



**Indonesian Personal Income Tax Microsimulation:
Tax Base Construction, Revenue, Distribution
and Compliance Analysis
(Case Study of Income Tax Reform 2008)**

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ABSTRACT

Following the 1980's oil price plunge, Indonesian economic growth fell sharply as a consequence of its heavy reliance on oil and gas exports. This drove the long overdue need to reform the tax law to replace an old and outdated colonial tax. This was the beginning of radical move to a self-assessment and simplification of the tax system to increase future revenue streams and to repay an increasing foreign debt. Since 1983, the tax policy has undergone ongoing reforms to improve effectiveness, efficiency, neutrality, vertical and horizontal equity with the final aim to encourage voluntary compliance to increase government revenue. Somehow, after years of reform, the actual tax performance is still far from what was initially expected. Among the ASEAN countries, Indonesia currently experiences the lowest tax ratio to GDP. Due to this low tax ratio, the total contribution of income tax (Indonesia's main tax revenue) is smaller than other ASEAN countries

Indonesian income tax law amendment typically is a long process with intensive discussion between the parliament and the government. It was observed that the government mainly used macro-based analysis. This analysis will be more cost effective and suitable when the primary concern is the aggregate-impact. However, several study have endorsed microsimulation model as the policy tool to address issue related to the need for detail impact of the policy scenarios. This model captures the interaction between the individual in the tax system and the assessment of the relational impact with other welfare program. This has led to the initial motivation of this thesis, the need for the development of a sound microsimulation model for the purpose of personal income tax (PIT) policy analysis.

A static microsimulation model is built for the current structure of the Indonesian PIT. We specifically looked at four major research areas - the best data source for constructing the base file of the Indonesian PIT (potential number of taxpayers and income base of the Indonesian PIT); the construction of PIT microsimulator and its sensitivity test; the impact of PIT reform on potential revenue, the distribution of the tax burden and the potential tax gap; the compliance issue and how it plays a part in the revenue accumulation.

This thesis builds a better database and elaborates a method for Indonesian PIT base file construction. We apply recommendations from the evaluation of several developed, transitional and developing countries' microsimulation models. We conduct a preliminary attempt to improve the PIT base file by using statistical matching of different datasets. This attempt overcomes the problems and limitations found in available survey and administrative data. Three sets of the Indonesian micro data were used -The Socio Economic Survey, Labour Force Survey and tax administrative data. The first two database were combined before being imputed with the latter. This microsimulation is a powerful tool for the Indonesian government to design its tax policy. This empirical analysis aims to fill the gap in the knowledge of microsimulation in Indonesia.

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