

Chapter 60

The Impact of Crises: Evidence from the Istanbul Stock Exchange

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ABSTRACT

Stock markets are the barometers of an economy. They are very sensitive to the news and can measure economic pressures to forecast economy. They react momentarily to crises that might be triggered by such events as a currency crisis, a debt crisis, a political crisis, or an accounting fraud crisis. According to technical analysts, drastic decreases in stock prices recover from their crash value rapidly since these decreases are realized with low traded values. The overreaction hypothesis affirms that extreme price movements are subsequently adjusted by opposite direction. This chapter analyses these assertions by measuring the impacts of the crises on the Istanbul Stock Exchange (ISE) over the last decade. The duration of the crises and weekly negative abnormal percentage returns in the period of 01.01.2000-31.12.2011 are analyzed using a regression model. In this period, from a total of 621 weeks, 277 weeks have negative returns, 93 of which are identified as negative abnormal returns. The results are statistically significant, and suggest that the duration of the crises is related to the magnitude of negative returns. On the other hand, research shows that the duration of the crisis and traded value are positively correlated. This study offers empirical observations that would be useful for technical analysts and stock investors.

INTRODUCTION

It used to take months for crises to be transmitted from the originating country to other countries. Globalization shortened this period which used to be measured by months to seconds. The first

example was the Black Monday on 19 October 1987, when the stock markets in Hong Kong crashed followed by the ones in Europe and the United States. The Black Monday decline was the largest one-day percentage decline with 22.61% in the Dow Jones. This crash is considered as the first systemic stock market shock (Carlson, 2007).

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Capital market crashes have become contagious. Evidence suggests that stock market crises are spread globally through asset holdings of international investors (Boyer, Kumagai, & Yuan, 2006). Market reactions tend to follow the behavior of other markets rather than macro data (Kenourgios, Samitas, & Paltalidis, 2011; Khan & Park, 2009). Decoupling markets for crisis are rare and when there is one, it is temporary. Empirical evidence shows that integration among markets is even stronger after the crisis (Yang, Hsiao, Li, & Wang, 2006). Markets are not only integrated in the post-crisis period but also during the pre-crisis period (Oh, Lau, Pua, & Mansor, 2010). Contagion is even more serious for emerging markets. Ülkü (2011) finds that developed markets are highly integrated, while developing markets are more strongly linked to Western markets than their neighbors.

Stock exchanges contribute to the development of capital markets and economies. However, they are fragile, and they react to economic, social and political news. Events may distort the general equilibrium all of a sudden. For instance, a credit rating agency has recently incited a new global turmoil after the AAA downgrade of the United States. The default probability of Greece and the Portugal borrowing rates that rise to record 19.4% create unrest in the countries that use euro. Therefore, the impact of the crisis can be studied by observing stock market behavior, just like using barometers (Hamilton, 1998) to predict market behavior.

A regression model is used to examine the negative reactions and their duration with XU100 index of Istanbul Stock Exchange over the period 1.1.2000-31.12.2011. The results suggest that the greater the negative reaction, the longer it takes for the index to recover the losses and to return to pre-crisis level. The results neither agree with technical analysts' view that the traded value decreases during the weeks of the crises, nor with the overreaction hypothesis that says that the extreme price movements are subsequently

followed by an opposite strong trend. The paper has practical implications. It provides empirical results that would be useful especially for stock analysts and investors to review their strategies for the abnormal negative return periods.

LITERATURE REVIEW

According to the traditional asset pricing theory, co-movement in prices reflects co-movement in fundamentals in an economy with rational investors. However, as the markets are getting more and more globalized, co-movement in prices has taken a worldwide character. The conditions of big markets such as the United States and Europe affect other markets directly. Nation-specific conditions have become of secondary importance. Hence, the traditional belief that a stock market crisis occurs due to long-term cumulative deterioration of the stock market fundamentals is challenging (Kim, Lee, Oh, & Kim, 2009). That is the point technical analysts, who study past market data such as price and volume (Kirkpatrick & Dahlquist, 2006), disagree with fundamental analysts who examine financial statements.

In the context of stock markets, technical analysis is the study of the behavior of stocks in the markets which ignores the fundamental analysis that is conducted by a firm's financial data such as earnings, dividends, investments and so on. Fundamental analysts assert that the operating activities of a firm are separate from the share price of that firm in the stock markets that are shaped by many external forces. The markets are influenced very easily by optimistic or pessimistic news. On the other hand, the firm would probably not be totally influenced by these temporary news, and would continue to carry its operations as before. Thus, the share price may go up or down easily but not necessarily make the real operations of the firm better or worse. On the technical analysts' side, they are not interested in the fundamental data of the firms. One of the reasons is that the reported

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