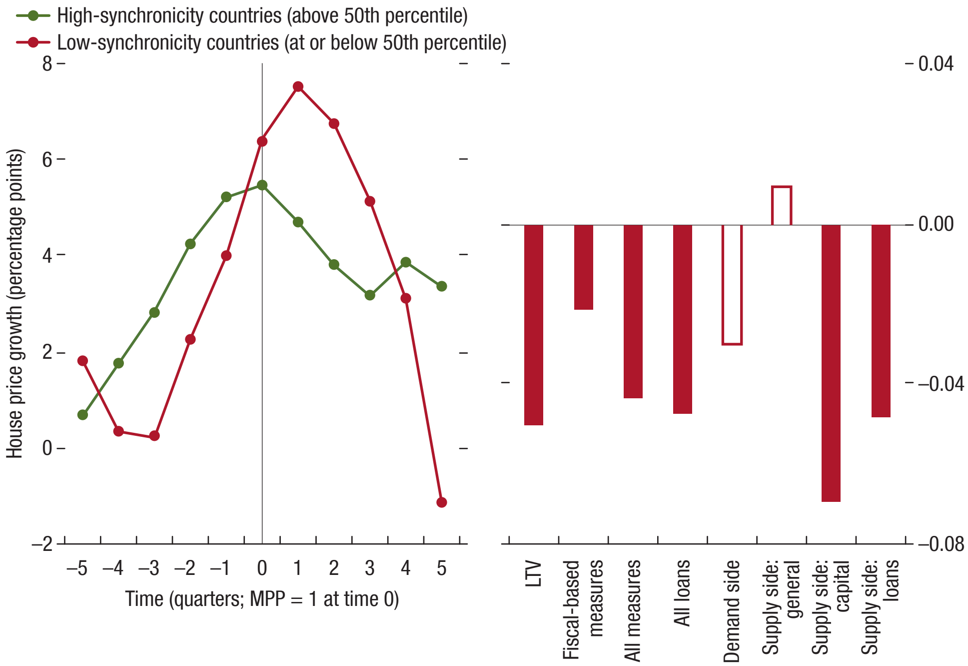
Figure 3.4.1. Macroprudential Tools Indirectly Reduce House Price Synchronicity

On average, house prices are affected more by demand-side macroprudential policies in low-synchronicity countries.

Supply-side measures targeting bank capital and loan-specific measures, including loan-to-value limits, seem effective in reducing synchronicity with the global cycle.

1. Average House Price Growth and Demand-Side Macroprudential Policies

2. Impact of Macroprudential Measures on House Price Synchronicity (Standard deviations)



Source: IMF staff estimates.

Note: Panel 1 depicts the average year-over-year house price growth for high-synchronicity and low-synchronicity countries within a period of plus or minus five quarters around the tightening of demand-side macroprudential policies (MPPs). Demand-side MPPs include limits on debt-service-to-income and loan-to-value (LTV) ratios. The total number of demand-side events is 47, and $t = 0$ is identified as the first quarter in which demand-side MPPs were implemented within the plus-or-minus-five-quarter window. Synchronicity is based on the quasi correlation of house price gaps with the global cycle. A country is classified in the high-synchronicity group when its average synchronicity (over the sample period) with the global cycle is above the 50th percentile in the sample, and vice versa. Panel 2 depicts estimated average effects of macroprudential tools on house price synchronicity with the global cycle (refers to through-the-cycle regressions). Solid bars in panel 2 show statistically significant standardized coefficients at the 10 percent confidence level. Estimated panel regressions use data for 41 countries spanning the period 1990:Q2–2016:Q4. Regressions control for business cycle synchronicity, financial integration, and global financial conditions. All regressors are lagged one quarter. Supply side (loans) consists of limits on credit growth, loan loss provisions, loan restrictions, and limits on foreign currency loans. Supply side (capital) consists of capital requirements, conservation buffers, the leverage ratio, and the countercyclical capital buffer. Supply side (general) consists of reserve requirements, liquidity requirements, and limits on foreign exchange positions. Demand side consists of limits to debt-service-to-income and LTV ratios. All loan measures include demand side and supply side (loans). Fiscal-based measures include taxes such as ad valorem, sellers' and buyers' stamp duty, or other taxes. For more details about the macroprudential tools database and estimation details, see Annex 3.3 on the methodology for Box 3.4.