

國立高雄科技大學
企業管理系碩士班
碩士論文

匯率變動對 GDP 不對稱效果之研究
— 非線性 ARDL 模型之應用

Asymmetry Effects of Exchange Rate Changes on GDP :
Evidence from Nonlinear ARDL model

研究生：蔡姍真
指導教授：李政峯 博士

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匯率變動對 GDP 不對稱效果之研究—非線性 ARDL 模型之應用

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摘要

傳統的經濟學理論中，凱因斯學派認為貨幣貶值有助於改善國家的外部條件，藉由貿易財的產量增長，讓國內出口上升，進口下降，具有貶值擴張效果（Expansionary Devaluation）。近年來，學者在實證研究上對凱因斯學派的主張提出質疑，認為貶值政策會讓價格重新調整，使進口原料價格上漲，成本增加，讓總供給減少，導致貶值緊縮效果（Contractionary Devaluations）。故本研究將運用較嚴謹的實證模型—非線性 ARDL 模型與檢定能力較佳之計量方法，藉以驗證 OECD 中 11 個國家分別為加拿大、丹麥、法國、日本、韓國、紐西蘭、挪威、瑞典、瑞士、英國、美國，匯率變動對 GDP 長期之關係。於 ARDL 實證結果發現在 5% 顯著水準下，丹麥、挪威、瑞典存在長期貶值緊縮效果，法國存在長期貶值擴張效果；為了讓實證結果更加豐富，納入 FM-OLS(N-FM-OLS)與 ARDL(NARDL)做比較，則在 FM-OLS 中多了美國在 5% 顯著水準下，存在長期貶值擴張效果。韓國在 ARDL 中存在長期貶值擴張效果，不具顯著影響；於 NARDL 中，5% 顯著水準下，存在長期貶值緊縮效果；N-FM-OLS 則是存在長期貶值擴張效果。日本在 ARDL 存在長期貶值擴張效果；FM-OLS 存在長期貶值緊縮效果，皆不具顯著影響；於 N-FM-OLS 中，5% 顯著水準下，則是存在長期貶值擴張效果。故貶值擴張效果與貶值緊縮效果因國而異，且整體來說 OECD11 個國家明顯存在不對稱影響。

關鍵詞：貶值擴張效果、貶值緊縮效果、bounds test 邊界共整合檢定、全修正普通最小平方法、非線性 ARDL

Asymmetry Effects of Exchange Rate Changes on GDP : Evidence from Nonlinear ARDL model

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ABSTRACT

In traditional economic theory, the Keynesian school believes that currency devaluation will help improve the external conditions of the country. According to the increase in the output of trade finance, domestic exports will increase, imports will decline, and the devaluation expansion effect. In recent years, scholars used empirical research to raise doubts about the Keynesian school claim. Scholars believe that the devaluation policy will allow the price to readjust and that the price of imported raw materials will increase, the cost will increase, and the total supply will decrease, leading to the devaluation and contraction effects. This study will use a more rigorous empirical model- nonlinear ARDL model and more better measurement method to verify that 11 OECD countries are Canada, Denmark, France, Japan, Korea, New Zealand, Norway, Sweden, Switzerland, In the United Kingdom and the United States, the exchange rate changes in these countries have a long-term impact on GDP. The ARDL empirical results show that Denmark, Norway, and Sweden have long-term depreciation and contraction effects at the 5% significance level, France have long-term depreciation and expansion effects; To make the empirical results more diversified, including FM-OLS (N-FM-OLS) and ARDL (NARDL) for comparison, in the FM-OLS model, the US at 5% significance level has a long-term depreciation expansion effect. The long-term depreciation expansion effect of Korea in ARDL has no significant effect; in NARDL, at the 5% significance level, there have a long-term depreciation and contraction effect; N-FM-OLS has the effect of long-term depreciation and expansion. Japan has a long-term depreciation expansion effect in ARDL; FM-OLS has a long-term depreciation and contraction effect, and neither has a significant effect; in N-FM-OLS, 5% significance level shows there has a long-term depreciation expansion effect. Therefore, the depreciation expansion effect and depreciation contraction effect differ from country to country, and overall OECD 11 countries have apparent asymmetric effects.

Keywords : Expansionary Devaluation · Contractionary Devaluations · bound test · FM-OLS · Nonlinear ARDL