Oxford Bulletin of Economics and Statistics / Volume 71, Issue 6 / p. 739-759

Global Financial Transmission of Monetary Policy Shocks*

Michael Ehrmann, Marcel Fratzscher

First published: 16 October 2009
https://doi.org/10.1111/j.1468-0084.2009.00561.x

* Research support and comments by Laurent Pauwels are gratefully acknowledged. The authors thank two anonymous referees, as well as the participants at the CEPR First Annual Workshop on the Macroeconomics of Global Interdependence and the CESifo MMI Area Conference, in particular the discussants Stefan Gerlach and Mathias Hoffmann, and seminar participants at Free University of Berlin for comments. The views expressed in this paper are those of the authors and do not necessarily reflect those of the European Central Bank.

Abstract

The paper analyses the transmission of US monetary policy shocks to global equity markets and the macroeconomic determinants of the underlying transmission process. We show that there is a substantial cross-country heterogeneity in reactions across 50 equity markets worldwide, with returns falling on average around 2.7% in response to a 100 basis point tightening of US monetary policy, but ranging from a zero response in some to a reaction of 5% or more in other markets. As to the determinants of the strength of transmission to individual countries, we test the relevance of their macroeconomic policies and the role of real and financial integration. We find that in particular the degree of global integration of countries – and not a country's bilateral integration with the United States – is a key determinant for the transmission process.

References

Ahmed, S., Ickes, B., Wang, P. and Byung, S. (1993). 'International business cycles', *American Economic Review*, Vol. **83**, pp. 335–359.

Andersen, T., Bollerslev, T., Diebold, F. and Vega, C. (2007). 'Real-time price discovery in stock, bond and foreign

Baxter, M. and Stockman, A. (1989). 'Business cycles and the exchange rate regime: some international evidence', *Journal of Monetary Economics*, Vol. **23**, pp. 377–400.

Bekaert, G. and Harvey, C. R. (1995). 'Time-varying world market integration', *Journal of Finance*, Vol. **50**, pp. 403–444.

Bernanke, B. and Kuttner, K. (2005). 'What explains the stock market's reaction to federal reserve policy', *Journal of Finance*, Vol. **60**, pp. 1221–1257.

Bomfim, A. (2001). 'Pre-announcement effects, news effects, and volatility: monetary policy and the stock market', *Journal of Banking and Finance*, Vol. **27**, pp. 133–151.

Bussiere, M. and Fratzscher, M. (2008). 'Financial openness and growth: short-run gain, long-run pain?' *Review of International Economics*, Vol. **16**, pp. 69–95.

Camacho, M., Perez-Quiros, G. and Saiz, L. (2006). 'Are European business cycles close enough to be just one?' *Journal of Economic Dynamics and Control*, Vol. **30**, pp. 1687–1706.

Campbell, J. Y., Lettau, M., Malkiel, B. G. and Xu, Y. (2001). 'Have individual stocks become more volatile? An empirical exploration of idiosyncratic risk', *Journal of Finance*, Vol. **56**, pp. 1–43.

Canova, F. (2005). 'The transmission of US shocks to Latin America', *Journal of Applied Econometrics*, Vol. **20**, pp. 229–251.

Canova, F. and Marrinan, J. (1998). 'Source and propagation of output cycles: common shocks or transmission', *Journal of International Economics*, Vol. **46**, pp. 133–166.

pp. 65–148.

Craine, R. and Martin, V. (2008). 'International Monetary Policy surprise spillovers', *Journal of International Economics*, Vol. **75**, pp. 180–196.

Ehrmann, M. and Fratzscher, M. (2004). 'Taking stock: monetary policy transmission to equity markets', *Journal of Money, Credit and Banking*, Vol. **36**, pp. 719–737.

Ehrmann, M. and Fratzscher, M. (2006). ' Global financial transmission of monetary policy shocks', ECB Working Paper No. 616, European Central Bank.

Faust, J., Rogers, J., Wang, S.-Y. and Wright, J. (2007). 'The high-frequency response of exchange rates and interest rates to macroeconomic announcements', *Journal of Monetary Economics*, Vol. **54**, pp. 1051–1068.

Forbes, K. and Chinn, M. (2004). 'A decomposition of global linkages in financial markets over time', *Review of Economics and Statistics*, Vol. **86**, pp. 705–722.

Forbes, K. and Rigobon, R. (2002). 'No contagion, only interdependence: measuring stock market co-movements', *Journal of Finance*, Vol. **57**, pp. 2223–2261.

Forni, M., Hallin, M., Lippi, M. and Reichlin, L. (2000). 'The generalized dynamic factor model: identification and estimation', *Review of Economics and Statistics*, Vol. **82**, pp. 540–554.

Fratzscher, M. (2008). 'US shocks and global exchange rate configurations', *Economic Policy*, Vol. **23**, pp. 363–409.

Gürkaynak, R. (2005). ‘ Using federal funds futures contracts for monetary policy analysis’, Finance and Economics Discussion Series 2005-29, Federal Reserve Board of Governors.

Gürkaynak, R., Sack, B. and Swanson, E. (2005). ‘Do actions speak louder than words? The response of asset prices to monetary policy actions and statements’, *International Journal of Central Banking*, Vol. **1**, pp. 55–94.

Kaminsky, G. and Schmukler, S. (2008). ‘Short-run pain, long-run gain: financial liberalization and stock market cycles’, *Review of Finance*, Vol. **12**, pp. 253–292.

Kim, S. (2001). ‘International transmission of U.S. monetary policy shocks: evidence from VAR's’, *Journal of Monetary Economics*, Vol. **48**, pp. 339–372.

King, M. A. and Wadhwani, S. (1990). ‘Transmission of volatility between stock markets’, *Review of Financial Studies*, Vol. **3**, pp. 5–33.

Kuttner, K. (2001). ‘Monetary policy surprises and interest rates: evidence from the Fed funds futures market’, *Journal of Monetary Economics*, Vol. **47**, pp. 523–544.

Lin, W., Engle, R. F. and Ito, T. (1994). ‘Do bulls and bears move across borders? International transmission of stock returns and volatility’, *Review of Financial Studies*, Vol. **7**, pp. 507–538.

Miniane, J. and Rogers, J. H. (2007). ‘Capital controls and the international transmission of U.S. money shocks’, *Journal of Money, Credit, and Banking*, Vol. **39**, pp. 1003–1035.

Patelis, A. D. (1997). ‘Stock return predictability: the role of monetary policy’, *Journal of Finance*, Vol. **52**, pp.

Rigobon, R. and Sack, B. (2004). 'The impact of monetary policy on asset prices', *Journal of Monetary Economics*, Vol. **51**, pp. 1553–1575.

Shambaugh, J. (2004). 'The effect of fixed exchange rates on monetary policy', *Quarterly Journal of Economics*, Vol. **119**, pp. 301–352.

Thorbecke, W. (1997). 'On stock market returns and monetary policy', *Journal of Finance*, Vol. **52**, pp. 635–654.

Wongswan, J. (2006). 'Transmission of information across international equity markets', *Review of Financial Studies*, Vol. **19**, pp. 1157–1189.

Citing Literature