Economic policy uncertainty in advanced countries and portfolio capital flows to emerging markets

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Uncertainty in advanced countries' economic policies spills over to emerging markets via portfolio bond and equity flows. A negative uncertainty shock in an advanced country has two opposing effects on portfolio flows: i) it can trigger a portfolio rebalancing in the form of flows towards other economies; and ii) it can prompt a flight to quality, potentially leading to a reduction in flows to EMEs. Flights to quality tend to be more marked during periods of stress in global financial markets, so that an uncertainty shock that might have had a positive impact during a "tranquil" period can instead have a negligible or even negative impact. For example, an increase in policy uncertainty in the United States has no effect on equity flows to EMEs during calm periods, but a negative impact during periods of heightened global risk.

Global transmission of economic policy uncertainty shocks

Does economic policy uncertainty in the United States and Europe affect capital flows to emerging market economies (EMEs)? And if so, does the scale of the impact depend on economic or financial conditions.

As a general rule, any increase in policy uncertainty that makes the economic environment less predictable will hamper growth prospects and weigh on domestic output and investment (Baker et al., 2013). This in turn reduces the attractiveness of investing in the affected countries – in this case the United States and Europe – and can prompt investors to shift a large share of their investments abroad, including to EMEs. Conversely, heightened uncertainty can lead investors to reduce their exposure to assets perceived as being riskier, such as emerging market bonds and equities, leading to a flight-to-quality effect where investors rebalance portfolios in favour of lower-risk assets, usually US Treasuries.

According to the IMF (2013), an increase in economic policy uncertainty in the United States and Europe has a negative impact on GDP in other regions and can trigger major corrections in financial markets together with significant capital outflows from EMEs.

In the United States, for example, the implementation of non-standard monetary policy measures, followed by the US Fed's announcement as of May 2013 that it would start tapering quantitative easing, triggered a flight to quality. Currencies in emerging markets also became more volatile, reflecting an underlying increase in capital movements. [1]

Similarly, the debt ceiling crisis of August 2011 – when the US Congress and White House clashed over raising the government borrowing limit – also prompted a spike in economic policy uncertainty. Nonetheless, demand for US Treasuries increased, ostensibly at the expense of other securities, notably those issued by EMEs. Investor behaviour can thus differ markedly during periods of heightened financial stress (see Bacchetta and van Wincoop, 2013).

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1 See article by the Council on Foreign Relations (CFR) on the currency crises in emerging markets following the Fed's announcement (http://www.cfr.org/emerging-markets/currency-crises-emerging-markets/p31843).

Uncertainty, financial tensions and portfolio rebalancing

By charting the correlation between economic policy uncertainty and capital flows to EMEs,[2] we assess whether the relationship between the two variables varies in response to global financial stress.

We use the economic policy uncertainty indicators constructed by Baker, Bloom and Davis [3] (2013), which are based on differences in forecasts for variables such as inflation or the budget deficit, and on the frequency of articles containing certain keywords in the leading newspapers. To gauge financial risk, we use the VIX index calculated by the Chicago Board Options Exchange (CBOE) which measures the implied volatility of the S&P500. Data on capital flows are from the Global EPFR database of funds' equity and bond investments. [4]

Charts 1a and 1b show the correlation between economic policy uncertainty (United States in green, Europe in blue) and capital flows to emerging countries when the VIX is at a low, medium or high level. [5] We distinguish between bond and equity flows. In general, the higher the VIX, the more negative the median correlation. However, in the case of bond flows, there is a slight nuance for US policy uncertainty, as correlation only becomes marginally more negative (–0.3) when the VIX is high.

This suggests that the relationship between economic policy uncertainty in advanced countries and capital flows to EMEs evolves depending on our measure of financial stress: during periods of heightened tension, the portfolio rebalancing effect is outweighed by a flight-to-quality effect.

The flight to quality dominates during periods of financial market stress

In order to confirm the existence of possible nonlinearities in the relationship between emerging market capital inflows and their determinants, we use the methodology developed by González et al. (2005). [6] This involves first

2 The emerging markets included in this study are: South Africa, Argentina, Brazil, Chile, Colombia, South Korea, Hong Kong, India, Indonesia, Malaysia, Mexico, Pakistan, Peru, the Philippines, Poland, the Czech Republic, Russia, Singapore, Thailand and Turkey. The period examined extends from January 2004 to December 2011.
3 See http://www.policyuncertainty.com
4 The flows examined are mainly cross-border as most of the funds covered by the EPFR are domiciled in the United States or Europe. The database has the advantage of being available at a monthly (or even weekly) frequency but only covers a portion of the portfolio flows included in the balance of payments.
5 The VIX index is deemed to be low if it is below the 20th percentile (around 13), medium if it is between the 20th and 80th percentiles and high if it is above the 80th percentile (around 26).
6 The determinants used in addition to US and EU economic policy uncertainty are taken from the existing literature on the factors behind flows to emerging market economies. These determinants are both domestic and global. For further details, see Gauvin et al. (2014).

C1 Rolling correlation between policy uncertainty and portfolio flows to EMEs

(January 2004-December 2011)

a) Bond inflows

b) Equity inflows

■ US policy uncertainty (median correlation)   ■ EU policy uncertainty (median correlation)
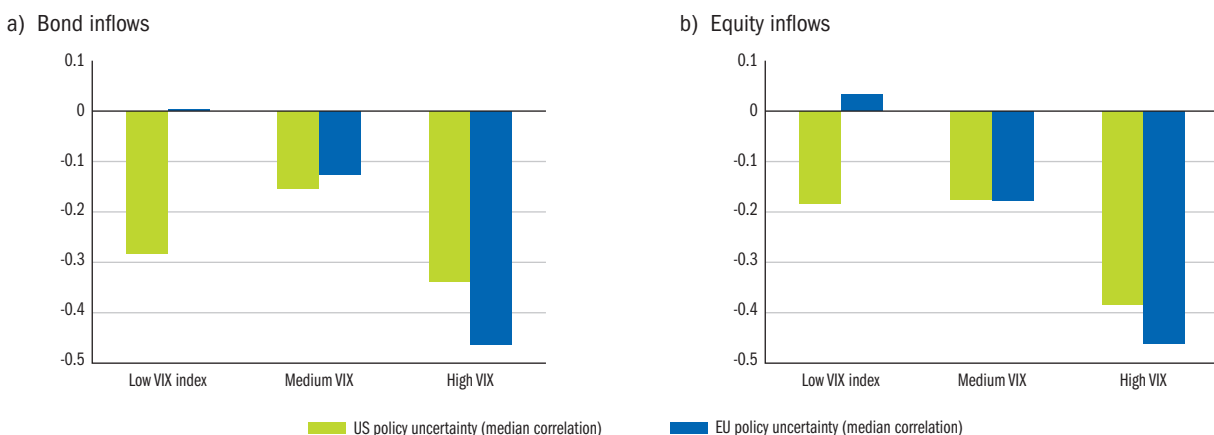
Sources: EPFR, CBOE, Baker et al. (2013), authors' calculations.

determining dates when there was a change in the regime of the estimated relationship (break dates), and then examining possible factors underlying the change.

Our results highlight two main dates corresponding to a major change in the relationship. The first (April/May 2007) coincides with the first major increase in the cost of reinsuring mortgages with lower credit ratings (BBB- and BBB). The second (November/December 2010) corresponds to the US Fed's announcement that it was significantly extending its quantitative easing programme.

In the next step, we try to find the variable associated with these break dates, and are then able to identify the threshold at which the transition variable triggers the change of regime. Of the different variables tested, we find that the indicator measuring perceptions of global financial risk (i.e. the VIX index) best explains the change in the spillover impact between advanced country policy uncertainty and inflows into EMEs (see Table 1). We also obtain the following results:

1. In the case of bond inflows into EMEs:

   a. Economic policy uncertainty in the United States always has a negative impact, regardless of the level of the VIX.

   b. In contrast, EU economic policy uncertainty only has a negative impact during periods of heightened financial market tension. [8]

2. Regarding equity inflows into EMEs, the results are more complex:

   a. In the case of a US uncertainty shock, a negative flight to quality effect dominates during periods of high financial market tension. [8]

   b. A rise in EU policy uncertainty has a positive impact during tranquil periods (via a portfolio rebalancing corresponding to the first of the two expected effects described previously), but no significant impact when the VIX increases. [9] This suggests that, unlike a US uncertainty shock, higher EU economic policy uncertainty does not trigger a flight to quality. This stronger global propagation of US domestic shocks [10] could be attributable to the much higher stock market capitalisation of US companies (USD 26 trillion, compared in 2014 compared with USD 9.8 trillion for the EU and USD 6.4 trillion for the euro area. [11]

T1 Change in the relation between advanced country policy uncertainty and portfolio flows into EMEs

Summary of results

	Bond flows		Equity flows	
	low VIX	high VIX	low VIX	high VIX
US policy uncertainty	–	–	0	–
EU policy uncertainty	0	–	+	0

Note: We find that the VIX makes it possible to distinguish between two global risk regimes – high and low. "-" and "+" indicate a negative and positive impact respectively. The VIX threshold is close to 18 pour for both types of flow (in line with other studies).

7   *See Brunnermeier (2009) and Fratzscher (2012).*
8   *Non-significant impact during tranquil periods.*
9   *In the underlying Working Paper, we show that the effect of EU policy uncertainty on equity flows may depend on the level of sovereign risk (measured by the CDS premium) in the recipient country. For further details, see Gauvin et al. (2014).*
10 *By way of illustration, it is possible to deduce from Diebold and Yilmaz (2008) that the spillover from a shock to US equity market returns to equity markets in other countries is greater than the combined spillovers from the United Kingdom, France and Germany (Europe's main financial markets).*
11 *Source: World Bank,* Word development indicators *(WDI).*

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