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Rita Biswas

University at Albany, State University of New York, rbiswas@albany.edu

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Democracy and Exchange Rate Regime Choice in Sub-Saharan Africa

Dr. Eric Ofori, Assistant Professor, Siena College
Dr. Rita Biswas, Associate Professor, University at Albany – SUNY
Introduction

• Definitions
• Understanding the Research Issue
• The Broader Context and Motivation
• The Narrower Context – Related Literature
• Specific Research Question
• Data, Methodology, Analysis & Results
• Implications of Findings
Some Definitions

• What is an exchange rate regime?
  – It is the system a country’s monetary authority uses to determine its exchange rate against other currencies
  – Freely Floating System: supply and demand in the foreign exchange market determines the price of our currency, the USD, against say, the British Pound
  – Opposite extreme – Fixed Exchange Rate System: the Central Bank determines what the price of your currency will be in terms of another currency. E.g. The Hong Kong dollar is pegged to the USD.
  – Range of arrangements in between
Range of Exchange Rate Regimes

- Monetary union
- No separate legal tender
- Currency board
- Fixed exchange rate
- Target zone
- Crawling peg
- Managed float
- Clean float

- Exchange rate flexibility
- Loss of monetary policy independence
- Anti-inflationary effect
- Credibility of the exchange rate commitment

- Source: Policonomics
Polity Regimes

• The system under which the governing authority or institution of an independent country is established and operates

• Range: fully institutionalized autocracies to fully institutionalized democracies with mixed or incoherent authority regimes in between (anocracies)
Sub-Saharan Africa (Source: Researchgate)
Research Issue

• Traditionally, in advanced economies, economic considerations drive the exchange rate regime choice.

• Balance of power between economic agents who stand to gain from flexible exchange rates versus agents with a strong preference for stability of exchange rates.

• However, in frontier and transition economies, political factors play a significant role in the exchange rate regime choice determination.

• This project examines the linkages between varying degrees of democratization and exchange rate regimes in sub-Saharan Africa.

• Why Africa? Why sub-Saharan Africa?
The African Experience

- 18 of the 20 slowest growing countries in the world during 1960-2000 happen to be in Africa
- 38 countries in Africa recorded a mean growth rate of 0.6 percent per year over the same period (Barro & Sala-i-Martin, 2004)
- Consistent problems with obsolete infrastructure, corruption, widespread poverty and malnutrition, exacerbated with frequent epidemics of diseases such as malaria, Ebola
- Political leaders have an incentive to stay in office for a protracted period
- Selects economic policies that enhance (re)electability and minimizes likelihood of a military takeover
Factors Behind African Growth Puzzle

• Ethno-linguistic fractionalization (Barr & Oduro, 2002, Easterly & Levine, 1997)
• Corruption (Vicente, 2010)
• Environmental factors such as natural resources (Sachs & Warner, 2001)
• History of slavery (Nunn, 2008)
  – Using data from shipping records, finds negative relationship between the number of slaves exported from each country and current economic performance
• Link between precolonial statehood and current regional African development (Michalopoulos and Papaioannou, 2015)
• Tse Tse Fly-suitable areas of Africa were less likely to be politically centralized historically in the precolonial era (Aslan, 2015)
• Bottomline: heterogeneity of today’s African growth experience has multiple sources
Broader Context and Motivation

• Economic growth: objective for both advanced countries (stable growth rate) and emerging countries (high growth rate)
• Issue of concern for domestic governments, global institutions such as World Bank, IMF, BIS, OECD, etc., academics, private investor groups, public-private partnerships, policy-makers
Context & Motivation (contd.)

- Complex set of determinants of economic growth identified by the literature across disciplines of economics and finance, development economics, political science and law, history, entrepreneurship.

- From economics and finance:
Context & Motivation (contd.)

• Inter-disciplinary literature suggests a wide range of factors:
  – inequality, legal environment, sustained program of privatization: Roe and Siegel, (2011),
  – environmental factors (natural resources), colonial legacies (slave exports): Nunn (2008)
  – proximity to the equator (Tsetse fly): Aslan (2015)
Narrower Context

• Exchange Rate Regime choice has also emerged as one of the influencers of economic growth
  – though not unequivocally (Jensen, 2003)
  – direction of causality could also be reversed
• So, this study focuses on one narrow aspect of this bigger issue: the nature of the influence of democratization on exchange rate regime choice
• Ultimate objective of discipline: identify drivers of economic growth in poorest nations
Related Literature

• Significant differences between drivers of the exchange rate regime choice between developed and less developed countries or LDCs (Roland, 2002, Markiewicz, 2006, Berdiev, Kim and Chang, 2012)

• Advanced economies’ primary considerations: unemployment, inflation, output growth

• LDCs and new democracies: Electoral considerations dominate
Electoral democracy brings with it a minimum legal infrastructure protecting property and investor rights and contract enforcements.

Political system under a democracy introduces:
- a system of checks and balances (Siegel et al., 2004)
- a certain openness and competitiveness (Haber et al., 2007) and
- constrains government ownership of financial institutions, including banks (La Porta et al., 1998, 1999)
Related Literature (contd.)

• However, there could be some inherent inhibiting factors, especially with nascent democracies
  – uncertainty about the political state
  – weak economic environment
  – inadequate financial infrastructure
  – Inequality - benefits of democratization accruing only to a few segments of society while leaving ethnic minorities unaffected
Democracy and Exchange Rate Regime Choice: The Trade-offs

• Fixed Exchange Rates – domestic currency pegged to a more disciplined foreign currency
  – Pros
    • Exchange rate stability
    • Lower, stable inflation
    • Commitment to peg implies credibility of leadership
  – Cons
    • Government loses monetary policy authority
      – Unable to use monetary policy tools such as interest rate changes to combat recession or unemployment
Democracy and Exchange Rate Regime Choice: The Trade-offs (contd.)

• Floating Exchange Rates – FX markets determine exchange rate
  – Pro
    • Monetary policy autonomy
      – Government has leeway to deal with macroeconomic issues
  – Cons
    • Exchange rate volatility
    • Possibility of high inflation
    • Uncertainty and instability deters foreign investment

• In the end – an empirical issue
Hypothesis Development

• We test the following relationship:
  The higher the degree of democracy, the greater the likelihood of adopting a pegged exchange rate regime

• We test three specific components of the electoral process
  – Openness of a country’s executive recruitment
  – Electoral competition
  – Separation of power in country’s political economy
Data and Methodology

• Screen:
  – Data availability

• Final sample: 49 countries; 2000 to 2016

• Data sources:
  – World Development Indicators (2018)
  – Polity IV
  – Database of Political Institutions
Data & Methodology (contd).

• Model:
• $y_{it} = \alpha_i + \beta_1 Z_{it} + \beta_2 X_{it} + u_{it}$

  – where $y_{it}$ denotes the exchange rate regime of country $i$ at time $t$
  – the vector $Z$ is our key independent variable representing the democracy index for country $i$ at time $t$
  – $X$ is a battery of control variables

• We use Ordered Logit Regression method
Model Specifications

• 3 key components of the electoral process examined – sub-categories in Polity IV:
  – Openness of a country’s executive recruitment process (EXECRECRUIT)
    • Closed = situation where leader of nation is a monarch or chosen via hereditary succession
    • Open = every politically active member of the population can contest for the highest office
Model Specifications (contd.)

• Political competition (EXECCOMP)
  – Possibility of 2 or more candidates or parties contesting for the highest office
    • 1 = little to no competition in the electoral process
    • 3 = very competitive process

• Constraints on chief executive (EXECCONST)
  – Separation of powers in a country’s political system
    • 1 = little or no constraints
    • 7 = constraints on the chief executive; separation of power
Findings and Implications

• Sub-Saharan African (SSA) countries with higher scores of democratization have a greater likelihood of pegging their currency (Table III in Appendix)
  – Lower inflation is perceived as key to (re)electability

• SSA countries with greater electoral openness are more likely to peg their currencies
  – Closed electoral system African leaders prefer floating their currencies – gives them monetary autonomy to print money to enhance (re)electability (Table IV in Appendix)
Findings and Implications (contd.)

• SSA countries with greater electoral competition have a greater preference for pegging their currency
  – Curbing inflation and establishing their credibility in doing so for (re) electability is achieved more easily with a fixed exchange rate (Table V in Appendix)

• SSA countries with greater separation of powers (more constraints on the chief executive) tend to prefer a pegged currency
  – Central banks in countries with greater separation of power are more independent so leaders do not derive any benefit from floating their currencies (Table VI in Appendix)

• SSA countries with military (authoritarian) leaders have no relationship with the exchange rate regime choice
  – Military ruler has no re-election concerns; actions are independent of exchange rate regime choice (Table VII)
Summary and Conclusions

• Using ordered logit regression analysis on 49 sub-Saharan African countries during the period 2000 to 2016, we examine the role of political factors in influencing the choice of the exchange rate regime

• We find supporting evidence that as the degree of democratization increases, there is a stronger preference for fixed exchange rates

• Next steps:
  – Distinguish between de jure and de facto exchange rate regimes
  – Test for Threshold effect – minimum threshold level of trade with single trading partner (former colonial power or powerful neighbor) dominate political considerations
Bibliography

Bibliography (contd).