

論文審査の要旨及び担当者

No.1

報告番号	甲 乙 第 号	氏 名	Laura B. Fermo
論文審査担当者	主 査	：大垣昌夫（慶應義塾大学教授（経済学部）Ph.D.）	
	副 査	：高阪章（関西学院大学教授（国際学部）Ph.D.）	
		：マッケンジー, コリン（慶應義塾大学教授（経済学部）Ph.D.）	
	面接担当	：大西広（慶應義塾大学教授（経済学部）経済学博士）	
		：嘉治佐保子（慶應義塾大学教授（経済学部）Ph.D.）	
（論文審査の要旨）			
<p>Ms. Laura B. Fermo's dissertation is entitled "Heterogeneity in the Influence of Monetary Policy: An Empirical Analysis Focused on the Philippines" and comprises three chapters. These chapters examine monetary policy of the Philippines as a small open economy which must somehow weather the turbulence created by volatile international financial flows. The first two chapters discuss possible regime changes in monetary policy in four ASEAN economies (ASEAN4), Indonesia, Malaysia, Philippines and Thailand and the last chapter examines the transmission of monetary policy solely in the context of the Philippines.</p>			
<p>In a small open economy such as ASEAN4 the monetary authorities face the policy trilemma between three policy goals, i.e. exchange rate stability, free capital mobility, and monetary independence. Under this constraint, if foreign capital comes in and out freely, the authorities must choose between exchange rate stability and monetary independence for macroeconomic stabilization purposes. The choice is, however, not black or white in practice. The authorities in many emerging economies choose in between the three policy goals. Consequently, monetary independence is also not always maintained. Moreover, even with free capital mobility, international capital flow is not at all persistent, depending on global investors' sentiment. They take turns, sometimes being bullish, sometimes bearish. Sudden stops of international capital flow are not specific to developing economies any more. If they become bearish, even exchange rate stability could be attained without losing monetary independence.</p>			
<p>Under the circumstance, given the use of some policy interest rate as a standard tool, the monetary authorities in a small open economy reasonably worry about to what extent they can control market interest rates in order to attain their whatever policy goals. For one thing, while they would like to know the relationship between their policy interest rate and market interest rates along the standard monetary policy convention, it depends not only on domestic factors such as their monetary policy frameworks, their stages of development and their financial market structures, but also on external environments dominated by global investors. Therefore, Ms. Fermo reasonably presumes heterogeneity across monetary policy frameworks and financial market structures as well as monetary policy transmissions.</p>			

Chapter 1 and Chapter 2 look at the policy rate divergence from market interest rates (or “rate gaps”) in ASEAN4 economies. Using a Markov-type regime-switching regression with time-varying transition probabilities (Filardo (1994, 1998)) with monthly data for the period of 2000-2015, Chapter 1 confirms that the policy rate divergence suggests regime-switching across two regimes, i.e. one with higher rate gaps and the other with lower rate gaps, and that this regime-switching is time-varying. Furthermore, testing possible determinants of the switching probabilities from one regime to the other, the Chapter identifies and characterizes the drivers of the transition probabilities as switching global risk assessments where higher interest rate gaps stand for risk-on and lower rate gaps for risk-off. The estimation results suggest that the similarities as well as the heterogeneity in the timing and magnitude of the rate gap across ASEAN4, probably based on the difference in their financial structures as well as the degree of their financial developments.

Chapter 2 also detects Markov-type regime switching by looking at the rate gaps of ASEAN4, this time considering the volatility in the rate gaps and using Markov-switching GARCH with conditional variance technique (Dueker (1997)). Again, confirming regime-switching with heterogeneity in the timing and magnitude of the policy rate gaps across ASEAN4, the Chapter identifies the variables that appear to drive the transition probabilities of regime-switching, via an events analysis using graphical exposition.

Chapter 3 turns to monetary policy transmission. Particularly the Chapter estimates reduced-form lending equations to identify the bank lending channel of monetary policy a la Kasyap and Stern (2000). It examines the impact of monetary policy in the Philippines using individual bank level data in terms of the response of bank lending growth and bank lending rates to the policy rate (Reverse Repurchase Rate). The panel data estimation using monthly data for the period of 2000-2015 not only reveals the impact of monetary policy on bank lending growth and high and low lending interest rates, but also the influence of bank characteristics including size, liquidity and capitalization across 10 large domestic banks and 10 large foreign banks and foreign bank branches.

The Chapter suggests that both domestic and foreign banks are not generally responsive to monetary policy, but responsive only with low-rate gaps, i.e. during risk-off period, which is consistent with the results of previous Chapters where monetary policy is effective only during the risk-off period. In addition, the Chapter reveals that the higher the equity to total capital ratio, the higher the lending growth for domestic banks, but not for foreign banks. Namely heterogeneity in the response to monetary policy comes from bank characteristics in domestic banks, but it is not the case in foreign banks.

【評価】

The chapters in this thesis examine monetary policy frameworks in a small open economy such as ASEAN4, particularly the Philippines in the context of turbulent international financial flow in recent decades. By applying two statistically distinct methodologies based on prior studies, Chapters 1 and 2 successfully show that there are monetary-policy-regime-switching in these small open economies in the 2000s triggered by switching risk assessments of global investors by examining the behavior of the divergence between the monetary policy interest rate and market interest rate. The Chapters also suggest that distinct responses among ASEAN4 might come from their diverse stages of financial development. Then, using individual bank panel data, Chapter 3 examines the lending channel of monetary policy transmission in the Philippines in the 2000s along the line with Kasyap and Stern (2000), expecting heterogeneous responses of individual banks based on their bank characteristics. It reveals that the lending channel is effective only under one policy regime implied by Chapters 1 and 2 and that bank characteristics matters for domestic banks, but not for foreign banks, the latter of which is supposed to operate beyond national borders.

There are some shortcomings in the research in this thesis. Throughout the Chapters, the relationship between interest rates and financial structure is not necessarily clear, however. For example, credit growth has witnessed serious stagnation since the Asian Crisis in the late 1990s, particularly in Indonesia and Philippines, while alternative asset (private bond) and liabilities (non-deposit) still remains almost nil. Ms. Fermo better justifies the relevance of the approach applied to developed economies in prior studies. In the same vein, as to the lending channel, Ms. Fermo better show typical balance sheet of banks as in Kasyap and Stern. The estimation results for domestic and foreign banks are very interesting (and puzzling), but Ms. Fermo's interpretation is not always convincing, nor consistent. More in-depth consideration on and analysis of domestic financial structure would enrich the implications of the results, which may be expected in the future. None of these shortcomings detract from the overall value of this thesis, but provide suggestions for avenues for future research in this area.

Part of Chapter 1 of the thesis has been published in the *Theoretical and Practical Research in Economic Fields*.

For these reasons, all five examiners of this thesis are unanimously of the view that Ms. Laura B. Fermo should be awarded a Doctoral Degree in Economics from Keio University.