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GOOD OR BAD TAX? ASSESSING THE EARLY EFFECTS OF THE PROGRESSIVE AND HIGHER PERSONAL INCOME TAX IN NORTH MACEDONIA

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GOOD OR BAD TAX? ASSESSING THE EARLY EFFECTS OF THE PROGRESSIVE AND HIGHER PERSONAL INCOME TAX IN NORTH MACEDONIA

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1. INTRODUCTION

North Macedonia has had – until recently - a flat personal income tax rate of 10% introduced in 2007, with its primary objective to make the business environment friendlier to businesses and hence support job creation. The flat tax was introduced after progressive tax systems of various compositions were in place since North Macedonia's independence in 1991. Indeed, during the right-wing party VMRO-DPMNE in power (2006-2017), the business environment became considerably conducive to doing business, as per the rankings of Doing Business, whereby North Macedonia has been frequently raked among the top reformers in the world. On the other hand, North Macedonia also faces large inequality, currently (2017) of 32.5% as measured by the Gini coefficient of the Laeken indicators. However, it has been declining from levels above 40% before 2010, mainly due to populist-minded social policies including ad-hoc increases in pensions, social assistance, public wages, as well other policies with emphasized poverty-reduction component like the agricultural subsidies, all of which at the expense of soaring public debt. However, one must not withstand the anecdotal evidence that North Macedonia likely recorded the highest rates of income inequality in the 1990s when the process of privatization was conducted in a way to concentrate firms' ownership in the hands of a small group colloquially known as 'oligarchs', while the massive layoffs, the disappearance of the traditional markets for companies and the political environment impoverished workers. The data for income inequality over that period (and then up until the first Survey of Income and Living Conditions SILC was produced in 2010) are insufficient and of low quality. However, we have reasons to believe that the then existing progressive tax structure has been preventing further surge of income inequality, although likely at the expense of job creation, which was very sluggish. North Macedonia recorded its highest unemployment in 2005 of 37.3%.

At the end of 2017 – few months after a new left-wing government led by the Social-Democrats was formed, the Ministry of Finance published inequality indicators based on tax administrative information. These data revealed the desperate picture of Macedonian inequality: the top 1% earners earned 14% of the total income in 2016, while the rest of the 99% earned below 1500 EUR per month; the rest 98% earned below 1000 EUR per month, while the bottom 90% earned below 495 EUR per month. For comparison purposes, the gross average wage in North Macedonia is approx. 600 EUR (2018). However, when the composition of the top 1% earners is considered, then the average is inflated by circa 500 individuals who earn enormous amounts, compared to all the rest (cca. 10.000 in the top 1%) who earn between 1500 and 3000 EUR per month. Hence, these data actually revealed that we are all poor, with the exception of a subgroup of individuals within the top 1%. The data, however, did not reveal the type of income of the top earners, but anecdotal evidence suggests this is a non-labor income, prevalently dividends, capital gains and rent. On the other hand, ILO (2019), based on LFS data, finds that it is 4.3% of the wage mass that goes to the top 1% earners. Therefore, overall, North Macedonia is a poor country, with top earners who are not this rich because of their wage income.

In such circumstances, the new left-centered government started advocating in favor of (returning to) progressive personal income taxation. The discussion dates back to the times when the current ruling party was in opposition, cca. 2014-15, when inequality as a topic has been put in their program. The topic endured in their program with which they won the elections of December 2016 (and subsequently formed the government in June 2017). Since then, the discussion about the introduction of the progressive personal income tax has been all around, but without clarity, details and unified voice within the government. In several occasions, the Minister of finance claimed that the progressive personal income tax will be introduced as of 2018, which sparked a heated public debate. When it became clear that such a systemic change may not be feasible in a short time, the reform was postponed for 2019. Then, the discussions subsided (inter alia because of Government's focus on the key political issue – the name dispute with Greece). Suddenly, in November 2018, the Government announced the design of the progressive and higher personal income tax, to enter into force as of January 2019 (i.e. in less than two months past the announcement). The move apparently sparked again heated debates - especially angry voices stemming from the business sector, although the entire society expected that sufficient time would be allowed for discussion and consultation, which was obviously not the case. Against this backdrop, the new Law on personal income tax was adopted by the parliament at end-December and entered into force as initially announced.

The reform stipulated a second bracket for the income earners whose income exceeded 90.000 MKD per month (cca.1.500 EUR), of 18%. According to the administrative data, these consisted the top 1% earners in North Macedonia. The personal income tax on capital remained flat, but increased, from a nominal 10% to 15%, although several exemptions which existed before were considerably reduced, implying even higher real increases. Despite the heated debate about the reform, it took into account at least two important aspects long present in the public discourse. First, the initial rumors that the bracket for the higher tax rate would be set at 700 EUR or 1.000 EUR, produced a debate on penalization of a productive share of labor force, notably, IT professionals, consultants, scientists. This pressed the bracket frontier to 1.500 EUR, being an implicit recognition, by the government, that the source of income inequality in North Macedonia is not wages per se. Second, the discourse argued that the extra collected funds must be earmarked for specific pro-poor programs, to secure the allocative function of the budget, which proved inefficient in the past; even worse, it was accompanied by doubts for corruptive behavior of high government officials. The government announced that the extra-collected funds from the progressive and higher personal income tax will be directly used for funding of the reform in the social assistance system (composed of its redesign towards guaranteed minimum income, along introducing of a social pension), which has been accepted as a robust response to the second important request of the public debate.

In any case, nevertheless, the government did not offer any robust evidence about the potential effects of the tax reform (nor evidence about the potentially negative effects of the decennial flat personal income tax system). The expert community correctly identified a set of issues relevant to be considered before a progressive personal income tax is imposed, which have been largely neglected by the government, or, at least, evidence was not offered to support their claims. These include the existing grey economy in the country which may be a source of tax revenues if formalized; the wage inequality which is significantly lower than the income inequality; the cause of the income inequality and the tax system as part of it; the still regressive structure of the social contributions; the inclination to emigration especially among youth; the impaired institutional order and public spending and others.

Given this backdrop, the objective of the current study is to provide robust evidence about the expected effects of the progressive and higher personal income tax in North Macedonia. Based on an already developed tax and benefit microsimulation model for North Macedonia MK-MOD, we provide research evidence about the expected distributional effects. This part of the analysis reveals if the tax reform may play its redistributive role: to pick form the richest and to give to the poorest, therefore affecting inequality and poverty. In the second part of the study, we use qualitative methods (interviews and focus group) and provide evidence about the expected effect of the progressive personal income tax onto employers' and workers' behavior in a broader sense, as per the elaboration in the previous paragraph.

Defined this way, this study brings at least two novelties in the research and public discourse: 1) so far, there has been no other evidence-based research on the topic, and 2) the microsimulation model is an innovative approach never used before for calculating the potential impact of a tax reform on the economy. Note that, at the time of conducting of this study, the progressive personal income tax has been in force for only few months, so that analysis of the actual effects is not possible, at least not entirely. Therefore, we are conducting a simulation exercise, while with the qualitative evidence we are trying to pick up early signs about the effects – positive or negative – of the progressive and higher personal income tax in North Macedonia.

The study is organized as follows. Section 2 presents a brief overview of the referent literature on the effects of the progressive personal income taxation. Section 3 discusses the microsimulation methodology and presents the simulated results. Section 4 provides the context, by discussing the qualitative results of the study. The last section concludes and points to the policy relevance.

2. LITERATURE OVERVIEW

2.1. Theoretical and empirical considerations

A baseline in defining progressive tax systems is the idea of a proportional or flat tax, where everyone pays an equal share of income in taxes. From that starting point, a progressive tax is the case when the share of income paid in taxes rises with the income base, while a regressive tax is one in which the share of income paid falls with the income base. Hence, a progressive tax system implies that the after-tax income is more equally distributed than before-tax income, and a regressive that after-tax income is less equally distributed than before-tax income (Piketty and Saez, 2007).

Looking at the tax system of developed countries, Pirttilä and Selin (2010) describe progressive tax systems as dual income taxes which were first implemented in Denmark, Finland, Norway and Sweden through a number of reforms from 1987 to 1993, but soon gained popularity with tax reforms in the western countries such as Germany and the US. Tax progressivity, as well as the size of personal income taxes and social security contributions, have experienced different changes in different OECD countries though time, analyzed by Causa and Hermansen (2017). From the mid-1990s to 2013, tax progressivity increased in Australia, Czech Republic, Israel, the United Kingdom, Germany, the Netherlands and Norway, while it changed little in Canada, Denmark, Finland, Sweden and the United States. From the mid-2000s to 2013 there was rise in tax progressivity in the majority of OECD countries. However, in light of declining tax revenues over the crisis period, over the same time, the size of personal income taxes and social contributions experienced an overall decline, which counteracted the increase in progressivity.

The progressive tax is expected to have a range of implications on key economic development and equality indicators, most notably through the income redistribution it aims to achieve. Income redistribution is broadly defined by Causa and Hermansen (2017) as the relative reduction in market income inequality achieved through personal income taxes, employees' social security contributions and cash transfers. The inequality-reducing effects of taxes and transfers, however, are determined by the interaction between their size and their progressivity, which is markedly different across the OECD countries. Measuring the redistributive effect of income taxes and using the Gini Index as a measure of economic inequality, Causa and Hermansen's results suggest that income taxes play an important fund reallocation role in many OECD countries such as Germany, Austria, Sweden, Denmark, Estonia, Israel, the US, Switzerland, Japan, Korea, etc. For example, transfers and progressive taxation are shown to have significantly reduced market income inequality by 7 Gini points in both Estonia and the US. Furthermore, Kakwani's (1977) seminal paper also provides an international comparison of the redistributive effects of tax policies, where he introduces a new measure of tax progressivity. Examining the United Kingdom, Canada, Australia and the United States, he observes that the UK and Australia showed a markedly more progressive tax system than Canada and the US. His conclusions are that the level of income redistribution achieved through taxation indeed depends on the degree of tax progressivity, while the level of progressivity recorded a decline in all examined countries. Such a decrease was expected to lead to an increase in social inequality, but that effect might have been offset by the growth in the average tax rate.

Another perspective of income redistribution achieved through the tax system is the desired widening of the middle class. Dallinger (2013) differentiates between a lower middle, middle middle and upper middle class, exploring the effects of a widely pro-poor oriented progressive taxation, especially dominant in continental Europe. His conclusion is that government redistribution mainly brought improvement in the position of the lower middle class, while the higher middle income group experienced losses, hence popularly being marked as "the endangered middle class".

Focusing on the re-distributive role of taxes in developing versus developed countries, Bird and Zolt (2005) explain that the main goal of any tax system is to allocate the cost of government in some fair and politically acceptable way. Developed economies have more freedom in choosing the size of their government, usually measured by the percentage of public expenditure in GDP, hence they can determine the level of income redistribution and tax progression within those limits. However, they advise that such redistribution is most effectively implied through the spending and not the taxing side of the budget, where governments should be careful not to penalize those who work more and earn more. As developing economies lack the freedom of less expensive spending policies, they highlight that such countries should focus on market-supporting activities and human capital to achieve redistribution. The progression of income taxes is shown to have done little to reduce inequality on itself in selected Asian developing countries, hence it should be combined with the previous strategy of market-based activities and growth-facilitating human capital development-oriented policies to achieve redistribution. In order to provide the best effects in a developing economy, an income tax should be modestly progressive on wage income, as well as have a dual nature on a comprehensive base, meaning that labor and capital are taxed on a different rate. Finally, an important point of income redistribution in developing countries is the effectiveness of the redistribution process itself and whether the public funds intended for redistribution are truly redistributed to those in need. Effective public expenditure in developing countries is of crucial importance, as governments that are believed to be effective in providing goods and services from taxpayers' money are more likely to enjoy public acceptance of the need to taxation.

Another general goal of collecting more budgetary funds is to support economic growth in an environment where income tax progressivity and growth effects are viewed to demonstrate a trade-off (Gale and Samwick, 2016). Weller and Rao's (2008) research empirically explores the question whether a progressive taxation system can contribute to a country's economic development. Explaining government's incentive of providing stable public resources from taxation , they combine several macroeconomic data sources to examine the link between progressive taxation on one side and economic stability, economic growth, inequality and fiscal policy on the other. They find that progressive income taxation enables a country to engage in countercyclical fiscal policies, thus significantly contributing to economic stability and having no implications on the reduction of economic growth. Economic stability, furthermore, can contribute to financial development, durable economic growth and more equal income distribution. However, the implementation of progressive taxation can be constrained in some cases of open economies with high capital mobility, as well as in cases of ineffective tax collection. Martinez-Mongay and Sekkat (2005) analyze the progressivity of tax systems in European Monetary Union countries, also with regards to their macroeconomic stabilization effects at a union level. Progressive taxation influences disposable income in a way that it makes it less volatile and has an effect on reducing fluctuations in GDP. Furthermore, they confirm that taxes in a progressive framework can impact output stabilization, where the higher and the more progressive the taxes are, the larger the smoothness of economic output will be. However, available evidence suggests that high and progressive taxation may also have an adverse impact on economic efficiency, which is a state of optimal allocation of resources in an economy while minimizing wastefulness. There is also a demonstrated potential trade-off between the stabilization role of fiscal policy and its efficiency.

There are widely contrasting views on the influence that a progressive tax has on unemployment. Koskela and Vilmunen (1996) argue the widely-held view that the more progressive the tax system is, the greater is the disincentive to work. However, in highly-unionized economies (such as the ones of the European Union), this may be a bad approximation. Through empirical analysis, they find that the effects of taxation can be very sensitive to the structure of labor markets, providing the examples of three popular models of trade union behavior. In trade unions, progressive taxes are found to be good for unemployment, but to also contribute to lower wages.

Another perspective to explore when implementing a specific tax policy is the efficiency gains it would introduce to the economy. Investigating the reform of introducing a progressive tax, Auerbach et al. (1981) find that shifting from a linearly proportional to a progressive income tax leads to a large welfare gain, distributed through social transfers and contributions. However, they stress that the level of progressivity of a tax may be at least as important as the tax base itself when determining the efficiency of the tax system. The implementation of a truly progressive tax can be substantially more distortionary than a proportional income tax, hence the tax base levels for a proposed progressive tax should be carefully thought out so as to avoid this effect. Taxes help to lower income dispersion between high earners and the poor, but which forms of taxation are socially acceptable? Building the case for a progressive tax, Diamond and Saez (2011) present the implications of an optimal progressive tax theory, asserting that the tax system should maximize social welfare while taking into account specific budget constraints and the way individual earners react to taxation. They describe the implications of a well-defined progressive tax system as a state of higher social prosperity, through more equally distributed resources and more efficient government institutions, having in mind that such system should not cause any negative incentives of individuals to work and earn.

Some researchers mark the behavioral response to taxation as unimportant, while others say that the behavioral responses are of crucial meaning. This meaning is demonstrated through the responsiveness of critical real economic variables such as labor, savings and investment to changes in tax rates (Slemrod, 1986). On a similar note, Gordon and Slemrod (1998) ask the question whether progressive income taxes simply cause income shifting between personal and corporate bases, given evidence of a wide trend in increasing average rates of personal income taxes and falling rates of corporate income taxes. Past work in public finance suggests that higher personal tax rates are expected to reduce reported labor income. To put simply, as a consequence of high marginal rates on high earnings, companies may choose to avoid typical personal income compensations such as wages and bonuses, and redirect them to retained earnings, corporate capital gains and share issuance to valuable employees. Pirttilä and Selin (2010) describe progressive taxation to have several merits in increasing efficiency and reducing the cost of the process of taxation. However, specific reforms in implementing progressive taxation could have changed people's incentives to save and caused tax avoidance through income shifting from personal to corporate earnings, especially among the self-employed who have more leeway for manipulation of the tax base.

2.2. Experiences from selected transition economies

Many new members of the European Union went through extensive processes of tax reform before joining the union, depending on their government structure and levels of economic development. As many were also part of past socialist regimes, these countries shared the characteristics of transition economies departing from a basic flat tax system and a lack of institutional framework. With North Macedonia paving its way to a more progressive taxation and membership to the European Union, lessons from countries that have experienced it may prove useful.

Pellegrino (2004) explores the tax reform in new EU members, using the example of the Czech Republic, who joined the EU in 2004. The Czech current tax structure is progressive and structured in four brackets with some allowances, with personal income rates going from 15 to 32 per cent and corporate income rates at 17 per cent of total tax revenue. More than half of the taxpayers fall in the lower bracket and the average effective tax rate is not higher than 10 per cent. Departing from a communist regime and a prevalent flat tax system, the country employed a radical economic and fiscal reform to obtain macroeconomic stability, low inflation and a balanced state budget. The most important effect of progressive tax fiscal policy was the sustainability support to the Czech public finances in the medium run, an achieved lower public debt and more stable institutional framework, which contributed to an environment for economic growth and business support.

Furthermore, Slovakia's tax system has foregone a range of reforms in the past decade, leading up to the current progressive income tax, implemented in 2013 and structured at two brackets of 19 and 25 percent, and a corporate tax rate of 23 per cent. Chalupka (2004) describes Slovakia's 2002 fiscal policy reform as a way to "tax all kinds of profit and all heights of profit equally and thus achieve the maximum possible equity". Such flat tax reform came in time when Slovakia joined the EU and was explained to be a simple way to attract new international investors. Peichl (2013) explains that although a change from flat to progressive taxation might have discouraged corporate investors in the short term, it brought about distributional effects and supported the expansion of the middle class. Additionally, the top marginal rate earners were not expected to be highly affected by the reform, due to their low proportion in the overall taxable public. Finally, Peichl gives the example of Bulgaria who faced extensive discussion of whether to implement progressive taxation, but chose to delay the process arguing that the country will need the flat tax for at least ten years to help the country raise investment and in that way catch up with other EU members.

Mitja et al. (2002) empirically analyze the redistributive effects attained by personal income tax and social contributions for Slovenia and Croatia, as countries starting from a similar socialist socioeconomic background, but diverging in results due to different levels of development over time. They measure how the countries approached prevalent inequality levels with regards to their differences in tax progressivity. Inequality, on the other hand, is divided into vertical inequality (between richer and poorer units) and horizontal inequality (between equally well-off units). The personal income tax was the largest contributor to reaching vertical effects in both countries. Slovenia's non-capital income tax is currently progressively defined in three levels of 16, 27 and 41 per cent, while the capital income tax flat at 20 per cent. Croatia's personal income tax is described as progressive with four brackets of increasing marginal rates from 15 to 45 per cent, with capital income exempt from taxation. Slovenia implemented progressive taxation in 1991, while Croatia first implemented progressive taxation in 1994. Mitja's et al. (2002) results indicate that a more progressively defined tax system has indeed led to a larger relative redistributive effects in Slovenia than Croatia, but it is important to note that the pre-fiscal income inequality in the country was lower to begin with. Slovenia's tax and benefit system created a strong vertical equality effect, but by doing so induced some horizontal inequity. The former means that the inequality in Slovenia was lowered between richer and poorer units, but became more evident among equally well-off entities. Furthermore, the situation of Croatia differs from Slovenia in the presence of higher vertical inequality before transfers (pre-fiscal inequality among richer and poorer), hence lower redistributive effects were achieved after these transfers. Another explanation comes from the fact that in Croatia the amount of taxes largely exceeded the amount of benefits, due to funds being used to cover pension and health systems. To conclude, even though there was a substantial contribution to the equalization of post-fiscal income, Croatia's tax system was still slightly less distributive than Slovenia's, while also contributing less to horizontal equality effects.

Albania left the flat tax system and implemented progressive taxation in 2015, as an economy that differs from developed countries in aspects like institutional capacity, economic structure and rule of law. Bardhi (2017) debates the pros and cons of having a progressive a tax system, explaining that the beneficial implications are evident through a significant increase in the state budget, distribution of more funds to those citizens in need and through support of the development of small business. However, in Albania's case, the disadvantages of such a system are suggested to outweigh the advantages, shown as a punishment of those who choose to work harder, a burden on corporations and successful businesses and an external motivation for tax evasion and untrue reporting of obligations.

The implementation of progressive taxation came at different times and showed different intensity of results in the elaborated countries. Even though these discrepancies in results were due to a range of development and structural differences between the countries, the effects of reduction in inequality and healthier public finances were evident in most of them. Martinez-Vazquez and McNab (2000) attempt to evaluate the choices of tax reform in transition countries departing centrally planned for market-oriented economies, most of which were at the time new EU members. Concluding that most reforms included some extent of tax progressivity, they advise that the modernization of tax systems should be gradual and evolutionary, but should also have in mind the lack of administrative and institutional capacity of countries embarking on such challenges.

3. SIMULATED QUANTITATIVE EVIDENCE

3.1. Microsimulation exercise

MK-MOD is a tax and benefit micro-simulation model belonging to the EUROMOD family. It is a static model where individual behavior (labor-market activity, employment, childcare, saving, etc.) is assumed to be exogenous to the tax-benefit system. It belongs to the family of "standard" static models where individuals/households choose to supply labor (hours of work) until the point where the "marginal disutility of work equals the marginal utility of disposable (net-of-tax) income." (Saez, 2010, p.180). In this setting, taxes and social transfers affect the labor-market behavior by changing the relative value of work vs. leisure. It allows the simulation of income assistance, child benefits, unemployment benefits, direct taxes and social security contributions. The advantage of the database we use here – the Quality of Life Survey 2017 is that it provides detailed data on the income sources (such as income from wages, self-employment, pensions, dividends, interest rates, etc.) including social transfers (such as the social financial assistance, child allowance, unemployment benefit, financial reimbursement for assistance and care by other person, etc.) and remittances. In this paper, we simulate (change) only direct taxes, while social security contributions and social assistance benefits are set as they have been in 2017. MK-MOD allows for computation of the disposable income, replacement rates and effective marginal tax rates. It allows the reproduction of the budget constraint for each household, i.e. the latent set of working hours and household disposable income alternatives based on the simulated values, while the labor supply model rationalizes observed behavior. The model has been validated by Petreski and Mojsoska-Blazevski (2017) and further details with that regard could be found there.

Using MK-MOD, we simulate the effects of the personal income tax reform on poverty, inequality and the collected funds. The reform incorporated several parts. First, it introduced higher personal income tax rate of 18% for the income from work (wages, honorary work and the like), exceeding 90.000 MKD per month. For the wages, the threshold applies to the amount obtained when the gross wage is reduced by the social contribution and the tax exemption, while to all other non-wage labor income it is applied to the gross amount. Second, the reform increased the tax exemption for wage workers, from 7.531 MKD to 8.000 MKD. Third, the personal income tax rate remained flat for capital income (dividends, capital gains and rents), though increased from 10% to 15%. Fourth, tax exemptions were reduced; for instance, the one on rents reduced from 25% to 15%, while the one on copyright contracts from the max of 50% to a max of 20%. Though, as we do not have so detailed division of contracts from non-wage labor income in our survey, we are bound to apply only the tax exemption reduction for rents. Fifth, the reform introduced tax on interest, though this will be applied starting January 2020, and hence is currently not simulated.

We also simulate the announced intention to use the extra collected money from the progressive taxation for funding of the reformed social assistance system, primarily the introduction of the guaranteed minimum assistance, including the reform pertinent to the child and educational allowances. This reform assumes an assistance of 4.000 MKD per unit of equivalence scale (being about 6.800 MKD for a standard four-member family), topped up with child and educational allowances, amounting to 10.600 MKD for the same standard family, and is means tested.

We rely on the Quality of Life Survey in Macedonia 2017. It is a nationally-representative survey of 1.200 households and 4.071 individuals providing rich dataset on labor income, social income, pensions and remittances. Other existing surveys do not provide all sources of income. However, as is the case with the national surveys, this survey also insufficiently precisely captures the top earners. From that viewpoint, the results may be slightly underestimated and this should be borne in mind when interpreting or concluding.

3.2. Results and discussion

We start the discussion of the results by looking at the values of poverty and inequality in the case of no-reform. This is needed to secure our comparator basis later. Table 1 presents six indicators for inequality: Gini, three percentile ratios (s80-s20, s80-middle class, middle class-s20), and the shares of the top 1% and 5% earners; and two indicators for poverty: relative and absolute. We present four variants of the disposable income, starting from the one before any transfers are considered (market disposable income), then the one with pensions but without social assistance and remittances, the next one includes pension and transfers but not remittances, and the final one includes all market earned income (net of tax), pensions, social assistance and remittances. The inequality indicators are slightly higher than the one published by the State statistical office (Gini of 33.6% and s80-s20 of 6.6), while the poverty indicators are largely alights (relative poverty rate of 21.9%). Still, these differences with regard to the national statistics are not that important given in the simulation exercise we are interested in the achieved changes in these indicators, rather than in their levels.

Table 1 – Development indicators in case of no reform

	Disposable household income before transfers, pensions and remittances	Disposable household income including pensions before transfers and remittances	Disposable household income including pensions and transfers before remittances	Final disposable income
Gini coefficient	39.86%	36.07%	36.19%	36.44%
S80-S20	34.32	9.61	8.03	7.73
S80-Middle class	3.19	2.71	2.61	2.63
Middle class-S20	10.75	3.54	3.07	2.93
Top 1% share	7.66%	6.45%	6.20%	6.12%
Top 5% share	21.00%	18.00%	17.40%	17.60%
Relative poverty rate (below the 60th percentile of the median)	39.56%	24.72%	21.55%	20.97%
Absolute poverty rate (under $1.9/day in 2011 PPP, %)	13.40%	4.55%	1.63%	1.21%

Source: Authors' calculations based on Quality of Life Survey 2017.

Table 2 presents the simulation results of the personal income tax reform, as it has been explained in Section 3.1. The cells which changed are shaded, for easier navigation. They suggest that the reform – which basically aimed the top 1% of earners, reduces the inequality indicators, but only negligibly. The Gini coefficient reduces by 0.06 percentage points (p.p.), while the s80-s20 by 0.03 p.p. Likewise, the top 1% and 5% shares reduce but only on the third decimal. Note that the increase of the tax rate for the top earners is partially compensated with the increased tax exemption, overall leading to infinitesimal improvements in the inequality ratios. Since the reform aimed the right part of the income distribution, the poverty ratios (which are calculated based on the developments in the left part of the income distribution) remain intact.

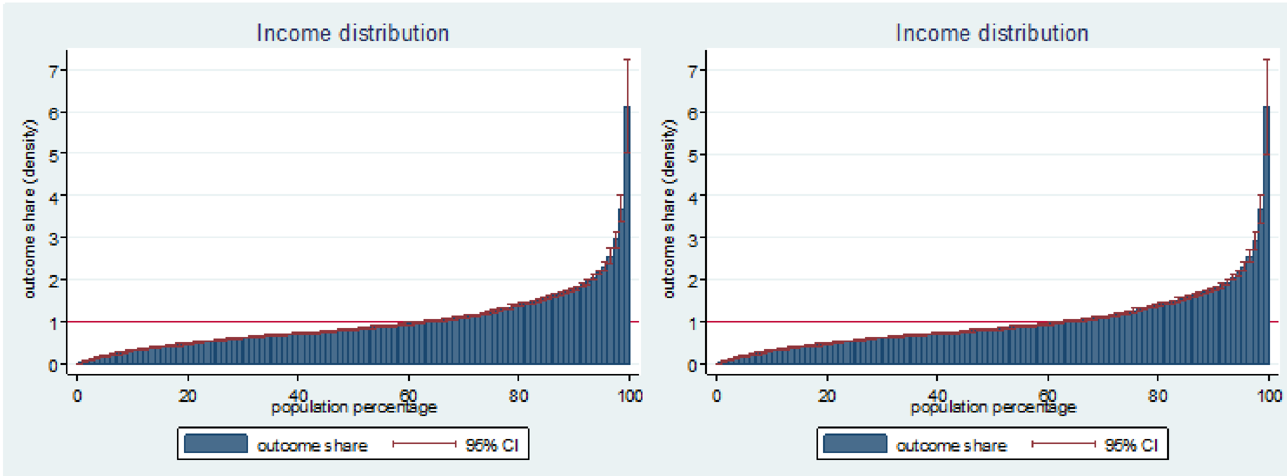
Table 2 – Development indicators in case of personal income tax reform

	Disposable household income before transfers, pensions and remittances	Disposable household income including pensions before transfers and remittances	Disposable household income including pensions and transfers before remittances	Final disposable income
Gini coefficient	39.82%	36.00%	36.12%	36.38%
S80-S20	34.48	9.59	8.01	7.70
S80-Middle class	3.18	2.71	2.60	2.62
Middle class-S20	10.83	3.54	3.09	2.93
Top 1% share	7.66%	6.44%	6.19%	6.12%
Top 5% share	21.00%	18.00%	17.30%	17.59%
Relative poverty rate (below the 60th percentile of the median)	36.63%	24.72%	21.55%	20.97%
Absolute poverty rate (under $1.9/day in 2011 PPP, %)	13.40%	4.55%	1.63%	1.21%

Source: Authors' calculations based on Quality of Life Survey 2017.

To gain further insight into the distributional effects of the tax reform, Figure 1 presents the centile distribution of total income of the households before (left) versus after (right) the imposition of the progressive tax. One could hardly see any difference between the two graphs, suggesting that any effects of the reform onto the income distribution have been small.

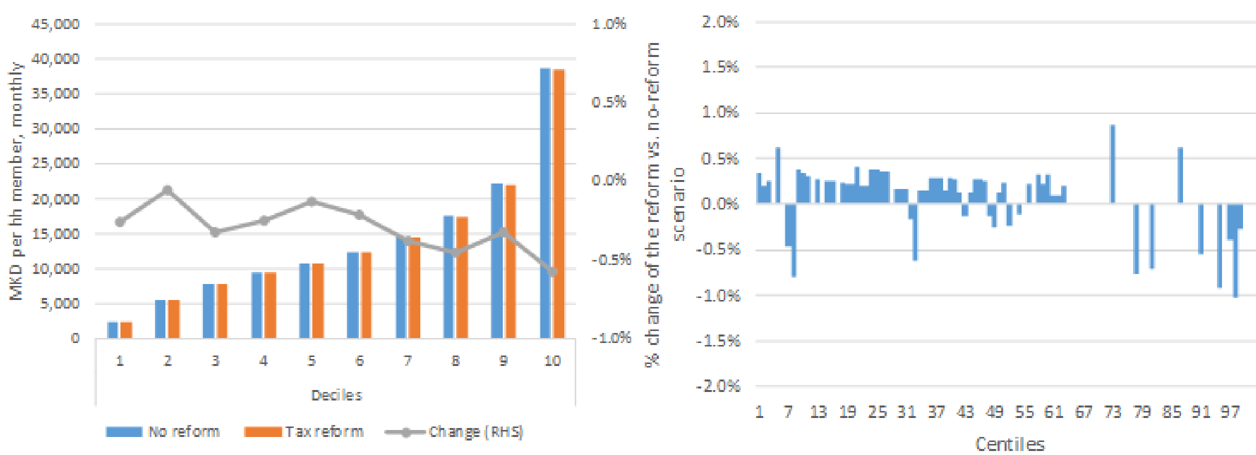
Figure 1 – Distributional effects of the personal income tax reform, before vs. after



Source: Authors' calculations based on Quality of Life Survey 2017.

To provide a better visual insight into the magnitude of the post-reform changes, we draft Figure 2, whereby the change is more easily observed. The left graph observes the change by deciles of the income distribution: the grey line presents the change (to be read on the right axis). It suggests that for the left part of the income distribution it is largely zero, i.e. no change in income of households is observes; while becomes slightly negative for the right part of the income distribution and apparently the largest (-0.6% of the pre-reform income) for the top decile. The change by centiles is observed on the right graph, which again corroborates that the reduction of the income due to the reform is observed in the right part of the income distribution, roughly being the top quintile. However, we should note that negative changes do not exceed 1% of the original household income, which is significantly small change.

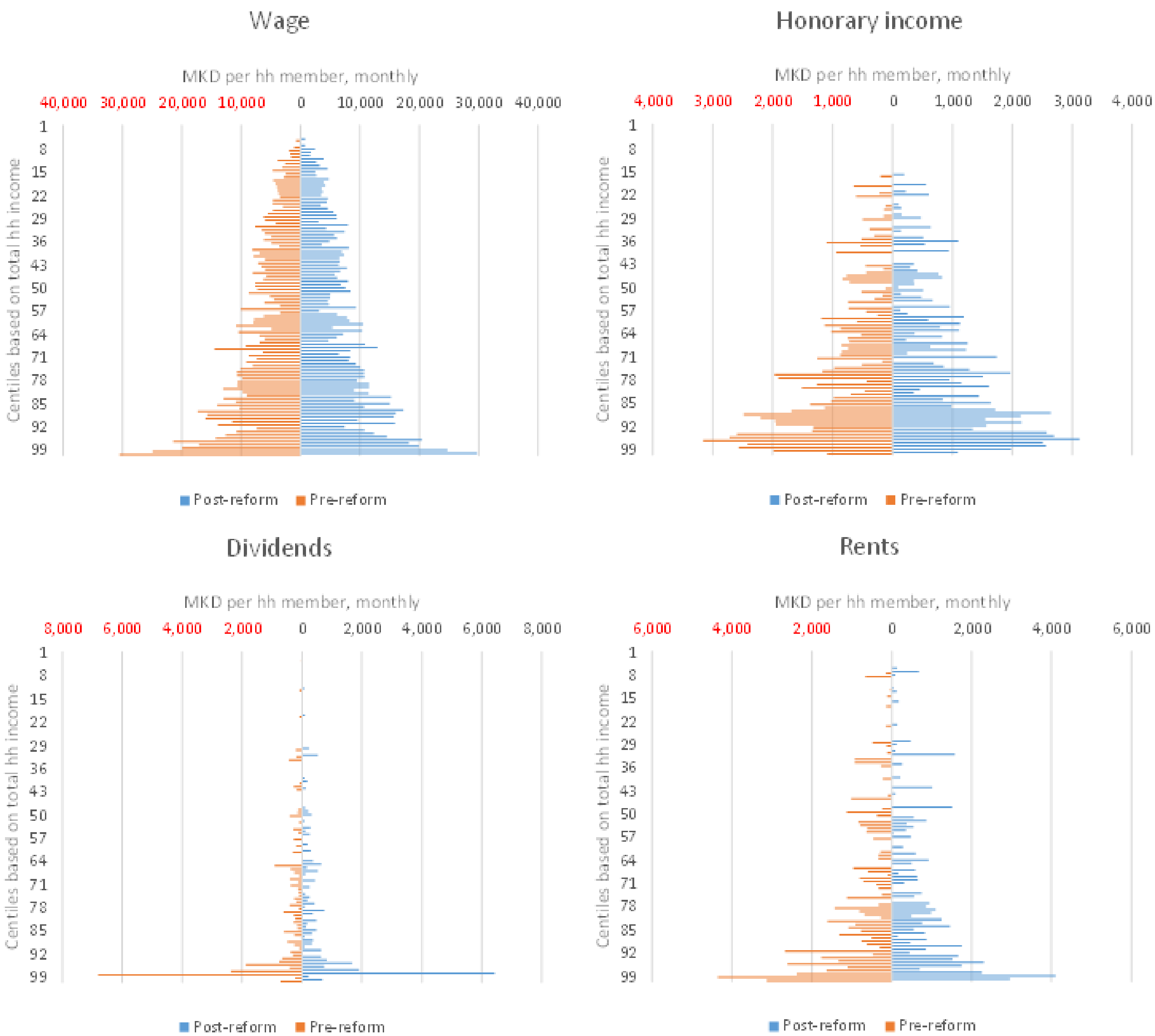
Figure 2 – Distributional effects of the personal income tax reform, changes



Source: Authors' calculations based on Quality of Life Survey 2017.

In Figure 3, we observe the income distribution by type of market income (wages, honorary income, dividends and rents), along the distribution as defined by the total household income (hence, the one that besides market income also includes social income and remittances), before versus after the tax reform. Graphs suggest that the four types of income are located among the wealthier households. Therefore, the progressive personal income tax on wages and honorary income and the higher tax on dividends and rents are potentially appropriately set to combat income inequality. However, the effect of reducing the incomes among the top centiles is negligible, even hardly visible on the picture; however, top centiles in the rights are slightly left-scaled compared to their right counterpart, suggesting that the tax reform still has exerted some effect.

Figure 3 – Distributional effects of the personal income tax reform, by types of income



Source: Authors' calculations based on Quality of Life Survey 2017.

Finally, as the spending of the extra collected funds due to the progressive and higher taxation of income in North Macedonia was explicitly tied to the reformed social assistance system, Table 3 presents the results of the overall reform, i.e. the combined effect of the tax and social reform. This is important since, as we observed, the tax reform worked only on the right part of the income distribution, while the social reform works mainly for the left part of the income distribution. Indeed, the table suggest that the social reform has both poverty-reduction and equalizing effect. Namely, Gini further declines by additional 1.3 percentage points, while s80-s20 improves by sizeable 1.5 index points. Likewise, relative poverty declines by 1.4 percentage points, while absolute poverty is fully eradicated. [1]

Table 3 – Development indicators in case of personal income tax reform and social assistance reform

	Disposable household income before transfers, pensions and remittances	Disposable household income including pensions before transfers and remittances	Disposable household income including pensions and transfers before remittances	Final disposable income
Gini coefficient	39.82%	36.00%	35.19%	35.14%
S80-S20	34.48	9.59	6.31	6.20
S80-Middle class	3.18	2.71	2.62	2.64
Middle class-S20	10.83	3.54	2.41	2.35
Top 1% share	7.66%	6.44%	6.11%	6.04%
Top 5% share	21.00%	18.00%	17.10%	17.40%
Relative poverty rate (below the 60th percentile of the median)	39.36%	24.57%	19.31%	18.64%
Absolute poverty rate (under $1.9/day in 2011 PPP, %)	13.40%	4.55%	0.00%	0.00%

Source: Authors' calculations based on Quality of Life Survey 2017.

[1] Though, one needs to note that MK-MOD works on the assumption of a full take-up of any social program, i.e. that everybody who is eligible will apply and obtain the assistance. This is the theoretical corner, since in reality take-up is usually below 100% for various reasons.

In what follows, we provide some further insights into the tax reform effect for wages only. We observe the wage distribution only, by gender, occupation and sector. In each of the following graphical compositions, the upper graph refers to the distribution before the tax reform, while the lower one to the distribution following the tax reform. We are interested in visual inspection of any differences between the upper and the lower graphs.

Figure 4 presents the overall wage distribution. While wages in general follow an expected distribution, still there are two things to note. First, the distribution exceeds unity (the exact indicator of equality, i.e. the case where each centile receives 1% of total wage mass) around the 60th centile, suggesting that the middle class in the true sense of the word may be around this percentile. In ideal distribution it would hover around the median (50th percentile), hence being a sign of skewness of the wage distribution to the right. Indeed, the top percentile captures around 4.5% of the wage mass (and fully replicating the value found in ILO (2019), which is based on data from LFS). However, this figure is estimated with the largest confidence interval, which corroborates our earlier caution that the top percentiles are insufficiently precisely captured in surveys. The bottom panel of Figure 4 fully replicated the upper panel, with only a slight exception of the top centile, suggesting that the tax reform affected only the top 1% earners and still in a relatively trivial way: their share declines from 4.5% to only 4.4%.

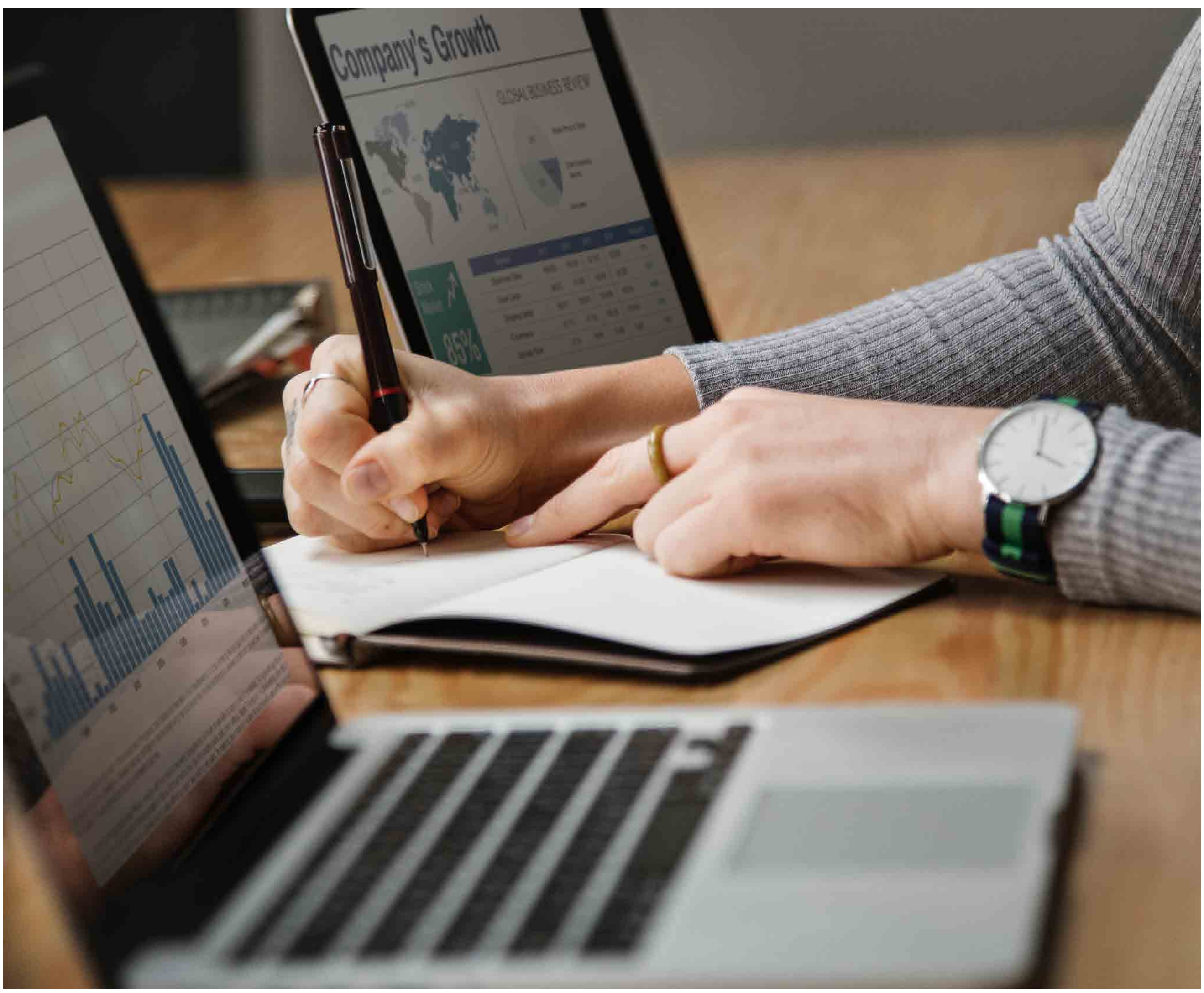
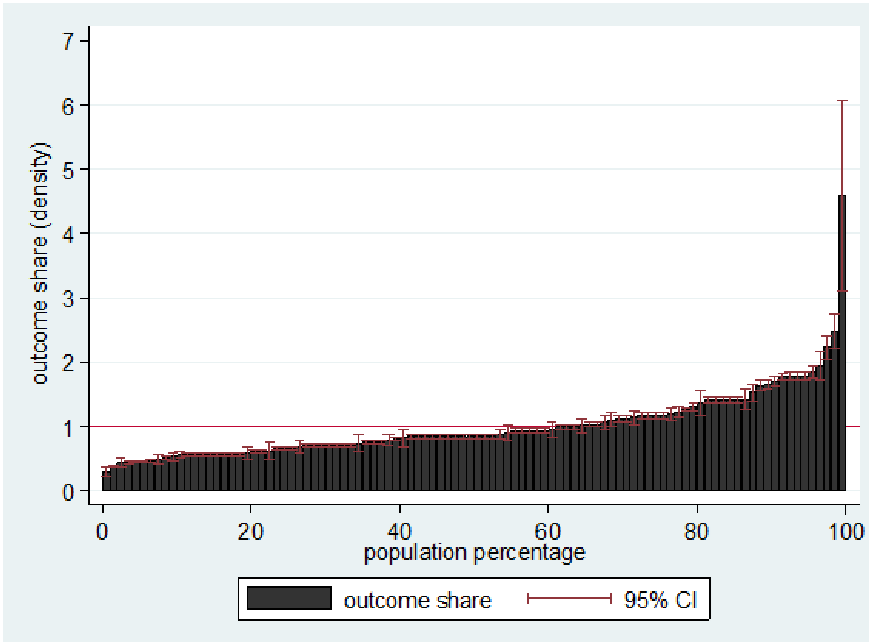
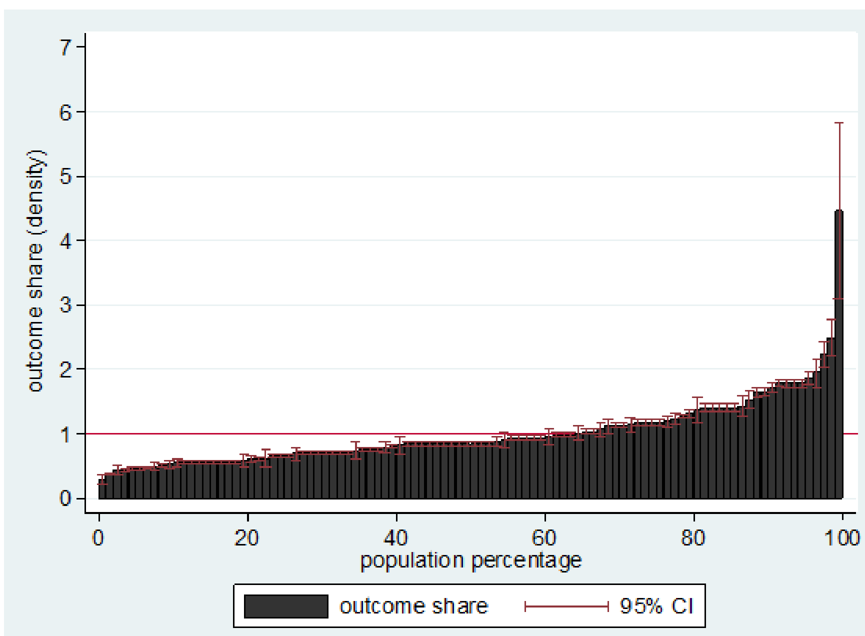


Figure 4 – Distributional effects of the personal income tax reform for wages

a) Pre-reform



b)Post-reform

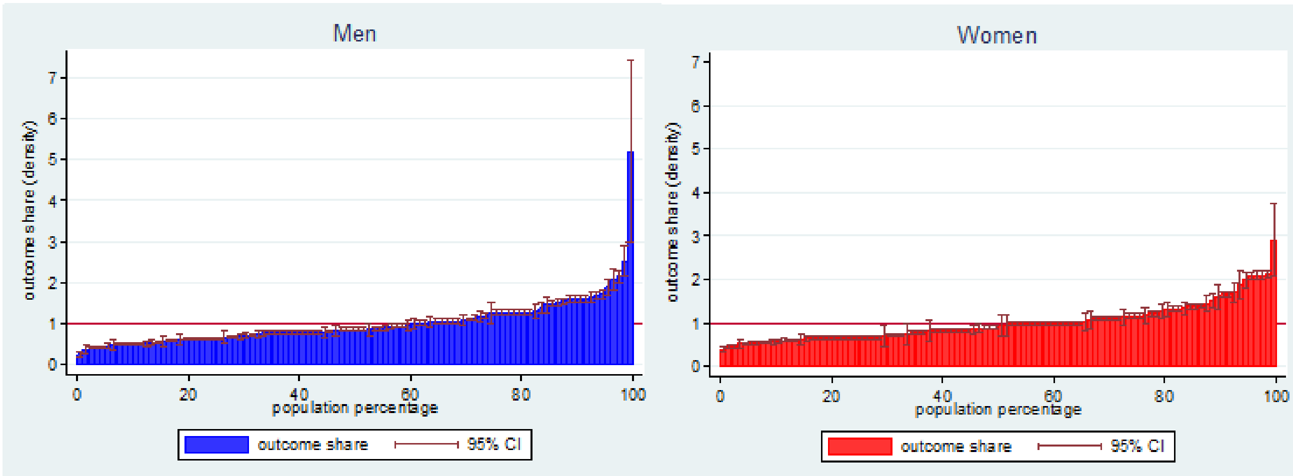


Source: Authors' calculations based on Quality of Life Survey 2017.

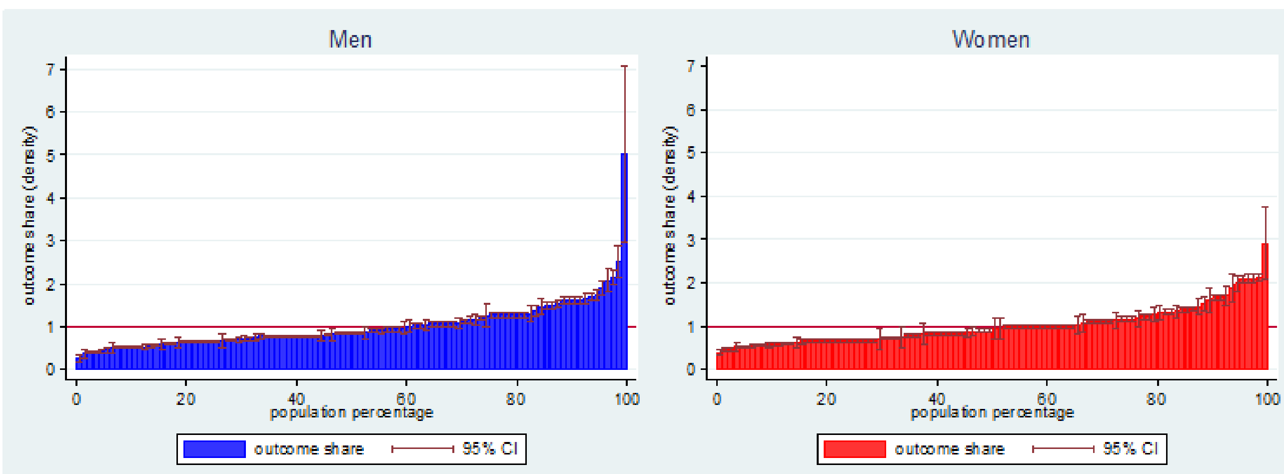
Figure 5 presents the same distributional observations by gender. In general, the figure suggests that men are higher paid than women in North Macedonia, corroborating the findings of Petreski et al. (2014) about the existing gender wage gap. The post-reform distribution suggests that men in the top centile are mostly affected by the progressive tax, while the distribution for women remains largely intact.

Figure 5 – Distributional effects of the personal income tax reform for wages, by gender

a) Pre-reform



b) Post-reform

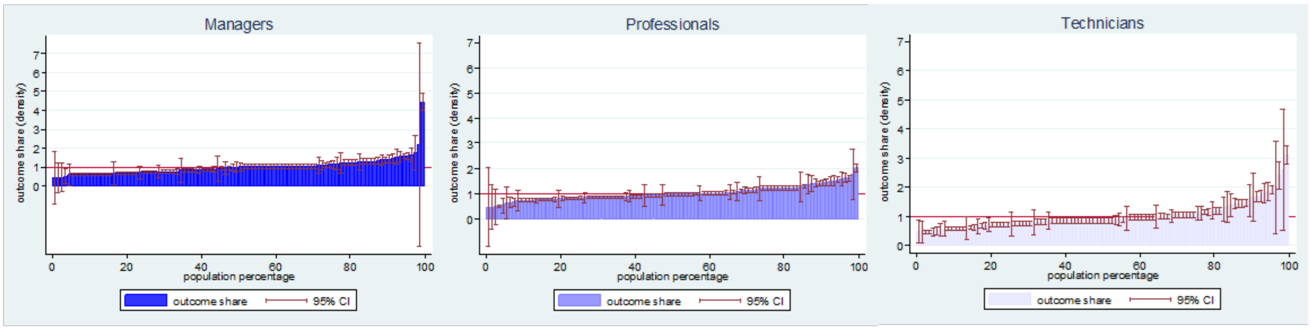


Source: Authors' calculations based on Quality of Life Survey 2017.

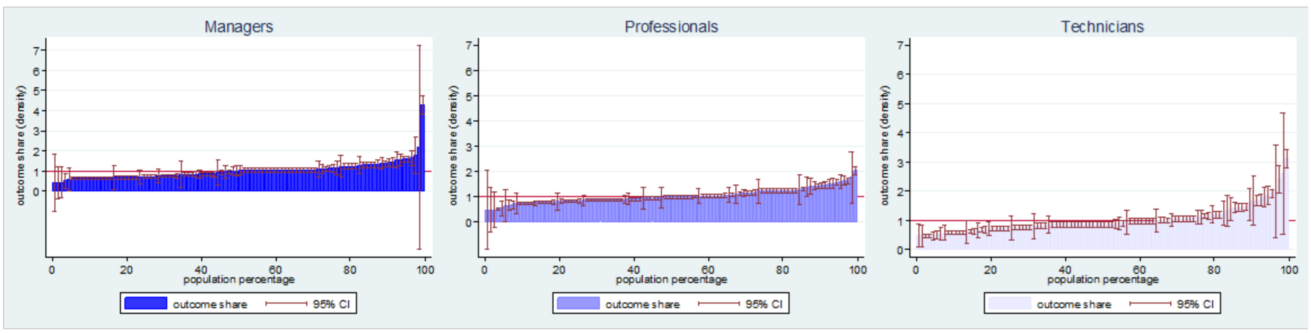
For the analysis by occupation (Figure 6) and by sector (Figure 7), we choose the three highest-paid of them. Top earners are apparently more frequently found among managers, than among professionals and technicians. The tax reform is affecting only them, at least in a visually significant manner. In terms of sectors, very high wages are more frequently found in the IT and telecommunications sector, as compared to the other two high-pay sectors: energy and finance, whereby the high average is derived from a higher share of high-pay positions. However, likely because of the smoother wage distributions in the sector, we cannot derive any credible conclusion that the any sector has been more sensitive to tax progressivity than others.

Figure 6 – Distributional effects of the personal income tax reform for wages, for high-paying occupations

a) Pre-reform



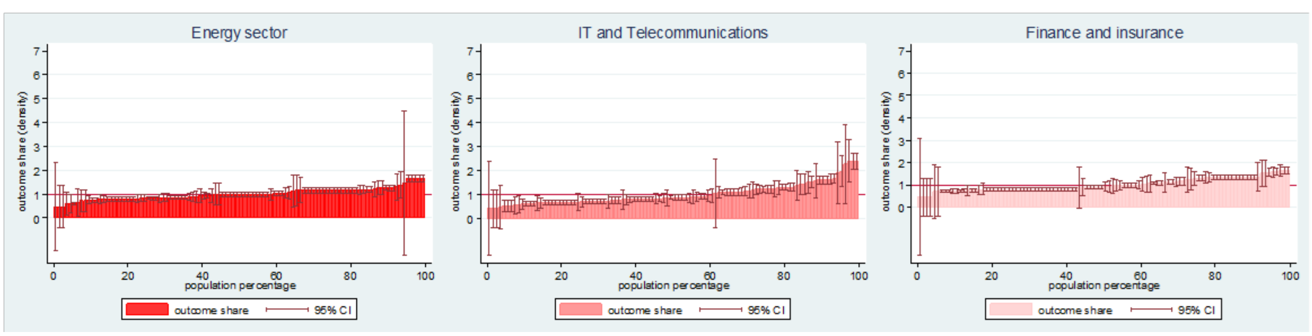
b) Post-reform



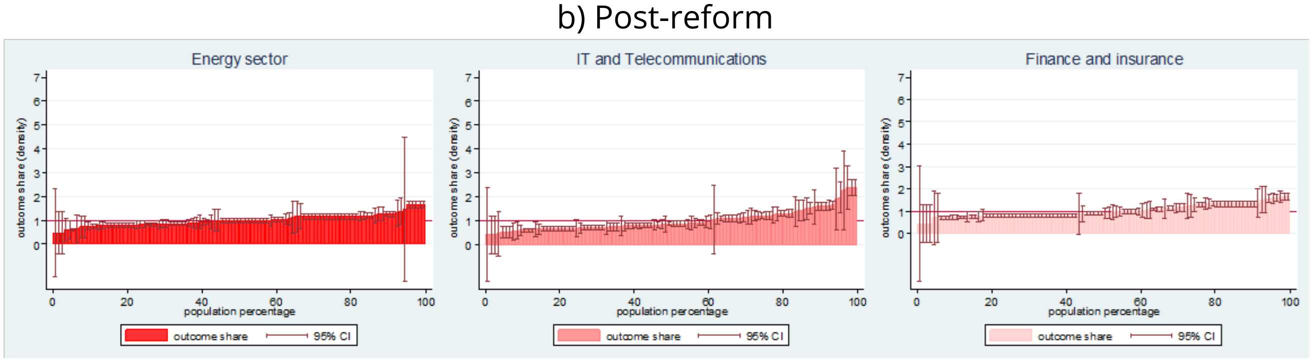
Source: Authors' calculations based on Quality of Life Survey 2017

Figure 7 – Distributional effects of the personal income tax reform for wages, for high-paying sectors

a) Pre-reform

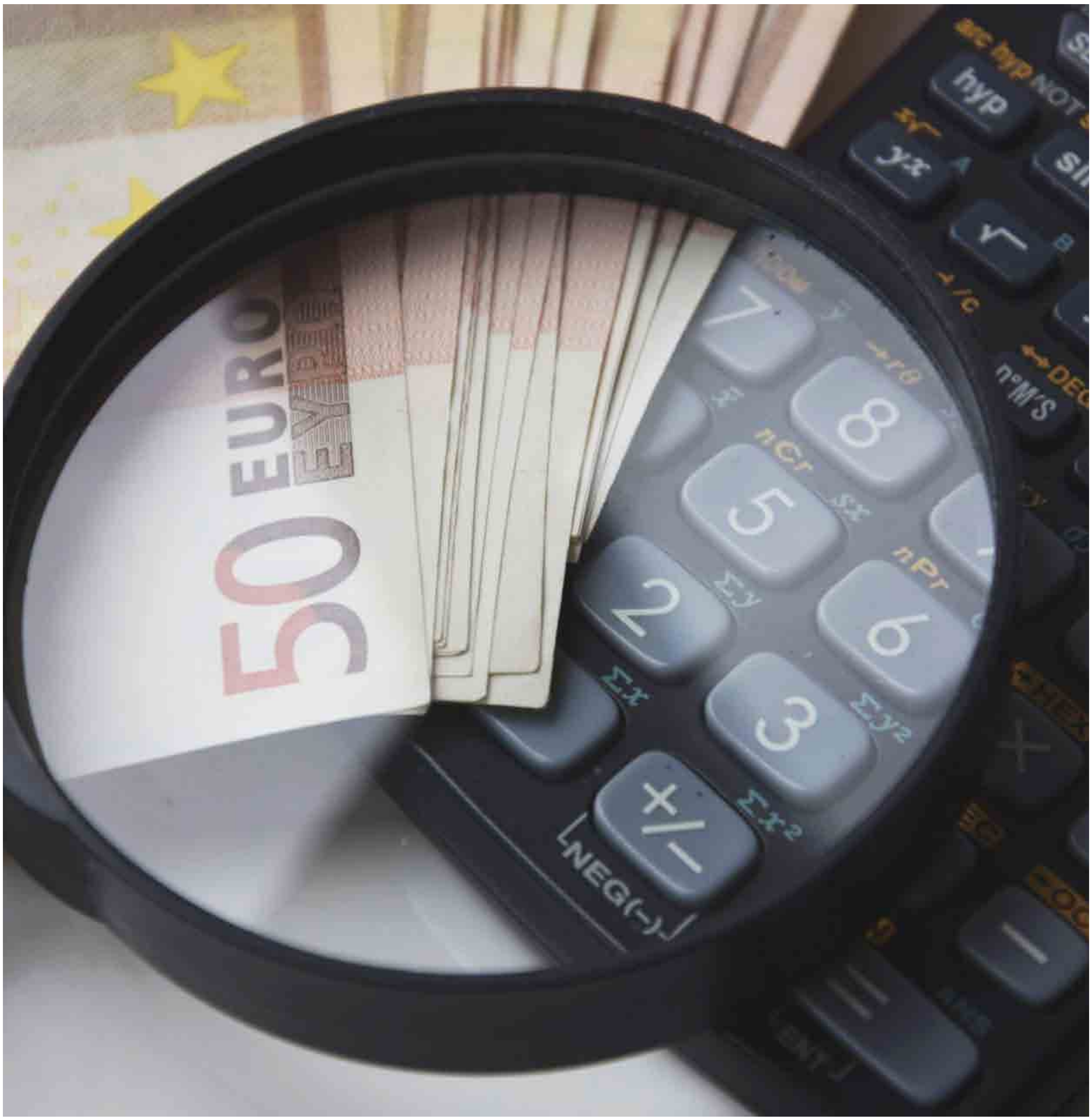


b) Post-reform



Source: Authors' calculations based on Quality of Life Survey 2017

To conclude, the tax reform produces plausible results for inequality in North Macedonia, despite these results are very small and potentially without any real significance. The combination of the tax and social reform leads to further plausible outcomes, as the collected funds from the progressive and higher tax, if directed to fund the guaranteed minimum assistance (including the child and educational allowances) further acts as poverty-reducing and equalizing factor with potentially stronger real impact. The analysis of the wage distribution suggests that wages are not the source of the income inequality in North Macedonia, despite about 4.5% of wage mass goes to the top 1% earners. They are the ones affected by the tax reform, but only infinitesimally. Male workers are more affected than female workers, as well managers more than the other occupations, while none sector proved especially sensitive to the tax progressivity.



4. PRELIMINARY QUALITATIVE EVIDENCE

4.1.Data collection

To gain qualitative insights into the potential implications of the introduction of the progressive and higher personal income tax, we collected qualitative information through interviews and focus groups. Three in-depth interviews have been conducted: one with the chair of a large chamber of commerce, another with the chair of IT association and a third with the CEO of large foreign company in the country. The focus group was conducted with workers affected by the policy change and coming from the following industries: manufacturing, media, NGO, finance and consulting. The interviews and the focus group have been conducted over April and May 2019, hence respondents were able to speak about the early effects of the new tax policy, though also about the broader picture in which the policy change occurred.

4.2. Results and discussion

The insights from the interviews as well the discussion within the focus group have been quite diverse and thorough, and comprehended a couple of aspects relevant for the effects of the progressive and higher personal income tax: the sudden announcement of the reform and the uncertainty it may have inflicted, the redistribution, employment and migration effects, the profiles and industries affected, as well the satisfaction and productivity implications for workers.

The main concern raised by all respondents is the sudden introduction of the reform. Despite it was a fairly-long debated issue, the design of the reform has been announced only in early November 2018, with the law adopted in late December 2018. This apparently sparked an environment of mistrust and undermined the principle of consultation with stakeholders to which the government previously abided to. In addition, it stressed the long-term planning with companies, especially the big ones where such planning processes are indeed long, comprehensive and any alteration may cause significant damage.

> *The decision was made very quickly, there was no period of adjustment by the private sector.*
>
> *So, it's not that the private sector feels threatened and whether it will lose money, it was about how things were set and how this law was passed.*
>
> *The unexpected tax change has caused problems in the planning of the annual budgets for the company, which in our case is set on a multi-annual basis. Thus, the change had a negative impact on the dynamics of job creation.*

Particularly important disappointment has been felt among the business sector, as they considered this to be signal that the private sector is not considered a partner to the government as it declared. On the other hand, however, they recognize that that it is not the quantitative effect of the reform that mattered, but rather the overall psychological effect.

> *This has led to a kind of disappointment in the private sector and that is, let's say, a more psychological effect than some kind of, I don't know, a quantitative effect. However, it is very strong.*

To a large scale, it is the uncertainty that the reform introduced, which is particularly relevant for the investment climate in the country and the efforts to attract FDIs. Respondents recognized that the frequent changes of laws and policies is far more relevant for the decisions to invest, rather than the content (or the size) of the policy changes.

This does not go in the direction of predictability. So, when foreign companies choose where to invest, they consider many aspects. If they decided to invest here and knew that there is flat tax, changing into a progressive tax, even if it does not have large financial effects, still has the effect of "our investment here is not certain, because as we see, laws can change overnight".

Before undertaking a new investment cycle, foreign companies in Macedonia prepare detailed plans with accurate financial projections for capital investments and operating expenditures. The sudden changes of the laws that have any implication onto financial operations of the companies, a perception of unpredictability and uncertainty is created.

Indeed, the perception that the reform is, at best, quantitatively mild, was present among all respondents. They recognize that the policy change was sudden, not well timed, brought about without consultation and without possibility for voice of the stakeholders. Despite the government elaborated ways to spend the extra collected money, the already generated climate of mistrust of if this money will be spent productively and effectively offset these intentions. In particular, the concern that there is no sign of improving public services, particularly those in education and health, has been vivid through the discussions.

Look, as a taxpayer for so many years, I would not have had any problems with tax increase, just to know where it would go. For now, it is unclear to anyone where those funds are finishing, even if everyone doubts that they are ending in an increase of the already bulky administration.

How much will this amount contribute to the services received? ... Already part of the services are paid privately, such as private schooling and health. We will pay the tax, but what will be gained, although I believe it will undoubtedly raise the threshold of living of some endangered groups, which in itself is a noble goal.

The discussion about the efficiency of the public spending is closely related with the living standard of citizens. The debate remained divided as some respondents (particularly the ones in the focus groups) agreed that it is reasonable to pay higher taxes if they earned more, as long as this contributed to elevating out of poverty of those in need. On the other hand, however, respondents describe the overall living picture in North Macedonia as 'on the brink of existence', providing additional reason of why increased personal income taxes will bring only dissatisfaction rather than strong redistribution effects. Hence, as a conclusion, the higher (and progressive) personal income tax is not the problem per se, but rather the offered public services and the misused public money.

The productivity of these people would not have fallen if we lowered the gross salary, but their personal satisfaction, surely would.

Of all the contacts with other companies in the country, no one was satisfied with the changes, quite the contrary.

The introduction of the progressive and higher personal income tax in North Macedonia occurred in a timing of widespread impaired credibility of the institutional order and undermined rule of law. However, the prevalently negative perception about the reform is also related to the overall low level of tax morale in the country. Respondents perceive that still one of the outcomes of the reform will be that taxpayers will seek ways to circumvent the additional tax burden.

The initial reaction is to seek creative ways to avoid this increase. ... Especially because we already know that not only the private sector but also the general population has a very low confidence in the Government and in the spending of public money.

Other "legal" ways of reducing the tax base for IT companies and other highly paid sectors will be utilized, which have a significant yield to the budget, and "should" create additional added value by applying new and advanced methods and technologies.

Finally, the discussion concentrated on the profiles that could be particularly affected by the reform. Some occupations and sectors will be more affected by others, notably those high paid. However, a general concern has been raised that the reform targets those who are already more productive and could be the cornerstone of economic growth.

These are people who actually have invested in their own development, who have been educated, with refined knowledge, skillful, qualified, and in this situation they feel like being punished for having invested in themselves so that they can raise their level income.

Particularly exposed to the tax increases are potentially young workers, and especially engineers.

Most affected by progressive taxation will be the highly educated young people, especially in the IT industry and other engineering-related industries.

In our case, highly-paid engineering and managerial positions are hit, for which we already have set aside higher salary costs, for their attraction in distant regions from Skopje. Unfortunately, such policies have further influenced the centralization of the economic activity.

This is important because taxation refers to individuals not the households and hence any specific household structure and life stage is not taken into account. Namely, the design of the personal income tax in North Macedonia does not recognize any deductions related to the number of dependents, affordability of housing, own car and so one.

Hence, respondents felt that young educated individuals will be most negatively affected, not because the tax increase is pervasive, but rather because they are signaled by the policy that their education and efforts, as a precondition for higher wages, may be penalized, as well that their familiar circumstances are not considered. On top of the ineffective public spending policies, this potentially induces these people to seek employment in environments of good physical and institutional infrastructure, irrespective of the fact that taxes there may be higher.

All people who have the opportunity to find employment somewhere outside the country, are willing to pay much higher taxes because they know they will get much more back.

In summary, respondents expressed prevalently negative picture about the effects of the progressive and higher personal income tax in North Macedonia. All respondents agreed that the policy change is fairly mild and quantitative insignificant, but the main concern was its suddenness, brought in times of impaired institutions and rule of law, and without widespread consultation on its design. Although, there was a prevalent niche that all respondents are ready to pay the additional tax and it would not affect their living standard in a meaningful way. However, coupled with the inefficient public spending and the perception of misuse of public funds created a psychological rather than real bubble that most productive employees are penalized for their education, skills and effort, which then feeds into their inclination to emigrate. Respondents agreed that the engineering occupations have been most affected.

5. CONCLUDING REMARKS AND POLICY GUIDANCE

The objective of this study is to provide preliminary evidence about the effects of the progressive and higher personal income tax in North Macedonia which has been introduced as of January 1, 2019. Based on an already developed tax and benefit microsimulation model for North Macedonia MK-MOD, we provide research evidence about the expected distributional effects. In the second part of the study, we use qualitative methods (interviews and focus group) and provide evidence about the current and expected effect of the progressive personal income tax onto employers' and workers' behavior in a broader sense, mainly touching upon the issues of the context of the policy change, its relation with the efficiency of the public spending, overall tax structure, as well the employment and emigration propensities.

Based on the quantitative calculations, results suggest that the tax reform produced plausible results for inequality in North Macedonia, despite these results are very small and potentially without any real significance. The combination of the tax and social reform led to further plausible outcomes, as the collected funds from the progressive and higher tax, if directed to fund the guaranteed minimum assistance (including the child and educational allowances) further acts as poverty-reducing and equalizing factor with potentially stronger real impact. The analysis of the wage distribution suggests that wages are not the source of the income inequality in North Macedonia, despite about 4.5% of wage mass goes to the top 1% earners. They are the ones affected by the tax reform, but only infinitesimally. Male workers are more affected than female workers, as well managers more than the other occupations, while none sector proved especially sensitive to the tax progressivity.

Based on the qualitative insights, results suggest prevalently negative effects of the progressive and higher personal income tax in North Macedonia, although dominantly in perceptive/psychological rather than quantitative sense. The policy change has been judged as fairly mild and quantitative insignificant, corroborating our quantitative calculations, but the main concern was its suddenness, brought in times of impaired institutions and rule of law, and without widespread consultation on its design. Although, there was a prevalent niche discussion about the readiness of concerned taxpayers to pay the additional tax without any significant burden. However, coupled with the inefficient public spending and the perception of misuse of public funds created a psychological rather than real bubble that most productive employees are penalized for their education, skills and effort, which then feeds into their inclination to emigrate. Respondents agreed that the engineering occupations have been most affected.

Overall, both the quantitative estimates and the qualitative insights unanimously suggest that the quantitative effects of the tax policy reform – for the budget and the income and wage inequality – have been small if at all significant in any extent. In addition, qualitative results suggest that the context in which the progressive personal income tax has been enacted may actually deliver a very high (political) price to be paid, incomparably higher than the economic benefits.

6. REFERENCES

Auerbach, A.J., Kotlikoff, L.J. and Skinner, J.S., (1981) The efficiency gains from dynamic tax reform. International Economic Review, 24(1), pp. 81-100

Bardhi, E. (2017) Albanian Economy: Proportional or Progressive Taxation? Mediterranean Journal of Social Sciences, 8(1), pp. 176-179

Bernardi, L., Chandler, M. and Gandullia, L. eds., (2005) Tax systems and tax reforms in new EU member states. Routledge.

Bird, R.M. and Zolt, E.M., (2005) The limited role of the personal income tax in developing countries. Journal of Asian Economics, 16(6), pp.928-946.

Böhringer, C., Boeters, S. and Feil, M., (2005) Taxation and unemployment: an applied general equilibrium approach. Economic Modelling, 22(1), pp.81-108.

Causa, O. and Hermansen, M., (2017) Income redistribution through taxes and transfers across OECD countries (No. 1453). OECD Publishing.

Chalupka, R., (2004) Tax reform in Slovakia. Czech Journal of Economics and Finance (Finance a uver), 54(9-10), pp.382-390.

Dallinger, U., (2013) The endangered middle class? A comparative analysis of the role played by income redistribution. Journal of European Social Policy, 23(1), pp.83-101.

Diamond, P. and Saez, E., (2011) The case for a progressive tax: from basic research to policy recommendations. Journal of Economic Perspectives, 25(4), pp.165-90.

Gale, W.G. and Samwick, A.A., (2014) Effects of income tax changes on economic growth. Economic Studies. SSRN Electronic Journal. 10.2139/ssrn.2494468.

Gordon, R., (2000) Are Real Responses to Taxes Simply Income Shifting Between Corporate and Personal Tax Bases?" In Joel Slemrod, ed., Does Atlas Shrug? The Economic Consequences of Taxing the Rich, Cambridge University Press.

ILO (2019) Assessing the economic impacts of the 2017 minimum wage increase in North Macedonia. Budapest: International Labor Organization (ILO).

Kakwani, N.C., (1977) Measurement of tax progressivity: an international comparison. The Economic Journal, 87(345), pp.71-80.

Koskela, Erkki, Vilmunen, Jouko, (1996) Tax progression is good for employment in popular models of trade union behaviour. Labour Economics, 3, pp. 65–80.

Martinez-Mongay, C. and Sekkat, K., (2005) Progressive taxation, macroeconomic stabilization and efficiency in Europe (No. 233). Directorate General Economic and Financial Affairs (DG ECFIN), European Commission.

Martinez-Vazquez, J., & McNab, R. (2000) The Tax Reform Experiment in Transitional Countries. National Tax Journal, 53(2), pp. 273-298.

Mitja, Č., Ivica, U. and Miroslav, V., (2002) Income Redistribution through Tax and Social Benefits: The Case of Slovenia and Croatia. Statistics, 67, pp.151-156.

Peichl, A., (2013) Slovakia has abolished its flat tax rate, but other Eastern and Central European countries are likely to continue with the policy. LSE European Politics and Policy (EUROPP) Blog.

Pellegrino, S. (2004) Tax policy in new EU members: Czech Republic. Department of Public and Environmental Economics, University of Pavia

Petreski, M. and Mojsoska-Blazevski, N. (2017) Overhaul of the social assistance system in Macedonia: Simulating the effects of introducing Guaranteed Minimum Income (GMI) scheme. Finance Think Policy Study No. 11.

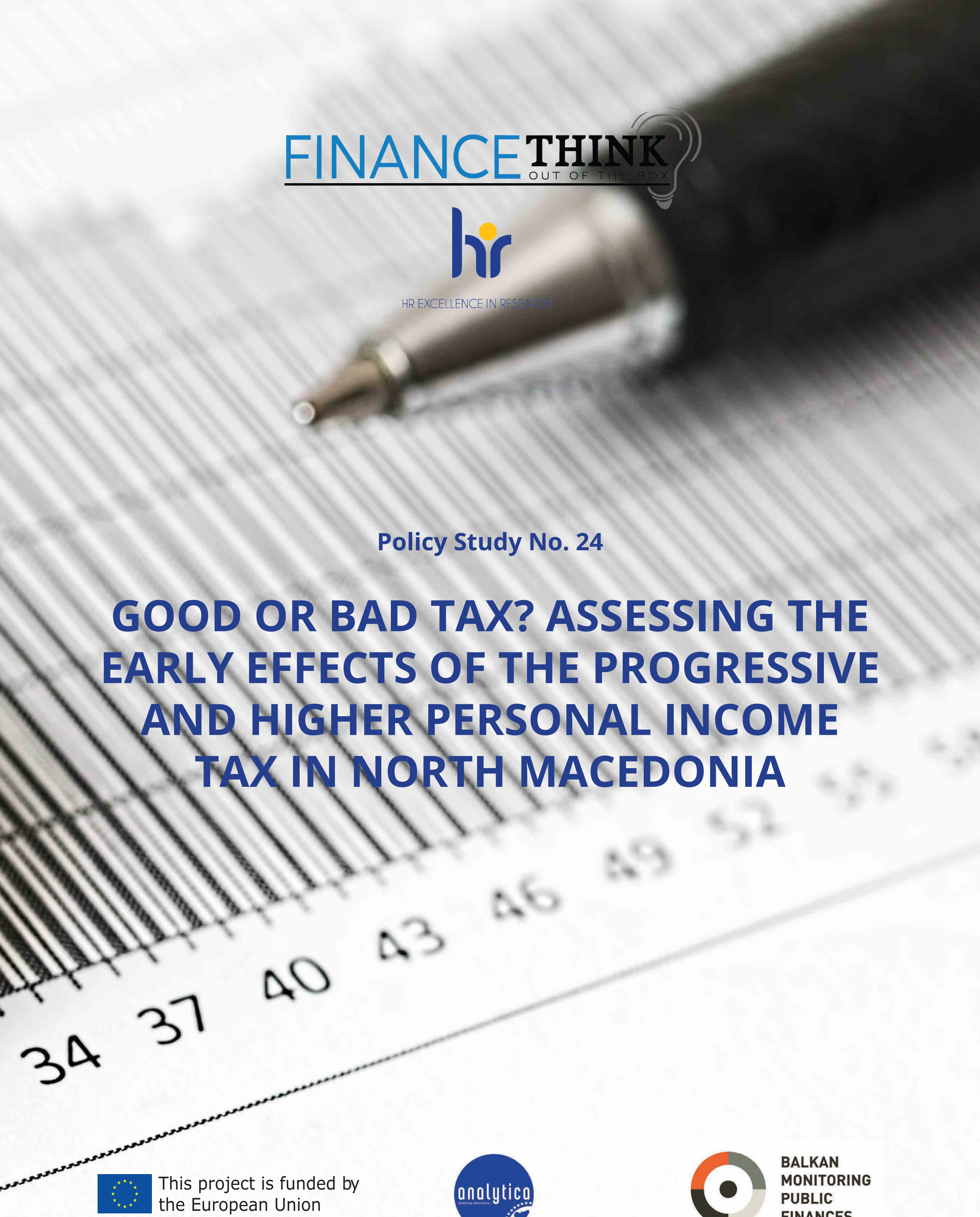
Petreski, M., Mojsoska-Blazevski, N. and Petreski, B. (2014) Gender wage gap when women are highly inactive: Evidence from repeated imputations with Macedonian data. Journal of Labor Research, 35(4), p.393-411.

Piketty, T. and Saez, E., (2007) How progressive is the US federal tax system? A historical and international perspective. Journal of Economic Perspectives, 21(1), pp.3-24.

Pirttilä, J. and Selin, H., (2011) Income shifting within a dual income tax system: Evidence from the Finnish tax reform of 1993. Scandinavian Journal of Economics, 113(1), pp.120-144.

Saez, E. (2010) Do Taxpayers Bunch at Kink Points? American Economic Journal: Economic Policy, 2(3): 180–212.

Weller, C.E. and Rao, M., (2008) Can Progressive Taxation Contribute to Economic Development? Working Papers wp176, Political Economy Research Institute, University of Massachusetts at Amherst.



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