New evidence shows the characteristics of financial cycles

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Financial cycles are on average *twice* as long as business cycles. At the same time, there is substantial heterogeneity of national cycles across G-7 countries, ranging from very similar financial and business cycles in Germany to markedly different cycles in the United States and Italy.

We conclude that policies targeting financial cycles (such as countercyclical macroprudential policies) can act as a powerful complement to traditional stabilisation policies targeting the business cycle (such as macroeconomic policies, including monetary policy) – particularly in periods where there may be considerable disconnect between financial markets and the real economy.

Attenuating financial cycles is an essential goal of macroprudential policy, the so-called ‘time series dimension’ of systemic risk. Despite the associated elevated prominence of curbing financial cycles as a policy objective, the research literature on empirical measurement of financial cycles remains in its infancy – particularly when compared with business cycle counterparts. This study sets out to fill this knowledge gap on financial cycle measurement and understanding.

Our research proposes a novel spectral method to capture financial cycles at the country level, applied to over 40 years of quarterly data for each of the G-7 countries (1970 Q1 to 2013 Q4).

In a first step, frequencies common to a set of indicators summarising financial and business cycles, respectively, are separately identified using spectral methods – providing insights on financial and business cycle length and volatility.

In a second step, composite measures of the financial and business cycle are constructed using time varying aggregation for each G-7 country – which can be compared to better understand *within* and *across* country cycle interaction.

Results are obtained using both a *narrow* measure of the financial cycle (comprised of credit and house prices) and a *broad* measure (completing portfolio choice amongst all asset classes, bringing in equity and bond prices).

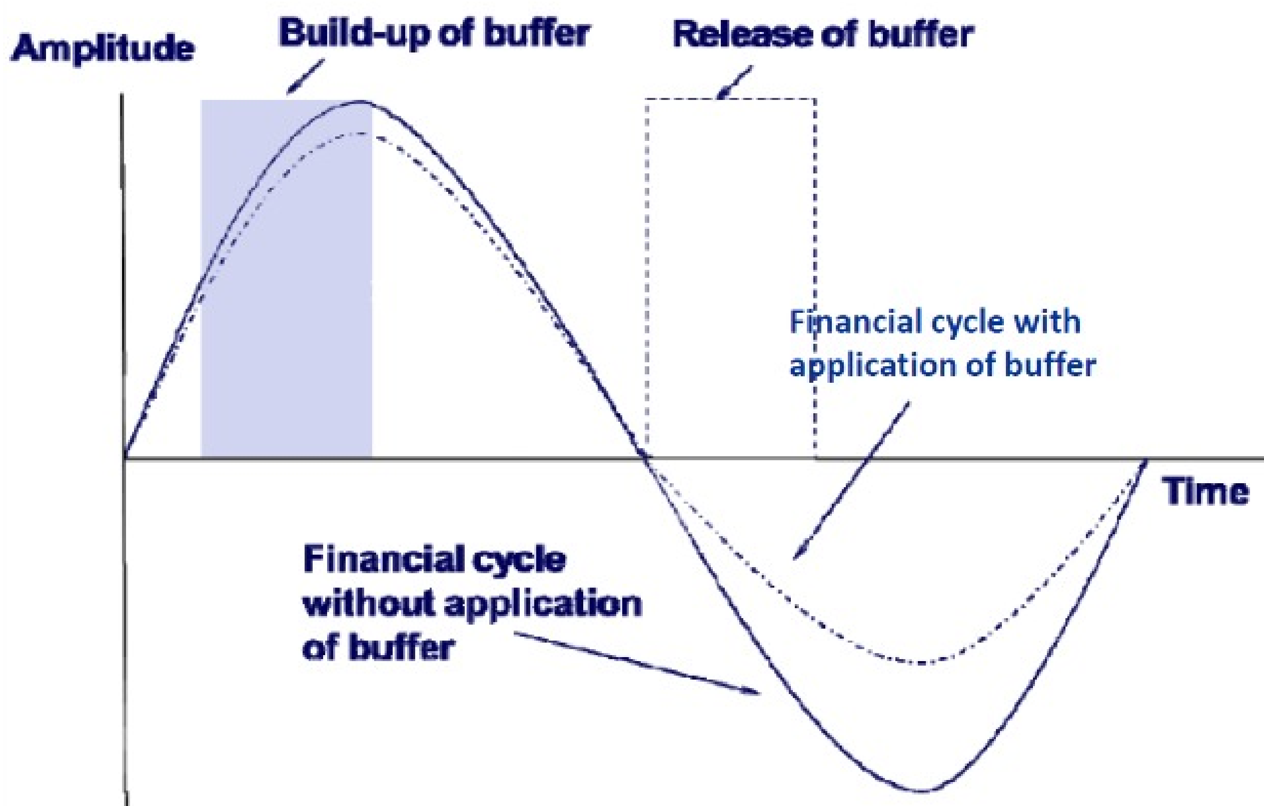
Four key results emerge from our research:

- *First*, credit and asset price indicators for G-7 countries exhibit considerable cyclical cohesion. This cohesion is most evident over the long term for most countries; that is, 8 to 20 years. A narrow measure of the financial cycle tends to be at the long end of that range, approaching 20 years, in all G-7 countries with the notable exception of Germany. Bringing in financial asset prices, broad measures of the financial cycle exhibit fluctuations also at shorter frequencies of less than 8 years – commonly associated with business cycle fluctuations.
- *Second*, the derived financial cycle measures are strong predictors of financial crises – whereby leverage and asset prices smoothed using frequency method outperform standard predictors of past financial crises.
- *Third,* financial cycles tend to differ from business cycles – being on average *twice* as long as business cycles. At the same time, there is substantial heterogeneity of national cycles across G-7 countries, ranging from very similar financial and business cycles in Germany to markedly different cycles in the United States and Italy.
- *Fourth*, financial cycles exhibit some similarity across G-7 countries, with the strongest contributor to co-movement of *broad* cycles relating to equity and, to a lesser extent, bond prices – explaining close to *half* of cross-country cyclical commonalities. Once these international financial asset prices are excluded, the co-movement of narrow financial cycles across G-7 countries is less pronounced, not surprising given a stronger domestic component of credit and house prices developments.

Taken together, these findings have at least two policy implications. First, they suggest a case for a differentiated application of macro policies. Policies targeting financial cycles (such as countercyclical macroprudential policies) can act as a powerful complement to traditional stabilisation policies targeting the business cycle (such as macroeconomic policies, including monetary policy) – particularly in periods where there may be real and financial disconnect.

Second, the results present a strong case for a differentiated national application of macroprudential policies, amid a far from complete convergence of country financial cycles.

Figure 1. Stylised representation of financial cycle



Source: Flagship report on macro-prudential policy in the banking sector, ESRB March 2014

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Notes:

- *This post is based on the authors' paper Characterising the Financial Cycle: A Multivariate and Time-Varying Approach, European Central Bank Working Paper No. 1846.*
- *This research is being presented at the annual congress of the European Economic Association in Geneva, 22-26 August 2016.*
- *The post gives the views of its author, not the position of LSE Business Review or the London School of Economics.*
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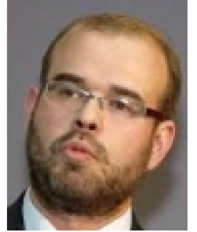

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