DISTRIBUTIONAL EFFECTS OF RECENT BENEFIT AND TAX REFORMS IN LATVIA

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Abstract

In this note, we evaluate the distributional effects of the minimum income reform and the tax reform, which are implemented in Latvia starting 2018. Our analysis is focused on estimating the expected changes in income inequality and poverty rates, which the reforms will induce. We use tax-benefit microsimulation model EUROMOD and a nationally representative data on income EU-SILC. Our results suggest that even though both the minimum income reform and the tax reform help achieving some reduction in income inequality and poverty, none of the reforms will be very effective in resolving the problem of weak work incentives and high tax wedge for low income earners.

1   Introduction

The rate of poverty and income inequality in Latvia is higher than in most other EU and OECD countries. One of the main reasons for high income inequality in Latvia is a low degree of income redistribution ensured by the tax-benefit system. Starting 2018, Latvia implements two major reforms – a tax reform, which will bring several important changes in personal income taxation, and a minimum income reform, which foresees considerable changes in the minimum income support schemes targeted at the poorest households. Our

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analysis of the tax reform (see Pluta and Zasova (2017)) suggests that the effect of the tax reform on income inequality is very limited, as individuals at the bottom of income distribution gain relatively little. In this note, we analyze the expected effect of the minimum income reform and the composite effect of both tax and minimum income reforms.

The minimum income reform will gradually become effective in 2018-2020. It will change pension indexation rules and will increase the minimum pensions, increase the GMI (Guaranteed Minimum Income) benefit and will introduce a supplementary benefit to households with more than one dependent child.

The structure of the paper is as follows. We begin by discussing the degree of income redistribution and work incentives that the current tax-benefit system ensures. Then we outline the main components of the minimum income reform and present our results with respect to the simulated effect of these measures on income distribution and poverty. Finally, we analyze the composite effect of the minimum income reform and the tax reform. In our analysis we use tax-benefit microsimulation model EUROMOD (for more details about the EUROMOD modelling approach, see Sutherland and Figari (2013)) and EU-SILC 2015 data.

2   Redistribution ensured by tax-benefit systems in Latvia and other EU countries

Inequality of original income[1] and the degree of income redistribution vary considerably among EU countries (see Figure 1a and Figure 1b). The Gini coefficient for original income in 2016 ranged from 0.40 in the Netherlands to 0.55 in Portugal (see Figure 1a). In Latvia, inequality of original income was the fourth highest in EU (0.53). The degree of redistribution generated by taxes and benefits in 2016 in Latvia was one of the lowest in the EU (see Figure 1b). The reduction in the Gini for original income generated by the tax-benefit system was only 0.16, much lower than in countries like Belgium (0.27) and Ireland (0.25), and also lower than in Estonia (0.17) and Lithuania (0.19). As a result of the high inequality

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[1]Original income consists of income from employment, self-employment, investment, property, private pensions, private transfers and maintenance payments.

of original income and the low degree of redistribution, inequality of disposable income in Latvia in 2016 was the highest in the EU.

Figure 1: Gini coefficient for original and disposable income and change in Gini coefficient ensured by taxes and benefits in EU-28 countries in 2016

(a) Gini for original and disposable income

(b) Gini for disposable income and change in Gini ensured by taxes and benefits
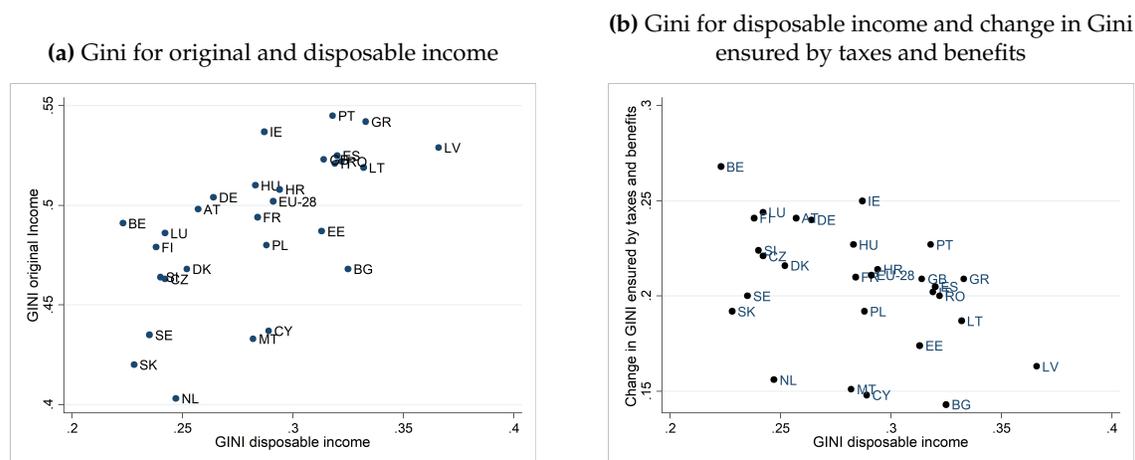
Source: EUROMOD Webstatistics, EUROMOD version no. G4.0

One of the reasons for the low degree of redistribution in Latvia compared with other EU countries is a relatively small contribution of means-tested benefits to the reduction in the Gini coefficient – it is the second lowest in the EU and amounts to 0.007, which is well below the EU-28 average level (0.036). Another reason is a lower contribution of pensions to the redistribution. In 2016, the reduction in Gini ensured by pensions (0.105) was the 6th lowest in EU, lower than in Lithuania (0.134) and Estonia (0.121), but pretty close to the EU-28 average level (0.118).

3   Trade-off between income redistribution and work incentives

There is a trade-off between the two principal objectives of a tax-benefit system – income redistribution and work incentives that the system generates. This suggests that tax-benefit systems that ensure more income redistribution are likely to generate weaker work incentives. Jara and Tumino (2013) demonstrated the presence of this trade-off in the EU countries by identifying a negative and statistically significant correlation between the Gini coefficients and the Marginal Effective Tax Rates (METR). The METR is a standard measure of work incentives at the intensive margin: it shows the proportion of a small increase

in earnings that is lost due to extra tax payments and foregone benefits that the person is no longer eligible for after the increase in earnings.

Zasova and Zdanovica (2014) argue that the Latvian tax-benefit system is characterized both by a relatively low degree of income redistribution and relatively weak work incentives. In Latvia, the mean METR in 2016 was 30.4%, which is below the EU average (33.9%), but higher than in Lithuania (26.3%) and Estonia (24.6). At the same time, as discussed above, the Latvian system ensures relatively little income redistribution (EURO-MOD statistics (2018)).

Another characteristic of the Latvian tax-benefit system are especially high METRs faced by poor individuals. In 2017, 94% of individuals who faced METRs exceeding 50% belonged to the two bottom deciles of distribution of equivalised disposable income. This is different from many other European countries, where distribution of high METRs is either more even across deciles or rising towards the top end of income distribution (Jara and Tumino (2013), data for 2007). The main reason for high METRs faced by the poor individuals in Latvia is the design of means-tested benefits (GMI and housing benefits): for each additional euro earned, the amount of the benefit is reduced by one euro, which leaves the net income unchanged, thus generating 100% METRs. This negatively affects work incentives of the poorest individuals and increases the poverty risk.

Figure 2 displays the contribution of taxes, benefits and social insurance contributions (SIC) to the mean METRs by deciles of equivalised disposable income in Latvia. It demonstrates that high METRs in the bottom deciles result mainly from the contribution of benefits, which disappears in the fourth decile.

Figure 2: Contribution of taxes, benefits and social insurance contributions (SIC) to mean METRs by deciles of equivalised disposable income in Latvia, in 2017

Source: authors' calculations using EUROMOD-LV model
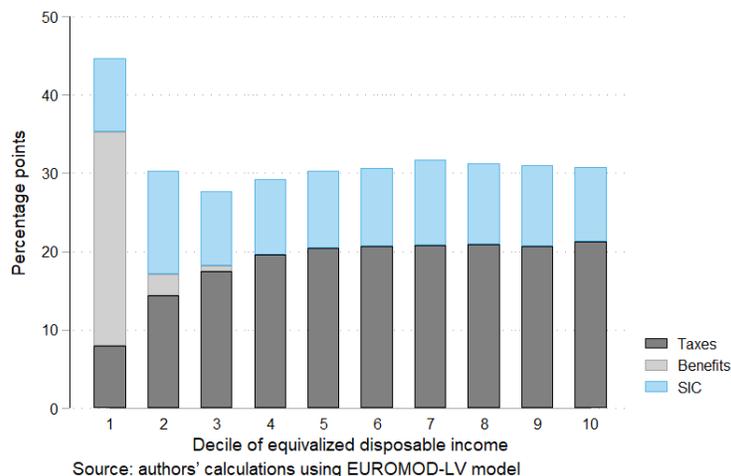
4 Reform of the minimum income scheme in Latvia in 2018-2020

The minimum income (MI) reform foresees several measures aimed at increasing incomes of the least protected groups, namely: (1) several measures to increase income of old-age pensioners, (2) revision of the guaranteed minimum income level, and (3) increase in the size of the state family benefit through introduction of supplementary payments for households with many children. Below we describe the main elements of the reform.

4.1 Indexation of pensions

Pensions in Latvia are indexed once a year, in October, taking into account the consumer price index (CPI) growth and the average wage growth. Only small pensions, which do not exceed 50% of the average economy wage in the previous calendar year, are fully indexed, while pensions above this threshold are indexed only partially (only the part below the threshold is indexed).

The rules that were in place before 2018 stipulated that, regardless of a pensioner's working history, the coefficient that was used in the indexation was computed taking into account consumer price inflation and 50% of the average wage growth.

The new rules, which became effective in 2018, foresee that for pensioners with longer contribution histories the index should be computed taking into account a larger share of the wage growth. Thus, according to the new rules, the index should take into account 60% of the average wage growth for pensioners with contribution histories between 30 and 39 years, and 70% of the average wage growth for pensioners with contribution histories 40 years or more.

4.2 GMI benefit

GMI benefit is one of the two means-tested benefits that exist in Latvia (the other being housing benefit). GMI benefit is calculated as the difference between the guaranteed minimum income and a person's actual income, excluding some income sources. In order to be eligible for GMI benefit, a separately leaving person or a household must classify as "being in need", which requires the person's or the household's average per person income over the previous three months to be below a defined threshold. Since 2011, the income threshold has been set in absolute terms (128.06 EUR per person per month) and has not been revised since then. In the first half of 2019, it is planned to tie the income threshold and the guaranteed minimum income to the median income. The reform foresees the following changes:

- *Minimum income threshold (income threshold that defines eligibility for GMI benefit).* The reform stipulates to define a person as a person in need if his/her income level is below 40% of the median equivalized disposable household income (188 euro, forecast using data for 2016 income). When assessing eligibility of a household, it is planned to use the same income threshold level, but apply 0.7 coefficient to the second and all other household members. The coefficient 0.7 is also applied to the first person in a household if he/she is of working age but is not employed and does not meet any of the following criteria: is disabled, is on parental leave, is a student.

- *Size of GMI benefit.* The maximum GMI benefit (i.e., the size of the benefit which is paid to a person with zero income) will also be tied to the median income and will be set at 20% of the median equivalized disposable household income – EUR 94

(forecast using data for 2016 income), applying a coefficient 0.7 for the second and all other household members.

4.3 Minimum pension and the state social security benefit in case of old age

Another measure stipulated by the reform package is tying the minimum pension and the state social security benefit in case of old age to the median income.

- The minimum pension currently equals the state social security benefit (64.03 EUR per month). For pensioners with longer employment histories this amount is multiplied by a coefficient (varying between 1.1 and 1.7) that increases with the length of service. The reform foresees to provide increased support for minimum pension recipients by raising the base for the calculation of the minimum state pension to 20% of the median income, i.e. to 94 EUR (keeping the coefficients of 1.1 - 1.7 unchanged). This change will become effective in 2019.

- State social security benefit in case of old age is paid to the elderly in case they are not entitled to the state old age pension because of insufficient length of service. The reform foresees to increase the benefit from 64.03 EUR per month to 20% of the median income (94 EUR; forecast using data for 2016 income). This change will also become effective in 2019.

4.4 State family benefit

State family benefit is a lump-sum monthly benefit paid to one of the parents of a child. Until the end of 2017, the benefit was paid until the child reaches the age of 15, or, if the child remains in education, does not receive scholarship and is not married, until the age of 19. Starting January 2018, the benefit is paid until the child reaches the age of 20 (conditional on continuing education and not getting married). The size of the benefit has not been changed (EUR 11.38 per month for the first child, EUR 22.76 for the second child, EUR 34.14 for the third child and EUR 50.07 for the fourth and each subsequent child), however, new supplementary payments will be introduced starting March 2018. The size of the supplementary payments (paid, like the basic benefit, until the child reaches 15 or

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20 years) is EUR 10 per month if there are two children in the family and EUR 66 if there are 3 children in the family. For each subsequent child in the family, the supplementary payment is increased by EUR 50 per month.

5 Results

5.1 Contribution by reform component

In this section, we present the estimated impact of these reforms on income distribution and poverty risk. In our analysis, we use tax-benefit microsimulation model EUROMOD and EU-SILC 2015 data.

5.1.1 Changes in pension indexation rules

For the purpose of our analysis, we compare two scenarios – the reform scenario and the no-reform scenario – for each year 2018, 2019 and 2020. The reform scenario includes new conditions on pension indexation rules that take into account the length of service. In the no-reform scenario, pensions are indexed in accordance with the rules that were in place before 2018.

First, we estimate the maximum possible increase in gross pension resulting from the change in the indexation rules. It refers to pensioners who receive pensions that are equal or exceed the threshold below which the pensions are indexed, and therefore can fully enjoy the change in the indexation rules. Our results suggest that the maximum possible increase in monthly gross pensions compared to the no-reform scenario is EUR 2.54 in 2018, EUR 2.29 in 2019 and EUR 2.41 in 2020 (see Table A.1 in the Appendix).

Figure 3a shows the simulated change in equivalized disposable income by income deciles caused by changes in the pension indexation rules in 2018-2020.

Figure 3: Effect of changes in pension indexation rules and distribution of pensioners receiving old age pensions in 2018

(a) Change in equivalized disposable income compared to no-reform scenario, %

(b) Households with pensioners receiving old age pensions, 2018
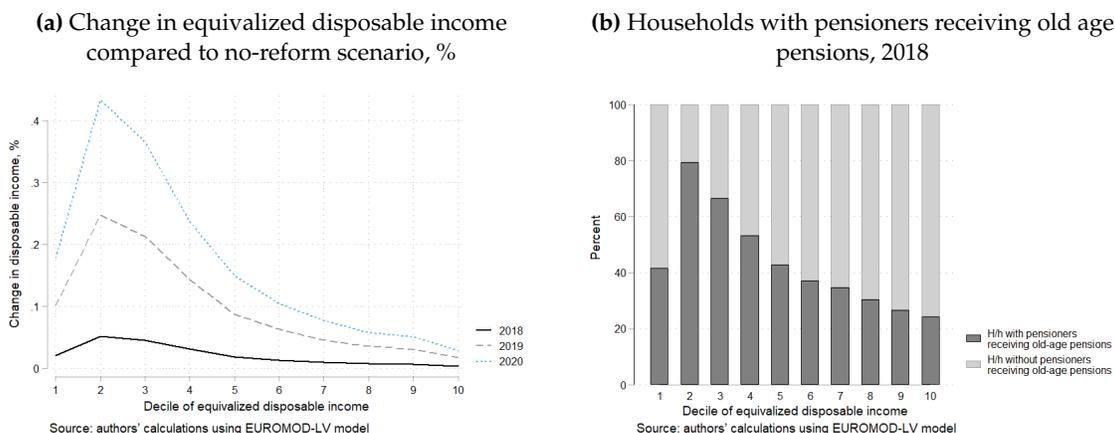
The overall effect of the new indexation rules is very small, but it is stronger in the bottom deciles, where the pensioners are mainly concentrated (see Figure 3a and Figure 3b). The effect is the largest in the second decile, where about 80% of the households have pensioners among their members.

The effect of the reform is smaller in 2018 due to the fact that pensions are reviewed in October, thereby the reform scenario in 2018 reflects the effect of the change that is effective only for 3 months (October-December 2018). The effect of the reform in 2019-2020 is larger, because it shows the cumulative effect of two and three indexation rounds, respectively.

Table 1 summarizes the effect of the pension indexation reform on income distribution, measured by the Gini coefficient, and S80/S20 income quintile share ratio. On the whole, the reform is estimated to slightly reduce income inequality – in 2020, Gini coefficient is expected to be 0.05 points lower and S80/S20 0.02 points lower than it would have been in the absence of the reform.

Table 1: Effect of changes in pension indexation rules on Gini coefficient and S80/S20 income quintile share ratio

		2018	2019	2020
Gini coefficient	No-reform scenario	35.20	35.42	35.65
	Reform scenario	35.19	35.39	35.60
S80/S20	No-reform scenario	6.29	6.37	6.50
	Reform scenario	6.29	6.38	6.48

Source: authors' calculations using EUROMOD-LV model.

Table 2 summarizes the effect of the reform on at-risk-of-poverty rates, measured by the share of people with an equivalized disposable income (after social transfer) below the at-risk-of-poverty threshold, which is set at 60 % of the national median equivalized disposable income after social transfers. A new approach to pension indexation is not likely to "pull" a large number of pensioners out of poverty. On the whole, the reform is estimated to slightly reduce at-risk-of-poverty rate – in 2020, at-risk-of-poverty rate is expected to be 0.38 point lower in the 65+ age group and 0.54 points lower in households where all members are above 65.

**Table 2: Effect of changes in pension indexation rules on poverty rates**

		2018	2019	2020
At-risk-of-poverty rate	No-reform scenario	22.93	23.16	23.36
	Reform scenario	22.91	23.07	23.35
At-risk-of-poverty rate, 65+ age group	No-reform scenario	39.31	40.45	41.39
	Reform scenario	39.20	40.02	41.01
At-risk-of-poverty rate in households where all members 65 or older	No-reform scenario	49.62	51.32	52.51
	Reform scenario	49.43	50.67	51.97

Note: At-the-risk-of-poverty rates are calculated at the threshold of 60% of median income.
Source: authors' calculations using EUROMOD-LV model.

5.1.2 Minimum income threshold and GMI benefit

Figure 4 shows the simulated change in equivalized disposable income by income deciles, induced by the change in the minimum income threshold and GMI benefit, compared to the baseline no-reform scenario in 2019.

Figure 4: Effect of changes in the minimum income threshold and GMI benefit compared to no-reform scenario in 2019, %
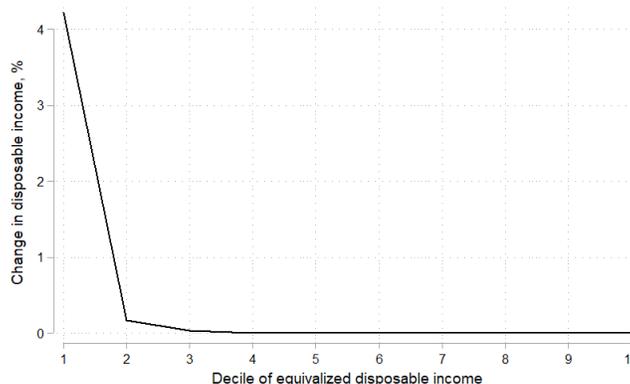
Source: authors' calculations using EUROMOD-LV model

The results show that the reform is well targeted at the poorest households. The reform leads to an increase in the equivalized household disposable income by 4.2% in the first decile, and by 0.2% in the second decile of income distribution. Our results also suggest that the reform is effective in reducing income inequality: in 2019, the Gini coefficient is expected to be 0.14 points lower and S80/S20 0.09 points lower than it would have been in the absence of the reform (see Table 3).

Table 3: Effect of changes in the minimum income threshold and GMI benefit on Gini coefficient and S80/S20 income quintile share ratio

		2019
Gini coefficient	No-reform scenario	35.42
	Reform scenario	35.28
S80/S20	No-reform scenario	6.37
	Reform scenario	6.28

Source: authors' calculations using EUROMOD-LV model.

Our results also suggest that the reform will contribute to a reduction in the poverty rate: on the whole, the at-risk-of-poverty rate is expected to go down by 0.02 points, while the largest reduction (by 0.21 points) is expected for single-parent households (see Table 4).

Table 4: Effect of changes in the minimum income threshold and GMI benefit on poverty rates

		2019
At-risk-of-poverty rate	No-reform scenario	23.16
	Reform scenario	23.14
At-risk-of-poverty rate, 65+ age group	No-reform scenario	40.45
	Reform scenario	40.45
At-risk-of-poverty rate, households where all members are 65 or older	No-reform scenario	51.32
	Reform scenario	51.32
At-risk-of-poverty rate, households with 3 children or more	No-reform scenario	27.62
	Reform scenario	27.62
At-risk-of-poverty rate, single-parent households	No-reform scenario	31.71
	Reform scenario	31.50

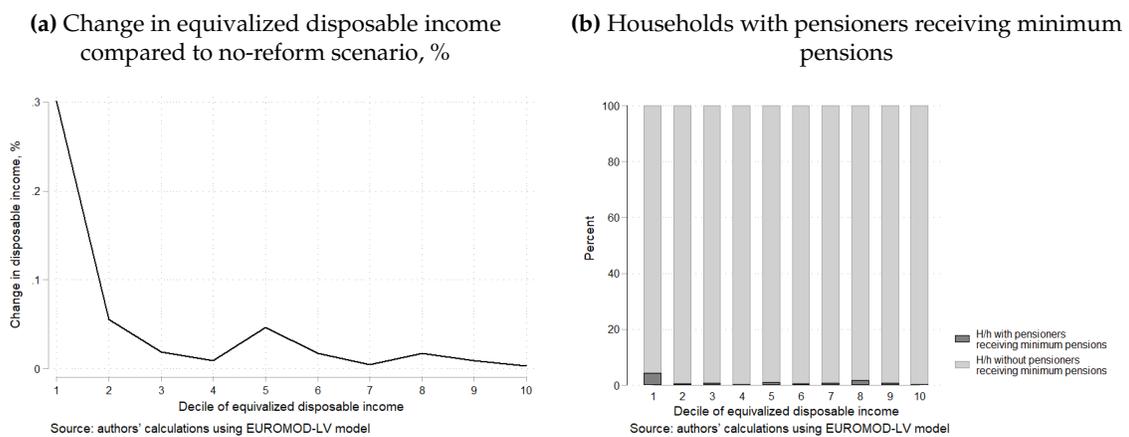Note: At-the-risk-of-poverty rates are calculated at the threshold of 60% of median income.
Source: authors' calculations using EUROMOD-LV model.

5.1.3 Minimum pensions and state social security benefit in case of old age

Figure 5 shows the simulated change in equivalized disposable income caused by an increase in the minimum pension and an increase of the state social security benefit in case of

old age, compared to no-reform scenario, in 2019. Households with pensioners receiving the minimum pensions are mainly concentrated in the first decile of income distribution, making up 4.3% of households in the decile (see Figure 5b). Households in the first decile of income distribution are expected to gain from the reform most, however, even for these households the estimated effect on household equivalized disposable income is small – 0.3% (see Figure 5a).
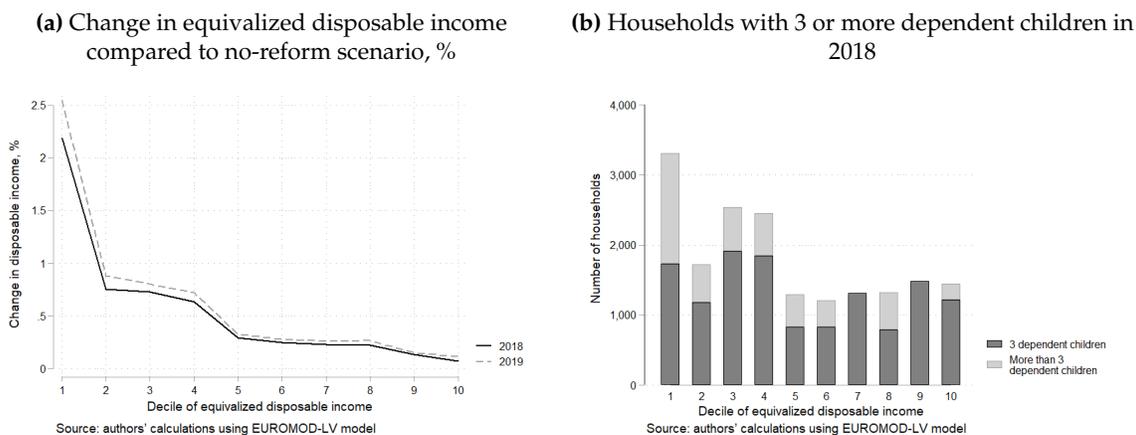
Figure 5: Effect of changes in the minimum pension and state social security benefit in case of old age, and distribution of pensioners receiving minimum pensions in 2019

(a) Change in equivalized disposable income compared to no-reform scenario, %

(b) Households with pensioners receiving minimum pensions

Source: authors' calculations using EUROMOD-LV model

Source: authors' calculations using EUROMOD-LV model

5.1.4 Changes in the state family benefit

Figure 6 shows the simulated change in equivalized disposable income by income deciles induced by new supplementary payments to the state family benefit. As before, we compare the no-reform scenario to the "reform scenario". The supplementary payments are introduced in 2018, but here we present our results for both 2018 and 2019. 2019 is the first year when the full effect of the reform can be observed because in 2018 the supplementary payments will be introduced only in March.

Figure 6: Effect of changes in the state family benefit in 2018-2019

(a) Change in equivalized disposable income compared to no-reform scenario, %

(b) Households with 3 or more dependent children in 2018

Source: authors' calculations using EUROMOD-LV model

Source: authors' calculations using EUROMOD-LV model

The reform is estimated to have a progressive impact, i.e., poor households are expected to gain proportionally more. The reasons for this is (i) a high concentration of households with three and more dependent children in the lowest decile of income distribution (see Figure 6b) and (ii) the fact that the supplementary payments make up a larger share of income for the poorest households. Introduction of the new supplements to the family state benefit is estimated to reduce income inequality – in 2019, the Gini coefficient is expected to be 0.16 points lower and S80/S20 0.06 points lower than it would have been in the absence of the reform (see Table 5).

Table 5: Effect of changes in the state family benefit on Gini coefficient and S80/S20 income quintile share ratio

		2018	2019
Gini coefficient	No-reform scenario	35.20	35.42
	Reform scenario	35.05	35.26
S80/S20	No-reform scenario	6.29	6.37
	Reform scenario	6.23	6.31

Source: authors' calculations using EUROMOD-LV model.

The reform is also expected to reduce at-risk-of-poverty rate: on average, at-risk-of-poverty rate in 2019 is expected to be 0.18 points lower due to the reform. Households with at least three dependent children are expected to have the largest reduction in poverty (by 3.27 percentage points, see Table 6).

Table 6: Effect of changes in the state family benefit on poverty rates

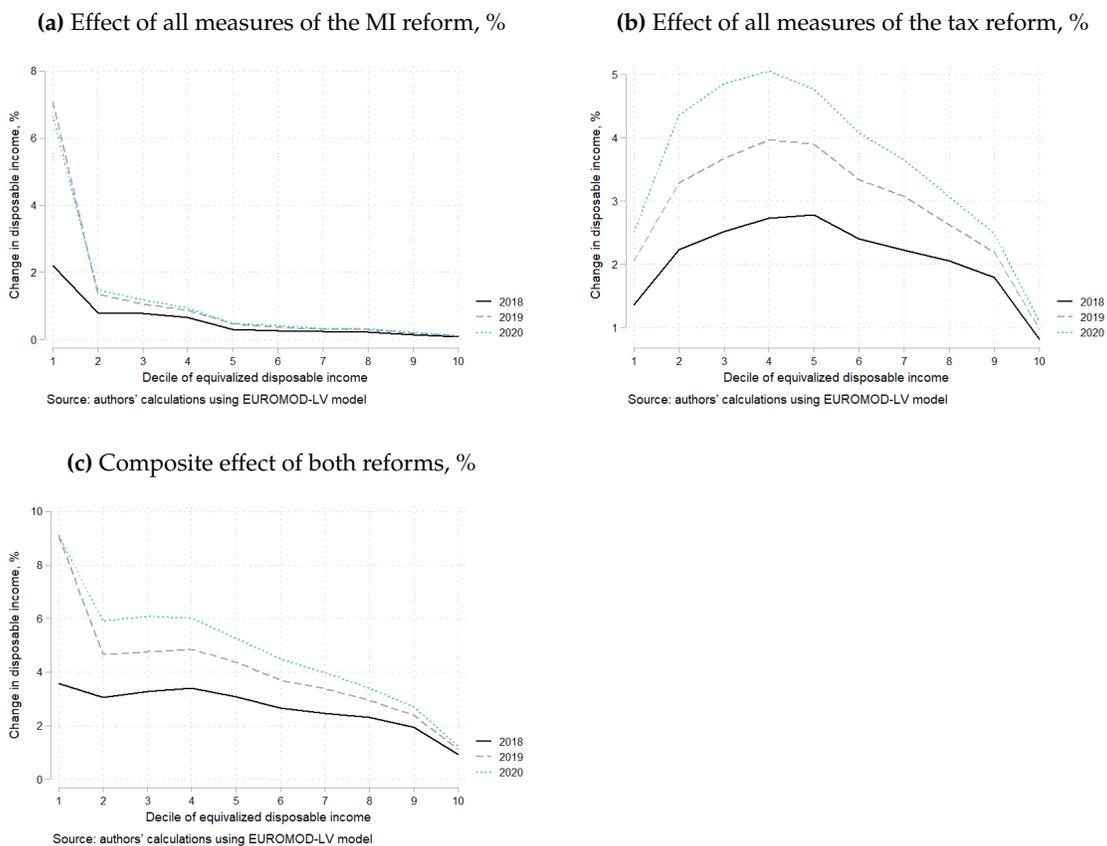|		2018	2019
At-risk-of-poverty rate	No-reform scenario	22.93	23.16
	Reform scenario	22.96	22.98
At-risk-of-poverty rate, 65+ age group	No-reform scenario	39.31	40.45
	Reform scenario	39.61	40.66
At-risk-of-poverty rate, households where all members are 65 or older	No-reform scenario	49.62	51.32
	Reform scenario	50.00	51.67
At-risk-of-poverty rate, households with 3 children or more	No-reform scenario	27.62	27.62
	Reform scenario	26.33	24.35
At-risk-of-poverty rate, single-parent households	No-reform scenario	31.71	31.71
	Reform scenario	31.96	31.29

Note: At-the-risk-of-poverty rates are calculated at the threshold of 60% of median income.
Source: authors' calculations using EUROMOD-LV model.

5.2 Composite effect of the minimum income reform and the tax reform

In this section, we present our results on the estimated composite effect of the MI reform and the tax reform which is being implemented in Latvia starting in 2018.

First of all, we present the simulated effect of the reforms on household equivalized disposable income by income deciles (see Figure 7). The first thing to note is that the composite effect of both reforms is progressive, meaning that the proportional gain in income is larger in the bottom deciles of income distribution. This progressivity is mainly ensured by the minimum income reform (see Figure 7a), which in turn mainly comes from the reform of the GMI benefit and the income threshold that determines eligibility for the GMI. The main gainers from the tax reform (see Figure 7b) are those in the middle of income distribution (for the discussion of this result, see Pluta and Zasova (2017)). Poorest households gain proportionally less from the tax reform, mainly because there is a larger share of non-employed individuals in the poorest households, who obviously don't benefit from changes in labour taxes.

Figure 7: Composite effect of MI and the tax reform in 2018-2020, % change from the baseline no-reform scenario

(a) Effect of all measures of the MI reform, %

Source: authors' calculations using EUROMOD-LV model

(b) Effect of all measures of the tax reform, %

Source: authors' calculations using EUROMOD-LV model

(c) Composite effect of both reforms, %

Source: authors' calculations using EUROMOD-LV model

Next, we present the simulated effect of the reforms on income inequality and poverty indicators (see Table 7). On the whole, the reforms induce a slight reduction in income inequality (measured by the Gini coefficient and S80/S20) in all years. The effect on poverty is however less clear-cut. On the whole, the reforms induce a slight reduction in the poverty rate in all years. For households with 3 children and more, however, the reforms produce a slight increase in the poverty rate. This happens because the reforms increase the median income level and hence the poverty line, which is set at 60% of the median income. Because of this, it is possible that despite an increase in a household income, a household which was above the poverty line before the reforms, falls below the poverty line after the reforms. The population group which, according to our results, is expected to face a relatively strong reduction in the poverty rate in all years, are single-parent households.

Table 7: Composite effect of the minimum income reform and the tax reform on income inequality and poverty rates

		2018	2019	2020
Gini coefficient	No-reform scenario	35.20	35.42	35.65
	Reform scenario	34.78	34.65	34.72
S80/S20	No-reform scenario	6.29	6.37	6.50
	Reform scenario	6.19	6.12	6.19
At-risk-of-poverty rate	No-reform scenario	22.93	23.16	23.36
	Reform scenario	22.75	22.83	23.05
At-risk-of-poverty rate, 65+ age group	No-reform scenario	39.31	40.45	41.39
	Reform scenario	40.14	40.54	40.87
At-risk-of-poverty rate, households where all members are 65 or older	No-reform scenario	49.62	51.32	52.51
	Reform scenario	50.98	51.55	51.79
At-risk-of-poverty rate, households with 3 children or more	No-reform scenario	27.62	27.62	28.03
	Reform scenario	27.62	28.27	29.32
At-risk-of-poverty rate, single-parent households	No-reform scenario	31.71	31.71	31.71
	Reform scenario	30.84	30.48	30.81

Note: At-the-risk-of-poverty rates are calculated at the threshold of 60% of median income.
Source: authors' calculations using EUROMOD-LV model.

6 Conclusion

In this note, we analyze the distributional effects of the minimum income reform, which is being implemented in Latvia starting 2018. We also analyze the composite effect of this reform and the tax reform, which became effective in January 2018. We perform our analysis using the microsimulation tax-benefit model EUROMOD and EU-SILC 2015 data.

Both reforms share a common goal of increasing the degree of income redistribution ensured by the Latvian tax-benefit system. The minimum income reform does so by increasing incomes of the poorest and the most vulnerable population groups – old-age pensioners, recipients of the GMI benefit and families with many children. The tax reform attempts to address this issue by increasing basic tax allowances for low wage recipients and by introducing a progressive tax rate.

Our results suggest that both reforms help achieving some reduction in income inequality measured by the Gini coefficient and S80/S20 income quintile share ratio. The effect of the minimum income scheme reform is more targeted at the poorest population groups, while the main gainers from the tax reform are those in the middle of income distribution.

None of the reforms, however, will be very effective in resolving the problem of weak work incentives and high tax wedge for low income earners. The minimum income reform increases support to the poorest households by raising the GMI benefit. It does not however resolve the problem of 100% marginal tax rate that the GMI benefit recipients face, when their employment income grows, which creates disincentives for employment. The tax reform will effectively lead to an across-the-board reduction in the tax burden on labour, while leaving the tax wedge on low wage earners high compared to other EU and OECD member states. Therefore, given the limited budget resources, a more targeted reduction of the tax burden on low wages would be a more preferred option.

References

EUROMOD statistics, "EUROMOD statistics on Distribution and Decomposition of Disposable Income," 2018.

Jara, H. Xavier and Alberto Tumino, "Tax-benefit systems, income distribution and work incentives in the European Union," *International Journal of Microsimulation*, 2013, *1* (6), 27–62.

Pluta, Anna and Anna Zasova, "Latvia Stumbling Towards Progressive Income Taxation: Episode II," SSE Riga/BICEPS Occasional Papers 10 2017.

Sutherland, Holly and Francesco Figari, "EUROMOD: the European Union tax-benefit microsimulation model," *International Journal of Microsimulation*, 2013.

Zasova, Anna and Anna Zdanovica, "Equity and Efficiency in the Latvian Tax-Benefit System," 2014.

A Appendix

Table A.1: Forecasted indices used for indexation of pensions in the no-reform and the reform scenario, 2018-2020

	Pension threshold for indexation, EUR	No-reform scenario	Length of service	Reform scenario Index	Maximum increase in pension compared to no-reform scenario, EUR
2018	373	1.0421	<30y	1.0421	0
			>=30y, <40y	1.0455	1.27
			>=40y	1.0489	2.54
2019	394	1.0397	<30y	1.0397	0
			>=30y, <40y	1.0426	1.14
			>=40y	1.0455	2.29
2020	416	1.0347	<30y	1.0347	0
			>=30y, <40y	1.0376	1.21
			>=40y	1.0405	2.41