

**EARLY WARNING SYSTEMS OF
FINANCIAL CRISES - IMPLEMENTATION OF A
CURRENCY CRISIS MODEL FOR INDONESIA¹**

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ABSTRACT

The objective of this paper is to implement a prototype of a currency crisis model as part of an early warning system framework for Indonesia. The financial systems of developing countries like Indonesia are especially vulnerable and therefore robust instruments to predict crises are needed. Our model is based on the signals approach developed by Kaminsky, Lizondo and Reinhart (1998) and Kaminsky and Reinhart (1999). The basic idea of the signals approach is to monitor several indicators that tend to exhibit an "unusual" behavior in the periods preceding a crisis. When an indicator crosses a threshold, then it is said to issue a "signal" that a currency crisis may occur within a given period. We implemented this signals approach for Indonesia. The outcomes of our calculations performed well and were economically validated.

Keywords : A Currency crisis, early warning systems, crisis prediction, Macroeconomic vulnerability indicators, signals approach.

1. BACKGROUND

The financial crisis that swept over East-Asian countries since 1997 has quickly deteriorated into an economic and social crisis. East Asia's crisis foretold a continuing loss in human potential that echoed for years after this crisis has passed. Moreover, the crisis has changed the political life in the East Asian countries instantly (Adiningsih et al., 2002).

There is a famous rule of Herbert Stein that things that cannot continue don't. The natural question is whether Korea or East Asia had crisis because its fundamentals were not sustainable (Park, 2001). Immediately after the crisis, the numerous studies drew the conclusion that East Asian crises were caused by the structural weaknesses. However, The East Asian countries immediately took steps to solve the crisis. Asian Development Bank reported that countries throughout the region are moving fast to recover their economic performances by enacting new policies and adopting more transparent ways of doing business. They made a significant progress in addressing the various policy issues that is faced by them. As Asian Development Bank reported, in 1998, the five countries most affected by the Asian financial crisis continue to recover.

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