ESSAYS ON PUBLIC POLICY AND POPULATION AGING IN DEVELOPING ECONOMIES

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This dissertation developed a two-sector general-equilibrium overlapping generations (OLG) model with endogenous fertility and education choices. We considered an emerging economy with a large informal sector and a trend of rapid population aging. In the model, individuals also choose to allocate labor between formal and informal sector. We used Thailand as an example for the quantitative analysis because of its dramatic decline in fertility to below the replacement rate. Moreover, roughly 60% of its workers are in the informal sector, and it has recently developed public pension and the universal-health insurance systems. We quantitatively investigated the impacts of aging and assessed the population and fiscal policies by their effects on economic performance and social welfare. We also discussed population and fiscal policies on taxation in an aging economy with informal employment. Our study found that while childcare subsidies (subsidies on time cost and lump-sum child allowances) do encourage fertility and improve age structure, they worsen the already low human-capital level and hurt social welfare in the long run, which possibly slows economic growth. Furthermore, if a consumption tax were available, we found that it was the best tax tool for aging economy, as it causes fewer distortions of labor allocation, saving, and education investment. We also found that capital income tax should not be zero in an economy with a large informal sector. Even if the

informal sector does not exist, a labor tax still distorts the decision of education investment and indicates the necessity of a positive capital income tax. We found that reducing pay-as-you-go government pension can be a welfare improvement if the government considered fiscal burdens and capital crowding out among a young generation. Finally, we found that if the government could improve its tax-collection system and be able to tax the informal sector, it could reduce the labor income-tax rate. Moreover, there would be less relocation between the formal and informal sector. We revisited the fiscal experiment by assuming that the government could collect 100% of all tax revenue to ensure the robustness of the results. We found that the consumption tax was still the best tax tool.