend of tax burdens. Taxes on labour are also worthy of special attention, because there still remain constructional tasks to be performed in this area. There is much truth in *Árva*'s assertion that in principle, the financing of the public expenditure of health care from taxes collected on wages is not substantiated.[47]

Hungary (after 2010)

Although the reduction of PIT (2012) did significantly lighten the burden of labour, it did so at the expense of other tax categories (see VAT increase). But even this was considered to be an achievement in those years because the government did not use the method of raising the total weight of taxation for wage earners in the course of reducing the deficit. According to a micro-simulation modelling on the impact of the 2011–2012 measures on employment and wage burdens prepared by *Baksay – Csomós*, these two together increase employment by 2 per cent and raise the level of GDP by 1.5 per cent.[48] Certainly, these also contributed to the growth of the economy in the last 4 years.[49]

The reduction of the marginal tax wedge also has such a transitive effect that today employers are less burdened by future wage increases.

> In the 2018–2022 period, the state intends to assume 2 percentage points per year from the

> burden of the expected 6 per cent real wage increase per year. If, instead of the present flat-rate tax, the structure of the PIT would be as it was in 2008, then wage dynamics of 1.5 percentage points higher would be needed for this, ceteris paribus. These cumulative surpluses would already mean HUF 750 billion more in wage costs to companies as a whole in 2022 – which they would only be able to finance if they always achieve a 1% price surplus annually in the given period. Namely, in my estimation, the price increase would exceed the 3 per cent predicted today by 1 percentage point. This would sooner or later cause the forint to depreciate.

László Nagy stresses that tax competitiveness is supported by marginal tax rates held at a low level.[50] This would be worth considering.

In principle, VAT does not directly affect competitiveness, as it is only a transitory item in corporate management. At the same time, the grey economy, which has also been strengthened by the high level of VAT on foods, is a competitive disadvantage in the food economy. In the case of the employment of workers in Hungary, high VAT is a competitive disadvantage because a large part of their forints spent at the time of purchase is transferred into the budget and does not finance the producers of the purchased goods.

In addition to the tax levels, a stable and thus predictable tax system represents additional value. In this respect, the Czech Republic certainly serves as the example to follow in the region.[51]

Hungarian taxation in view of the last two years

In Hungary, from 2015, the source of tax reduction has been to improve the efficiency of tax collection while raising GDP and wages. PIT decreased by 1 percentage point (2016), and year on year the VAT rate of certain products (services) is reduced within a narrow scope. As regards social contribution tax, a reduction of 5 percentage points has occurred from 2017, with a promise of further substantive moderation (in case of an increase in real wages).[52] Thus, a tax reduction process may have started not too late in the case of the other two burdens (social security burdens, VAT). Hopefully these burdens will no longer have to "peak" later. So perhaps erosion with other taxes can be avoided in this case.[53] For social contribution tax, for example, a reduction to the envisaged 12 to 13 per cent can prevent this (if it is possible to increase real wages by as much as 41 per cent in 6 years, as planned). However, a significant reduction would also be needed in the case of VAT. Domokos describes the principle of sustainable whitening,[54] by which he means that the tax surplus achieved through whitening should be returned to taxpayers in the form of a tax reduction.

Regional overview

In the past 14 to 15 years, the following major tax changes have taken place in the neighbouring countries.

- Between 2004 and 2008, there was a strong wave of transitioning to flat-rate taxes, mainly in respect of PIT (Slovakia, Romania, Czech Republic, Ukraine, Serbia, Bulgaria). In Hungary, the decrease of VAT to 20 per cent (2006) was a significant change.
- In order to improve deficits, VAT was drastically increased in Romania, Croatia and Hungary in the first years of the crisis, and in the second period, it was increased to a minor extent in a number of countries (Slovakia, Czech Republic, Poland, Slovenia). In respect of PIT, two countries with flat-rate tax (Slovakia, Czech Republic) also introduced an upper tax rate.

On the basis of the growth that started after the crisis, two countries have set off on the path of major tax cuts. The greatest change was in Romania, where the value of GDP-proportionate tax cuts in 2016 alone was 2.3 per cent.[55] Also related to PIT is the fact that the social contribution rates were reduced in two steps, altogether by 10 percentage points. Hungarian changes brought about a tax cut of 1.8 per cent of GDP (2016–2017).

CONCLUSIONS

In the first two decades of the change of regime, over-spending has created a strain on revenue policy. In the preparation of annual budgets, the practice of taxation has often overruled reasonable taxation principles. Tax burden increases were implemented that distorted taxation in the case of the two tax categories under review. On the one hand, even average wage earners were placed in a high PIT tax bracket, and on the other hand, foodstuffs were subjected to outstanding VAT. This resulted in a system that differs from the majority of neighbouring countries – no country had such a high tax wedge as Hungary, and only two smaller countries levied normal VAT rates on foodstuffs (Slovakia and Croatia, which latter lives off tourism).

The political response to the process was the transition to flat-rate taxation in the case of PIT.

In order to make up for this lost income, tax policy innovations had to be implemented for other types of burdens (see special taxes). Correction is now commencing in the case of the other tax category (VAT). Conclusion from the diagnosis side: in the period of the whitening of the economy, it is preferable to have PIT flat rate rather than VAT.

Epilogue

My article approached the structure of the two tax categories from the diagnosis side. If someone is interested in therapy, it is better to ask the question "Which of our taxes should be progressive?" Since Hungarian PIT (with the given magnitude of income) today is healthier than that of the neighbouring countries, therefore, our healing energies should now not be devoted to additional PIT "care". It is more important to cure VAT made "sick" by flat-rate taxation, including making it a progressive tax.

Annex

PIT AND VAT IN NEIGHBOURING COUNTRIES

Poland

In 2009, PIT was made two-rate, reducing the upper rate to 32 per cent. Due to the package of measures also affecting other burdens to a minor extent, income increased by an average of 4–5 percentage points, while in the case of the highest fifth the increase was 9 per cent.[56] All this limited the spreading of the crisis, and there was no downturn due to the expansion of domestic demand.

It is not possible to determine the amount of PIT actually payable solely on the basis of the tax schedule. The reasons for this are

the generous tax allowances on social security payments.

> Employees' pension contributions can be deducted from earnings. For this reason, 100 units of earnings will only have 87 to 88 units as tax base. This can be multiplied by the lower tax rate (18 per cent), but only about one-half of the resulting value has to be paid. This is because the other component of employees' social security contributions (7.8 per cent of the earnings) can be deducted almost entirely from the product.

In principle, the 18 per cent tax is only about 8 per cent (on account of the above). The formally 32 per cent tax rate of the rate of income in excess of HUF 510 thousand (monthly) is in fact only 20 per cent. About 7 per cent of earners belonged to the upper PIT rate in 2014.[57]

For VAT, 23 per cent has been the standard rate since 2012, while the tax on foodstuffs and medicines is lower at 8 per cent and 5 per cent, respectively.

Slovakia

In the country that became famous for its 19 per cent tax rate (2004) for the three tax categories, PIT has again become a two-rate tax from 2013. In the case of high income (over HUF 900 thousand monthly), the 25 per cent upper tax rate is introduced. It is assumed that only 5–7 per cent of earners are affected by this tax bracket. Social security burden is relatively high, at 48 per cent in proportion to wage.

VAT is standard, with the normal rate payable even on foodstuffs, now at 20 per cent after the increase in 2012. At the same time, it is a fact that from 2005–2006 the efficiency of VAT collection has deteriorated. It is suspected that one of the reasons for that is that high food VAT has become a target for the international mafia since 2004.

Czech Republic

In the Czech Republic, PIT has been a flat-rate tax since 2008, with an upper tax rate introduced in 2013, and according to earnings figures from 2015, about 2 per cent of earners fall into this category. Social security burden is relatively high, at 45 per cent in proportion to wage. VAT is 21 per cent, and VAT on foodstuffs is 15 per cent.

Romania

Since 2005, PIT has been a flat-rate tax of 16 per cent, which practically represents a burden of 18 per cent for the majority of taxpayers (due to the lowering of employees' allowance). There is a tax exemption up to HUF 110 thousand per month. VAT rates have changed a lot. In 2010, normal burden was increased to 24 per cent instead of 19 per cent and foodstuffs were also reclassified here. From 2016, the standard rate was reduced to 20 per cent, and to 9 per cent for basic foodstuffs. From 2017, the standard rate became 19 per cent. The efficiency of VAT collection is low.

From the autumn of 2014, employers' social security contributions were reduced by 5 percentage points. Resources for this at the time were generated through a special form of burden.[58] From January 2017, social security burdens fell by another 5 percentage points, and are now low.

Croatia

The VAT rate was raised from 22 per cent to 25 per cent 4 years ago. The scope of those subject to a discounted rate is narrow. (The VAT rate for bread and milk is 5 per cent, accommodation services, cooking oil and electricity are at 13 per cent). The efficiency of

VAT collection is favourable. Personal Income Tax is progressive. The level of average earnings already falls into the upper (32 per cent) tax bracket, but due to exemptions (e.g. HUF 110,000 tax exempt part per month), and deductions, PIT actually paid is only 10 per cent of the average earnings.

Slovenia

The VAT rate is 21 per cent, and 9.5 per cent on foodstuffs. The efficiency of VAT collection is favourable. PIT is progressive, and in fact the current highest rate is temporarily 50 per cent. On the other hand, this is tolerable because earnings are relatively high (EUR 1,600/month) and the items deductible from the tax base and tax are significant.

Ukraine

Since 2004, a flat-rate PIT has been introduced with a 13 per cent tax rate. This is now 18 per cent. VAT is, in principle, flat-rate, with a tax rate of 16 per cent. Hectic movements are common in taxation. For instance, taxes are levied on income earned abroad, and a war tax (4 per cent) is also payable. From 2016, the employers' social security contribution was reduced to 22 per cent (from 38 per cent).[59]

Serbia

Since 2003, a flat-rate PIT has been introduced (16 per cent), which today is 10 per cent. The normal rate of VAT is 20 per cent, and foodstuffs are usually taxed at 9 per cent.

Notes

[1] The May 2017 convergence programme predicts that the 2.4% deficit in 2017 will fall to 1.2 per cent by 2021. This indicates that a tax cut of HUF 500 billion annually, comprising 1.2 per cent of the GDP, would also be possible (beyond the planned reduction in social contributions tax).

[2] Flat-rate taxes in Slovakia and in 2012 in Hungary, tax cuts in Romania in 2014–2016.

[3] See Romania and Bulgaria due to the more significant weight of agriculture

[4] There are also extreme examples. For instance, in the Ukraine, a special tax is levied on the foreign income of those working abroad, following the principle "do not even come home if you do not pay this tax".

[5] There were hardly any Western investments, and the number of Western tourists was low.

[6] Árva, Giday, Mádi (2017), p. 2

[7] One exception was the slightly more distant Israel where, along with wages, taxes were also indexed at the time of stubborn inflation.

[8] Exceptions are Slovenian and Croatian PIT, but in those countries, for two decades now people have been earning at least a thousand euros on average and there are many deductible items from PIT, so the burdens subject to progressivity are "affordable".

[9] This was complicated by the fact that while employee benefits were granted on one side, on the other side, head tax (health care contribution) was collected from employers for each person employed. Thus recalling the spirit of the tax of ages such as the birth or marriage tax of the Turkish occupation or the decade of Bach-hussars taxing windows and doors.

[10] This lowering seemed more presentable to them than the open admission of a higher tax rate. True, there were income ranges where the actual burden was at around 50 per cent, but for those who would have criticised this, they could throw up their hands saying that the law only stated a tax rate of 36 or 38 per cent.

[11] Which already approximated a violation of personality rights, as the new employer had access to the level of earnings previously achieved.

[12] The picture is nuanced by the fact that before 2002, this was not the stated purpose of the politicians who introduced it. Namely, 2 years earlier, they criticised the increase in the gross value of the minimum wage (from HUF 23,000 to HUF 50,000). In contrast, from 2003 they operated a system in which the amount received from the minimum wage by employees was above 40 thousand forints per month.

[13] Apart from Hungary, only the change in Poland (2009) has had such an impact, but to a lesser extent.

[14] The income of the more affluent upper fifth stratum increased during the transition. This amounted to around HUF 350–400 billion. The tax also brought about surplus for those raising children (almost HUF 200 billion back then). For the others, the transition was essentially neutral as the so-called expected wage increase put forward shortly afterwards compensated for the increase in their tax burdens.

[15] For example, the upper tax bracket is only introduced well beyond the average income so it does not result in marginal tax wedges of more than 52 per cent, and it is preferably checked by an independent institution (even a Supreme Tax Office) whether the tax brackets are adjusted appropriately annually, and that the former short-term (monthly-quarterly) demand for revenues is not revived by the tax authorities.

[16] This was not even changed in essence by the fact that 4–5 years ago they returned to two-rate taxation, as the upper tax bracket is only applied in the case of high income, affecting few taxpayers.

[17] The amounts contained therein have been rounded up, the country names are shown using vehicle country signs.

[18] The actual difference is not 4%, but only 1.5% because the employees' pension contribution in the Slovak system can be deducted from the tax base.

[19] The 15 per cent tax rate should be projected to a tax base increased with all contributions (to the "super-gross wage"), so this actually amounts to a burden of around 20 per cent.

[20] The surplus of the tax collected subject to a tax rate higher than the Hungarian rate would only exceed the amount of HUF 15,000 per month uncollected below (below 100,000) beyond these levels.

[21] If the 42 per cent rise in real wage growth (envisaged in the wage increase/contribution reduction agreement) is achieved by 2023.

[22] The US stubbornly insists on its old-fashioned turnover taxation, as it is one of the last funding resorts of its 51 member states.

[23] Denmark represents a different model. There are no social security contributions, social security expenses are covered from taxes, which is why VAT rate is high and everything is categorised in the standard rate.

[24] Gábriel – Reiff (2006)

[25] Sometimes selling inferior quality products.

[26] Namely, the VAT reclaimed after EVA invoices was HUF 94 billion, and thus ultimately public

finances were only increased by HUF 47 billion (47=140−94). Source: Kopint-Tárki (2007), p. 9

[27] Revenue from turnover excluding Treasury.

[28] In 2014, except for the 5 per cent rate for medicines and the 18 per cent rate for milk and bread.

[29] VAT fraud worth a thousand billion 24.hu The news provider. 29 January 2016, http://24.hu/fn/gazdasag/2016/01/29/ezermilliardos-afacsalas-a-kormany-letiltotta-a-tanulmanyt/

[30] If the VAT cuts planned for 2018 are also taken into account, the cuts in rates will reduce revenues by 0.5 per cent of GDP.

[31] Tax evasion dropped by more than four per cent over a year 11 September 2016, http://www.kormany.hu/hu/nemzetgazdasagi-miniszterium/parlamenti-allamtitkarsag/hirek/egy-ev-alatt-tobb-mint-negy-szazalekkal-csokkent-az-adoelkerules

[32] Varga (2017), p. 14

[33] Study and Reports on the VAT Gap in the EU–28 Member States: 2016 Final Report p. 19 TAXUD/2015/CC/131, https://ec.europa.eu/taxation_customs/sites/taxation/files/2016–09_vat-gap-report_final.pdf Downloaded on: 18/02/2017

[34] The same reference is made by the SAO. They have concluded that the rise in VAT revenue data in 2012–2015 exceeded the value which could have been expected in terms of turnover growth. By their calculation, the deviation represents 0.95 per cent of annual GDP (i.e. HUF 290 billion in HUF).

[35] The estimate of the VAT loss. (2012)

[36] High tax rates, online cash registers, calling tourists' attention to taxation, audits, etc. See: Wars with tax evaders: shameless turnover in restaurants MTI 15.08.2015, http://adozona.hu/altalanos/Adocsalokkal_haboruznak_arcatlan_forgalom_a_1RQ0IC

[37] The Hungarian situation has improved slightly since then due to the 2016 and 2017 VAT cuts.

[38] Public services and financial services were considered as such, as well as the amortisation accounted on the calculation of GDP after housing (this is the so-called imputed depreciation, its extent is part of GDP and accounts for about 3–6 per cent thereof in the various countries).

[39] Hospitals, banks, etc., for they cannot reclaim this tax

[40] Giday (2015), p. 182

[41] This effect is also strong because VAT is based on a value increased by excise tax, that is, taxation of the tax also increases revenues.

[42] When calculating the rate, in the case of the trade of other commodities I did not take into account goods that are not characterised by being purchased on the other side of the border do not apply (books, furniture, vehicles and their parts, medicines, furniture, construction materials and motor vehicles and their components).

[43] In 2012, it was estimated that the rate of VAT fraud in the food economy was 30–35 per cent

[44] In 2013, AKI estimated /AKI (2013)/ that, if 53 per cent of food consumption, as basic products, were to be reclassified as products subject to a preferential tax rate and the tax rate were to be reduced to 9 per cent, then taxes amounting to HUF 210 billion would not be realised, but due to a reduction of VAT fraud to a quarter of its previous value, HUF 79 billion thereof could have been recovered for the state (and thus the net decrease in revenues could have been HUF 130 billion (see AKI 2012. pp. 78–78).

Since then, about one-fifth of the above HUF 210 billion reduction has already been implemented by the state.

[45] Of the HUF 3,500 billion per year VAT, HUF 1,000 billion is such that the change in VAT means only that the state would put money from one pocket into the other (VAT on public investments, non-wage costs of hospitals).

[46] Lentner (2013) p. 172

[47] Árva- Mádi (2016)

[48] Baksay – Csomós (2014)

[49] The benefits of the Workplace Action Plan also facilitated the rise in employment. See Giday (2012)

[50] Nagy, L. (2017), p. 12

[51] The termination and then reintroduction of the upper tax rate was a zig-zag movement for the Czechs (and the Slovaks), but its effect as to magnitude was more moderate.

[52] Moreover, the tax on profit fell to 9 per cent.

[53] Tax evasion, etc.

[54] Domokos (2016)

[55] Thus the government hoped for a 1.6 per cent increase in GDP, and planned a tax revenue increase of EUR 2 billion against EUR 3.5 billion of revenue loss.

[56] Myck (2011)

[57] Own estimate based on earnings data for 2014 in the Polish statistical almanac.

[58] A so-called column tax (for certain industrial structures, pipelines, stacks, etc.) was introduced, representing about 1 per cent of GDP. This tax category was terminated after 2–3 years. VAT and tax changes from 2016in Romaniahttp://hirkozpont.eu/index.php/nagyvilag/1754-afa-es-adovaltozasok–2016-tol-romaniaban-penzuegyi-bombat-epit-a-roman-kormany

[59] http://5percado.hu/kozep-kelet-europai-adokalauz–2016–1-resz/

Literature

Árva L.– Giday A. – Mádi L. (2017): Az egészségügy fiskalizációja: kérdőjelek és válaszok. *Valóság*, várható megjelenés 2017-ben [Fiscalisation of Health Care: Question Marks and Answers. Reality, expected publication in 2017]

Baksay G. – Csomós B. (2014): Az adó- és transzferrendszer 2010 és 2014 közötti változásainak elemzése [Analysis of Changes in the Tax and Transfer System between 2010 and 2014] *KÖZ-GAZDASÁG* 2014/4 http://www.lib.pte.hu/akk/tartalomjegyzek/aktualis/K%C3%B6z-gazdas%C3%A1g%202014–4%20KSZ.pdf

Bokor P. – Lucz Z.né – Sághy Z. (1998): Tízéves az adóreform. [Ten years of Tax Reform]*Magyarország politikai évkönyve [Political Almanac of Hungary.] No. 2/1998. pp. 231–263*

Domokos L. (2016): Versenyképesség, állami szerep, állammenedzsment. [Competitiveness, role of the state, state management] http://www.aszhirportal.hu/hu/hirek/domokos-laszlo-eloadasa-az–54-kozgazdasz-vandorgyulesen

Gábriel P. – Reiff. Á. (2006): Az áfakulcsok változásának hatása a fogyasztóiár-indexre. [Effect of

VAT Rate Changes on the Consumer Price Index] 2006 MNB, https://www.mnb.hu/letoltes/mnbsz–200612-gabriel-reiff.pd

Giday A. (2012): Életciklus-szemlélet és a társadalombiztosítás bevételei. [Life Cycle Approach and Social Security Revenues.] *Polgári Szemle. (Civic Review) No.* 3–6

Giday, A. (2015): Beruházási ráta a visegrádi térségben. [Investment Rate in the Visegrád Group] *Public Finance Quarterly* 2015/2, pp. 178–199

Giday A. (2016): Eldőlt: egykulcsos marad az adó [Decision made: Tax to Remain Flat-Rate Tax]. *Magyar Idők.*

György L. – Veress J. (2016): 2010 utáni magyar gazdaságpolitikai modell. [The Hungarian Economic Policy Model after 2010.] *Public Finance Quarterly*

Lentner, Cs. (2013): Közpénzügyek és államháztartástan [Public Finances & Government Policy]. *(Nemzeti Közszolgálati Egyetem) [National University of Public Service]*

Lentner, Cs. (2015): Az új magyar állampénzügyi rendszer – történeti, intézményi és tudományos összefüggésekben. [The new Hungarian public finance system – in a historical, institutional and scientific context.] *Public Finance Quarterly*, 2015/4, pp. 458–472

Mádi, L. – Árva, L. (2016): A társadalombiztosítás finanszírozási reformja. [The Financing Reform of Social Security] *Public Finance Quarterly*, pp. 389–406

Myck, M. (2011): Incomes Of Polish Households In The Context of 2005–2011 Tax And Benefit Reforms. *FREE Policy Brief Series.*

Nagy, L. (2017): Az adórendszer hatása a vállalati versenyképességre és a tőkebeáramlásra. [Impact of the tax system on the competitiveness of businesses and capital inflow] *Public Finance Quarterly*

Svraka, A. – Szabó, I. – Hudecz, V. (2013): Foglalkoztatás-ösztönző adókedvezmények a magyar munkaerőpiacon. [Tax Allowances in the Hungarian Labour Market to Promote Employment]*Public Finance Quarterly* pp. 401–417

Varga, J. (2011): Az adóteher-csökkenés és a gazdaság kifehérítésének pályája Magyarországon 2010 után. [Reduction of the Tax Burden and the Whitening the Economy in Hungary after 2010] *Public Finance Quarterly*

Hungary's Convergence Programme 2017–2021, April 2017, https://ec.europa.eu/info/sites/info/files/2017-european-semester-convergence-programme-hungary-hu_2.pdf letöltés 2017–05–26

KOPINT-TÁRKI: Az adóbázis szélesítésének nemzetközi tapasztalatai [International Experiences of Tax Base Expansion] Working Material October 2007, p. 60 http://www.adko.hu/01_files/adotanulmanyok/2007/Adobazis_szelesites.pdf

OECD DATA http://www.keepeek.com/Digital-Asset-Management/oecd/taxation/taxing-wages–2000_tax_wages–2000-en-fr#page65

Study and Reports on the VAT Gap in the EU–28 Member States, https://ec.europa.eu/taxation_customs/sites/taxation/files/2016–09_vat-gap-report_final.pdf

The estimate of the value added tax revenue loss, Bratislava, 2012, https://www.finance.gov.sk/en/.../s_LoadDocument.aspx?...614...

Tax guidelines

ACCACE 2017 Tax Guidelines
https://accace.com/doing-business-in-central-and-eastern-europe/

MAZARS Közép-kelet-Európai Adókalauz 2016
https://www.mazars.com/Home/News/Latest-News3/Central-Eastern-European-Tax-brochure-2014

Trading economics
http://hu.tradingeconomics.com/serbia/personal-income-tax-rate

Adoztatas-a-kornyezo-orszagokban-is-lazitanak fn.h
http://24.hu/fn/penzugy/2016/04/04/adoztatas-a-kornyezo-orszagokban-is-lazitanak/

CZECHINVEST
http://www.czechinvest.org/data/files/fs-13-taxation-77-en.pdf?lien_externe_oui=Continue