

EVIDENCE FROM PIT REFORM - QUO VADIS?

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Tax behavior insights for improved tax compliance and responsibility

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Introduction

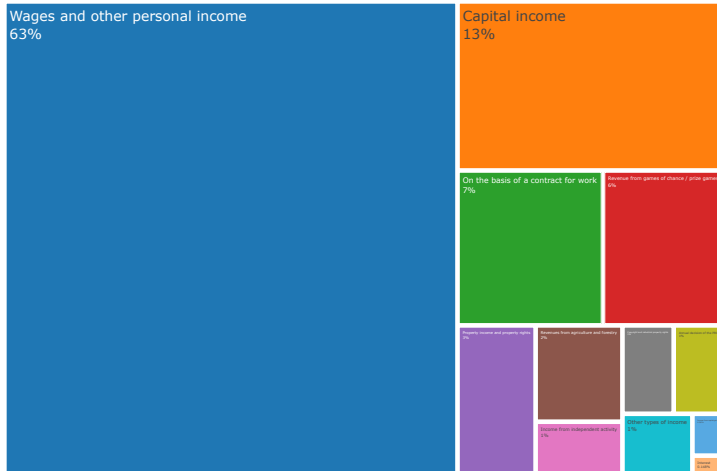
PIT REFORM 2019

- Law on Personal Income Tax started to be applied on 1.1.2019.
- Progressive taxation of **labor income** (introduction of a rate of 18% that will be calculated and paid on a tax basis surpassing 1,080,000 denars
- Single rate of 15% for taxation of **income from capital**

Behavior of employees subject to progression

Structure of PIT in 2018

Structure



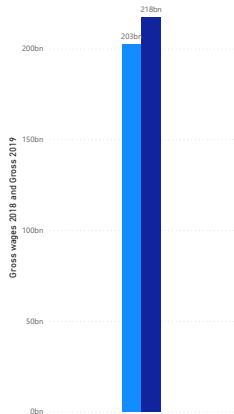
Main motivation

What happened to the wages and employees that were subject to progression in 2019?

Collection of PIT from WAGES

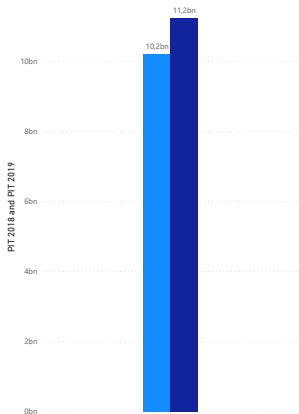
Comparison gross wages

● Gross wages 2018 ● Gross 2019



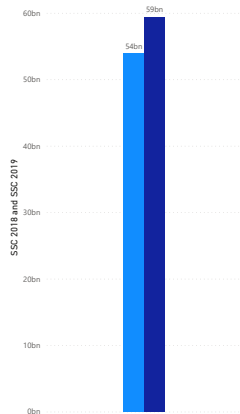
Comparison of PIT revenue from wages

● PIT 2018 ● PIT 2019



Comparison SSC

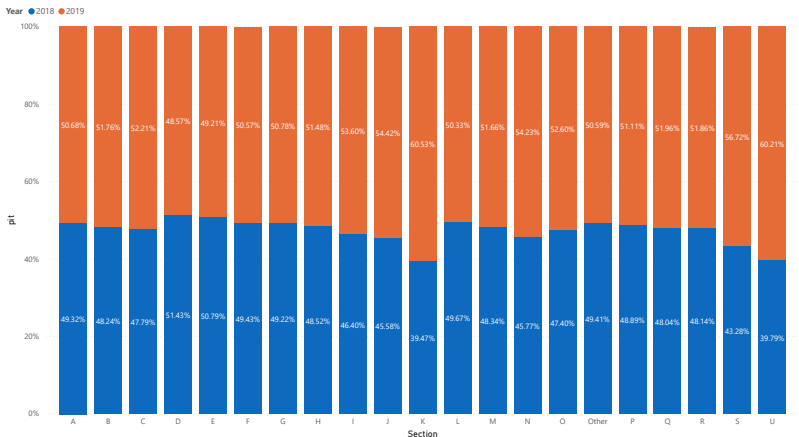
● SSC 2018 ● SSC 2019



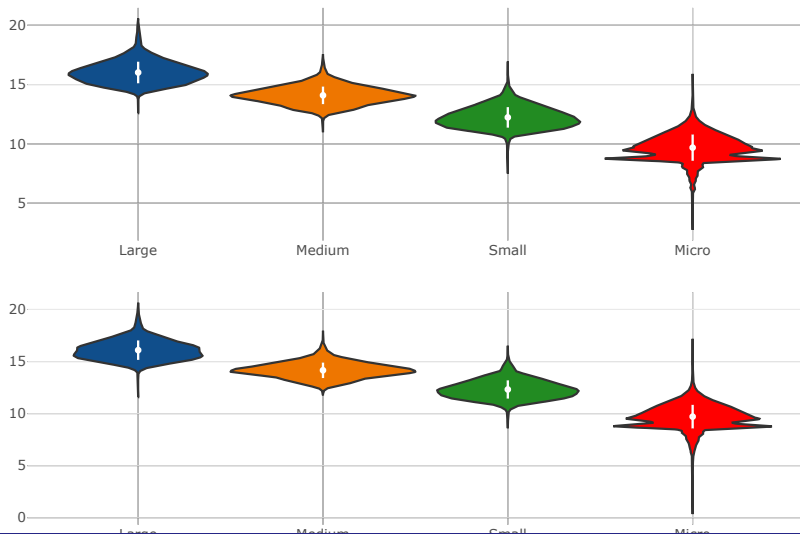
Taxpayers

The number of taxpayers who had tax basis higher than 1,080,000 on the basis of wages in 2018 was 3,981 taxpayers while in 2019 this number was 4,889 taxpayers which is an increase of the number of taxpayers for 22.8% or 908 persons.

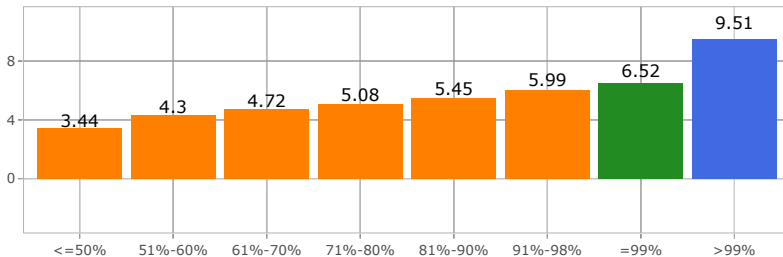
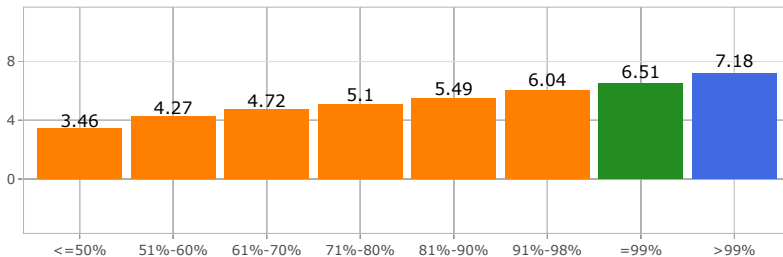
PIT by NACE SECTIONS



Violin plot per company type (plot above 2018, plot below 2019)

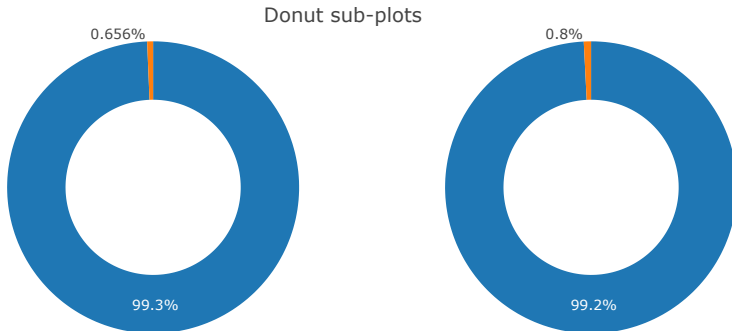


Comparison of the effective tax rate for selected centiles groups



Comparison of the structure of taxpayers

It can be seen that the number of taxpayers the tax basis of which is above the threshold for the application of the progression in 2018 was 0.7%, while in 2019 it was 0.8%.



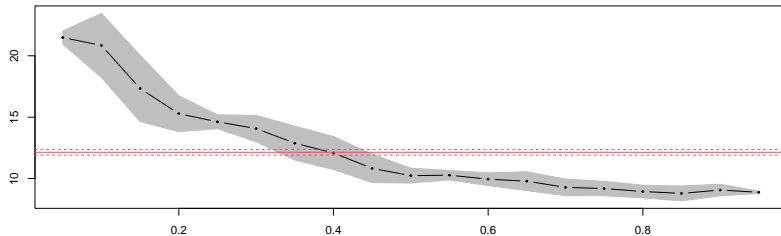
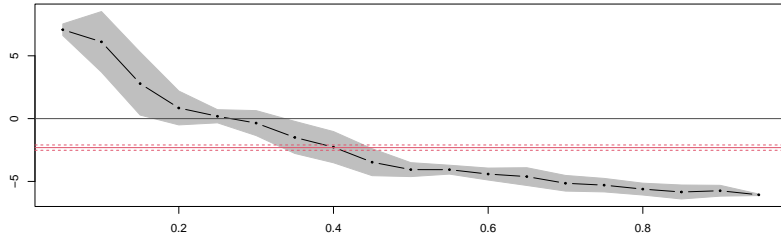
Comparison between OLS and quantile regressions (25th , 50 th and 75 th quantile)

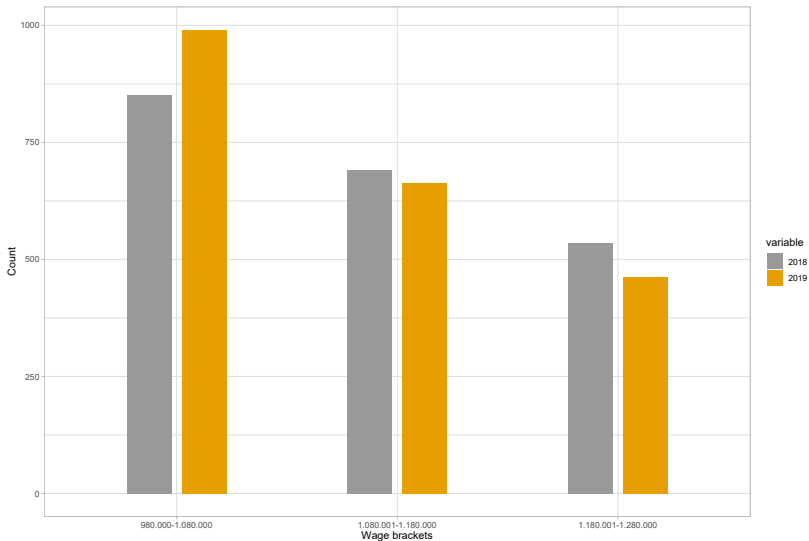
	OLS Regression	Quantile regression at 0.25 quantile	Quantile regression at 0.50 quantile	Quantile regression at 0.75 quantile
Constant	-0.128	-0.318	-0.338	-0.327
log (potential_tax_burden)	-2.309***	0.187	-4.060***	-5.297***
Note: *p<0.1; **p<0.05; ***p<0.01				

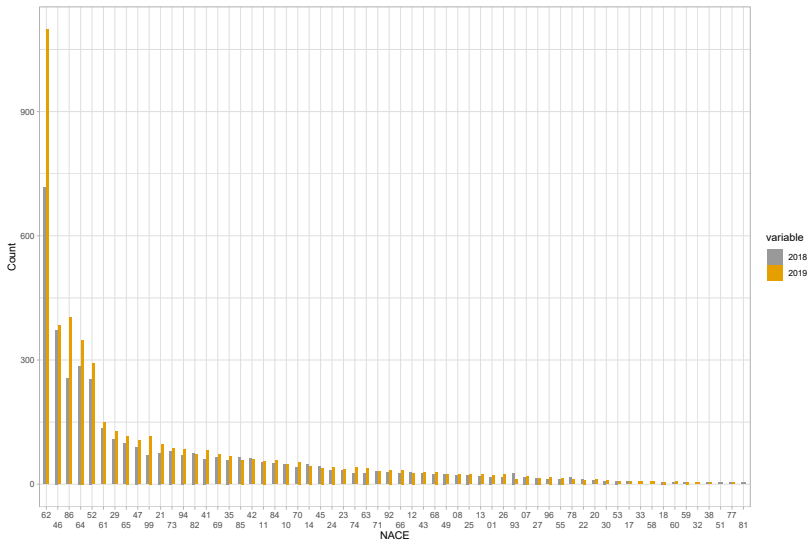
Elasticity coefficients of gross income

Elasticity coefficients is negative in every case where it is of statistical significance which practically means that by increasing the effective tax burden for 1%, the gross income would reduce for 2.3% with OLS, i.e. according to the quantile regressions for -4.06% at the level of the 50th quantile and -5.29% at the level of the 75th quantile.

(Intercept)

 $\log(\text{potential_tax_buden})$ 





Conclusion

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Analogous to the above, these things must be taken into account in order to realistically determine the effects of progressive taxation and to focus on the overall effects of progressive taxation, and not just the partial ones that do not include economic growth, new jobs, taxpayers behavior etc. For that purpose in project Twinning Project “Improving revenue collection and tax and customs policy” we preparing machine learning models with neural network that will determine in detail the behavior of taxpayers in 2019 and will propose appropriate evidence-based reform for the next PIT reform scheduled for 2023.