# Contagion without borders

## The lessons taught by the "Tequila Effect" or the "Brazilian Sneeze."

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Economists are developing a fascinating body of work around how international markets interact and behave during times of economic crisis. The extension of this work could prove seminal to how institutional investors model their portfolios and manage risk.

The phenomenon known as financial contagion is the cross-border financial shock that propagates between countries and cannot be explained by examining standard channels of interaction, such as trade links.

### The Contagions

Evidence of contagion and subsequent study is based on the following prominent examples:

- Tequila Effect (1994) – Mexican devaluation of the peso. Economists noticed the shock unduly influenced several Latin American markets, while the rest of the world came away relatively unscathed.
- Asian Flu (1997) – Speculative attacks in Indonesian, Korean, Malaysian and Thai markets. Almost all emerging markets—and even some developed markets—were affected. With the exception of Chile, these countries in Latin America had almost no direct trading relationships with the southeast Asian region.
- Russian Cold (1997) – Russia defaulted on its sovereign bonds and followed with a devaluation of the ruble, leading to a dramatic drop in the Russian stock market. The Russian Cold had a surprisingly large impact on international markets, given its small size relative to global market capitalization.
- Brazilian Sneeze (1999) – Speculative attack on the Brazilian real, which eventually caused the central bank to devalue the currency. The impact was smaller than the Russian or Asian crises, and did not have a consistent effect on other emerging markets.
- The NASDAQ Rash (2000) – Drop in the NASDAQ index and rise in its volatility. The losses sustained from this shock in the majority of the emerging markets were greater than in the U.S. market. As well, the impact was widespread in all the developed markets.

### Shift Contagion

There are two schools of thought on identifying when contagion is taking place: shift contagion and pure contagion. Shift contagion refers to changes in the normal strength of transmission mechanisms, including the fundamental channels of trade links, financial links, monetary policy and common shocks affecting those links. Fundamental channels are the oldest and best understood of all the linkages between countries. Bilateral trade relationships, for example, are most often believed responsible for transmitting financial, market and economic shocks across countries.

### Pure Contagion

Pure contagion refers to non-fundamental links. The transmission channels relate to investors' expectations and behaviour. The "herding" theory of investor behaviour, for example, focuses on the notion that individuals copy others in their group, acting on the perception that others have better information. The key points here are that imitation may be rewarded and individuals have an intrinsic preference for conformity.

Every country has contagious links both directly and indirectly to other nations. These links are present all the time, not just during the crisis. With the integration of global markets, this means that contagion can spread quickly and affect developed and emerging markets, regardless of whether or not there is an apparent disconnect. What's more, many of the linkages cannot be controlled through macroeconomic policy decisions.

Advancements in the study of financial contagion and the subsequent application of this learning to the institutional investment arena will result in:

- A better understanding of the stability relationship between international markets and how they move together;
- An improved forecasting ability for these markets;
- More robust Value-at-Risk (VaR) and asset allocation modelling; and,
- Improved buy/sell decisions during times of market distress. ∎