

The 24th WORKSHOP

24 June, 2006 (Sat) at GRIPS Campus, 14:00-17:00

Subject: "Tax Corruption, Public Debt, and the Policy Interaction in Emerging Economies"

**By Mr. Nguyen Thanh Ha
(MA, International University of Japan - IUJ)**



In this workshop, Mr. Nguyen Thanh Ha presented his theoretical paper to analyze the stabilization of public debt in emerging economies. This is his MA thesis in International Development at the International University of Japan (IUJ).

Mr. Ha began the presentation by providing a literature review on the issue, and his research motivation. It was shown by IMF World Economic Outlook (2003) that public debt had been a big concern in emerging economies since it might have negative impacts on economic performance. Public debt stabilization involved a strategic dynamic policy interaction between monetary and fiscal authorities since the two policy makers become relatively decentralized in emerging economies. Moreover, if tax collection - a main source of government revenue - were corrupted, they would cause leakages in budgetary collection as well as dynamic linkage among public debt and conduct of monetary and fiscal policies. Being interested in those links, Mr. Ha would like to discover how tax corruption might influence the policy interaction between fiscal and monetary authorities in the context of emerging economies.

Mr. Ha continued the presentation by explaining his theoretical model*. This model was closely related with Tabellini (1986) and Huang and Wei (2003), in which it considered a small open economy with continuous time under infinite horizon and deterministic environment. After introducing Lucas-type output, corruption of tax collection was integrated through a form of the actual tax collection in the approximation of government budget constraint. Those variables were then put into the model to consider decision-making processes of monetary and fiscal authorities. To find the impact of tax corruption on those processes, the author used an open-loop Nash equilibrium framework. A series of results on tax rate, public debt, government spending, and inflation was found under analyses of the optimal path for controlled policy instruments, and speed of adjustment at the steady state condition.

From the obtained results, Mr. Ha provided some discussion on the main focus of his paper, which were impacts of tax corruption on monetary and fiscal policy interaction. It was indicated that debt stock would be higher for an economy associated with higher level of corruption in tax collection at the steady state since such incidence would create more burdens on fiscal authorities in stabilizing debt, which in turn could not be mitigated by externality from inflation tax derived from policy actions of the monetary authorities. High incidence of tax corruption, at the steady state, would also make the adjustment speed for the public debt lower, which might have negative impacts on economic performance. In addition, the findings also implied that country with high corruption of tax collection would have lower government spending – an important macroeconomic factor – at the steady state. It was, however, ambiguous to make conclusions about the influences of level of corruption of tax collection on inflation and tax rate – the two crucial policy targets of monetary and fiscal authorities.

Starting the discussion section, Prof. Kenichi Ohno raised various questions and comments on the modelling strategy of the study. Prof. Ohno emphasized that there should be more clarification on several crucial elements of model regarding the supply schedule, the objective functions of policy makers and the impatience of policy makers because he seemed not to be clear with the linkage between these assumptions and the obtained results by reading Mr. Ha's paper once.

Firstly, Prof. Ohno questioned on the relevance of tax rate (τ), and how the coefficient of that tax rate and level of tax corruption was introduced as α and ϕ as in the equation (1) and (2a), respectively. In response, Mr. Ha said that the setting up of Lucas type equations was consistent with the existing literature and the index ϕ was intended to capture corruption of tax collection, which would play an important role in explaining dynamic games between authorities in the latter part of the paper. Secondly, Prof. Ohno put the question on the role of monetary authority in the model and the particular form of its loss function assigned the weight 1-1-1 for π , y and d . He suggested the author put more weight for π regarding the main function of the central bank. More importantly, Prof. Ohno suggested that monetary authority's loss function may substantially change if the regime of inflation targeting was in place. Extending his related question to equation (4), which showed the lost function, Prof. Ohno wondered about the consistency of the variables in that equation when the author added only \bar{g} for g , but not \bar{y} and \bar{d} for y and d , respectively. Prof. Ohno also asked on an economic meaning of assumption on impatience of policy makers.

In response to these comments, Mr. Ha explained that those assumptions were needed for simplicity of technical solution only. A more general form of lost functions in term of assigned weights and policy target has been tried and it should not affect the nature of model's results. Mr. Ha admitted that although these assumptions are widely used in the existing literature they should be carefully adopted with a consideration on relevant characteristics of emerging economies. Mr. Ha also explained on the crucial assumption on impatience of policy makers who may discount future less seriously than market and emphasized this assumption may be relevant to emerging economies rather than advanced economies such as Japan and the U.S.

Lastly, Prof. Ohno gave an encouraging comment on a formally written presentation of Mr. Ha's paper as well as plausible results obtained. Prof. Ohno also provided Mr. Ha with a useful recommendation to extend his paper since it might be more interesting and relevant to emerging economies to consider a cooperative policy game where the two policy makers were controlled by a central planner. Mr. Ha agreed that it would be very interesting direction for further studies on this topic.

In his turn, Mr. Long (GRIPS & VDFTokyo) made questions related to the title of the paper. The first one was about "emerging economies" that Mr. Ha used to consider stabilization of public debt. What were the most particular characteristics of emerging economies to consider in this paper, and why they were not developed or less developed ones to consider? The second question was about the implicit pension debt - a part of public debt - in the countries with the state-run pay-as-you-go pension schemes under aging population. Such debts were shrinking in many countries with unexpected rate, and they thus had negative impacts on stabilization of public debt. How could those debts be taken into the model to consider the problem? In his response, for the first question, Mr. Ha said that the choice of emerging economies was intended to address a characteristic of corruption which separated emerging economies from advanced economies in the relevant literature. For the second one, he replied that the presented model would consider only current explicit debt of the public sector, and therefore it did not integrate implicit debt to analyze the issue.

There were also some questions and comments related to technical requirements of the presented model, which would be useful for Mr. Ha to revise his paper.

We had an informal meeting at the end of the workshop. We provided our information about on-going research as well as preparation of the VDF-Tokyo Second Conference on Social and Economic Development of Vietnam on July 15, 2006.

(By Giang Thanh Long)

* As the later part of this summary, i.e. discussion section, will be closely related to the research, please refer to Mr. Ha's presentation and paper attached to this summary.