論　文　概　評

氏　　　名	Mesa Wanasilp
学 位 の 種 類	博士（経済学）
学 位 記 番 号	博人社甲 35 号
学位授与年月日	令和 4 年 3 月 24 日
学位授与の要件	学位規則第 3 条第 3 項該当
学位論文題目	Monetary Policy Rules under the Inflation Targeting Framework in Emerging ASEAN Economies
論文審査委員	委員長　田口　博之 委　員　長島　正治 委　員　丸茂　幸平 委　員　中川　忍

論文の内容の要旨

This dissertation seeks to examine the performance of monetary policies under the inflation targeting (IT) framework, focusing on their capability to control inflation in emerging ASEAN economies: Indonesia, the Philippines, and Thailand for IT adopters, and Malaysia and Vietnam for the non-IT adopters. In doing so, the series of studies in this dissertation adopted the following methodologies: GMM estimations of both backward-looking and forward-looking versions of monetary policy reaction functions proposed by Clarida et.al., (1998) for examining the link between an economy's announced monetary policy rule and the estimated monetary policy rule, particularly from the perspective of the adaptability of the Taylor principle. The VAR model and impulse response function estimation were adapted from Taguchi and Bolortuya (2019) for identifying the link between the adoption of IT and the loss of the exchange rate pass-through (ERPT). Finally, the Bayesian estimation of a small open economy version of the New Keynesian DSGE model proposed by Smets and Wouters (2003, 2007), Gali and Monacelli (2005), and Gali (2008), was used for reassessing the adaptability of the Taylor principle by a macroeconomic model with micro-foundations. With these approaches, this dissertation expects to enrich the evidence of the performance of IT in emerging ASEAN economies.

Chapter 1 explores and presents the announced monetary policy rules of each economy, divided into two groups – IT adopters (Indonesia, the Philippines, and Thailand) and non-IT adopters (Malaysia and Vietnam). The major differences found among both groups can be summarized as follows: first, despite "price stability" being positioned as an ultimate goal in all sample economies, IT adopters stick to a single goal, while non-IT economies may adopt multiple goals on the side to maintain policy flexibility which could hinder their capability to stabilize inflation; and second, IT adopters explicitly announce their inflation targets to the public while non-IT adopters conduct implicit inflation targeting. Regarding exchange rates management, Indonesia, the Philippines, Thailand, and Malaysia are classified as "floating" while Vietnam is classified as "stabilized arrangement." In practice, these countries casually intervene in the FX market to avoid excessive exchange rate volatilities, which is regarded as the phenomenon of "fear of floating."

The empirical analysis in Chapter 2 aims to answer the following two major research questions: whether the monetary policy rules of the IT adopters have fulfilled the Taylor principle, and what has been the difference in monetary policy rules between IT adopters and non-IT adopters. Regarding the first research question, the findings show that IT adopters' monetary policy rules are characterized by inflation-responsive rules fulfilling the Taylor principle – this means that their policy rate reactions to inflation are counter-cyclical. The link between the announced monetary policy rules and the estimated ones is identified in the sense that their actual practices are in line with their "price stability" objective. Additionally, as the adaptability of the Taylor principle is now identified among emerging ASEAN economies, it can be concluded that there is no gap between the theoretical Taylor principle and their actual practices. Surprisingly, Vietnam's monetary policy rules also fulfill the Taylor principle. This may imply its efforts in transitioning to explicit inflation targeting adoption. Regarding the second research question, the difference in monetary policy rules between the two groups is that non-IT adopters' monetary policy rules are not centered on an inflation-responsive rule. Malaysia follows solely an output-gap responsive rule while Vietnam exhibits mixed rules with inflation- and exchange rate- responsiveness. On a side note, although the "fear of floating" effect was assumed to have a negative impact on an economy's monetary policy independence, the findings reveal that the effect had no serious repercussions since the Taylor principle holds under the "fear of floating".

Chapter 3 focuses solely on IT-adopters and seeks to answer the following research questions: first, whether the relationship between the IT framework and the loss of the ERPT is valid in emerging ASEAN economies; and second, whether there is a relationship between the forward-looking monetary policy rule and the loss of the ERPT. In examining the first research question, the empirical results show the existence of the ERPT in the pre-IT period and a clear loss of ERPT in the post-IT period for Indonesia, the Philippines, and Thailand. Therefore, we can conclude that there is a valid relationship between IT and the loss of the ERPT in emerging ASEAN economies. Thus, the results could highlight the role of the inflation-responsive monetary policy rule in contributing to the loss of the ERPT. The additional finding is that the sample economies' average inflation in the post-IT period has been much lower compared to the pre-IT period, thereby supporting Taylor's hypothesis which suggests low pass-through effects under a low inflation environment. Regarding the second question, the empirical results show no evidence of the link between the forward-looking monetary policy rule and the loss of the ERPT as the Philippines, whose monetary policy rule remains backward-looking, satisfied the requirements of the loss of the ERPT.

With the use of a macroeconomic model, the empirical results from Chapter 4 endorsed the validity of the Taylor principle verified by the GMM estimation in Chapter 2. The posterior estimates produced similar results to those from the partial GMM estimations. However, the significantly positive posterior means of the reaction to output gap suggests a need for further investigation into the cause of such discrepancy between the two approaches.

Based on the empirical results from Chapter 2, Chapter 3, and Chapter 4, the policy implications can be highlighted as follows. First, despite their policy-rate reactions having an effect to stabilize inflation, the monetary authorities in Indonesia, the Philippines, and Thailand should emphasize on improving the policy-rate responses to be more elastic to inflation as their reactions are found to be much weaker compared to those of advanced economies. Second, for non-IT adopters, an explicit IT framework is suggested to be adopted to ensure a robust effect of policy rate on stabilizing inflation. Third, to better anchor public expectations, the Philippines should focus on upgrading its monetary policy rules to a forward-looking rule.

There are some limitations in this dissertation to be noted. First, the VAR model specification in the empirical analysis in Chapter 3 involves only two major variables due to the focus on the effects on consumer prices. However, there is room to extend the scope of variables in the baseline model in future research and investigate more comprehensively. Second, since small open economies are prone to foreign shocks and emerging market economies are suffering from the fear of floating problems, control variables such as external exposure and external debt should also be added in future research. Third, the focus only on emerging ASEAN economies limits room for comparison with other literature to come to a clear conclusion, and thus, the analytical targets should be enriched, for instance, by including the emerging market economies in areas other than the ASEAN region.

論文審査の結果の要旨

In the discussions in the mid-term report session, the following suggestions were pointed out and the author responded in the following ways.

The first suggestion is that the study should clarify the logical linkage between the adoption of inflation targeting and the reduction of the pass-through effect in Chapter 3. Following this suggestion, the author added the explanation by referring to the previous studies that domestic agents are less inclined to change prices in response to price shocks under inflation targeting, given the strong commitment of the monetary authority towards price stability.

The second suggestion is that the further explanations are needed for the role of forward-looking monetary policy rule under the persistent inflation in Chapter 3. Based on this suggestion, the author added the argument that the forward-looking rule has worked well in crisis times rather than in normal times by referring to the previous studies: the forward-looking manner with reliable information of forecasted inflation and strong commitment of the monetary authority to price stability under inflation targeting contributed to a lower sensitivity of inflation expectations toward the external price shock, thereby avoiding an inflation spiral in the 2008 Korean crisis case.

The third suggestion is that the external exposure and external debt should be applied as a control variable in the model estimation, because small open economies are prone to foreign shocks. The author tried on some improvements in the estimation, but found it difficult to change the model structure in the dissertation. Since the author recognized the importance of this suggestion, the author tool the note as the limitation of this dissertation in the conclusion.

The fourth suggestion is that the model structure on a small open economy version of the New Keynesian DSGE should be explained including the micro foundation. Responding to this suggestion, the author added the model description with the overall structure in Appendix.

In the final examination, the following suggestions including those for her future research were pointed out.

First, in the VAR analysis Chapter 3, the author should include the other structural factors that differ between the pre-IT period and the post-IT period in the estimation. The emerging ASEAN economies have experienced a plenty of structural reformations since the Asian currency crisis, such as the accumulation of foreign reserves, the development of bond markets, the consolidation of fiscal balance, and the mitigation of double mismatches (term and currency) in foreign borrowing. All these improvements should affect the exchange-rate pass-through effects, although the current estimation dealt with only two variables of exchange rate and CPI. Even though the inclusion of these structural variables is difficult in the estimation, the author should materialize the proxy indicators as control variables, or at least describe these factors in the discussion on the estimation results.

Second, the author should further consider the practical ways on how the central banks in emerging ASEAN economies can improve their forecasting capabilities to realize the forward-looking rules, such as utilizing the Break-Even Inflation rate in government bond markets, conducting inflation-expectation surveys, and building up reliable macroeconomic forecasting models.

Third, the author should explain the reasons why Indonesia, the Philippines, and Thailand have adopted inflation targeting, whereas Malaysia and Vietnam have not, and also the future perspective on whether the non-IT-adopters of Malaysia and Vietnam are going to adopt inflation targeting. The discussions in the final examination referred to the historical difference right after the Asian currency crisis that Malaysia kept the pegged currency regime, thereby having had no need to create a price anchor, whereas the three IT adopters transformed their currency regime from the pegged system to floating one. In case of Vietnam, its economy was too premature to adopt inflation targeting, since the economy had still suffered from the fear of floating. Regarding the future prospect, Malaysia had a different objective of monetary policy valuing the growth of output and employment, whereas Vietnam has been on the way to prepare for adopting inflation targeting.

Although there is room for improvements identified by the examiners, the dissertation is considered to have original contributions sufficient to deserve a doctorate dissertation. The major contributions can be highlighted as follows: 1) identifying the validity of the Taylor principle in the adopters of inflation targeting in emerging ASEAN, 2) enriching evidence on the linkage between the adoption of inflation target and the loss of the exchange rate pass-through effect, and 3) applying a small open economy version of the New Keynesian DSGE to the analysis of monetary policy rules in emerging ASEAN for the first time.

It should also be noted that the dissertation contains the author's independent papers, which were published in the peer-reviewed high quality international journals. Chapter 1 and 2 is based on the paper: 'Monetary Policy Rules in Emerging ASEAN Economies: Adaptability of Taylor Principle,' *International Journal of Asian Business and Information Management*, 2021, 12(3): 255-274, listed in Emerging Sources Citation Index of Web of Science (ESCI). Chapter 3 is based on the paper: 'The Exchange Rate Pass-Through Under the Inflation Targeting Framework in Indonesia, the Philippines, and Thailand,' *Advances in Pacific Basin Business, Economics and Finance*, 2021, 9: 237-251. Chapter 4 is based on the paper: 'Taylor Principle under Inflation Targeting in Emerging ASEAN Economies: GMM and DSGE Approaches,' *Bulletin of Applied Economics*, 2020, 7(2): 35-47.

Through the comprehensive consideration, consequently, the committee unanimously agreed that the dissertation meets the requirement for the Doctorate's degree.