ESSAYS ON FISCAL AND PENSION POLICIES IN DEVELOPING ECONOMIES

Opoku Kwadwo

National Graduate Institute for Policy Studies

This dissertation investigates issues relating to optimal income taxation and pension policies in a developing economy with a large informal sector. First, we developed a two-sector general equilibrium overlapping generation model with endogenous formal-informal labor supply and human capital investment to characterize the optimal capital and labor income taxation in developing economy with large informal sector. For the quantitative analyses, Ghana is used as an example given its large size of informal sector employing about 88% of total workers. We found that in an economy with large informal sector, capital income should be taxed at a rate higher than that of labor income tax. This result comes from the fact that a labor income tax still distorts human capital investment and this necessitate a positive capital income tax to mitigate the negative impact of labor tax. In addition, even if informal sector can be taxed, optimal tax design still requires a non-zero capital income tax due to the presence of human capital investment which will be more elastic compared to financial savings. Thus, neglecting informal sector in tax design would lead to understating optimal capital income tax and overstating labor

income tax and the difference is quantitatively significant.

Second, we developed an applied partial equilibrium life cycle model that consists of overlapping generations of 60-period lived individuals facing mortality risk and individual income risk to investigate the role matching contributions and payments options in influencing participation and contribution to informal pension schemes in developing countries. The model was calibrated to data from Ghana for the quantitative analyses. The simulations results suggest that matching contributions (pension saving subsidy) targeted to informal workers could be a potent instrument to encourage voluntary participation and contribution by informal workers pension schemes. The policy proposal would be welfare improvement resulting from the redistribution of income from the rich formal workers to the poor informal workers, insurance against risk of poverty from annuity, intra-generation redistribution through accidental bequest from mortality premium and reduction in self control costs. In addition, Our results indicate that targeted matching contributions (pension saving subsidy) to informal workers increase savings unlike redistribution for social pensions (or unconditional redistribution). The study also showed that mandatory annuitization of pension savings with 0% of matching rate would improve participation, contribution, savings and improve welfare of the society.