

THE DECLINE IN THE VOLATILITY OF THE BUSINESS CYCLES IN THE UK

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We analyse the sources of the decline of business cycle volatility in the UK using a dynamic factor model that allows for the presence of a structural break in the conditional mean and variance of output, sales, income and unemployment. We augment the factor model with an economic component to investigate the role of structural changes and improved monetary policy in the volatility decline of the series. Our results suggest that the dominant cause for the observed volatility decline is the reduced variability of shocks.

1 INTRODUCTION

Recent empirical evidence suggests that business cycle fluctuations in the USA have dampened considerably over the last two decades, the so-called volatility moderation. Kim and Nelson (1999a) and McConnell and Perez-Quiros (2000) report a substantial reduction in the volatility of US output growth in the early 1980s. Chauvet and Potter (2001) and Ahmed *et al.* (2001) document evidence that this reduction in volatility is shared by other important macroeconomic variables such as employment, consumption and income.

Corresponding volatility reductions have been observed in other countries. Mills and Wang (2000), Blanchard and Simon (2001) and Smith and Summers (2002) examine the volatility of output growth in the G7 countries and find that all seven economies have experienced a decline in output growth volatility, although the magnitudes and dates of the breaks differ across countries. Stock and Watson (2002) examine industrial production of the G7 countries and also document the presence of breaks in volatility. Finally, van Dijk *et al.* (2002) provide evidence for a decline in volatility across a wide range of macroeconomic time series from each of the G7 countries.

* We thank the participants of the Money, Macroeconomics and Finance (MMF) Conference 2007, Karim Abadir, Peter N. Smith and Rob Hudson for their valuable suggestions. We are also grateful to S. Radchenko for making his estimation code available to us.