Directions for the Reconstruction of the Tax System in Poland – a Growth-Enhancing Proposal

Abstract: The paper aims to present directions for the growth-enhancing reconstruction of the tax system in Poland. It presents a diagnosis of the main strengths and weaknesses of that system. Based on this diagnosis and a review of the literature, the authors propose a package of recommendations whose introduction would be conducive to economic growth. The recommendations include: shifting the burden of taxation from income, in particular low labour income, to consumption; exempting low earners from a part of social security contributions; the introduction of the possibility for local governments to increase the PIT-free allowance above the centrally set base amount; the unification of the basis for the PIT, National Health Fund and Social Insurance Institution contributions; the elimination of differences in contributions for different types of contracts on the basis of which work is performed; the extension of one-off amortisation to all machine investments; and the elimination of sectoral taxes.

Keywords: tax system, taxes, pro-growth proposal, impact of taxes on economic growth

JEL: H20, H21, H24, H25, H29, O10, O11, O43
1. Introduction

After the fall of socialism, Poland achieved economic success without precedent in its history. In 1990–2010, the increase in per capita GDP was about six times as strong as in 1918–1938.\(^1\) Since 1989 per capita GDP has increased by more than two and a half times. Poland has repeated the economic miracle of Germany: since 1989 per capita GDP in the former country has followed almost the same path as in the latter country after 1955.\(^2\) Poland is now more or less as far away from Germany in terms of per capita GDP as it was from Hungary in 1990, which it surpassed in 2012.\(^3\) Poland has also surpassed two countries of the ‘old’ European Union (EU): Greece and Portugal. Nevertheless, it still lags far behind the EU average.

In order to eliminate that gap, Poland has to strengthen the elements that contributed to its economic success after 1989. Those were free market reforms, introduced earlier than in other post-socialist countries (see, e.g., Balcerowicz, 1995 or Aslund, Djankov, 2014) and macroeconomic policies that avoided large imbalances (see, e.g., Bakker, Gulde, 2010). If Poland does not continue with its reforms or leaves itself little room for manoeuvre in macroeconomic policy, the Polish economic miracle will come to an end. Even before the pandemic, long-term forecasts indicated that economic growth in Poland would slow down to just 1% after 2040 without further reforms (European Commission, 2015a). Although Poland would remain a country with a fairly high per capita income, it would never catch-up to even poorer countries of the ‘old’ EU, such as Spain.

Taxation is an area where growth-enhancing reforms are possible and particularly desirable for at least three reasons.

Firstly, taxes are an important factor in determining economic growth. Their burden depends on productive behaviours: whether and how much the economic agent (taxpayer) works, acquires new skills, saves, invests, innovates, etc.

Secondly, the effects of changes in taxes on growth occur more rapidly than those of many other structural reforms. In the past, they were estimated to become clearly visible after five to ten years, i.e., only after one or even two parliamentary terms (see Kneller, Stevens, 2006). However, according to more recent studies, this period is much shorter (and does not exceed three to five years).

Thirdly, the negative impact of taxes on economic growth is strongly felt in Poland.\(^4\) Entrepreneurs complain that taxes are the main barrier to their development

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1. The authors’ calculations based on data from Maddison-Project, http://www.ggdc.net/maddison/maddison-project/home.htm [accessed: 3.05.2021].
2. The authors’ calculations based on data from The Conference Board Total Economy Database™.
3. The authors’ calculations based on the IMF World Economic Outlook Database.
4. Compare, for example, data from the Executive Opinion Survey conducted annually by the World Economic Forum and published in subsequent editions of ‘The Global Competitiveness Report’.
more frequently than on average in the countries of the region. They particularly and frequently point to tax regulations as a barrier to development (see Figure 1). Moreover, the percentage of entrepreneurs complaining about the amount of tax burden increases. Recently, it has once again exceeded the average for countries in the region (see Figure 2). All in all, taxes are growing in importance as a barrier to development compared to other barriers, such as the quality of infrastructure and corruption (see Figures 3 and 4).

The aim of the article is to present directions for the growth-enhancing reconstruction of the tax system in Poland. We are aware that there is a wide range of tax reform proposals in Poland. However, they are most often weakly related to the literature concerning effects of taxes on economic growth (with only few exceptions – see, e.g. Bukowski, Morawski, Trzcinskiakowski, 2016). We seek to fill this gap.
The analysis presented below is conducted in three steps that correspond to the main sections of the article.

In section two, we summarise how taxes affect growth. We do that by referring to a simple endogenous growth model. We also define the possibilities of changes in the tax system in Poland in the coming years from the perspective of the sustainability of general government.

In section three, we diagnose the tax system in Poland. We present its strengths that should be preserved or augmented if one wants to enhance economic growth. Above all, however, we identify its weaknesses that need to be removed or at least mitigated.

In section four, we outline the general directions of desired changes in the tax system in Poland. The changes meet three conditions resulting from the analysis carried out in the previous sections: firstly, they are growth enhancing; secondly, they are potentially sustainable as they do not undermine the sustainability of general government; thirdly, they enhance the strengths of the tax system in Poland or mitigate its weaknesses. The last two conditions imply that the shape of the tax system presented in the article does not maximise economic growth as only changes achievable in the foreseeable future are considered.

Section five concludes the analysis.

2. Effect of taxes on economic growth

Taxes are hereafter understood as (most often) monetary, compulsory, and non-refundable benefits borne to the State (see Figure 5). The monetary form is the only form of tax payment recognised by Polish law. This manner of regulating taxes is the most convenient for the majority of citizens as well as for the State. In the past, tax also took other forms – it was very often collected, for example, in agricultural crops.6 The compulsory nature of taxation means that its payment, as well as the amount, does not depend on the benevolence of citizens. If some people try not to pay the tax, the State has the right to force them to pay, applying appropriate sanctions. If taxes were not compulsory, the State would quickly stop earning most of its revenue, as the so-called free rider problem would appear. Finally, it follows from the non-refundability of taxes that the State, having collected taxes in the amount provided for by law, does not have to reimburse any portion of it after some time. In the article, benefits that have the above-mentioned characteristics are treated as taxes, regardless of their name. According to this definition, taxes are all types of compulsory contributions that finance the State’s expenditures.6

5 In the past, tax also took other forms – it was very often collected, for example, in agricultural crops.
6 Sometimes the definition of taxes includes another feature, i.e. their non-reciprocal nature. That feature means absence of a direct ‘quid-pro-quo’ between taxpayers and the State wherein
Taxes can generally be divided into two groups: direct and indirect (see Figure 6). The former one is imposed on private individuals’ income (possibly also on their property), while the latter is charged on expenses – most often consumption expenses.

Taxes can distort incentives for productive behaviours: whether and how much to work, acquire new skills, save and invest, or innovate. In particular, direct taxes are distortionary, especially in an economy open to capital and labour flows.\textsuperscript{7} However, even lump-sum taxation, which serves as a reference for estimating deadweight losses from other types of taxes, does not affect incentives for productive behaviours only as long as economic agents do not expect any change in their tax burden. Any reference of a formally lump-sum tax to variables that depend on productive behaviours makes it a type of tax that distorts decisions concerning these behaviours.\textsuperscript{8}

Each of these decisions, in turn, influences economic growth (see Figure 7). The higher the percentage of people working in an economy, the higher per capita income the economy can achieve. A similar effect occurs with an improvement in the efficiency with which labour and the existing capital stock are used. Innovations are even more powerful, as they can influence not only the level of income but its growth rate as well. The more innovations an economy introduces, the faster it grows. In turn, intensity of innovation is partly linked to investments, as a part of innovation is embodied in new machines and devices. Besides, investments are paying taxes does not give taxpayers the right to make any claims against the State. This characteristic is not met by some of the contributions (e.g. by paying a pension contribution one acquires the right to a pension in the future, while paying the health insurance contribution, one can use the services of healthcare institutions that have concluded an appropriate contract with the National Health Fund, etc.). However, their impact on development is qualitatively similar to other taxes. For this reason, a broader definition of tax has been adopted in the article.

\textsuperscript{7} In some studies, only their impact proves to be statistically significant (see Easterly, Rebelo, 1993).

\textsuperscript{8} At the same time, even a lump-sum tax fixed over time, if it were high enough, could have an impact on incentives and, as a result, economic growth. This would happen if lump-sum tax exceeded the level of consumption (before tax introduction) of at least one economic agent, as a result of which that agent would have to cover part of it by reducing savings.
a source of capital, which, if broadly defined, also depends upon qualifications by employees (human capital). Capital is another factor determining the level of per capita income. Finally, investments require financing, and national savings are the most stable source of financing. The higher the savings in a country, the easier it is to finance investments.

![Figure 6. Tax breakdown](source: authors' elaboration)

![Figure 7. Influence channels of taxes on economic growth](source: authors' elaboration)

Even if taxes distort productive behaviours, and thereby negatively affect economic growth, they are indispensable.

The State cannot be replaced by the private sector in conducting some tasks fundamental to economic growth. These tasks include protection of individuals and their property (Keefer, Knack, 1995; Sala-i-Martin, 1997), national defence, as long as it does not consume more resources than are needed to convince people that the country is not seriously threatened from abroad (Landau, 1996; Baffes, Shah, 1998; Aizeman, Glick, 2003), and basic research (see, e.g., Jaumotte, Pain, 2005).

Some tasks that the State carries out support economic growth but can also be carried out by the private sector. However, the private sector will not carry out the tasks to the extent that will provide maximum benefits because it only takes into account the part of the benefit for which it can be paid and omits indirect benefits
for which it cannot bill their recipients, i.e. positive externalities. These tasks (referred to as merit goods) include ensuring wide access to quality infrastructure, education, and health care. Their implementation by the State accelerates economic growth as long as the spending of tax money is guided by economic rational and not by political calculation (Aschauer, 1989a; 1989b; 1989c; 2000a; 2000b; Baffes, Shah, 1998; Ramirez, Ranis, Stewart, 2000; Bleaney, Gemmell, Kneller, 2001; Miller, Tsoukis, 2001; Gyimah-Brempong, Wilson 2004). For example, the State builds roads where there will be car traffic, and provides education for children, not only a ‘school stay’.

There are also tasks of the State that do not, in themselves, affect economic growth and yet increase welfare. In particular, pensions for the elderly or for disabled do not accelerate economic growth, but society is better-off in those countries where they exist.

That said, the State also undertakes tasks that are detrimental to economic growth and welfare, even when the costs of taxes financing these tasks are not taken into account. For example, benefits for people who are capable of work can incentivise them to exit the labour market. Even worse, this behaviour can be inherited because children observe first hand that it is possible to get by without work (Hansson, Henrekson, 1994; Atkinson, 1999; Mares, 2007; Afonso, Allegre, 2011; Clemente, Marcuello, Montañés, 2012; Afonso, Jalles, 2014). In turn, subsidies to unprofitable sectors or companies inhibit the reallocation of capital and labour from where they are not productive to where they would be (Aiginger, Falk, 2005).

The increase in possible benefits for economic growth (or welfare) derived from government spending decreases with increasing levels of spending (Hulten, 1996; Afonso, Schuknecht, Tanzi, 2003; 2006; Baldacci et al., 2004). On the one hand, proper supervision of expenditures becomes more difficult and costly as the bureaucracy grows. On the other hand, the possibilities of productive use of expenditures become limited. Moreover, there is a growing risk of them being misdirected.\footnote{For example, in only six OECD countries, mostly with government spending below the OECD median (i.e. the Czech Republic, Canada, South Korea, and Switzerland), one tenth of the lowest-income households receive more than one tenth of social transfers. In five countries, this share is 4% or less. In three of these countries (Greece, Portugal and Italy), government expenditures are high (OECD, 2017).} Meanwhile, the tax burden from which they are financed increases. The accelerating cost of taxes in combination with the slower-growing benefits derived from government spending mean that, at a certain level of expenditure, the costs of taxes are equal to the benefits of expenditure.

This level maximises economic growth. According to different estimates, it varies between 17% and 25% of GDP (see, e.g. Smith, 2006; 2016; Skrok, 2013). In particular, it is lowered by the politicisation of the public sector, while it is increased by the efficiency of this sector and the ability of the State to obtain income
without raising tax rates to levels that significantly weaken the incentives for productive behaviours. These possibilities increase with per capita income. The structure of the economy is changing in a way that makes tax evasion more difficult, at the same time reducing the relative benefits of engaging in those economic activities where such evasion is easy. Government expenditures of Asian Tigers (Hong Kong, South Korea, Singapore, and Taiwan) range from 17 to 25% of GDP (see Figure 8). They were similar in the West until the 1960s (Tanzi, Schuknecht, 2000). Among Western countries, they returned to those levels in Ireland (see Figure 8).

The range of government spending that allows an economy to maximise social welfare, resulting both from growth and a sense of social security, is higher and amounts to 30%–35% of GDP (cf. Tanzi, Schuknecht, 2000; Tanzi, 2008; Smith, 2016). This is the range of government expenditures in New Zealand, Switzerland, and Lithuania; government expenditures are slightly higher in Australia, the United States, and in Latvia in the CEE region (see Figure 8).

![Figure 8. General government expenditures in the EU Member States. Data for 2019 (as a percentage of GDP)](source: Eurostat, 2021a)

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10 Low government spending does not guarantee rapid economic growth as money does not have to be spent on objectives that favour it. Nor does it have to mean lower taxes. Low tax revenues may be the result of low tax collection of taxes that are set at a high level or, worse, at a discretionary level by officials. High or arbitrarily set official taxes give officials a wide range of possibilities for the extortion of bribes, i.e. a corruption tax. As a result of a high corruption tax, total forced payments become large and uncertain (Frye, 2001).
In Poland, government expenditure amounts to almost 43% of GDP.\footnote{Data acquired from the IMF World Economic Outlook Database. The information refers to the pre-pandemic period. In 2020, due to economic costs of COVID–19, general government expenditure in Poland exceeded 50% of GDP. Yet, this increase is likely to be short lived.} It is, therefore, about 20% of GDP above the level that allows for maximising economic growth and about 10% of GDP above the level allowing it to maximise social welfare. In the region, only Slovenia and Hungary have higher government expenditures. They are also lower in most of the developed countries to which Poland is still aspiring to catch up. At the same time, even fewer of those countries had equally high expenditures at Poland’s current stage of development.

Leibfritz, Thornton, and Bibbee (1997) conduct a simple cross-sectional study isolating the impact of non-tax factors on the growth of the economy. They show that the increase in the tax-to-GDP ratio in the OECD countries, from about 30% in the 1960s to about 40% in the 1990s, reduced the average annual growth rate by about 0.5 pps or by approximately one fifth. A review of more recent empirical studies confirms the conclusion that an increase (reduction) of the tax-to-GDP ratio of 10 pps slows down (accelerates) the growth rate on average by 0.5–1 pps (see, e.g., Bergh, Henrekson, 2011; 2016). Calibrating endogenous growth models to the characteristics of OECD economies gives results that depend on the model design, but they usually turn out to be even stronger (see, e.g., King, Rebelo, 1990). Nevertheless, it should be noted that there is no consensus among economists whether taxes affect the long-term growth rate or only the level of income in the long term (see, e.g., Koester, Kormendi, 1989).

Research on the countries in our region indicates a significantly stronger impact of taxes on economic growth than in developed countries, on which most research focuses. In particular, an analysis carried out by Skrok (2013) for the new EU Member States shows that a reduction in the tax-to-GDP ratio of 1 pps led to an increase in their growth ranging from 0.2–0.5 pps, provided that the reduction concerned income taxes, and the loss of revenue in the budget was matched by a reduction in social spending.

One may summarise the main points of the above-presented discussion by referring to the learning-by-doing model, i.e. a simple endogenous growth model (cf. Rzońca, 2005). The following assumptions are made in the model:

The production function of an individual entrepreneur is as follows:

\[ Y_i(t) = (K_i(t))^{\alpha} \left( B \left( \frac{K(t)}{L(t)} \right)^{\beta} L_i(t) \right)^{1-\alpha}, \tag{1} \]

where: \( B \left( \frac{K(t)}{L(t)} \right)^{\beta} = A(t) \) – level of technology ("knowledge") in the economy; \( Y_i \) – individual output; \( K_i \) – individual capital input; \( L_i \) – individual labour input; \( K \) – aggregate capital input; \( L \) – aggregate labour input; \( 0 < B < e^{1/\alpha}; 0 < \alpha < 1; \beta \geq 0. \)

This form of the microeconomic production function reflects two basic assumptions of the learning-by-doing model: the production process provides companies
with knowledge how to produce more efficiently and the knowledge spillovers freely throughout the economy. Note that the level of technology ("knowledge") is slightly modified compared to macroeconomics textbooks. It depends on capital per unit of labour, instead of capital. Due to such a modification, the production function shows constant economies of scale both at the micro and macro level, regardless of the adopted product elasticities with respect to individual production factors.

The aggregate production function is easily obtained as a result of summing up the production functions of all \((m)\) companies in the economy.

\[
Y = \sum_{i=1}^{m} Y_i = \sum_{i=1}^{m} \left( (A(t))^{1-\alpha} (k(t))^\alpha L_i(t) \right) = (A(t))^{1-\alpha} (k(t))^\alpha \sum_{i=1}^{n} (L_i(t)) = (A(t))^{1-\alpha} (k(t))^\alpha L(t) = (A(t))^{1-\alpha} \left( \frac{K(t)}{L(t)} \right)^\alpha L(t) = K(t)^\alpha \left( A(t) L(t) \right)^{1-\alpha},
\]

where: \(k = K/L\). Labour input grows at a constant rate \((n)\).

\[
\dot{L}(t) = nL(t),
\]

where: \(n \geq 0\).

All households are the same. Their number is equal to the labour input (each household has a unit of labour). Households own companies; hence, all income generated by the companies goes to them. Households pay tax on their income. They maximise their utility, which is a function of their consumption over an infinite time horizon. The utility function is defined by the following formula:

\[
U_s = \int_s^\infty e^{-\rho(t-s)} u(c) \, dt,
\]

where: \(u(c)\) – instantaneous utility; \(c\) – consumption of an individual household (consumption per unit of labour); \(\rho\) – discount rate.

The State collects income tax. Its rate \((\tau)\) depends neither on the source nor on the amount of income of an economic agent. All government revenues come from the income tax. Thus its rate also determines the degree of fiscalism.

\[
\tau(t) = \frac{T(t)}{Y(t)} = \frac{\tau(t)Y(t)}{Y(t)} = \frac{G(t)}{Y(t)},
\]

where: \(\tau \in [0; 1)\); \(T\) – tax revenue; \(G\) – government expenditure.

The State allocates some part of its revenue to finance the supply of merit goods. Let us call this part the government capital accumulation rate. The capital accumulation rate in the economy is the average of the capital accumulation rates in government and private sectors weighted by the share of these sectors in the total income.
\[ s = s_p (1 - \tau) + s_s \tau, \]

where: \( s_p \) – the capital accumulation rate in the private sector; \( s_s \) – the capital accumulation rate in the government sector.

The State can also provide public goods that can be treated as an additional production factor.

\[ Y_t = h(g(K_t))A(t)L_t \]

where: \( g \) – spending on public goods to output ratio (as it is not so much the absolute volume of supply of these goods that is important for the production process but their availability); \( h \) – the function, which is non-negative and growing slower and slower, which reflects falling albeit always positive marginal productivity of public goods. For example, the following function meets these conditions:

\[ h(g) = (a + bg)^\gamma, \]

where: \( a, b, \gamma \) – parameters; \( a \geq 0; b > 0; 0 < \gamma < 1. \)

The model has stable and non-zero growth, only if \( \beta = 0 \) (i.e., externalities of capital accumulation are large enough to neutralise the decreasing marginal productivity of capital at the micro level, but not larger). If \( \beta < 0 \), the growth rate is converging towards zero, due to decreasing marginal productivity of capital. The model simplifies to the neoclassical growth model (with no technical progress). In that case, long term growth is unaffected by any of the fiscal variables. They can only influence the output level per unit of labour in the steady state. As this influence is qualitatively quite similar to their effects on growth when \( \beta = 0 \), we focus on that case.\(^{12}\)

When the State does not provide public goods, then growth of output per unit of labour is given by the following formula:

\[ \frac{\dot{y}(t)}{y(t)} = \frac{(1 - \tau)\alpha B^{1-\alpha} + s_s \tau\alpha B^{1-\alpha} - \rho - n}{\theta}, \]

where: \( \theta = -\frac{c(t)u''(c(t))}{u'(c(t))} = \text{const} - \text{relative risk aversion (greater than zero and not equal to one).} \)

It follows that income tax reduces the growth rate, except when the State spends all tax revenues on merit goods. The greater the fiscalism, the slower the growth. However, if the tax were not an income tax but a lump sum (not distorting

\(^{12}\) For \( \beta > 0 \), growth of output per unit labour would be exploding. As this result hardly corresponds to reality, at least in the long term, it is not analysed further.
the marginal product of capital), then the tax burden (at least up to a point) would not affect growth.

With strongly distortionary taxation, the State is hardly able to accelerate growth. This is because capital accumulation by the private sector is a decreasing function not only of distortionary taxation but also of capital accumulation by the State.

\[
\frac{S_p}{Y} = \frac{(1 - \tau)\alpha}{\theta} + n(\theta - 1) - \frac{s_x\tau}{\theta}(\theta - \alpha).
\]  

(10)

Government spending on merit goods crowds out some private investment. Economic agents postpone their consumption less if the State takes on the burden of accumulating the capital (broadly defined) necessary to ensure an adequate level of future consumption. Note however, that the crowding-out effect would be weaker if capital accumulated by the State were not a perfect substitute for capital accumulated by the private sector.

The State in the model could raise the capital accumulation only if it set its investment at such a level that would reduce private investment to zero. As a result, the State would take over the entire capital stock in the economy. However, as international experience shows, with State ownership of capital, the process of learning by doing is at least slower ($\beta$ drops below unity). The initial growth may be fast but it slows to zero over time – no matter how much the rate of capital accumulation has increased.

If the State supplies public goods, the growth equation changes to the following form:

\[
\frac{\dot{y}(t)}{y(t)} = \frac{(1 - \tau)(a + bg)^{\gamma}B^{1-\alpha} + s_x\tau(a + bg)^{\gamma}B^{1-\alpha} - \rho - n}{\theta}.
\]  

(11)

This equation shows that there is a range within which increasing the share of expenditure on public goods in the output accelerates the long-term growth more than it is decelerated by the increase in distortionary taxation necessary to finance the increase in expenditure. For the adopted form of the $h$ function, the right-hand border of this interval is the expenditure on public goods relative to the output ($g$) that maximises the following expression: $(1 - g)(a + bg)^{\gamma}$. That is:

\[
\frac{d}{dg}\left[(1 - g)(a + bg)^{\gamma}\right]_0 \rightarrow g = \frac{\gamma b - a}{\gamma b + b} < 0.5.
\]  

(12)

At the end of this section, it should be emphasised that one should not think about a tax reform that would result in an increase in general government deficit. A deficit usually means higher taxes in the future. This is implied by dynamic efficiency, which requires the interest rate in the long term to be higher than the GDP
growth rate (see, e.g., Romer, 2000). With such a relationship between the interest rate and the growth rate, a deficit even in a single period means, on average, a higher tax burden in other periods. Additional tax revenue is necessary to cover at least part of the interest on the sovereign debt incurred to finance the deficit.

Deficits have a negative impact on economic growth also through mechanisms other than future tax increases. Firstly, a deficit worsens the structure of government expenditures and makes it easier to direct them towards goals that do not benefit society. Secondly, by consuming private savings, a deficit makes it difficult to finance investments. Although the issue of Ricardian equivalence is a subject of dispute among economists, most empirical studies indicate that households increase their savings by 20% to 50% of the deficit increase (see, e.g., Gale, Orszag, 2003). Thus, the pool of savings that can finance investments is reduced by 50% to 80% of the deficit. Thirdly, by raising the interest rate and increasing uncertainty, including uncertainty about future tax burdens, a deficit discourages economic agents from making investments. Fourthly, by increasing exchange rate volatility, it hinders both exports and imports and, as a result, weakens the country’s connection to the world economy. Finally, sometimes it ends in a crisis (for more, see, e.g. Ciżkowicz, Rzońca, 2011).

Therefore, tax reconstruction has a chance to speed up economic growth, provided that it does not increase the budget deficit. If it were to include tax cuts, it should be accompanied by a reduction in government spending that is detrimental, neutral, or insignificant to economic growth. If the reconstruction of taxes deepens the budget deficit, taxes will have to be increased in the following periods. Due to additional mechanisms, including uncertainty about the level of taxes, the deficit may be more damaging to economic growth than increases in taxes that eventually appear due to the deficit.

In the foreseeable future, there is no room for tax changes that would deplete budget revenue. There is a high general government deficit. According to early estimates by the Central Statistical Office, in 2020, the year in which the COVID–19 pandemic broke out, it amounted to almost 7% of GDP. Tax revenues decreased, and expenditures increased significantly. According to the European Commission,13 in 2021, only the structural part of the deficit will exceed 4% of GDP. This heralds serious fiscal tensions in the near future.

They may be exacerbated by interest rate increases. Currently, interest rates in Poland are at their historical low, so that in spite of high sovereign debt perilously close to the constitutional limit of 60% of GDP, the cost of debt servicing consumes a record-low percentage of GDP (in 2021, it will be 1.4%, almost half of that in 2012,14 and in 2022, it is expected to fall even further to 1.3% of GDP15).

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13 European Economic Forecast, Institutional Paper 136, November 2020.
14 Data from the Ameco European Commission database.
15 European Economic Forecast, Institutional Paper 136, November 2020.
However, following a period of low rates, interest rate increases always occur. Growing inflation is likely to bring Poland closer to that point.

The already adopted regulations ensuring an expenditure increase for a specific purpose in the coming years ahead of economic growth are yet another factor that will exacerbate tensions in general government. The increase includes expenditures on pensions (an outcome of lowering the retirement age and the introduction of 13th and 14th pension), national defence (from 2% of GDP to 2.5% of GDP in 2030), health care (from 4.7% to 6.5% of GDP in 2025), and science (from 0.4% of GDP to 1.0% of GDP).

This does not mean that nothing should be done about taxes until the deficit has been reduced. Not all taxes have the same effect on work, savings, investments, and innovations. At the same time, the influence of taxes on these behaviours depends not only on the amount of taxes but also on the uncertainty about that amount, and the costs of fulfilling tax obligations. Change in the structure of taxes, the reduction of uncertainty about their amount, the facilitation of tax payment, and the reduction of tax compliance costs are areas that can have a positive impact on economic growth, and they are the focus of changes proposed by the authors.

The acceleration of economic growth that would ensure these changes would facilitate the reduction of the government expenditure-to-GDP ratio. Its decline after the elimination of the deficit would create room for tax cuts and further growth benefits. Therefore, the presented proposals should be treated as the first stage of tax reform in a direction that would maximise economic growth and welfare in Poland.

3. Strengths and weaknesses of the tax system in Poland

Taxes in Poland, assessed in terms of their impact on economic growth, have both strengths and weaknesses.

Their main strength is the relatively high proportion of indirect taxes from consumption in government revenues, including levies from a VAT (see Figure 9). This feature is more important than on average in the European Union. However, for most new Member States, its importance is even greater.\textsuperscript{16} Thus, there is a room for improvement of this positive feature in Poland’s tax structure. The high proportion of consumption taxes in the government revenues is beneficial because these taxes weaken the incentives for work, investments and entrepreneurship to a lesser extent than other type of taxes.

\textsuperscript{16} Data from the European Commission.
In theory, taxation of consumption should be equivalent to the taxation of labour income (Layard, Nickell, Jackman, 1996; Stiglitz, 2004: 605–609). Two crucial factors determine utility maximised by households: consumption and leisure. Consumption is determined by income, which is primarily derived from work. Work, however, consumes time. Both taxation of labour income and taxation of consumption distort the ‘price’ relationship between leisure and consumption in the same way. The higher the taxes on consumption or labour income, the more expensive consumption becomes relative to leisure. As a result, both taxes weaken people’s incentive to work. However, in practice there is no such equivalence, if only because taxes on consumption affect the expenses of everyone, including those who do not work and those who consume imported goods, i.e., goods produced by working abroad, while taxation of labour income is by definition imposed on those who work only within the borders of a given country. This difference would not be of great importance if unemployed persons lived off the savings they had accumulated.

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17 One can imagine a situation where a VAT tax would increase the incentive to work. This would be the case if it was imposed only on goods complementary to leisure time (e.g. tourist services), and income obtained in this way was used to subsidise goods complementary to labour (e.g. childcare) – see Corlett and Hague (1953).
during their employment and if consumers purchased only domestically produced goods. In practice, the majority of unemployed persons make a living from other people’s work, and consumers buy at least some imported goods. While taxation of consumption does not distort the relations between the prices of consumption and labour, including work performed abroad, the taxation of income from labour limits the consumption possibilities only of those working in the country.

Martinez-Vazquez, Vulovic, and Liu (2009) provide a broad overview of the effects of shifts between taxes on consumption and labour income, respectively. A smaller negative impact of consumption taxes on economic growth than taxes on labour income is pointed out by Widmalm (2001), Dahlby (2003), International Monetary Fund (2004), European Commission (2006), Arnold (2008), OECD (2010), Gemmel, Kneller, and Sanz (2011; 2014), Thomas and Picos-Sánchez (2012), Pestel and Sommer (2017).

Another positive feature of taxes in Poland is a moderate, compared to most EU countries, level of the upper income tax rates, both for companies (CIT) and on personal income (PIT) (see Figure 11). However, the difference in marginal CIT between Poland and the EU on average has been systematically shrinking in recent years. Still, the rates of both types of income taxes alone are less of a disincentive to productive behaviours than in the EU countries. In particular, the lower taxation of high personal income than in the West is beneficial for the accumulation of human capital, i.e., for improving one’s own qualifications.

High levels of skilled labour support economic growth in at least four ways. Firstly, they encourage the search for new and more efficient production techniques. Secondly, they are often a necessary condition for the introduction and development of technologies invented abroad (see, e.g., Nelson, Phelps, 1966; Griffith, Redding, Van Reenen, 2005). Thirdly, they facilitate productivity growth of low-skilled workers. This is achieved not only by improving the organisation of work, which is made possible by high skills of their superiors, but also by transferring knowledge, even unknowingly, regarding how to produce goods and services more efficiently (see, e.g., Feldstein, 1973). Fourthly, they provide an income that gives the opportunity to increase savings (see, e.g., Kaldor, 1956), which are a source of investment financing.\footnote{For example, in Canada and Germany, the wealthiest one-fifth of the population puts aside one fifth of their income, and in the UK, one fourth. In all these countries, the poorest one-fifth of the population has no savings at all.}

Individuals with high skills, and consequently income, constitute a group whose professional activity is particularly sensitive to the level of taxation (Disney, 2000 and works cited therein). Satisfied consumption needs increase the importance they attach to leisure. Self-employment, which they choose more often than other society members, gives them the freedom to shape their working time, which is not available to contract workers (Showalter, Thurston, 1997). Simultaneously, work of highly skilled individuals affects the demand for unskilled labour. Their professional work forces them to buy many services that they cannot perform
on their own due to lack of free time – they are able to do so because of their higher income (Feldstein, 1973). The importance of relatively low taxation on highly qualified persons (experts, managers, specialists, etc.) in terms of economic growth is increased by their freedom to work abroad. The low tax rate decreases the incentive for economic emigration, which would otherwise be strong as long as labour productivity and, as a result, wages in Poland differ significantly from those in the West.

![Figure 1](https://www.czasopisma.uni.lodz.pl/foe/images/article/FOE2353_91.png)

**Figure 11. The highest CIT and PIT rate in the EU countries in 2020 (%)**

Source: European Commission, 2021

The negative aspects of Poland’s tax structure include a very high proportion of government revenues from social security contributions, which can be treated as a form of taxation of labour income (see Figure 10). This proportion is clearly higher than in the countries of our region and higher than in the West. The level of taxation of labour income is mitigated by a significantly lower personal income tax than in the West. However, due to the low PIT-free allowance compared to other countries, this mitigation applies to a small extent to low income from work. While the combined PIT and contributions on the average wage in Poland is clearly below the OECD average, in the case of low wages (at the level of half the average wage), it corresponds to the average of OECD countries and is much higher than in countries such as Ireland, the UK, or the Netherlands.

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19 Data from the European Commission.

20 Data from the European Commission.

21 OECD data.
Individuals with low income comprise the group whose work is the most sensitive to taxation (Disney, 2000). Low income is usually either a reflection of low skills or a result of family duties that make it difficult to adapt time to employers’ requirements. For such people, a financially attractive alternative may be living off benefits or on the salary of a family member, including parents, the more so as working involves some costs (e.g., travel or purchase of services previously performed by themselves).

In Poland, these costs, and as a consequence, the impact of taxation on incentives of unskilled labour to work are reinforced by the structure of social benefits. Seeking employment results in either a total loss of benefits or a reduction of benefits by an amount equal to the increase in income from employment. As a result, the average effective taxation of income of people moving from unemployment to employment exceeds 80% and this is the seventh highest value in the EU.22

Another weakness of taxes in Poland is higher taxation of income from investment in machinery than in the region. While the effective taxation of profits in general does not differ significantly from the average in the region, the difference is clear in the case of profits from investment in machinery. All countries in the region tax those profits less than Poland (Spengel, Elschner, Endres, 2012).

On average, investments in machinery are more conducive to economic growth than other types of investment (De Long, Summers, 1991). These investments more often lead to technical progress, which, in addition to improving efficiency, is a source of productivity growth in the economy. Investment and productivity growth are also hindered by further tax system weaknesses in Poland.

One of the hindrances to the growth of investment and productivity is the complexity of taxes. Poland’s taxes are regulated by 11 Acts and 292 Regulations for a total of 5,789 pages. It would take almost 284 hours to read them (Grant Thornton, 2017a). In the opinion of entrepreneurs, taxes are not as complex in any EU country as they are in Poland. Moreover, the degree of their complexity is a barrier to development, which negatively distinguishes Poland from the countries in the region (see the Introduction).

A manifestation of this complexity is the large amount of time that an average entrepreneur has to allocate to fulfilling tax obligations. In Poland entrepreneurs utilise 260 hours per year, compared to 161 hours on average in the EU and EFTA countries, and 50–82 hours in countries such as Estonia, Ireland, and Luxembourg. Only two EU countries, Hungary and Bulgaria, require more time devoted to taxes than Poland (PwC UK, World Bank Group, 2017). Micro-enterprises in Poland have to submit an average of 30 different tax returns per year, medium enterprises – 41, and large one – 67.

Taxes are complicated by numerous exceptions and tax reliefs. Poland has the second highest share of tax preferences in VAT in the EU after Spain, even higher

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22 Data from the European Commission.
than Greece. In terms of forgone revenue from this tax, they are almost twice as expensive as the EU average (CASE, 2016). If not for these preferences, the VAT rate could be less than 17%,\textsuperscript{23} instead of 23%. The same good may be taxed at different VAT rates depending on its purpose, the type of activity of the entrepreneur, or minor differences in composition or state. Reduced rates are applied not only by Poland, but also by the other EU countries, with the exception of Denmark. However, two such rates are not equally common. There is only one reduced rate in eight EU countries (see Appendix).

In turn, if it were not for the numerous CIT reliefs, its rate could be 13% instead of 19%.\textsuperscript{24} In relation to PIT, such a calculation is more difficult due to the different charging forms of this tax. In the case of taxpayers accounting for the tax scale, the average income burden after deducting social security contributions is less than 9%. Exceptions and preferences also apply to social security contributions. Thus, depending on the legal form of the agreement under which labour income is received, it may be charged with very different overall amount of taxes. For the minimal remuneration of PLN 2,800, that amount may stands at 0% (a mandate contract, an employee is a student below the age of 26) or 41% (an employment contract, an employee over the age of 26, a participant of the Employee Capital Schemes (PPK)). For the remuneration of PLN 20,000, it may amount to 16% (self-employment) through 23% to 45% (an employment contract, an employee is over the age of 26, a participant of the PPK). At the same time, individual taxes and contributions have different bases for calculating their amount.

Tax preferences distort the demand for individual goods and services as well as their production costs. In this way, they create barriers to the reallocation of labour and capital to their most efficient use. The directions of investments and changes in employment are not entirely determined by the profitability of individual projects, but to a large extent, by differences in taxation.

The complicated law causes a great deal of confusion. The tax administration in Poland issues over 30,000 tax interpretations per year, with the average length being five pages (Grant Thornton, 2017a). A single person does not have the physical ability to check all of these documents. At the same time, one cannot count on a friendly approach of the tax administration to problems with the interpretation of unclear laws. Although the clause for resolving doubts of interpretation is in favour of the taxpayer (\textit{in dubio pro tributario}), the tax administration very rarely uses it (Grant Thornton, 2017c).

The tax administration is often wrong in its interpretations. Court challenges occur in about one third of the unfavourable decisions to taxpayers. It takes a great deal of time for taxpayers wrongly accused of tax understatement to clear themselves of charges. On average, the time frame is 56 months, with the longest trial

\textsuperscript{23} FOR estimates based on MF and CASE data (2016).
\textsuperscript{24} FOR estimates based on MF data.
lasting 20 years. Moreover, before taxpayers receive a favourable judgment, they must pay the disputed amount (Grant Thornton, 2017a).

The frequent overruling of tax administration decisions by the courts is a symptom of a more general problem – low efficiency of tax administration. Among the OECD countries, only in Japan is the cost of tax collection (in relation to tax revenues) higher than in Poland (see Figure 12).

![Figure 12. Tax collection costs in the OECD countries (as a percentage of tax revenue). Data for 2013 (Latest available)](source: OECD, 2015)

Disputes with the tax administration reduce average capacity utilisation, and thus productivity of labour and capital. Often, disputes limit the scope of companies’ activities and sometimes result in a permanent cessation of business. The risk of liquidation, regardless of which party of the dispute is right, the entrepreneur or the tax administration, increases with the length of the court proceedings. Some of the resources available to companies (e.g., knowledge of how to reach customers or use machines) may be so specific that it is difficult for other companies to take over and use them fully. Moreover, some companies may be reluctant to enter into transactions with entrepreneurs who have serious problems with the tax administration.25 Non-use of resources, if long enough, further restricts their use in new applications – unmaintained machines break down, buildings deteriorate, and workers lose their qualifications along with the ability to improve them.

25 This does not mean that economic efficiency is in conflict with the pursuit of tax fraud. The truth is precisely the opposite. However, the State should not only prosecute tax fraud but above all reduce the incentives to commit it (see, e.g. Smith, 1954, vol. II: 586–587).
The complicated tax law reduces productivity in the economy also by the unproductive behaviour it causes (cf. Slemrod, Yitzhaki, 2002). Meeting tax obligations requires unnecessary expenditures that could be used in a productive manner. With simple taxes, it would be less costly to keep proper records. There would be fewer unclear or contentious cases, so tax audits would be less frequent and shorter. Taxpayers would have to appeal to courts against unfavourable decisions of the tax administration less frequently. Finally, the State expenditure on taxpayer control could be reduced without the risk of increased tax fraud.26

Above all, complicated tax laws lower productivity by inhibiting reallocation of labour and capital to the most efficient uses and reducing investment in high-performance technologies. Such laws encourage economic agents to develop activities in which they have as limited relationship with the tax administration as possible. In addition to the activities covered by the tax preferences already mentioned, this condition is met by small-scale and non-innovative activities; they are not conspicuous, and at the same time, they do not require large production assets against which the tax administration could pursue its claims.

A review of research on the determinants of companies’ size confirms that it significantly depends on the quality of the tax system (Friesenbichler et al., 2014). The high percentage of micro-enterprises in countries with complicated taxes is not only the result of the choice made by entrepreneurs to reduce interactions with the tax administration. It also reflects the smaller possibilities of micro-businesses overcoming barriers to development, including covering the costs of complying with tax obligations. Taking Canada, New Zealand and the UK, for example, these costs consume 2% of annual sales in a company with revenues below $50,000, but only 0.04% in companies with sales above one million dollars (Government Accountability Office, 2011).

The small scale of operations reduces the productivity of companies because it does not allow them to achieve economies of scale, including investing in high-performance technologies, which often requires large scale production (see, e.g., Pagano, Schivardi, 2003; Castany, López-Bazo, Moreno, 2005; Van Biesbroeck, 2005; Leung, Meh, Terajima, 2008; Melitz, Ottaviano, 2008; Braguinsky, Branstetter, Regateiro, 2011). The impact on productivity is particularly negative if a business is run in the shadow economy. It is not possible there to ask the State to enforce claims against unreliable counterparties. Therefore, business is conducted mainly without deferred payments or with clients who are well known and trusted. The former limits the size of individual transactions, while the latter limits the circle of customers. Modern economic growth requires depersonalised transactions (North, 1993). In addition, due to the risk of both detection and coming across an unreliable customer, it is practically impossible to conduct large or long-term contracts that would guarantee the recovery of at least part of the investment.26

Cf. Smith, 1954: vol. II, p. 587.
The greater the importance of economic activities that are hardly visible to the tax administration, the more oppressive the tax administration becomes towards other entities in order to obtain planned budget revenues. This further weakens incentives to scale up activities and invest. At the same time, there are more reasons to stay out of the market sector and produce various types of goods and services for personal use only. By definition, such production closes the possibilities of both specialisation and economies of scale.

The complicated system results in numerous loopholes continuously discovered by taxpayers. The legislators in turn attempt to fight these gaps by adding more laws. At the same time, the opaqueness of the tax system makes it easier for interest groups to introduce new preferences. All this, together with the casuistic nature of tax law, leads to the high variability of tax regulations, which is another weakness of the tax system in Poland. So far, each tax law has been amended on average about twice a year. In the years 2012–2014, Poland produced 56 times more tax regulations than in Sweden, where tax law is the most stable in the EU, and much more than in other countries of the region. For example, Poland produced 11 times more tax regulations than Lithuania and twice as many as Hungary. In 2016, the tax law inflation accelerated even more – twice as many regulations were produced than the average in the previous few years (Grant Thornton, 2017a). In total, 1,784 pages of laws and regulations were introduced, thus amending almost one third of the tax laws. One of the amendments to the Personal Income Tax Act was pushed through the entire legislative process, including the signature of the President, within one day (Grant Thornton, 2017b). In the following years, the prolific enactment of tax regulations continued.

The instability of tax law makes individuals uncertain about the tax burdens. The shape of the tax system becomes an additional risk. This risk not only discourages investment but also, once it has materialised, leads to a waste of some resources in the economy. If no changes in taxes are foreseen at the project implementation stage, and the estimates of its profitability prove to be overestimated, then the investment may become worthless. The revenue may no longer cover the costs and the capital may not be (fully) used in other applications due to its specific nature.

Companies can partially protect themselves against the threat of unstable taxes by replacing capital with labour from the shadow economy. This allows them to quickly adapt to changes in the environment that are difficult to predict. These companies may dismiss employees not covered by any contract or limit their wages (or even not pay them). Poorly equipped with machines, they are characterised by low productivity, which makes it difficult to cover labour costs. However, avoiding non-wage labour costs (which operating in the shadow economy enables) mitigates this difficulty.

It is worth noting that complicated and unstable tax regulations mutually reinforce their negative impact on investment and productivity in the economy. On the one hand, if the tax system was complicated but stable, it would require a one-off
cost to understand. Where the regulations are continuously changed, the costs of tracking them never end. On the other hand, if taxes were frequently changed but simple, it would be possible to identify potential scenarios and prepare for each of them. When the number of parameters in the tax system subject to change is high, the analysis of potential scenarios becomes very difficult, if possible at all. This difficulty discourages investments in projects that cannot be abandoned without serious losses; by contrast, it does encourage small-scale operations without significant production assets, especially of specific nature.

Finally, the high degree of centralisation of the tax system in Poland should be considered a weakness. There are local taxes in Poland. Local governments have also a share in income tax revenues. However, their share in general government revenues is lower in Poland than in the average EU country (see Figure 13).

![Figure 13. Shares in general government revenues (%). Data for 2019](source: Eurostat, 2021b)

Research indicates that if the expenditure of local governments is not based on their own revenues but on transfers, local authorities do not compete with each other in creating the best possible conditions to attract economic agents (Besley, Coate, 2003). These conditions do not determine their ability to spend. This ability depends on the central government’s favouritism. As a result, the efforts of local authorities to broaden their tax base weaken – the more so when the transfers received from the central budget are (negatively) linked to their own revenues or, more generally, per capita income in a given area (Bird, Smart, 2002). Simultaneously, the resilience of local governments to shocks may weaken because they
may rely on the central government and they have no provisions for self-remedy. Finally, fiscal discipline also weakens. The more central government finances local authorities, the higher the political costs it faces if it refuses to support a unit in financial difficulties (Rodden, 2005). The negative effects of transfers are more serious if the transfer system is more complicated. High complexity of transfers limits the ability of voters to evaluate public services provided by local governments (Kotsogiannis, Schwager, 2008).

4. Recommendations

The following proposals for changes to the tax system in Poland meet, as indicated in the Introduction, three conditions: they foster economic growth; they are potentially sustainable; and they improve the strengths of the tax system in Poland or mitigate its weaknesses.

An essential element of the proposed changes is to shift the burden of taxation from income, in particular low income from labour, to consumption. Shifting the tax burden instead of reducing it (at least in the initial stage of tax system reconstruction) is associated with the need to meet the second of the conditions required for such reconstruction.

Based on various models, it can be estimated that shifting the tax burden from income to consumption alone could increase GDP per capita by 1 to 8% over 10 years. Thus, the average growth rate of the economy over that period would accelerate by about 0.1–0.8 percentage points. The lower limit of this range is obtained from the European Commission’s (European Commission, 2006) general equilibrium model. Other tools imply benefits close to the upper limit of this range (compare International Monetary Fund, 2004; Arnold, 2008; Gemmell, Kneller, Sanz, 2011).

This shift should be done by limiting preferences in VAT, the revenue from which would be sufficient to cover the cost of increasing the PIT-free allowance and exempting low earners from a part of their social security contributions. The range of contributions covered by the exemption should be selected in such a way that the total taxation of the highest possible labour income is as close as possible to the taxation of income from economic activity. Such a solution would help to reduce the shadow economy, as the tax benefit of illegal employment would disappear, or at least decrease. At the same time, the solution would reduce the taxation of labour income of those groups whose incentives to take up employment are most sensitive to taxes (i.e., young people, low skilled workers or those unable to work full-time). In order to further strengthen the incentive to work, it would be necessary to make the receipt of benefits by persons able to work dependent on their professional activity and to change the way in which benefits are taken away from
a person whose income increased, so that the loss of benefits is gradual, rather than sudden. In particular, the allowance 500+ should be covered by this principle.

With a broad reduction in VAT preferences, including those regarding goods that are mainly consumed by the poorest individuals or those with children, the budget should allocate part of the additional revenue to compensate for them. Compensation can be made in such a way that shifting the burden of taxation from income to consumption, regardless of its scope, does not lead to a worsening of the material situation of any social group even in the short term, i.e., before its positive effects on legal employment and economic growth become apparent.

The elimination of differences in contributions for different types of contracts on the basis of which work is performed could serve as an additional source of coverage of the costs of lowering labour income taxation especially for low earners. An additional benefit of this elimination would be the simplification of the social security system and the removal of distortions when the main condition for choosing a given form of contract is not its legal and economic sense but its non-contributory nature. There would be an end to lawsuits concerning, for example, whether digging a ditch is a contract for specific work.

A significant increase in the PIT-free allowance could be achieved by transferring the entire income tax revenue to local authorities and allowing them to compete with the allowance amount. This solution would remove another flaw in the tax system in Poland, namely its excessive centralisation. Local authorities (municipal councils) could increase the allowance above the base level defined at the central level. Such tax competition between local authorities would avoid the inefficient flow of capital from poor parts of the country to the rich ones. If it contributed to the movement of people (especially the poor, i.e., those without capital) from poor parts of the country to the wealthy ones, it would strengthen the mechanism of equalisation of income per capita (Barro, Sala-i-Martin, 1991).

These changes could be complemented by an exemption from social security contributions for older and younger people. As they are characterised by lower than average labour activity in Poland (compared to the EU), this solution would not pose a risk of a significant deadweight loss. Making contributions dependent on age would not cause significant distortions in the choices made by the economic agents because age is not the subject of their choice. This dependency could shift the demand of entrepreneurs for labour towards young and old. However, in a situation of shortage of labour, this shift should not significantly reduce the chances of other age groups for employment. By exempting older and younger people from social security contributions, their net income could significantly increase while the cost of their employment for entrepreneurs would decrease.

Another proposed change is to extend the possibility of ‘one-off’ amortisation to all investments in machines. It would strengthen the incentive for such investments. Although they are the most conducive to economic growth, their low level
mostly contributes to the low investment rate in Poland and negatively distinguishes Poland from other countries in the region (Forum Obywatelskiego Rozwoju, 2015). The extension would result in a temporary decrease in CIT revenue. Thus its implementation should depend on the scale of the preference reduction in VAT. If the scale were small, the implementation of this proposal would have to be postponed until the general government deficit has been significantly reduced.

The proposals presented above would not only alleviate the main weaknesses of taxes in Poland (i.e., a high share of social security contributions in government revenues and, as a result, a fairly high overall taxation of low labour income; higher taxation of income from investment in machinery than from other investments; a fairly high degree of centralisation of taxes) but also augment one of their strengths and maintain another one (respectively, the high share of consumption tax in government revenues and moderate marginal income taxation). They would also reduce the complexity of the tax system, and a reduction in VAT preferences could radically simplify it. If it were broad enough, it would at the same time significantly narrow the scope for fraud, significantly narrowing the VAT gap in Poland, which until recently was one of the largest in the EU (CASE, 2016). This gap, despite many measures taken in recent years to reduce it, is still quite large.

A significant simplification of taxes and/or their stabilisation would also be achieved by unifying the basis for the PIT, National Health Fund and Social Insurance Institution contributions. Consideration should also be given to replacing the casuistic definition of revenues and costs in economic activities by more general definitions. The first of these proposals would reduce the number of mathematical operations taken to calculate PIT and contributions to the National Health Fund and Social Insurance Institution from sixteen to three. It would thus reduce the risk of confusion and administrative costs for both entrepreneurs and the tax authorities. The second proposal would interrupt the continuous struggle between the Minister of Finance and entrepreneurs in finding new loopholes in the legislation. The implementation of this proposal should be accompanied by a change in the interpretation of tax law by the tax administration. This would consist of two elements. The first is a clear increase in the availability of general interpretations of tax law. The second is a gradual building of a structuralised and searchable database based on conclusions resulting, in particular, from judicial decisions.

A phasing out of sectoral taxes would also serve as a simplification, and it would create a sense of stability. These taxes are fiscally inefficient in that they generate little revenue compared to the distortions caused, weakening economic growth. In particular, these taxes are similar in nature to tax surcharges, the fears of which result in a significant reduction or dispersion of investment between different tax jurisdictions (cf. Janeba, 2000). These fears are not only limited to sectors that are already covered by this type of taxes but concern also other sectors
as such taxes undermine the credibility of the government’s commitment not to impose confiscatory burdens.

5. Conclusions

Almost every type of tax distorts economic agents’ incentives to pursue productive behaviours, i.e., working, acquiring skills, saving and investing, as well as innovating. Simultaneously, any type of tax may be conducive to economic growth if the State allocates the revenue from it to purposes that sufficiently promote growth. Potentially growth-enhancing government expenditure includes expenditure on public goods and merit goods as well as on social expenditure that encourages/facilitates labour activity.

As government expenditure rises, the potential benefits from it fall, while the tax burden and distortions it causes increase. That said, more developed countries have larger possibilities to raise government revenue without significant distortions. With the normal relationship between interest rates and economic growth, lowering taxes without corresponding reductions in government expenditure results in the need to increase taxes in the following periods. Due to additional mechanisms, including uncertainty about the level of taxes, a deficit may be more damaging to economic growth than the eventual increases in taxes. Therefore, the reconstruction of the tax system should preferably not lead to an increase in the deficit.

Not all taxes are similarly distortionary. As a result, not only the level of taxation but also its structure is important for economic growth. This gives an opportunity to rebuild the tax system, and thereby enhance economic growth, without waiting until the general government deficit is eliminated.

Even if there is equivalence in theory between the selected types of taxes (e.g., taxation of labour and consumption), in reality, it does not work. In particular, it is blocked by the heterogeneity of economic agents. Therefore, in practice, shifting the tax burden from labour to consumption promotes economic growth.

Some taxes, which are not significant for fiscal revenues, may be very distortionary and, as a result, have an extremely adverse effects on economic growth. They include, in particular, taxation of company profits, or reliefs and exemptions from this tax, as well as sectoral taxes.

The magnitude of the impact of a given type of tax on economic growth depends not only on its amount, but also on detailed solutions that determine its shape. The magnitude of this impact is influenced mainly by two elements. The first is the cost of compliance by economic agents with their tax obligations, which affects the incentives to avoid these obligations, and the other is the possibility of avoiding a given tax, including the use of tax reliefs and exemptions. In turn, the evasion or avoidance of a given tax contributes to its frequent changes. The instability
of taxes reinforces their negative impact on economic growth. In order to mitigate this impact, the reconstruction of taxes should simplify them, which in turn should promote their future greater stability.

The tax system in Poland has two main strengths, the importance of consumption tax in government revenues and moderate marginal income taxation. It also has five major weaknesses: a high share of social security contributions in government revenues and the associated relatively high total taxation of low labour income, higher taxation of income from investment in machinery than from other investments, high complexity, instability, and a fairly high level of centralisation.

The reconstruction of the tax system in Poland should preserve or enhance its basic strengths and eliminate or at least alleviate its weaknesses. For this purpose, the following should be considered:

– shifting the burden of taxation from income, in particular low labour income, to consumption; this shift should be done by reducing VAT preferences, the revenue from which would first cover the cost of raising the PIT-free allowance;
– exempting low earners from a part of their social security contributions;
– the introduction of the possibility for local governments to increase the PIT-free allowance above the centrally set base amount;
– the unification of the basis for the PIT, National Health Fund and Social Insurance Institution contributions, which would reduce the number of mathematical activities when calculating the PIT, National Health Fund and Social Insurance Institution contributions from sixteen to three;
– the elimination of differences in contributions for different types of contracts on the basis of which work is performed;
– the extension of one-off amortisation to all machine investments;
– the elimination of sectoral taxes.

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### Appendix. Amount of reduced VAT rates in the EU countries in the period 2002–2021

| Country        | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2021  |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Belgium        | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  | 6/12  |
| Bulgaria       | n/a   | n/a   | n/a   | n/a   | n/a   | 7     | 7     | 7     | 7     | 9     | 9     | 10    | 10    | 14    | 15    | 15    | 10/15 | 10/15 | 10/15 | 10/15 |
| Czech Republic | 5     | 5     | 5     | 5     | 5     | 5     | 9     | 9     | 10    | 10    | 14    | 15    | 15    | 10/15 | 10/15 | 10/15 | 10/15 | 10/15 |
| Denmark        | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   | n/a   |
| Germany        | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     |
| Estonia        | 5     | 5     | 5     | 5     | 5     | 5     | 9     | 9     | 9     | 9     | 9     | 9     | 9     | 9     | 9     | 9     | 9     | 9     | 9     |
| Ireland        | 12.5  | 13.5  | 13.5  | 13.5  | 13.5  | 13.5  | 13.5  | 13.5  | 13.5  | 9/13.5| 9/13.5| 9/13.5| 9/13.5| 9/13.5| 9/13.5| 9/13.5| 9/13.5| 9/13.5| 9/13.5| 9/13.5|
| Greece         | 8 (4) | 8 (4) | 8 (4) | 9 (4.5)| 9 (4.5)| 9 (4.5)| 5.5/11| 6.5/13| 6.5/13| 6.5/13| 6.5/13| 6.5/13| 6.5/13| 6.5/13| 6.5/13| 6.5/13| 6.5/13| 6.5/13| 6.5/13| 6.5/13|
| Spain          | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) | 7 (4) |
| France         | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   |
| Croatia        | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Italy          | 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)| 10 (4)|
| Cyprus         | 5     | 5     | 5     | 5/8   | 5/8   | 5/8   | 5/8   | 5/8   | 5/8   | 5/8   | 5/8   | 5/8   | 5/8   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   |
| Latvia         | n/a   | 9     | 5     | 5     | 5     | 5     | 10    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    |
| Lithuania      | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   | 5/9   |
| Luxembourg     | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   | 3/6   |
| Hungary        | 12 (0)| 12 (0)| 12 (0)| 12 (0)| 15/15 | 15/15 | 5     | 5     | 5     | 5     | 5/18  | 5/18  | 5/18  | 5/18  | 5/18  | 5/18  | 5/18  | 5/18  | 5/18  | 5/18  | 5/18  |
| Malta          | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5/7   | 5/7   | 5/7   | 5/7   | 5/7   | 5/7   | 5/7   | 5/7   | 5/7   | 5/7   | 5/7   | 5/7   | 5/7   |
| Netherlands    | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 9     |
| Austria        | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10/13| 10/13|

www.czasopisma.uni.lodz.pl/foe/ FOE 2(353) 2021
| Country      | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Poland      | 7 (3)| 7 (3)| 7 (3)| 7 (3)| 7 (3)| 7 (3)| 7 (3)| 5/8  | 5/8  | 5/8  | 5/8  | 5/8  | 5/8  | 5/8  | 5/8  | 5/8  | 5/8  | 5/8  | 5/8  | 5/8  |
| Portugal    | 5/12 | 5/12 | 5/12 | 5/12 | 5/12 | 5/12 | 5/12 | 6/13 | 6/13 | 6/13 | 6/13 | 6/13 | 6/13 | 6/13 | 6/13 | 6/13 | 6/13 | 6/13 | 6/13 | 6/13 |
| Romania     | n/a  | n/a  | n/a  | n/a  | 9    | 9    | 9    | 5/9  | 5/9  | 5/9  | 5/9  | 5/9  | 5/9  | 5/9  | 5/9  | 5/9  | 5/9  | 5/9  | 5/9  | 5/9  | 5/9  |
| Slovenia    | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  | 9.5  | 9.5  | 9.5  | 9.5  | 9.5  | 9.5  | 9.5  | 5/9  |
| Slovakia    | 10   | 14   | n/a  | n/a  | n/a  | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   |
| Finland     | 8/17 | 8/17 | 8/17 | 8/17 | 8/17 | 8/17 | 8/17 | 8/17 | 9/13 | 9/13 | 10/14| 10/14| 10/14| 10/14| 10/14| 10/14| 10/14| 10/14| 10/14| 10/14|
| Sweden      | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 | 6/12 |

* n/a – non-applicable.

Source: European Commission, 2015b
Kierunki przebudowy systemu podatkowego w Polsce. Propozycja prowzrostowa

Streszczenie: Celem artykułu jest przedstawienie kierunków przebudowy systemu podatkowego w Polsce, która wzmacniałaby wzrost gospodarczy. Opracowanie zawiera diagnozę głównych silnych stron i słabości tego systemu. Na podstawie tej diagnozy oraz przeglądu literatury autorzy proponują rekomendacje, których uwzględnienie przy przebudowie podatków sprzyjałoby wzrostowi gospodarczemu. Obejmują one: przesunięcie ciężaru opodatkowania z dochodów, zwłaszcza z nisko płatnej pracy, na konsumpcję; objęcie części składek na ubezpieczenie społeczne kwotą wolną; umożliwienie samorządom podwyższenia kwoty wolnej od podatku PIT powyżej centralnie ustalonej kwoty bazowej; ujednolicenie podstawy wymiaru podatku PIT, składek NFZ i ZUS; usunięcie różnic w oskładkowaniu różnych typów umów, na podstawie których jest wykonywana praca; rozszerzenie możliwości jednorazowej amortyzacji na wszystkie inwestycje maszynowe; eliminację podatków sektorowych.

Słowa kluczowe: podatki, system podatkowy, propozycja prowzrostowej zmiany

JEL: H20, H21, H24, H25, H29, O10, O11, O43