

学位論文及び審査結果の要旨

横浜国立大学

氏名	Wong Yii Siing
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論文審査委員	主査 横浜国立大学 教授 佐藤 清隆 横浜国立大学 教授 パーソンズ クレグ 横浜国立大学 教授 藤生 源子 横浜国立大学 教授 シュレスト ナゲンドラ 横浜国立大学 准教授 西川 輝

論文の要旨

The exchange rate is a important policy variable in determines trade flows, capital flows, inflation, and the international reserves in a given economy. Economists have devoted considerable empirical attention to various questions surrounding exchange rates. One area of interest has been the exchange rate pass through (ERPT) into import price have been debated for long time. In this dissertation consist of three independent research papers that study regarding the exchange rate pass through. In particular, this dissertation tries to extend the literature through advanced methodologies. In order to overcome the limitation of past studies, the threshold models is employed and new threshold variable is used. The first paper is to examine the exchange rate pass through into Korean import. After the currency crisis in 1997-1998, many countries started to change their exchange rate regime. Korea had switched her exchange rate regime to floating with the inflation targeting framework. However, it is difficult to maintain inflation target while achieving the exchange rate target. Therefore, in order to achieve the exchange rate stability, Korean authorities tend to intervene the foreign exchange market. This raise a question that would these intervention in foreign exchange market affect the level of exchange rate pass through? However, past studies are limited. This might due to the limitation of the data. In Korea, there is a unique tool using to sterilize the money supply after the intervention known as monetary stabilization bonds (MSBs). This bond is use to control the excessive short term liquidity. The monetary stabilization bonds is chose as the threshold variable in this paper. Past studies show that the spread of this bond can be serve as a signal of financial crisis. In contrast with past studies, the contract currency based Nominal Effective Exchange Rate (NEER) is used in this paper. Unlike the conventional NEER, contract currency based NEER is invoice currency shares weighted. This help to the capture the effect of third currency using the invoicing. According to Bank of Korea, Korean import consists of large share of third currency in invoicing. Almost 80 % of the import are invoicing in U.S. Dollar. Results revealed that the exchange rate pass through are different across the industries and different during the foreign exchange rate intervention period. Exchange rate is expected to be more volatility during intervention period, exporters have tendency to pass through effect of the

exchange rate movement. Overall, Korea has high level of exchange rate pass through. Significant of the exchange rate pass through in short run reflects the important of foreign currency used as invoicing currency. The second paper is examining the level of exchange rate pass through into Malaysian import during depreciation and appreciation period. After July of 2005, Malaysia had change from fix exchange rate regime to manage float regime. This had led to a greater fluctuation in exchange rate. In this paper, the asymmetric effects that raise from the exchange rate appreciation and depreciation is taking into consideration. Based on the previous empirical studies, the exporters are expected to behave differently during the appreciation and depreciation period. To capture this effect, the Nonlinear Autoregressive Distributed Lag (NARDL) model is used in this paper. Based on the model, the asymmetric variable is decomposed into partial sum by using threshold. NARDL model allows to examine the effect of asymmetric variable in both long run and short run. The results show that most of the commodities have cointegrating relationship among the variables. Long run pass through exists for most of the commodities. The exchange rate pass through is different across the commodities. However, the asymmetric test show that only a commodity exhibits the asymmetric effect in the exchange rate pass through. This implies the position of Malaysia as a price taker. This also explained the less responsiveness of Malaysia import price to the sharp depreciation in Malaysian Ringgit since September 2015. The third paper is to examine the exchange rate pass through using threshold model. The threshold variable used in this study is the level of exchange rate volatility. After the change of the exchange rate regime, Central Bank of Malaysia, Bank Negara Malaysia (BNM) tend to intervene the foreign exchange market. The intention to intervene in the foreign exchange rate is to contain the excessive exchange rate volatility. However, there are studies show that the foreign intervention tend to increase the exchange rate volatility in the short run. For the case of Malaysia, the central bank of Malaysia intervened foreign exchange market to counter strong portfolio inflows against the US dollar that sharply increased international reserves, from USD 83.5 billion in January 2007 to USD 125.8 billion in June 2008, a rise of just over 50%. However, the onset of the global financial crisis caused a sudden reversal of portfolio investment, exerting a significant downward pull on the ringgit. This lead to a greater exchange rate volatility. As argued by previous study the performance of the Malaysian import is important in order to further generate Malaysia's economy. There are studies show that the demand of Malaysian imports is affected by the exchange rate volatility. Hence, it is important to understand the relationship between the exchange rate volatility and the exchange rate pass through in Malaysian import. The results show that significant pass through in low exchange rate volatility. However, there are two commodities where the exchange rate pass through is in negative and both commodities are the main imported commodities. In overall, the exchange rate pass through is different across the industries and commodities. Lack of evidence in the asymmetric effect of exchange appreciation and depreciation in Malaysia import reveal the position of Malaysia as a price taker. The results help to explain the less responsiveness of Malaysian import to the sharp decline of exchange rate.

審査結果の要旨

本論文は、韓国とマレーシアの為替レートのパススルーに関する実証分析を行なった 2～4 章を中心に構成されている。この三つの章の概要と評価は以下の通りである。

第 2 章は韓国の輸入における為替レートのパススルーを Threshold autoregressive (TAR) モデルを用いて分析している。韓国は為替レートの大幅な変動を繰り返し経験しており、為替介入を頻繁に行なっている。為替変動が大きい時期と比較的安定している時期を区別するために

Monetary Stabilization Bond (MSB) の発行残高を threshold として TAR 推定を行なった結果、「為替介入無し」と「為替介入有り」の二つの時期で輸入のパススルー率が異なることが明らかになった。韓国の輸入物価だけでなく、国内生産者物価へのパススルー率も推定し、ほぼ同様の結果が得られることを確認している。

第3章と第4章はマレーシアを対象として、輸入のパススルーの実証分析を行っている。第3章ではリングgit高（増価）局面とリングgit安（減価）局面においてパススルー率の違いがあるか否かを Nonlinear Autoregressive Distributed Lag (NARDL) モデルを用いて推定した結果、長期のパススルー率が有意に正の値をとることが確認されたが、リングgit高局面とリングgit安局面でパススルー率が有意に異なるという結果は得られなかった。産業別の輸入物価で推定した場合も同様の結果が得られることが確認された。また、第4章では為替レートのボラティリティを threshold として用いて TAR 推定を行い、為替変動が大きい時期と安定した時期の二つに分けて輸入のパススルー率を推定している。ボラティリティが小さい時期では輸入のパススルー率が有意に正の値をとるのに対して、ボラティリティが大きい時期ではパススルー率が有意でなくなる産業が多く見られることが確認された。これは為替レートのボラティリティが大きくなるほど、海外企業がマレーシア向けの輸出価格をより安定させる行動をとっていることを示唆する結果である。

本学位請求論文の特徴は threshold モデルを用いることで為替変動の局面の違いによってパススルー率がどのように異なるかを分析している点である。特に第2章の韓国の分析では MSB の残高を threshold に選んでいる点がオリジナルな貢献であるが、どの章もパススルー率の推定結果の違いに関するファクト・ファインディングにとどまっており、理論的な考察が十分に行われていない。しかし、今後この点を適切に改訂すれば、査読付き学術雑誌に投稿可能な水準まで各章の内容を改善することが可能である。

以上のことから、本論文審査委員一同は、本学府の博士号審査基準③に照らして、Wong Yii Siing 氏の学位請求論文 “Exchange Rate Pass-Through into Domestic Prices” が博士（経済学）の学位を授与するに値するものと判断する。

注 論文及び審査結果の要旨欄に不足が生じる場合には、同欄の様式に準じ裏面又は別紙によること。