DISSERTATION

EXCHANGE RATE REGIME FOR MACROECONOMIC PERFORMANCE: LESSONS FROM REGIONAL INTEGRATED AREAS IN SOUTHEAST ASIA (ASEAN-10) AND WEST AFRICA (ECOWAS-15)

MORO KADJO DANIEL BITTY

NIM: 041217037311

DOCTORAL PROGRAM IN ECONOMICS

FACULTY OF ECONOMICS AND BUSINESS

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This Dissertation

has been submitted and successfully evaluated by the Board of Examiners for the Award of a Doctoral Degree in Economics at the Faculty of Economics and Business in Universitas Airlangga On Wednesday, June 1, 2016

Time: 10am-12pm

By:

MORO KADJO DANIEL BITTY

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THIS DISSERTATION HAS BEEN APPROVED

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This Dissertation has been examined and approved by the Board of Examiners through a Closed-door Examination at the Faculty of Economics and Business of Universitas Airlangga in February 23rd, 2016.

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Fakultas Ekonomi dan Bisnis Universitas Airlangga
Nomor : 644/UN3.1.4/PP/2016
Tanggal : 15 Februari 2016

DECLARATION / PERNYATAAN

I, MORO KADJO DANIEL BITTY BBA, M.E/041217037311, Doctoral Student at Universitas Airlangga, declare that:

1. My Dissertation is genuine and truly my own creation, and it is not another person work made under my name, nor a piracy or plagiarism. This Dissertation has been submitted as part of the process to obtain an academic Degree from Airlangga University.

2. This Dissertation does not contain any work or opinion written or published by anyone, unless clearly acknowledged or referred to by quoting the author's name and stated in the references.

3. This statement is true; if in the future, this statement is proven to be fraudulent or dishonest, I agree to receive an academic sanction in accordance with the prevailing norms and regulations in Airlangga University.

Surabaya, June 2016
Declared by,

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041217037311

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SUMMARY

This dissertation shows that, nowadays, the exchange rate appears to be the single monetary tool that can be used to simultaneously boost economic growth and protect national or regional economic fundamentals against adverse external shocks, but how? That's the question which constitutes the major concern of this study. Using secondary macroeconomic data for the period 1990-2014, this research has adopted a mixed-methodology approach based on correlation tests and statistical mapping technique analyses. Indeed, it is a systematic descriptive and comparative study that aims to comprehend the factual correlation between exchange rate and five macroeconomic performance indicators namely: GDP growth, inflation, foreign direct investment, unemployment rate and current account balance of twenty five countries from two regional integrated areas which are the Association of Southeast Asian Nations (ASEAN-10) and the Economic Community of West African States (ECOWAS-15). The major findings of this dissertation are firstly: we have learned that under floating exchange rate regime, a low GDP growth appears to be the cost of a successful inflation targeting policy; and to avoid that tradeoff between inflation and GDP growth, "qualitative easing" policies are suggested. On the other hand, currency pegged regime fits well "Externally Oriented Economies" like Singapore and most of the small economies of ECOWAS. Also, in countries under floating exchange rate regimes, the FDI is high but very cyclical due to the ability of investors to freely move their capital while in countries under fixed exchange rate regimes the FDI is lower but stable over time. Hence, we propose new formulations of the exchange rate valuation named: the *"Inclusive Nominal Exchange rate"* (INEX) and *"Commodity Nominal Exchange rate"* (CNEX) which are both based on real economic performances of countries and the structure of their economies. Finally, this research provides an illustration of the INEX which showed that in 2014, the Indonesian "inclusive exchange rate" was estimated at 10,524 while the nominal exchange rate was near 12,000. This means that the macroeconomic fundamentals of Indonesia were better but, the nominal exchange rate failed to capture that performance. In short, rethinking the exchange rate regime strategy is a necessity and it should be used as a major instrument in open economies according to the structure of their markets and their macroeconomic objectives. In fact, a *"new monetary era"* is emerging due to the greater openness of economies, the increasing influence of regional economic blocks and the global industrial value-chains that creates an interconnected global market. Clearly, exchange rate has become a more effective monetary tool than the interest rate was. Indeed, for more than seven years of *"quantitative easing"* policy applied by the United States and followed by European countries, the failure of the interest rate as a monetary instrument used to address fundamental economic issues is so palpable. In short, this dissertation is expected to open a new window of discussions about the responsibility of governments and monetary authorities as the guarantor of the value of money which currently is based on nothing but a mere game played by the actors of a supposedly free-market.

Abstrak (Indonesian Language)

Disertasi ini menunjukkan bahwa, saat ini, nilai tukar tampaknya menjadi alat moneter tunggal yang dapat digunakan untuk secara bersamaan meningkatkan pertumbuhan ekonomi dan melindungi fundamental ekonomi nasional atau regional terhadap guncangan eksternal, tapi bagaimana caranya? Pertanyaan itulah yang merupakan perhatian utama dari penelitian ini. Dengan menggunakan data makroekonomi sekunder untuk periode 1990-2014, penelitian ini telah mengadopsi pendekatan mix-metodologi berdasarkan tes korelasi dan teknik pemetaan. Tulisan ini menganalisa korelasi faktual antara nilai tukar dan lima makroekonomi variabel yaitu pertumbuhan PDB, inflasi, investasi asing langsung, tingkat pengangguran dan neraca perdagangan. Di sini, kita belajar dari dua puluh lima negara berasal dari dua Kawasan Ekonomi yaitu ASEAN-10 dan Masyarakat Ekonomi Negara Afrika Barat (ECOWAS-15) dengan masing masing rezim nilai tukar yang sangat beragam. Penelitian ini adalah studi deskriptif dan komparatif yang bertujuan untuk memahami secara sistematis saluran transmisi antara nilai tukar dan kelima indikator kinerja makroekonomi tersebut. Temuan-temuan utama dari disertasi ini adalah pertama: di bawah rezim kurs mengambang bebas, pertumbuhan PDB yang rendah tampaknya menjadi biaya kesuksesan inflasi yang terkendali rendah; dan untuk menghindari tradeoff tersebut antara inflasi dan pertumbuhan PDB, "pelonggaran kualitatif" adalah kebijakan yang disarankan di studi ini. Di sisi lain, rezim nilai tukar tetap cocok dengan "External Oriented Economies" seperti Singapura dan kebanyakan Negara di ECOWAS. Juga, di negara-negara di bawah rezim nilai tukar mengambang, investasi asing langsung sangat tinggi tapi sangat siklis karena kemampuan investor untuk dengan bebas memindahkan modal mereka; sementara di negara-negara di bawah rezim nilai tukar tetap investasi asing langsung menjadi lebih rendah tapi stabil dalam jangka panjang. Oleh karena itu, kami mengusulkan formulasi baru dari penilaian nilai tukar yang bernama: yang "Inclusive Nominal Exchange rate" (INEX) dan "Commodity Nominal Exchange rate" (CNEX) yang mana penilaiannya didasarkan pada kinerja ekonomi riil negara dan struktur ekonomi mereka. Akhirnya, penelitian ini memberikan ilustrasi dari INEX yang menunjukkan bahwa pada tahun 2014, "nilai tukar inklusif" Indonesia menguat sampai 10524 terhadap US dollar sedangkan nilai tukar nominal saat itu mendekati 12000. Itu berarti bahwa fundamental makroekonomi Indonesia sudah membaik, namun kurs nominal gagal menangkap kinerja tersebut. Singkatnya, memikirkan kembali strategi rezim nilai tukar adalah suatu keharusan dan harus digunakan sebagai sebuah instrumen utama di negara-negara terbuka sesuai struktur ekonomi dan tujuan makro ekonomi mereka.

Kata kunci: Kawasan Ekonomi Regional, kebijakan nilai tukar, kinerja ekonomi, "Inclusive Nominal Exchange rate" (INEX) dan " Commodity Nominal Exchange rate" (CNEX).

Résumé (French)

Cette thèse montre que, de nos jours, le taux de change semble être l'unique outil monétaire qui peut être utilisé pour simultanément stimuler la croissance économique et protéger les fondamentaux économiques nationaux ou régionaux contre les potentiels chocs externes, mais comment? Telle est la question qui constitue la préoccupation majeure de cette étude. En utilisant les données macro-économiques secondaires durant la période 1990-2014, cette recherche a adopté une approche méthodologique mixte basée sur des tests de corrélation et technique statistique de cartographie. En effet, il s'agit d'une étude descriptive et comparative systématique qui vise à comprendre la corrélation factuelle entre le taux de change et des cinq indicateurs de performance macro-économiques à savoir: la croissance du PIB, l'inflation, l'investissement direct étranger, le taux de chômage et la balance commerciale des vingt-cinq pays de l'Association des Nations d'Asie du Sud-Est (ANASE-10) et la Communauté Economique des Etats de l'Afrique de l'Ouest (CEDEAO-15). Les principales conclusions de cette thèse sont entre autre: sous le régime de change flottant, une faible croissance du PIB semble être le coût d'une inflation contrôlée. Ainsi pour éviter ce choix difficile entre l'inflation et la croissance du PIB, les politiques «d'assouplissements qualitatifs" sont suggérées. D'autre part, les régimes fixes ou d'arrimage de monnaies semblent bien adaptées aux "économies orientées vers l'extérieur" comme Singapour et la plus part des économies de la CEDEAO. En outre, dans les pays sous les régimes de change flottants, l'investissement direct étranger est élevé, mais très cyclique en raison de la capacité des investisseurs à déplacer librement leur capitaux alors que dans les pays soumis à des régimes de change fixes, l'investissement direct étranger est plus faible mais assez stable sur le long terme. Par conséquent, nous proposons de nouvelles formulations du taux de change dont le nom serait : le "Inclusive Nominal Exchange rate" (INEX) et le "Commodity Nominal Exchange rate" (CNEX) qui ont tous deux leurs valeurs basées sur les performances économiques réelles et la structure de leurs économies. Enfin, cette thèse offre une illustration du "INEX" qui montre qu'en 2014, le "taux de change inclusif" Indonésien devait apprécier et être estimer à 10.524 alors que le taux de change nominal par rapport au dollar Américain avoisinait 12.000. Cela signifie que les fondamentaux macroéconomiques de l'Indonésie s'étaient améliorés, mais le taux de change nominal a manqué de prendre compte cette performance. En bref, repenser la stratégie liée au choix du régime de change est une nécessité et cela doit être utilisé en tant qu'un instrument majeur dans les économies ouvertes, en tenant compte bien sûr de leurs structures économiques et objectifs macroéconomiques.

Mots-clés: Intégration économique régionale, les politiques de taux de change, la performance économique, taux nominal de change inclusive (INEX) et taux de change nominal de commodité (CNEX).

Abstract

This dissertation shows that, nowadays, the exchange rate appears to be the single monetary tool that can be used to simultaneously boost economic growth and protect national or regional economic fundamentals against adverse external shocks, but how? That's the question which constitutes the major concern of this study. Using secondary macroeconomic data for the period 1990-2014, this research has adopted a mixed-methodology approach based on correlation tests and statistical mapping technique analyses. Indeed, it is a systematic descriptive and comparative study that aims to comprehend the factual correlation between exchange rate and five macroeconomic performance indicators namely: GDP growth, inflation, foreign direct investment, unemployment rate and current account balance of twenty five countries from two regional integrated areas which are the Association of Southeast Asian Nations (ASEAN-10) and Economic Community of West African States (ECOWAS-15). The major findings of this dissertation are firstly: we have learned that under floating exchange rate regime, a low GDP growth appears to be the cost of a successful inflation targeting; and to avoid that tradeoff between inflation and GDP growth, "qualitative easing" policies are suggested. On the other hand, currency pegged regime fits well "Externally Oriented Economies" like Singapore and most small economies of ECOWAS. Also, in countries under floating exchange rate regimes, the FDI is high but very cyclical due to the ability of investors to freely move their capital while in countries under fixed exchange rate regimes the FDI is lower but stable over time. Hence, we propose new formulations of the exchange rate valuation named: the *"Inclusive Nominal Exchange rate"* (INEX) and *"Commodity Nominal Exchange rate"* (CNEX) which are both based on real economic performances of countries and the structure of their economies. Finally, this research provides an illustration of the INEX which showed that in 2014, the Indonesian "inclusive exchange rate" was estimated at 10.524 while the nominal exchange rate was near 12.000. This means that the macroeconomic fundamentals of Indonesia were better but, the nominal exchange rate failed to capture that performance. In short, rethinking the exchange rate regime strategy is a necessity and it should be used as a major instrument in open economies according to the structure of their economies and their macroeconomic objectives.

Keywords: Regional Economic Integration, Exchange rate policies, Economic performance, Inclusive Nominal Exchange Rate (INEX) and Commodity Nominal Exchange rate (CNEX).

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Abbreviations

ASEAN:	Association of Southeast Asian Nations
CNEX	Commodity Nominal Exchange rate
ECOWAS:	Economic Community of West African States
FDI:	Foreign Direct Investment
GDP:	Gross Domestic Product
IMF:	International Monetary Fund
INEX	Inclusive Nominal Exchange rate
LCU/USD	Local Currency Unit per United States dollar
WAEMU:	West African Economic and Monetary Union