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Regional financial integration in the GCC☆

Raphael Espinoza, Ananthakrishnan Prasad, Oral Williams *

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ABSTRACT

We investigate the extent of regional financial integration in the member countries of the Gulf Cooperation Council. Interest rate data show that convergence exists and that interest rate differentials are relatively short-lived—especially relative to other unified currency area and comparable to those of the Euro Area post 1999. Equity data using cross-listed stocks confirm that stock markets are fairly integrated compared to other emerging market regions, although price equalization is hampered by market illiquidity. The limited volume data available suggests that intra-GCC capital flows are sizeable.

1. Introduction

We assess the extent of regional financial integration in the countries of the Cooperation Council of the Arab States of the Gulf (GCC)[1] by looking at the structure of the financial system and using interest rate and equity price data. While various papers (e.g. Adam et al., 2002; Baele et al., 2004) have investigated financial integration in the Euro Area, few studies to the authors' knowledge have done so for common currency areas among emerging markets. Our assessment relies on a description of the market structure and the volume of capital flows, and on an analysis of price data. Both volume and price data are needed because, on the one hand, capital flows may be high on account

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Raphael Espinoza is an economist in the Strategy, Policy and Review Department at the IMF. Ananthakrishnan Prasad is the mission chief for Qatar in the Middle East and Central Asia Department at the IMF. Oral Williams is a Deputy Division Chief in the African Department at the IMF.

* Corresponding author at: IMF 700 19th St. N.W. D.C. 20431, USA. Tel.: +1 202 623 8632; fax: +1 202 589 8632.
E-mail address: owilliams2@imf.org (O. Williams)

[1] Member countries of the GCC are: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE).

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of diverging fundamentals that would generate higher differentials in the rates of return, rather than because of financial integration; and on the other hand, price convergence may reflect the importance of global shocks rather than financial integration and therefore need to be complemented by the available information on the structure of markets and volume data.

The study is motivated by the fact that the GCC countries have pursued economic and financial integration since 1981, although there remain several restrictions in the financial account.[2] The GCC countries exhibit convergence on many macroeconomic indicators and took a major step towards monetary union through the establishment of the Monetary Council in 2009, the precursor to the common central bank. Common shocks are frequent in the GCC, since the economic structure of these countries are very similar (preponderance of the hydrocarbon sector, reliance on imported labor, peg to the dollar or to a basket including the dollar). The GCC countries are important systemically; they account for 40% and 23% of global proven oil and gas reserves respectively; their sovereign wealth funds (SWFs) are estimated to be upwards of US$ 1 trillion in size while the market capitalization of their equity markets (US$ 1 trillion) was about half that of Hong Kong at their peak. Saudi Arabia, which has the largest economy is a member of the G-20. The financial systems in the GCC remain however dominated by commercial banks, which limits the importance of cross-border equity flows.

Financial integration is thought to contribute to economic growth by removing barriers to exchange and allocating capital more efficiently (Baele et al., 2004), although the empirical literature has been inconclusive on this topic (see Edison et al., 2002). For countries with a single currency, the effectiveness of monetary policy is influenced by the degree of financial integration, given the role the financial system plays in allocating capital and in transmitting monetary policy decisions to the various interest rates and asset prices. Against this background we assess money market integration with widely-used measures of interest rate convergence. The first measure, beta-convergence, evaluates whether interest rates in countries with relatively high spreads[3] have a tendency to decrease rapidly, relative to those in countries with low spreads (Baele et al., 2004). We find strong evidence of financial integration using beta-convergence and we estimate a half-life of two to five months, significantly shorter than what could be found for the Eastern Caribbean Currency Union (ECCU) (another emerging market country group pegged to the U.S. dollar) and comparable to those of the Euro Area post 1999. The second measure, sigma-convergence, which draws from the growth literature, tests whether the cross-country standard deviation of interest rates had a declining trend in the years 1993–2009 (Barro and Sala-i-Martin, 1991; Mankiw et al., 1995). We find the trend to be negative suggesting that the cross-sectional variation among interest rates decline notwithstanding a widening in this variance with the emergence of the global financial crisis.

We further explored evidence of financial integration in equity markets by analyzing the prices of cross-listed stocks. An important limitation of studies on stock market co-movements is that, by focusing on aggregate stock market data (i.e. indexes), econometricians compare the prices of two assets (or baskets of assets) that have different payoffs. There is no reason to expect that two different assets would have similar prices, unless common shocks drive the two price processes. Using Structural VARs, Araujo (2009) shows for instance that portfolio shocks (identified as shocks that are not related with macroeconomic variables in the long-run) are the main drivers of positive correlation across stock markets. In the GCC, Fayyad and Daly (2011) show using a VAR analysis that foreign variables (mostly the Kuwait and Oman stock market returns) contribute significantly to the variance of the U.A.E., Bahrain and Qatar stock markets (surprisingly, though, they find that U.S. stock market and oil price shocks do not affect much these GCC markets).

Following Levy-Yeyati et al. (2006), we avoid this pitfall by using the few individual cross-listed stocks for which data were available, in order to assess the relative magnitude of transaction costs in equity markets. Compared with other financial markets, we find that the arbitrage opportunities remain large and fairly persistent, which suggests that the barriers to movement of capital in the Gulf are still important, although less so than in other emerging markets. The main source of sluggishness in the markets seems to be that days during which the two cross-listed stocks are simultaneously traded are infrequent. This aside,

[2] These include restrictions on residents opening accounts abroad and restrictions on investments in local equity and real estate markets.

[3] The spreads are interest rate differentials with respect to a country of reference, normally the largest economy for the same class of bond. We used Saudi Arabia as the country of reference for the GCC.