

Income tax collection and non-compliance in Ghana

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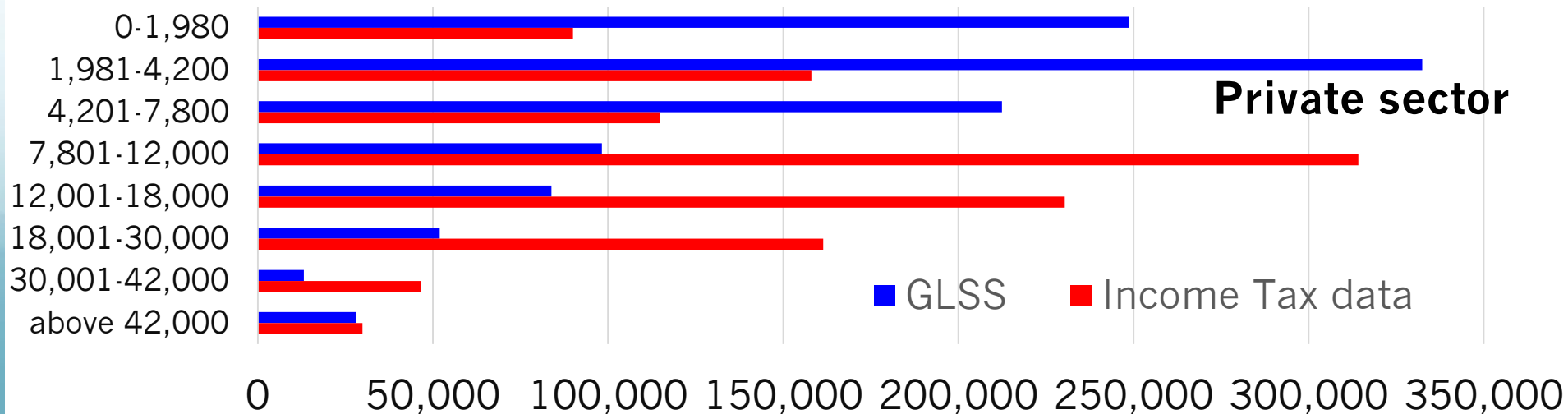
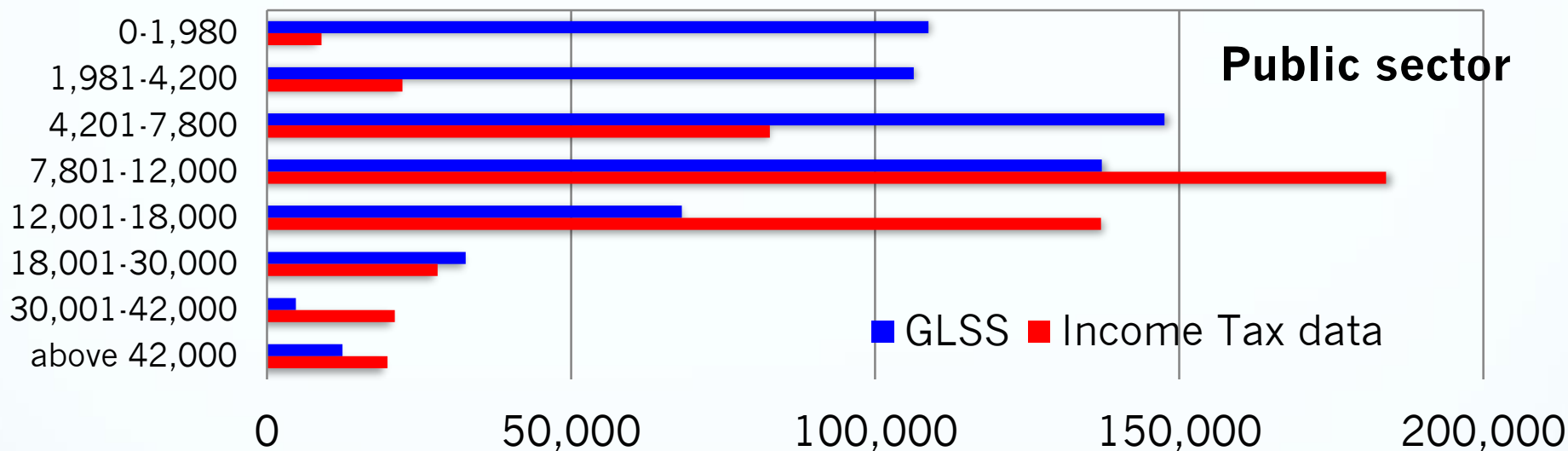
Objective

- To estimate potential income tax revenue gain from the enforcement of tax collection.

Problems with Data

- Administrative income tax data: No information about workers who did not file income tax
- Household data suffers from under-sampling and under-reporting, especially high income individuals.

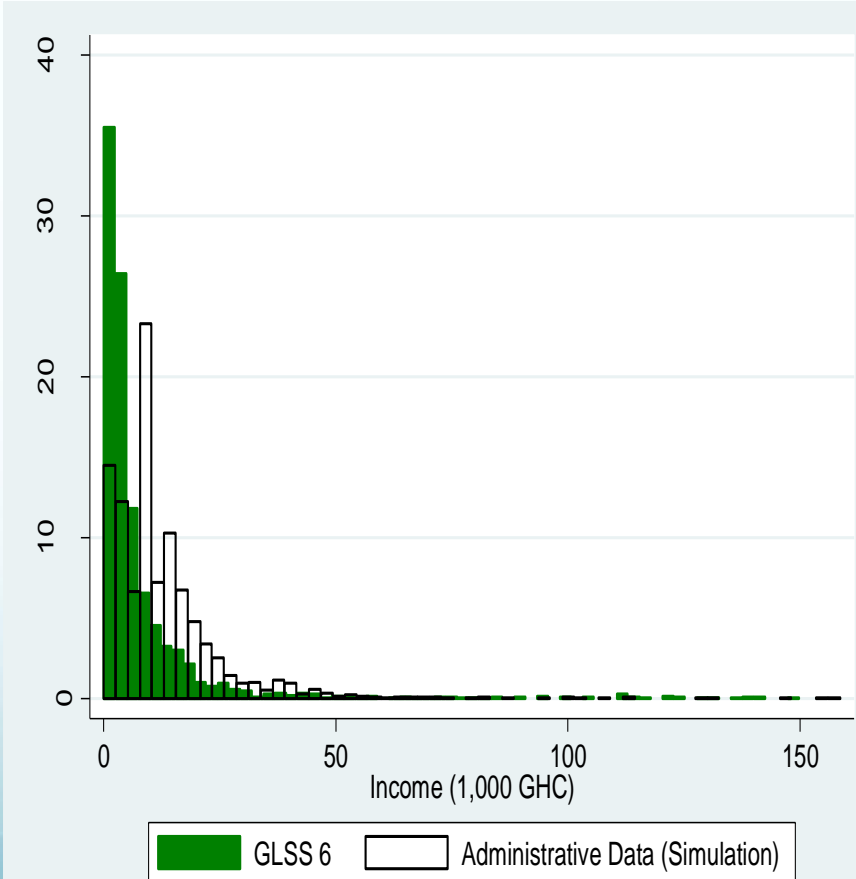
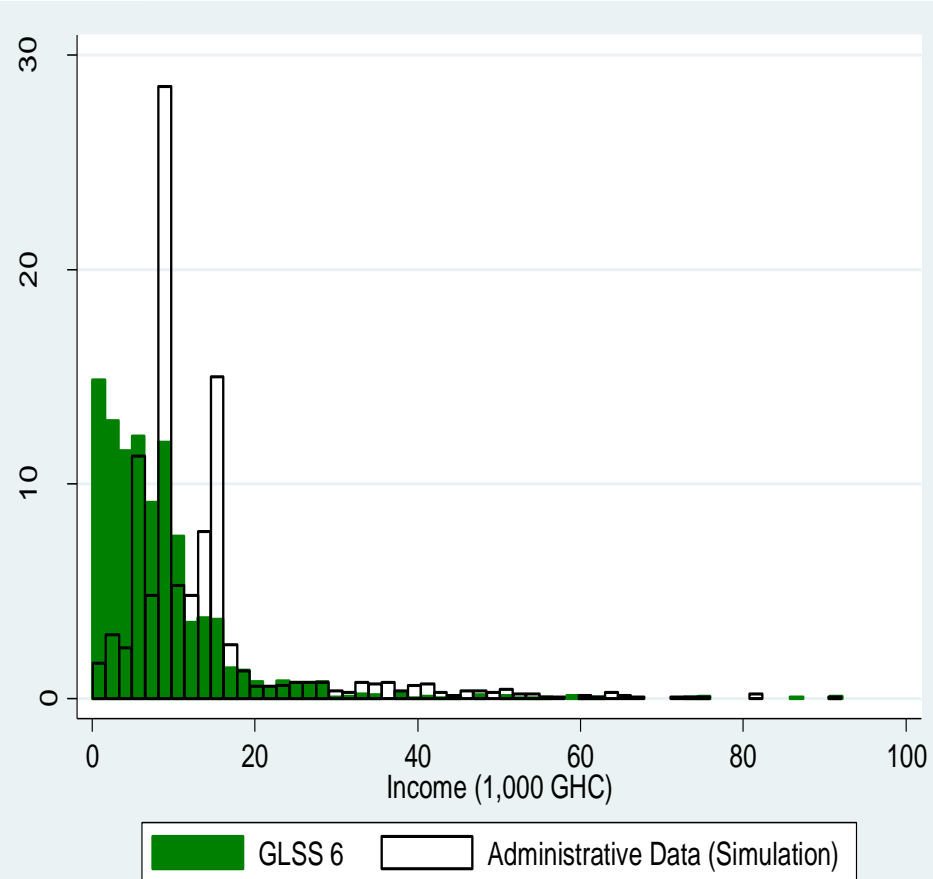
Comparison of income distributions between household survey data and administrative income tax data (2014)



Another problems with administrative income tax data

Discrete -> need to produce continuous version of income distributions by simulations (Blachet, Founier and Piketty 2017)

Comparison of income distributions between household survey data and simulation results (2014)



Comparison of mean income between household survey data and simulation results (2014 and 2016)

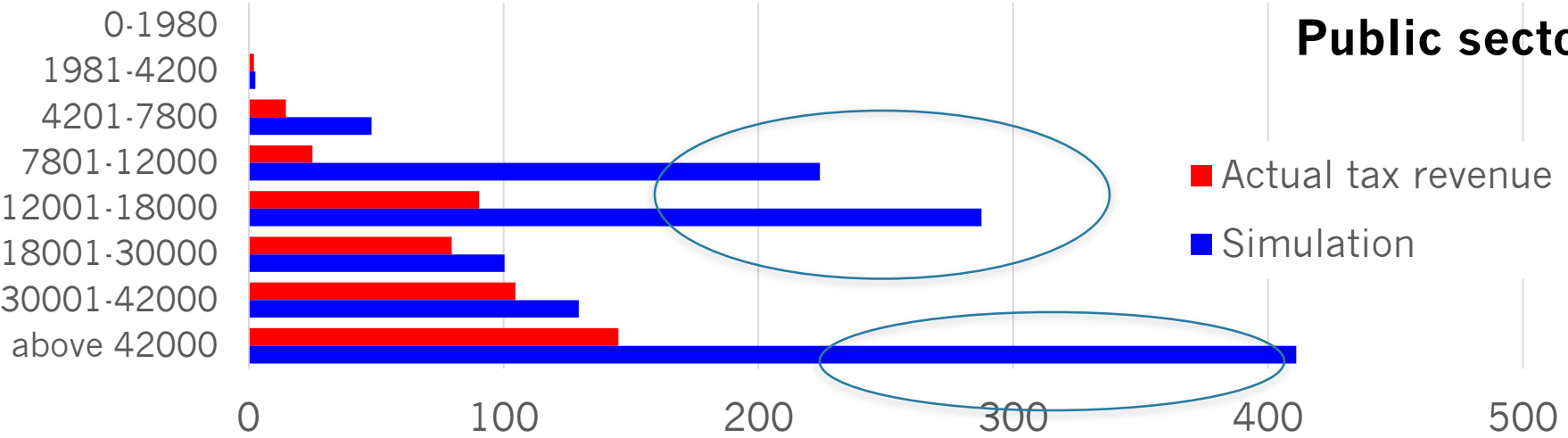
	GLSS/LFS	Simulation
GLSS 6 - Public	7.92 (0.23)	14.78*** (0.50)
GLSS 6 - Private	7.53 (0.30)	13.15*** (0.25)
GLSS 6 - Total	7.69 (0.19)	13.96*** (0.29)
LFS - Public	15.25 (0.44)	16.79** (0.49)
LFS - Private	12.37 (1.07)	18.60*** (1.77)
LFS - Total	14.19 (0.49)	16.62*** (0.61)

Comparison of the number of formal private sector workers between administrative income tax data and business census

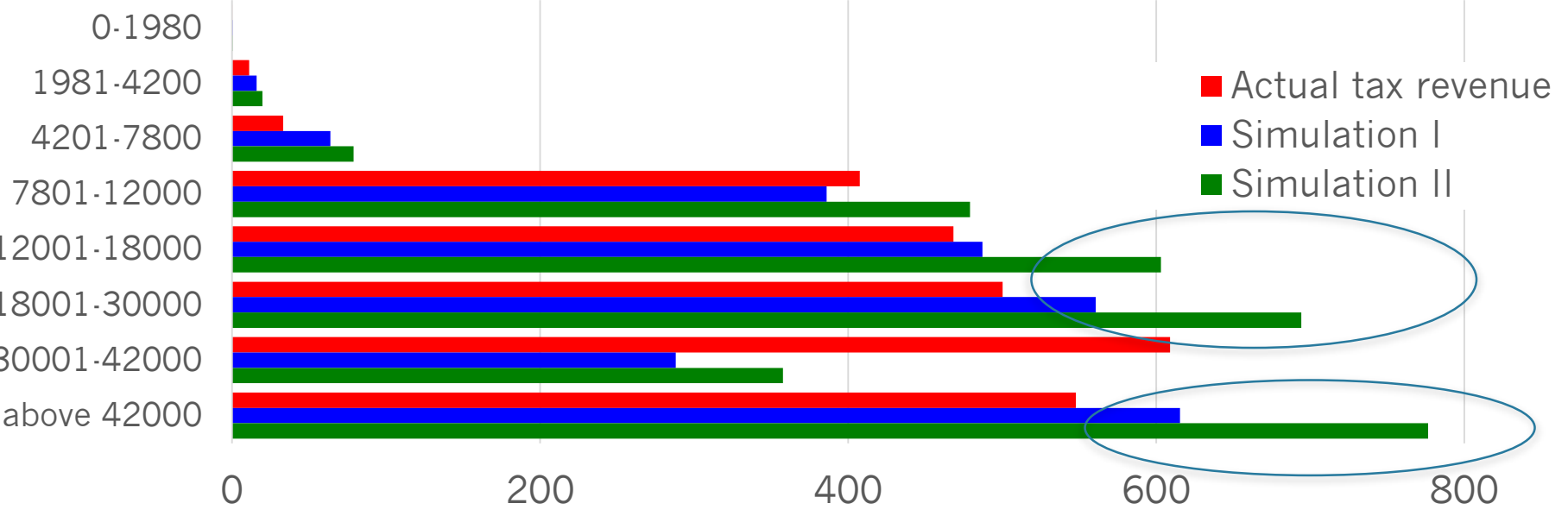
Admin data (2014)	Admin data (2016)	Business Census (2014)
1,145,183	309,763	1,417,368

Simulation results (2014)

Public sector



Private sector



Changes in tax rate in 2016

Until 2015

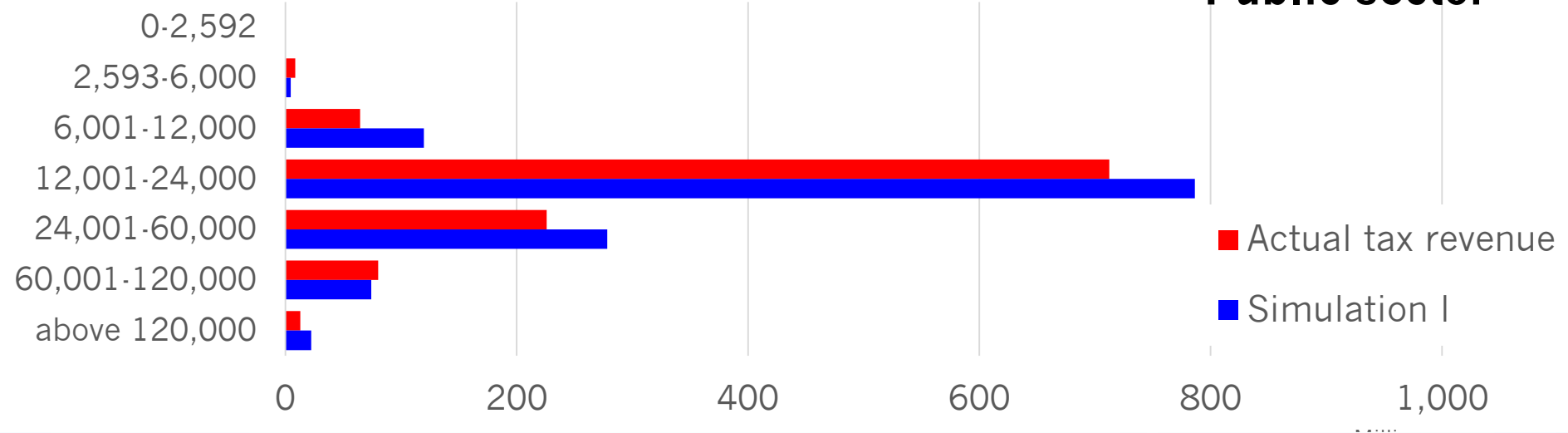
Income	Rate
0- 1,584	0
1,585-2,376	5
2,377-3,480	10
3,481-31,680	17.5
31,681 and above	25

From 2016

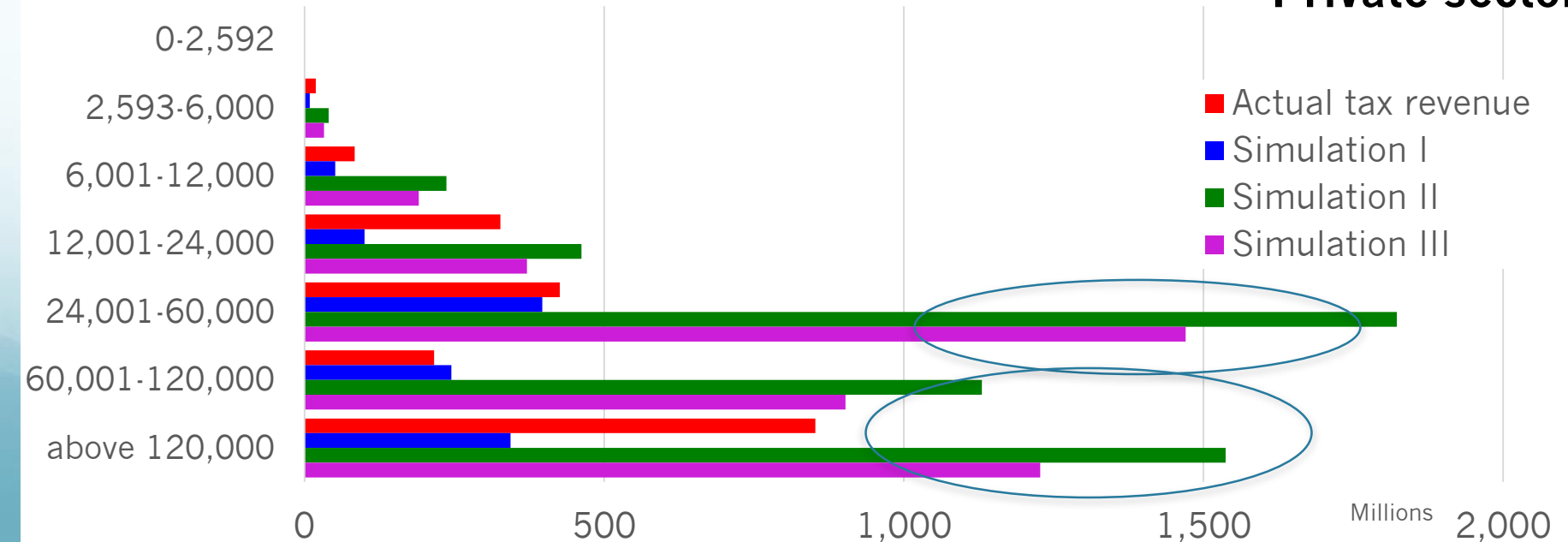
Income	Rate
0- 2,592	0
2,593-3,888	5
3,889-5,700	10
5,701-38,880	17.5
38,881 and above	25

Simulation results (2016)

Public sector



Private sector



Conclusion and Recommendations

There is a large scale of non-compliance of income tax.

- Main cause in 2014: non or under payments in the public sector.
- Main cause in 2016: non-filing of PAYE in the private sector.
- If everyone paid income tax in full amount, tax revenue could have been higher by 1.2 billion Cedi (=1.4% of GDP) and 3.6 billion Cedi (=2.2 % of GDP) in 2014 ad 2016, respectively.

Data limitation

- Simulation results depend on the accuracy of 1) the number of workers in each income bracket, 2) mean income in each bracket, and 3) distribution of people who did not pay income tax.
- Ideal to use mean income from administrative income tax data.

Policy recommendations

- Digitalization of tax records, linked to national ID.
- Enforcements of audit and penalty (proved to be effective in other countries)