Reply to Referee Report #1

First of all, I would like to thank the referee for providing useful comments to improve my paper. I am happy to address those points and will revise the paper as necessary. My responses to comments are as follow.

1. I agree that the paper could be streamlined by presenting only final Table 10 in text and Table 7 and 8 in appendix. However, my intention here is to show sequential steps to readers about the changing nature of coefficients and the robustness of the impact of international reserves. Since the paper is not so long, I think keeping Table 7 and Table 8 in text may not be problematic for flow and consistency of the text.

2. Diagnostic checks of the preferred model will be presented in revision.

3. Section 2 intends to show the linkage between the central bank and the banking systems. Since there is no well established theoretical foundation for international reserve accumulation by the central banks and the banking system in the literature, this section, at least, tends to establish the balance sheet linkage. However, I think that the theory of high powered money supply could be used as a theoretical foundation to some extent, which will be addressed in revision. On the other hand, Section 3 presents the changing pattern of the balance sheet structure of the central banks and the banking system, which are also matters of interest for this paper. Although these sections could be shortened, I believe that these sections have important information for readers.

4. Regarding the selection of control variables for empirical estimation, I have tried to give a brief theoretical logic such as selection of lending rate for opportunity costs of holding liquidity and budget deficit for supply side factors in the market for liquid assets. A higher budget deficit means a higher amount of issuance of treasury bills, where the banking system could park their cash, collected from deposits instead of lending to the private sector. Holdings of government's treasury bills or central banks' bills are considered as liquid assets. Finally, economic growth is taken to represent the overall macroeconomic situation. It is generally believed that if the economy is growing, there should be a higher demand for private sector credits, which means less holding of liquid assets. Although, to some extent, holding of liquid assets, decision to lending and deposit mobilization could be three different types of decisions for the banking systems, we

consider common explanatory variables for all three items in empirical estimations considering the fact that these three decisions are interrelated and our main interest is to see the relation with international reserves. Importantly, since many mainstream models for banking systems have not considered the foreign exchange markets seriously despite the importance of it has been growing in the context of financial liberalization and capital mobility, our intention is to provide some empirical evidence to think about modifying the models for the banking systems. However, as suggested by the referee, I could elaborate this section to make it more clear about the choice of control variables for empirical estimations.

5. I agree that the links between the dependent variable and the explanatory variables could change over time. I have put dummy variable to account for the structural break caused by the 1997 Asian crisis. However, it may not be sufficient. Obviously, it would be interesting to look at rolling estimation, which could be an extension for this research. I have yet to look at the feasibility of panel VAR and recursive estimation in a panel setting. On the other hand, one could study such as a changing nature of relation just taking individual countries. As pointed out by the referee, it would provide empirical evidence of the working of financial accelerator. However, the analysis of structure of balance sheets in section 3 shows that financial accelerator may not be effectively working in these selected countries, at least, in the post crisis period, because both the private sector credit and economic growth have not increased to the level which was before the crisis of 1997, although the liquidity of the banking system has been increasing. It seems that these economies are more cautious for financial stability than higher economic growth as a lesson learned from the crisis.

6. With regard to comments about "somewhat disappointing" concluding remarks, I have some reservations with due respect. I have presented some implication of empirical findings in my conclusion. For example, quote from my paper, "*A panel data estimation shows that international reserves to GDP ratio (ir) is a robust factor, contributing to increase in liquid assets and deposits of the banking system, even after taking the possible impacts of other potential variables. Hence, it can be concluded that reserve accumulation not only provides international liquidity; it also generates domestic liquidity in the banking system. Such a holding of liquid assets provides a cushion to*

withstand any external shock by the banking system. This may be one reason that has made the banking systems of these countries resilient to the recent global financial crisis. However, any serious unwinding of global imbalances will have serious implication for the banking systems of these countries". However, it could be elaborated further in revision, even to think about building up banking models relevant for an open economy.

7. Finally, thank you very much for providing a list of related literature. I will go through and link my research with these papers as necessary in revision. However, one important change occurred in the selected countries is that they have current account surplus in the aftermath of the financial crisis compared to current account deficit before. Hence, international reserve accumulations in these countries have been more due to the current account surplus. Obviously, there are different implications of foreign currency inflows and policy responses. My paper mainly focuses on the impact on some important items of the balance sheets of the banking system.

8. Thank you once again. I hope that my responses have addressed adequately the comments raised by the referee.