

-0.98 percentage points of GDP after eight quarters (-0.90 percentage points of GDP for the non-G4 countries).

- **The results suggest that demand-driven shocks have long-lasting results, while supply-driven shocks tend to fade by eight quarters.** For example, while demand shock to noncore liquidity reduce real GDP by up to 0.98 percentage points over eight quarters, the real impact of supply shocks falls to 0.18 percentage points over the same time frame. This result is true both for G4 economies and the other economies, except for demand shocks for core liquidity, which seem to have limited spillover effects. This result reflects the domestic nature of core liquidity.
- **Furthermore, we find that both demand and supply shocks to core liquidity are counter-cyclical.** A positive demand (supply) shock to core liquidity lowers real GDP by 0.5 (0.3) percentage points after eight quarters (Figure 12). This is consistent with the idea that a rise in core liquidity is associated with a “flight-to-safety” behavior on the supply side or limited alternative funding sources on the demand side, both of which tend to occur under worsening economic conditions. Furthermore, rising funding costs are likely to spur further deleveraging, leading to further adverse growth effects. In contrast, we find that positive supply shocks to noncore yield a positive impact on GDP growth, in line with the idea of “inside” money creation through leverage and financial innovation, as witnessed during the run-up to the global financial crisis with the explosion of noncore liquidity (Figure 14).
- **Our analysis offers a number of nuances** (Table 3). First, the ranking of the relative GDP impact of different shocks is slightly different, with supply (rather than demand) shocks to noncore liquidity yielding the largest positive impact on GDP growth. This result would be consistent with the idea that noncore liquidity shocks reflect “inside” money creation, as banks raise funding in wholesale markets to leverage and expand their balance sheets, with such balance sheet expansions occurring typically around economic expansions. Second, under the panel regression analysis, supply shocks to core liquidity have a positive (rather than negative) impact on GDP growth over the *entire* sample, although the impact is reversed during the crisis, when it becomes strongly negative. The difference between the panel regression results (Table 3) and the VAR (Figure 12) may be due to an important difference between the two methodologies: The panel regression provides more robust estimates of the unconditional average instantaneous effects of supply and demand shocks, whereas the VAR results focus in the effects of shocks over time and after taking into account their effects on other variables included in the VAR (e.g., inflation).
- **Our analysis provides also some interesting results about the changing nature of funding shocks on growth over time.** First, we find that the strongly positive impact of noncore liquidity supply shocks was driven largely by the precrisis period (Table 4). During the global financial crisis, the impact of liquidity on GDP was negative,