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LABOUR INCOMES AND ECONOMIC ACTIVITY IN POLAND

Abstract

The purpose of this paper is to examine the impact of labour incomes on economic activity and growth in Poland. The thesis of this paper is rooted in the hypothesis of underconsumption and it claims that a proportion of labour incomes to the domestic product exerts an influence on the structure and the value of the aggregate demand and thus it eventually has an effect on economic activity. The simple empirical analysis provided refers to macroeconomic data for the period 2010-2019; recent data at the time of the analysis and a very illustrative period with respect to the thesis. The analysis supports the thesis; relatively low growth of labour incomes is followed by low rates of economic growth and investment and higher rates of unemployment. However, reasons behind the fluctuations in the participation of employees in the domestic product are far from being obvious. Market, economic policy and regulatory aspects of the problem deserve further research.

Keywords: *labour incomes, economic growth, economic activity, income distribution, underconsumption*

Introduction

The purpose of this paper is an investigation into the impact of labour incomes on economic activity and growth in Poland. Labour incomes – and their share in GDP – are shaped by market forces and by public policies and regulations that determine an institutional environment of economic processes. A proportion of labour incomes to the product in its turn exerts an influence on the structure and the value of the aggregate demand and thus it eventually has an effect on economic activity.

Social distribution of incomes – a falling share of labour incomes in GDP or more generally income inequality – has become a hot issue in economics in recent years. The tendency of the share to fall is now a well-established fact with respect to many major economies. It evokes opinions that capitalism has become more aggressive again. It seems that the problem may be particularly acute in Poland where the share of wages and salaries (labour incomes) in GDP is low by European standards and has been falling in recent years.

A consistent and useful theoretical paradigm that relates the share of labour incomes to economic activity is the hypothesis of underconsumption; a proposition that low wages undermine consumption spending and eventually lead to a persistent stagnation. The hypothesis claims that higher labour incomes might increase a deficient level of the aggregate demand and make it closer to the potential output.

In principle wages – or more generally primary incomes, i.e. incomes received by factors of production net of any later public redistribution – are determined by market forces. Market forces are not, however, free of public regulation and policies that create an institutional and legal economic environment and – in particular – determine functioning of labour markets. As J. Berg (2015) puts it *Equitable societies with large middle classes are not the natural outcome of market forces. Equity, rather, is created by society, by the institutions – the laws, policies and practices – that govern the society, its economy and, in particular, its labour market.* In this context it is reasonable to mention labour market law, an actual role of labour unions, tax systems or the degree of monopolization of the economy that should be subject to legal rules and policies that promote competition. Institutional changes that have been taking place in some major market economies under the influence of supply side economics in recent decades are a good example how state policies create economic institutional environment; in principle economic conditions have been typically expected to be business friendly.

These introductory remarks express my view that, firstly, a share of labour incomes and respectively a share of consumer spending in GDP matter for economic activity and that, secondly, the level and the structure of national spending may be subject to different – more or less activist and more or less direct – public policies. The state determines rules and creates institutions that fine-tune market forces and superimpose on the outcomes of the market play. Moreover, the state directly determines labour incomes in the public sector.

The next, second part of this paper presents theoretical and methodological remarks that relate to the hypothesis of underconsumption, the third part provides an answer based on statistical data to the question whether wages are too low in Poland in view of the hypothesis as well as some remarks on

factors that may drive changes in the social structure of incomes and the last, fourth part concludes.

Some theoretical and methodological remarks

The issue of income and wealth inequalities has become in recent years an intensively discussed subject of the economic debate, both theoretical and empirical. The newly gained popularity is in a sharp contradiction to an earlier elimination of the question of income distribution from the mainstream economics (Lucas, 2004). The new strand in economics is represented by the famous bestsellers of Stiglitz (2012) and Picketty (2014) and some other books, for example Rajan (2010), Zingales (2012), Atkinson (2015) and Milanovic (2016). There are important papers published under the auspices of IMF which analyse the problem of rising inequalities; (Kumhof, Ranciere, 2010), (Berg, Ostry, 2011), (Berg et al., 2014), (Dabla-Norris et al., 2015) and official reports by international organizations that document the decline in the labour share in GDP; (ILO, OECD, 2015), (OECD, 2012). The decline is now a well-established fact.

Both the reasons for and even more the consequences of rising income and wealth inequalities are not sufficiently recognized. Among the reasons technological progress (automatization) and globalization seem crucially important (Koronowski, 2016). With regard to the consequences they are social, political and economic. Possibly still the best analysis of social and political consequences is (Stiglitz, 2012). Recognizing economic effects of rising income inequalities/a declining share of labour incomes is more challenging. Empirically, (Berg, Ostry, 2011), (Berg et al., 2014), (Dabla-Norris et al., 2015) document a negative correlation between inequalities and economic growth and (Kumhof, Ranciere, 2010) finds that rising inequalities impair financial stability.

There is no clear theoretical, broadly accepted paradigm that would provide well established judgements whether wages are too low or too high in economic terms (Diallo et al., 2011). In the economic theory there are concepts of both

profit-led and wage-led growth. Within the neoclassical school wages that emerge on the free market are always at the right level; such an attitude lied behind the claim by Lucas referred to above. Within this paradigm any forced rise of wages is harmful to the economy and to the society. However, the paradigm does not allow for any possibility that wages may be too low and that they may coexist with unemployment; this is a case important for this analysis.

In my opinion, the best paradigm that allows to comprehensively and consistently consider the problem of **too low** wages is the hypothesis of underconsumption (Koronowski, 2018). The hypothesis of underconsumption is a version of the idea of deficient demand; the version is older, more concise, precise and consistent than the Keynesian theory. It claims that low wages result in little consumption spending which does not support new investment. Eventually, the economy stagnates at the level of production below its potential. Such a stagnation may be persistent and long-lasting or – as Hansen (1939) named the phenomenon – it is a secular stagnation. Contemporary discussion of secular stagnation includes, for example: (Teulings, Baldwin, 2014), (Backhouse, Boianovsky, 2016), (Koronowski, 2021).

In the situation of underconsumption there is no mechanism that would guarantee self-regulation. On the contrary, in terms of the game theory it is easy to prove that microeconomic rationality that makes firms keep wage costs low results in non-optimum macroeconomic outcomes. Kalecki (1935, transl. A.K.) wrote that *if one entrepreneur cut wages, he could, ceteris paribus, increase the utilization of his factory, but if all entrepreneurs cut wages the result (…) would be quite different*, as a group they would find it impossible to sell their product. The forces that could make wages rise and boost the deficient consumption spending must be of social and political character. Income distribution is to a certain degree determined by social and political factors (Koronowski, 2016, 2022), for example the power of labour unions. This statement is in sharp contrast with marginal, neoclassical claims (that are in particular deeply rooted in the assumption of Cobb-Doulas production function (Koronowski, 2018)).

An institutional aspect of economies that keeps profits high (and their share in GDP big) is a high degree of monopolization; competition does not provide forces that should reduce profits and their share in GDP. That

is the reason why Kalecki paid so much attention in his work to degrees of monopolization (Kalecki, 1986). The problem of monopolization was also central to the analysis of capitalist economy by P.A. Baran and P.M. Sweezy (1968), what found its expression in the title of their book; *Monopoly Capital, an Essay on the American Economic and Social Order* . It is important to note that even a high degree of monopolization that is restricted to a few major sectors may be enough to poison the whole economy with underconsumption; more competition among those who anyway fight to survive in a milieu of deficient demand would not help a lot (Koronowski, 2021).

Can the hypothesis of underconsumption be empirically tested? I mentioned above some papers that present conclusions of empirical analysis of the consequences of low shares of labour incomes in GDP. The conclusions are reassuring for the proponents of the hypothesis. However, for reasons that were first sketched by Baran and Sweezy (1968) it may be difficult to decisively prove the hypothesis empirically. To put it simply, the small share of wages in GDP may trigger processes of adjustment similar to what is the essence of the paradox of thrift; in this case savings are nothing else but excessive profits that cannot be spent on new investment due to a lack of demand for final, consumer products. Like excessive savings in the case of the paradox of thrift, profits that can't be spent on new investment *evaporate* in terms of macroeconomic cathegories; the problem is that the process may hit rather competitive sectors than monopolies that are responsible for the underlying mismatch in the relative structures of incomes and spending. Eventually the manifestation of underconsumption is persistent tendencies of the economy to remain below the potential level of production, what is reflected by high rates of unemployment. Capital would not be accumulated and invested in new productive assets thus excessive capital resources would not necessarily emerge.

The effects of low wage and consumption shares may be temporarily modified, weakened or eliminated by public policies or market developments; it also makes empirical analysis complicated. An example of market developments that have an impact on the share of consumer spending in GDP is a rising role of consumer credit. In the US economy where the share of labour incomes in GDP has been continuously falling and income inequalities have been rising in recent decades the share of private consumption in GDP increased. It is thus

impossible to argue that a lower share of labour incomes led to a deepening underconsumption and it is also difficult to claim that the American economy has been persistently and considerably under its potential for a few recent decades. A solution to this conundrum is a fast rise in private credit; labour incomes are supplemented with more credit (Richardson, 2017). Rising debt was boosted by lax monetary policy, financial innovations and deregulation of financial markets (*privatized Keynesianism* (Crouch, 2009)). This is an important aspect of excessive financialization. Capital incomes that are replaced in the flow of value in the economy with credit financed consumption are spent on existing assets and fuel speculative bubbles. Financial instability follows, as documented by (Kumhof, Ranciere, 2010).

These remarks are not sufficient to decisively prove the validity of the hypothesis of underconsumption. It should also be obvious that the validity would never be universal; one can't in principle exclude a case of too high wages. Every case is determined by particular institutional features of the economy. However, there are observations compatible with the hypothesis of underconsumption; this is when the hypothesis provides a consistent theoretical basis for an analysis that has a strong explanatory power. A question that matters most in this paper is whether this is the case of Poland; the following part contains a discussion of the issue and provides an answer.

Labour incomes in Poland: facts and an assessment

The evolution of the labour incomes share in GDP in Poland is in line with global trends; the share has been declining. However, the global trends are not overwhelming. In particular, in the European Union the share of labour incomes in market prices in GDP remained fairly stable; in 1997 it was equal to 56.2% and in 2017 55.2%. In Poland in the same time the share declined from 59.2% to 48.4% (source of data; AMECO). The share is one of the lowest in the European Union. Also hourly wages in Poland are among the lowest in the European Union (European Commission, 2020).

The low share of labour incomes in Poland may call for an analysis along the lines of the hypothesis of underconsumption. However, it is also possible to express some reservations.

Firstly, the data presented must be subject to some caution. In particular, the share of labour incomes may be low in Poland due to a common and increasingly wide-spread *self-employment* of actual employees that are motivated to register their own firms for tax considerations; their incomes are not wages and are not included in statistics into labour incomes. It makes any international comparisons and time series burdened with much uncertainty. Another factor that has a similar effect is a relatively high share of people working in Poland in agriculture; their incomes in a big part are not classified as wages.

Secondly, in accordance with the hypothesis, a low share of labour incomes in GDP should result in low consumption spending and tendencies of the economy to stagnate. However, as compared to other countries of the European Union, the economy of Poland grew fast and this growth was to a high degree fueled by rising private consumption spending. The contribution of private consumption in market prices to the economic growth in the period 1997-2017 was equal on average 2.24% in Poland as compared to 1.0% in the European Union. The share of private consumption in GDP (in market prices) decreased in Poland between 1997 and 2017 from ca. 62% to ca. 57%, but it remained above the average for the European Union, which was equal respectively to ca. 58% and ca. 56% (own calculations, source of data; AMECO).

Thirdly, the positive difference between the share of private consumption and labour incomes is much higher in Poland than in the European Union. This may be an effect of relatively high non-wage incomes of households; operational surplus of small companies that constitute a relatively big part of the economy (including self-employment mentioned) and incomes in agriculture, including payments from the Common Agricultural Policy.

An alternative explanation why the decline in consumption was much slower than the fall in labour incomes might be a dynamic growth of consumer credit and fast increase in households debt, the mechanism that worked in the US economy. Such supposition does not find confirmation in data. Although the rate of growth of consumer credit is high, the ratio of credit to GDP

remains fairly low by European standards. This is typical for post-transformation countries and to a degree it determines the high rate of growth of credit. New consumer credit is not a crucially important source of financing of private consumption. However, there is another source of financing private consumption that is not labour incomes: social programmes. This is well presented in (NBP, 2017, transl. A.K.): *Rising consumer demand only to a low degree was financed with credit. The balance of credit changes has remained positive since 2013 (more credit taken than paid back), but the rising trend of the ratio of new credit to consumption slowed down in recent six quarters and in the first quarter of 2017 it was equal 1.1%. This phenomenon may be partly explained by social benefits of the 500+ programme replacing new liabilities.*

Summing up, it seems that the low share of labor incomes in GDP in Poland partly reflects specific, structural and legal features of the Polish economy, it does not induce a particularly low share of consumption spending and consumer demand is not financed in excess by new credit. Moreover, Poland's economy has been on average growing fast in comparison to other European countries. It thus seems that wages in Poland are not too low to claim that the hypothesis of underconsumption matters in the case.

This conclusion might be, however, propitious and questioned. It is drawn on the basis of observations concerning the dynamics of the economy and international comparisons. The observations are not sufficient to say that the economy – and economies that serve as a comparison – could not grow faster/attain higher levels of GDP and employment if a possible barrier of deficient consumer demand was lifted.

A closer analysis of macroeconomic data in fact speaks for the applicability of the hypothesis of underconsumption to the case of Poland. To justify this opinion I refer to a few macroeconomic categories of data from the period 2010-2019; the period chosen seems relevant to provide a good, illustrative example of the dependencies that are subject of interest in this paper. I do not include more recent data – for 2020 and later; the impact of Covid blurred the picture.

Table 1 contains data that allow a comparison of the rates of growth of productivity per employee and real wages and basic indices of economic activity; the rates of unemployment and GDP growth.

Table 1. *Growth rates of real GDP per employee, real wages, real GDP and the rate of unemployment.*

	growth of real GDP per employee (yearly, %)	growth of real wages (yearly, %)	rate of unemployment (Dec. %,)	growth of real GDP (yearly, %)
2010	13.8	1.4	12.4	3.4
2011	5.9	1.4	12.5	5.0
2012	4.1	0.1	13.4	1.5
2013	3.0	2.8	13.4	0.9
2014	1.7	3.2	11.4	3.8
2015	3.1	4.5	9.7	4.4
2016	3.1	4.6	8.2	3.0
2017	3.4	3.4	6.6	5.1
2018	7.8	5.3	5.8	5.9
2019	5.7	4.8	5.2	4.5

Source of data: GUS (2015,2022) and Krajowa Platforma Raportująca – SDG (https://sdg.gov.pl/statistics_glob/8-2-1/, access 16.01.2023).

Table 2 supplements the data in table 1 with indices of the dynamics of households consumption and of investment outlays.

Table 2. *Indices households consumption and investment outlays (constant prices, previous year 100).*

	Change in households consumption	Change in total investment outlays	Change in investment outlays in industry
2010	101.6	100.2	97,0
2011	102.5	110.6	109,3
2012	100.9	97.2	100,1
2013	100.0	98.8	104,0
2014	103.4	109.5	115.5

2015	103.8	113.4	107.1
2016	103.6	87.5	88.8
2017	106.3	106.6	102.8
2018	104.4	115.4	109.6
2019	103.4	103.1	109.9

Source: GUS (2015, 2015a, 2017, 2022, 2022a).

In 2010 there was a very fast of growth of real GDP per employee that did not find its way to a similar growth of real wages or households' consumption. The rate of real growth of GDP was fairly good but the rate of unemployment was high; it also rose with respect to the previous year (a jobless growth). In 2011 the tendencies were similar; the rate of growth of GDP per worker was, however, lower. Next year and in 2013 positive rates of growth of real GDP per employee, real wages, real GDP, private consumption were even lower, households' spending on consumption stalled in 2013. Moreover, in years 2012 and 2013 the impact of gross capital formation on GDP growth was negative; the economy was on a brink of stagnation and the situation did not boost investment.

Year 2014 marked a major change in earlier trends. Modest rates of growth of real GDP per employee started rising until 2019 and in years 2014-2016 the rate of growth of real wages was even higher. Faster growth of wages than growth of productivity was accompanied by a turning change in the negative developments of the earlier period; the rate of unemployment was falling in the whole period 20154-2019, the rate of growth of real GDP was rising until 2018 (with an exemption in 2016) and the rate of consumer spending was rising until 2017. After a short period of real wages rising faster than productivity that finished in year 2016, private consumption was still rising faster than GDP in year 2017, the rate of GDP growth was rising at a lower rate and the rate unemployment kept falling in year 2018. A short-lived consumption stimulus had a fading invigorating effect on the economy. Also investment in year 2014 bounced back although not steadily. In 2016 the impact of gross capital formation on the rate of growth of GDP was negative again; however, in this case – as surveys showed – the problem was a very bad investment climate due to political and legal uncertainty. It had respectively a cooling effect on the economy.

The invigorating effect seemed to have already fade in 2019 with an exemption of still good a record of investment dynamics. Due to the impact of Covid any interpretation of later developments in terms of underconsumption would be difficult and risky; other factors played a major role.

The data provided clearly suggest – I do not dare to say they prove – that whenever the engine of consumption stops propelling the economy, it slows down; the rate of unemployment increases and the rate of GDP growth falls. Eventually there are neither much profits to invest nor – probably even to a higher degree – sufficient incentives to invest. The economic slowdown eventually gains solid supply side foundations. However, this is not an argument for more profits in expense of labour incomes and allegedly a faster profit-led growth but on the opposite it speaks for a more wage-led strategy. The relation between the rates of growth of productivity and wages is vital for a switch between two different types of economic dynamics.

Summing up, there are strong indications that the Polish economy was at least periodically subject to a major constraint of underconsumption rooted in low labour incomes.

At this stage of research another questions arises: what factors drive changes in employees' remuneration (in particular with respect to changes in productivity). Are they market forces or institutional, legal, policy developments? Reasons that lie behind a relatively slow growth of labour incomes have been shortly sketched earlier in this paper. An important question now is what can revert this tendency and make the share of wages in the value of product rise.

What concerns market mechanisms it is important to notice that their operation might not provide a quick solution to the problem of underconsumption. Rising unemployment – due to low labour incomes – means even tougher labour market conditions; wages would rather not bounce back quickly. Earlier I also mentioned the contradiction between microeconomic optimising decisions and good macroeconomic outcomes as noticed by Kalecki. This is a paradox – or a kind of a market failure – that a disequilibrium may self-reinforce. Probably there are less direct and more subtle market adjustments that restore conditions for higher economic activity but – if so – they have not yet been discovered. Anyway, it would be risky to claim that the system is implosive.

However, it is also reasonable to look for explanations among institutional, legal and policy factors. One of them – often pointed at in economic journalism in Poland – is rising minimum wage. The problem with this explanation is that the process was fairly smooth in the period analysed. It is also doubtful whether minimum wage has much impact on the average wage.

In the period analysed there were minor changes with respect to *job junk contracts* but they had no major impact on the labour market and it seems highly improbable that they should influence wages considerably – and exactly at times when wages grew relatively fast.

Obviously, a factor that might have boosted the economy was the social programmes (in the first place the 500+ programme), also via the multiplier effect. The problem with this explanation is that economic activity started rising before the programme began in 2016.

Another explanation might relate to salaries set in the public sector; however, salaries of public servants at best dragged behind other labour incomes and this factor could not lie behind some recovery that started in 2014.

It is difficult to point at any major institutional/legal/policy factors that might explain the dynamics of labour incomes in the period analysed. However, it does not mean that such factors do not deserve much attention; they role may be pivotal in keeping the economy at/close to full employment equilibrium. Even if it is difficult to trace their impact in the analysed case, there is no doubt that in principle they may strongly influence social (re)distribution of incomes.

Conclusions

The problem analysed in this paper concerns low labour incomes and respectively low consumer spending that does not support full employment equilibrium; the phenomena of underconsumption and secular stagnation. The analysis of changes in real production per employee, real wages, the rate of unemployment, the rate of GDP growth and changes in households' consumption spending strongly support the claim that low wages at least periodically stand behind a demand constraint in the Polish economy and that they impair economic activity.

As far as reasons for a falling share of labour incomes – a major trend in developed economies in recent decades – are identified in the literature, it is much more difficult to explain changes in the opposite direction that occasionally appeared in Poland and had a due positive impact on economic activity. It is doubtful whether simple economic mechanisms could trigger such changes. However, it is also difficult to find any institutional/legal/policy factors that might explain them. The factors that determine the developments remain rather mysterious. It thus seems that they deserve in-depth research.

Even so there is no doubt that institutional evolution of an economy may have a great meaning for social distribution of incomes; we should be ready to use legal and policy tools in face of underconsumption so as economists since the times of Keynes have used to intervene to overcome a more general problem of deficient demand. Of course, very different tools are needed in the specific case of underconsumption. However, it is also important to avoid a dogmatic attitude or policy instruments that can backfire. The problem analysed in this paper is one of proper proportions. Supply side constrains may also matter and profitability is crucial for investment and growth in parallel with demand for final products. However, supply-side policies should not be identified with pro-business *liberalisation* of the labour market. Demonopolizing of the economy could do much of a good job. Good policies should address the problem of the social structure of incomes and provide necessary room for consumption and incentives to invest. Design of such complex policies goes beyond the scope of this paper that has a more limited aim of identifying the problem of underconsumption in Poland.

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