Chapter 11

KLR Approach as an Early Warning Indicator of Turkish Currency and Banking Crisis in 2000 and 2001

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ABSTRACT

International organizations as private sector institutions started to develop Early Warning System [EWS] models aiming to anticipate whether and when individual countries can collide with a financial crisis. EWS models can be made most useful to help sustain global growth and maintain financial stability, especially in light of the lessons learned from the current and past crises. This paper proposes Early Warning Systems (EWS) for Turkish Currency and Banking Crisis in 2000 and 2001. To that end "KLR model" or "signaling window" approach developed by Kaminski, Lorezondo and Reinhart (1998) is testified in the empirical part of this research and applied to a sample of Turkey macroeconomic data for the 1998-2003 monthly periods.

1. INTRODUCTION

After 1980 in Turkey, as a result of the negative outcomes of the January 24th resolutions, the first exchange rate crisis was experienced in 1994. The most significant characteristic of the 1994 crisis was that the exchange rate crisis occurred together with an intense financial sector crisis. The reason for the economy going into crisis in 1994 was that the *"April 5th Economic Resolutions"* had to be implemented. Despite these resolutions, as

structural transformation had not been made in the economy in the long term and macro economic stability had not been achieved, for the second time since 24th January 1980, the Turkish economy went into recession at the end of 2000 and in the beginning of 2001. Although improvement was achieved in some macro variables with the implementation of the *"Inflation Reduction Program (IRP)"*, supported by the IMF, the basic economic indicators remained weak in the measurement of the possibility of a speculative attack.

Therefore, following the 1994 crisis, the Turkish economy was shaken by a new crisis on 22nd November 2000. This was a crisis originating in the financial system with the leading actors in banking sector. Following the crisis of November 2000, the markets experienced a new and deeper shock in February 2001. The crisis that started in November 2000 in the banking sector became an exchange rate crisis on 19th February 2001 and thus had the characteristics of a twin crisis. The 2001 financial crisis resulted in the shrinking of the economy to an unexpected degree and brought about multi-dimensional new conditions, which changed the mid-term perspective of Turkey. Following the February 2001 crisis, Turkey entered the IMF-supported '*Transition to a Strong Economy Program (TSEP)*' on 15th May 2001. The TSEP projected legislation in 15 areas to restructure the financial sector, increase the transparency of the State, strengthen public financing, increase competition and activity in the economy, and strengthen social consultation.

2. BACKGROUND

2.1. Economic Crisis

The concept of crisis, which is widely used in the literature of various disciplines and in daily language, has its etymological roots in Greek "krisis" (κρίση). The concept of economical crisis first entered the social sciences literature in 1960's (Eryılmaz and Eryılmaz, 2011: 39). Economic crisis could be defined as a period of difficulty, dismay or an emergency in the life of a country, a society or a corporation, or in relations of several countries. In other words, an economic crisis is an unforeseen set of developments creating results which would affect states in the macro level and corporations in the micro level. According to another definition, economic crisis could be expressed as a situation that develops unexpectedly in the operation of the financial system or its sub-components and affects the operation of the system in a significantly negative manner (Kol and Karaçor, 2012: 381). Economic crises experienced in national economies are usually a product of negative fallout in the economical and political cycles and structures. But it could be stated that economic crises are a general outcome of macro economical instability (Eryılmaz and Eryılmaz, 2011: 39).

The term financial crisis is applied broadly to a variety of situations in which some financial institutions or assets suddenly lose a large part of their value. In the 19th and early 20th centuries, many financial crises were associated with banking panics, and many recessions coincided with these panics. Other situations that are often called financial crises include stock market crashes and the bursting of financial bubbles, currency crises, and sovereign defaults. Financial crises directly result in a loss of paper wealth; they do not directly result in changes in the real economy, however may indirectly do so, notably if a recession or depression follows. A financial crisis is a disturbance to financial markets that disrupts the market's capacity to allocate capital – financial intermediation and hence investments come to a halt (Singh, 2011: 5-6).

Literature review reveals three types of financial crisis: currency crisis, banking crisis and foreign debt crisis. However, in reality it is hardly possible to find a pure form of these three types of crises. Especially recently *twin crises*, where banking and currency crises are experienced together, are often observed. Examples of this type of crisis were Asian Crisis (1997), Russian Crisis (1997) and Turkey's November 2000 and February 2001 crises (Percic et al., 2013: 78). Historical development of the theoretical literature of the crises could be grouped in three models. First are Krugman's (1979) first generation financial crisis models. In these, sudden decline in international reserves, increasing fiscal and current deficit, expansion of domestic lending and overvaluation of the exchange rate are considered as early warn-

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