

# International Financial Contagion

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## Financial Contagion: Definition

- The propagation of shocks among markets in excess of the transmission explained by the fundamentals.

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## Incidents of Contagion: Cases for Examination

- Tequila Effect – 1995
  - Devaluation of the peso
- Asian Flu – 1997
  - “Crony capitalism”
- Russian Cold – 1998
  - Default on debt, devaluation of the ruble
- Brazilian Sneeze – 1999
  - Devaluation of the real
- NASDAQ Rash – 2000
  - The drop in the NASDAQ index and a rise in its volatility

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## Symptoms

- Changes in the normal strength of the transmission mechanism (*shift contagion*)
- Transmission of shocks through non-fundamental channels (*pure contagion*)
- Increased correlations between two countries’ market movements

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## Channels

- Fundamental
  - Trade
  - Macroeconomic Policy
  - Common shocks
- Financial Links
  - Common lender
  - Moral hazard

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## Channels

- Investor Behaviour
  - Multiple equilibriums
  - Herding
  - Pure Learning
- Liquidity Links
  - Margin Calls
  - Wealth Effects

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## How to Measure It

- No universal measure has been discovered
  - Statistical problems associated with modelling data from financial markets
  - Difficult to measure variables such as investor sentiment
- Result
  - a lack of robustness in the large number of current theories

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## Conclusions

- Every country carries the transmission mechanism
- All the channels have not been identified nor understood
  - Institutional investors' actions could be a channel
- The evidence of pure contagion is more compelling than shift contagion
- Much of the spill over effect caused by contagion is unavoidable

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## Implications for Plan Sponsors

- Improved understanding of the relationship between assets over time
- Improved understanding of risk in global markets
- Asset allocation
  - How markets correlate is being redefined
  - Re-balancing strategies
  - Asset selection

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## Application for Money Managers

- Mainstream analysis can be supplemented with emerging views
- Improved understanding of market DNA
- Improved forecasting/ modelling of financial markets
- Buy/sell discipline
- Better investment decisions

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## Implications for Performance Measurement Providers

- Mainstream Analysis
  - Correlation, standard deviation and relative returns
- Emerging Views
  - Heteroskedasticity, VaR, absolute returns
- Supporting Analysis
  - Attribution analysis
  - Security level analysis
  - Statistical measures
- Fitness tests

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## More Research Required

- How to detect the symptoms
  - Understanding and recognizing the channels
- How to measure, monitor and evaluate
  - Quantification
- Understanding the risks
  - Strength of the shocks
- How to treat
  - Reactive countermeasures
- How to prevent
  - Immunization/mitigation of effects

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