

## Figure 2.5. Effects of Household Debt on GDP Growth and Consumption

Sources: Bank for International Settlements; CEIC Data Co. Ltd.; Economic Cycle Research Institute; Haver Analytics; IMF, World Economic Outlook database; Jordà-Schularick-Taylor Macrohistory Database; Penn World Table; and IMF staff calculations.

Note: Panels 1, 2, and 3 are from panel regressions of rolling three-year real GDP growth (consumption and unemployment, respectively) up to six years ahead, on lagged changes in household and corporate debt-to-GDP ratios (over a three-year period), controlling for lags of the dependent variable, and country and time fixed effects. Panel 4 shows quantile regression coefficient estimates for changes in the household debt ratio, using the same specification as the panel regression model. Panel 5 breaks down changes in household debt-to-GDP ratios into supply and demand factors, where local financial conditions are assumed to signal supply-side factors, and the residual to reflect other (demand) factors. Panel 6 shows coefficient estimates from a panel regression estimation, conditioning the effect on changes in household debt, and interacted with various debt thresholds. Colored bars indicate that the effects are statistically significant at the 10 percent level or higher. See Annex 2.2 for details of the estimation methodology. AEs = advanced economies; EMEs = emerging market economies.