Chapter 9
Building a Surveillance Framework for Currency Crises in Indonesia:
Macroprudential Approach

Dimas Bagus Wiranatakusuma
Muhammadiyah University of Yogyakarta, Indonesia

Ricky Dwi Apriyono
Indonesian Association of Islamic Economist, Jakarta, Indonesia

ABSTRACT

There seems to be no single country that can escape from currency crises. This paper aims to answer: (i) How to determine exchange market pressure (EMP)? and (ii) To what extent the contribution of selected indicators to the prediction of currency crises?. The study adopts indicators developed by Kaminski, et.al (1999) by using signal extraction method as the early warning system (EWS) mechanism. By employing four selected variables, International reserve, real exchange rates, credit growth, and domestic inflation, the findings suggest the periods of crises fluctuated over the observations under various thresholds. The EMP touched the Kaminsky's line only during the Asian and global financial crises. Meanwhile, the Garcia's, Park's and Lestano's line was passed through frequently over the observations, and it implies that the financial system was cyclically under shocks. In conclusion, the currency crises frequently appear attacking Indonesia's financial system so that need to be mitigated by net open position (NOP) as macroprudential instrument.

INTRODUCTION

Financial crisis that erupted during 1997-1998 in Indonesia and some Asian countries had been a valuable lesson for the presence of financial system stability. The preserved financial system could be used as a sound evidence for generating the early warning system (EWS) mechanism in the midst of financial turbulence. The EWS is a tool commonly exercised in order to assess whether the financial system is under pressure and showing the abnormal behavior over the particular period.

DOI: 10.4018/978-1-4666-9484-2.ch009

Copyright © 2016, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

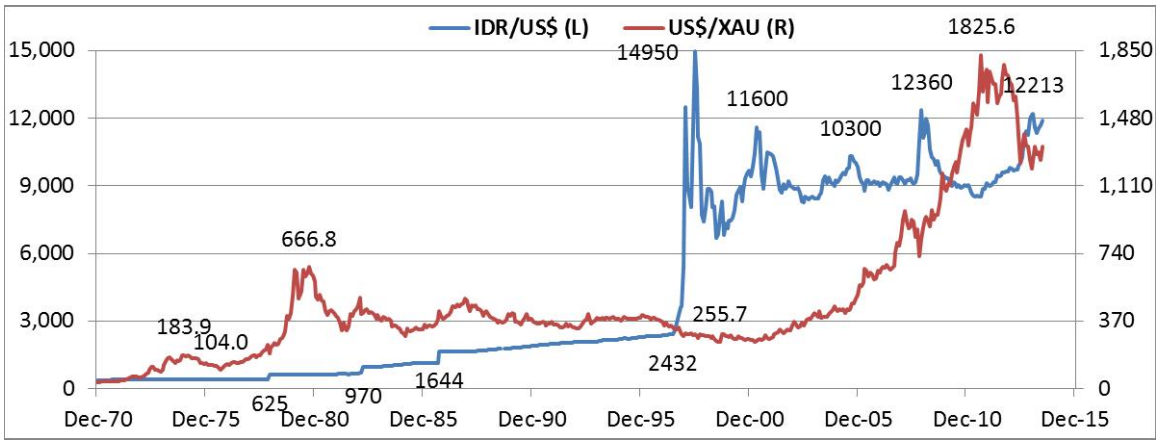
From the financial supervisor's point of view, an EWS involves an ex ante approach to regulation, that is, one designed to highlight conditions that have in the past been associated with systemic risk. Forward-looking supervisory instruments become more important as the speed and amplitude of financial crises increase. For instance, according to IMF (2009) report estimates the costs of the most recent financial crises at approximately USD 12 trillion, reaching up to 20% of GDP in the most hit countries. Honohan and Klingebiel (2003) find economic studies suggest that systemic downturns last from two to three year and cost, on average, 5% to 10% of pre-crisis GDP, but can cost as much as 50%. All in all, financial crisis creates huge economic cost, such as the implied waste of investible funds on inefficient projects, the subsequent loss of consumption and production, and higher spreads on new borrowing. Therefore, an efficient EWS allows ex ante policy action and can reduce the need for ex post regulation. Conversely, a poor EWS may send false signals, leading to actions that may amplify systemic crises. Finally, EWS presents a supervisory model risk in financial system.

Currency crisis is one substantial aspects contributing towards financial crisis or instability. In that regards, central bank of Indonesia is given a clear mandate, officially declared in constitution, that Bank Indonesia has to maintain and preserve the stability of Rupiah. However, the definition of rupiah stability does not obviously touch to which state of mind considers as stability. Goodhart (2005) clearly defines the primary concern of a central bank which is described into three aspects of stability: (1) domestic price stability; (2) external stability of the value of the currency; and (3) overall systemic stability in the financial system. Goodhart (2005) further clarifies that the stability of domestic and external value of the currency could be measured by the strength of purchasing power parity (PPP) of currency overtime.

In the context of currency crises, Kaminski (1998) defines a crisis as a situation in which an attack on the currency leads to a sharp depreciation of the currency, a large decline in international reserves or a combination of the two. A crisis so defined includes both successful and unsuccessful attacks on the currency. Figure 1 demonstrates the movement of rupiah against US dollar since May 1967 to June 2014. In addition, table 1 shows the movement of gold price per troy against US dollar.

Figure 1. obviously shows that Bank of Indonesia as a central monetary authority is difficult

Figure 1. The fluctuation and depreciation of Rupiah against US dollar since the demise of Bretton Woods System
Source: Bloomberg and Bank Indonesia



19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/building-a-surveillance-framework-for-currency-crises-in-indonesia/140073

Related Content

Employing Islamic Microfinance in Addressing Poverty Challenges in Brunei: A Mudarabah Approach
Ssemambo Hussein Kakemboand Abu Umar Faruq Ahmad (2019). *International Journal of Corporate Finance and Accounting (pp. 49-61).*
www.irma-international.org/article/employing-islamic-microfinance-in-addressing-poverty-challenges-in-brunei/227420

Value Relevance of Accounting Information in Capital Markets: A Comparative Analysis between Jurisdictions from the Middle East, Africa and Asia
James A. Rossi (2017). *Value Relevance of Accounting Information in Capital Markets (pp. 90-101).*
www.irma-international.org/chapter/value-relevance-of-accounting-information-in-capital-markets/173099

Analyzing the Existence of the Day of the Week Effect in Selected Emerging Country Stock Exchanges
Murat Çinko, Emin Avci, Asl Aybarsand Mehtap Öner (2014). *International Journal of Corporate Finance and Accounting (pp. 33-43).*
www.irma-international.org/article/analyzing-the-existence-of-the-day-of-the-week-effect-in-selected-emerging-country-stock-exchanges/119401

Major Factors Instigating Engineers to Shift their Career from Engineering to Management
Shahid Mahmood, Shahrukhand Ali Sajid (2013). *Technology and Financial Crisis: Economical and Analytical Views (pp. 80-89).*
www.irma-international.org/chapter/major-factors-instigating-engineers-shift/77015

Accountant Perceptions and Attitudes Towards the Social Accounting Practices in Bangladesh
Mohammad Mizenur Rahaman, Adiba Rahman Bushra Chowdhury, Shamima Akterand Md. Zillur Rahman (2023). *International Journal of Corporate Finance and Accounting (pp. 1-19).*
www.irma-international.org/article/accountant-perceptions-and-attitudes-towards-the-social-accounting-practices-in-bangladesh/319709