

[Home](#) > [Journal of Asset Management](#) > [Article](#)

# Indian stock market volatility in recent years: Transmission from global market, regional market and traditional domestic sectors

| Original Article | Published: 10 April 2009

| Volume 10, pages 63–71, (2009) [Cite this article](#)



## [Journal of Asset Management](#)

[Aims and scope](#) →[Submit manuscript](#) →[Amitava Sarkar](#) <sup>1</sup>, [Gagari Chakrabarti](#) & [Chitralalpa Sen](#) 160 Accesses [Explore all metrics](#) →

## Abstract

This study investigates volatility in Indian stock markets. Specifically, it looks for the possible volatility transmission channel for the Indian stock market from among Indian sectoral developments as well as developments in the global market. The SENSEX is used as the Indian market index and its response to overseas market indices such as Dow Jones, FTSE, BVSP, MerVal and JKSE is examined. The relationship between the SENSEX and domestic sectoral indices has also been examined. It has been found that the volatility in the developed market indices Granger causes SENSEX volatility, showing strong proof of a global contagion. SENSEX volatility is also related to some extent to the volatility of the Jakarta Stock index, hinting towards some kind of regional contagion. Moreover,

as the impulse-response function shows, a shock in Dow Jones, the Jakarta stock index and BVSP has a profound effect on the SENSEX (Dow Jones having the most important one). As for sources from its domestic sectors, capital goods and consumer durables are the most prominent contributors to the volatility of the SENSEX.

 This is a preview of subscription content, [log in via an institution](#)  to check access.

### Access this article

[Log in via an institution](#) →

[Buy article PDF 39,95 €](#)

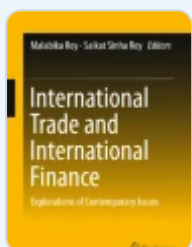
Price includes VAT (Poland)

Instant access to the full article PDF.

Rent this article via [DeepDyve](#) 

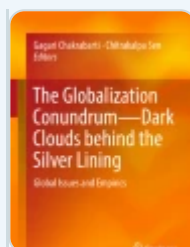
[Institutional subscriptions](#) →

### Similar content being viewed by others



**An Empirical Investigation of Volatility Clustering, Volatility Spillover and Persistence from USA to Two Emerging...**

Chapter | © 2016



**A Study on the Spillover of Stock Market Volatility between India and US in the Context of the Global Financ...**

Chapter | © 2019



**A Study of Volatility of Five Major Stock Indices of Indian Stock Market**

Chapter | © 2019

# References

---

Agmon, T. (1972) The relations among equity markets: A study of share price co-movements in the United States, United Kingdom, Germany and Japan. *The Journal of Finance* 27 (4): 839-855.

[Article](#) [Google Scholar](#)

Arshanapalli, B. and Doukas, J. (1993) International stock market linkages: Evidence from the pre- and post-October 1987 period. *Journal of Banking and Finance* 17: 193-208.

[Article](#) [Google Scholar](#)

Baig, T. and Goldfajn, I. (1999) Financial market contagion in the Asian crisis. *IMF Staff Papers, International Monetary Fund* 46 (2): 3.

[Google Scholar](#)

Cheung, Y. -W. and Ng, L. K. (1992) Stock price dynamics and firm size: An empirical investigation. *The Journal of Finance* 47: 1985-1997.

[Article](#) [Google Scholar](#)

Eun, C. and Shim, S. (1989) International transmission of stock market movements. *Journal of Financial and Quantitative Analysis* 24: 241-256.

[Article](#) [Google Scholar](#)

Glezakos, M., Merika, A. and Kaligosfiris, H. (2007) Interdependence of major world stock exchanges: How is the Athens stock exchange affected? *International Research Journal of Finance and Economics*, ISSN 1450-2887 Issue 7.

Hilliard, J. (1979) The relationship between equity indices on world exchanges. *Journal of Finance* 34 (1): 103-114.

Jeon, B. and Von Furstenberg, G. (1990) Growing international co-movement in stock price indexes. *Quarterly Review of Economics and Finance* 30 (30): 17-30.

[Google Scholar](#)

Koch, P. D. and Koch, T. W. (1991) Evolution in dynamic linkages across daily national stock indexes. *Journal of International Money and Finance* 10: 231-251.

[Article](#) [Google Scholar](#)

Koutmos, G. (1996) Modeling the dynamic interdependence of major European stock markets. *Journal of Business Finance and Accounting* 23 (7): 975-988.

[Article](#) [Google Scholar](#)

Lee, S. B. and Kim, K. J. (1994) Does the October 1987 crash strengthen the co-movement in stock price indexes. *Quarterly Review of Economics and Business* 3 (1-2): 89-102.

[Google Scholar](#)

Masih, A. M. M. and Masih, R. (1997a) A comparative analysis of the propagation of stock market fluctuations in alternative models of dynamic causal linkages. *Applied Financial Economics* 7 (1): 59-74.

[Article](#) [Google Scholar](#)

Masih, A. M. M. and Masih, R. (1997b) Dynamic linkages and the propagation mechanism driving major international stock markets: An analysis of the pre- and post-crash eras. *Quarterly Review of Economics and Finance* 37 (4): 859-885.

[Article](#) [Google Scholar](#)

Masih, R. and Masih, A. M. M. (2001) Long and short-term dynamic causal transmission amongst international stock markets. *Journal of International Money and Finance* 20: 563-587.

[Article](#) [Google Scholar](#)

Rao, B. S. R. and Naik, U. (1990) Inter-relatedness of stock market spectral investigation of USA, Japan and Indian markets note. *Artha Vignana* 32 (3&4): 309-321.

[Article](#) [Google Scholar](#)

Ripley, D. (1973) Systematic elements in the linkage of national stock market indices. *Review of Economic and Statistics* 55: 356-361.

[Article](#) [Google Scholar](#)

Sarkar, A., Mallick, S. K., Roy, K. K., Chakraborty, A. and Duttachaudhuri, T. (2001) Financial fragility, asset bubbles, capital structure and real rate of growth – A study of the Indian economy during 1970-00. Planning Commission, Government of India.

Sarkar, A., Mallick, S. K., Roy, K. K., Chakraborty, A. and Duttachaudhuri, T. (2003) Financial fragility in emerging markets – A time-series analysis of Indian stock markets in the decade of the nineties. Paper presented at the ASARC (Australia South Asia Research Centre), Australian National University, November 2001; published in a ASARC Volume entitled 'Indian Economic Reforms' (Palgrave-Macmillan, London).

Sarkar, A., Mallick, S. K., Roy, K. K., Chakraborty, A. and Duttachaudhuri, T. (2007) A mathematical statistical pricing model for emerging stock markets. *Journal of Asset Management* 7 (5): 335-346.

[Article](#) [Google Scholar](#)

Sharma, J. L. and Kennedy, R. E. (1977) Comparative analysis of stock price behavior on the Bombay, London & New York stock exchanges. *Journal of Finance and Quantitative Analysis* 12 (3): 391-413.

[Article](#) [Google Scholar](#)

Suleimann, R. (2003a) Should stock market indexes time varying correlations be taken into account? A conditional variance multivariate approach. *Econometrics* 0307004, EconWPA, revised 18 July 2003.

Suleimann, R. (2003b) The contagion effect between the volatilities of the NASDAQ-100 and the IT.CA: A Univariate and A Bivariate switching approach. *Econometrics* 0307002, EconWPA, revised 18 July 2003.

Wong, W. -K., Agarwal, A. and Du, J. (2005) Financial Integration for India Stock Market, a Fractional Cointegration Approach. Departmental Working Papers, wp0501, National University of Singapore, Department of Economics.

## Author information

---

### Authors and Affiliations

**School of Management, West Bengal University of Technology, BF 142, Salt Lake City, 700064, Calcutta, India**

Amitava Sarkar

### Corresponding author

Correspondence to [Amitava Sarkar](#).

## Additional information

---

<sup>3</sup>has done his masters from University of Calcutta and is currently pursuing his PhD (in Finance) from the School of Management, West Bengal University of Technology. His thrust area of work is Indian stock and foreign exchange market. Sen is working as a project fellow for a UGC (University Grants Commission, Government of India) major project entitled 'Functional Instability or Paradigm Shift? A Study of Indian Stock Market in Recent Years' under the School of Management, WBUT.

## Rights and permissions

---

[Reprints and permissions](#)

## About this article

---

### Cite this article

Sarkar, A., Chakrabarti, G. & Sen, C. Indian stock market volatility in recent years: Transmission from global market, regional market and traditional domestic sectors. *J Asset Manag* **10**, 63–71 (2009).

<https://doi.org/10.1057/jam.2008.29>

Received

30 April 2008

Issue Date

01 April 2009

DOI

<https://doi.org/10.1057/jam.2008.29>

Revised

30 April 2008

Published

10 April 2009

### Keywords

[stock prices](#)

[volatility](#)

[contagion](#)

## Search

Search by keyword or author



## Navigation

Find a journal

---

Publish with us

---

Track your research

---

