leverage, and show that VIX is a good proxy for leverage. These results provide a point of contact with Forbes and Warnock (2012) who have highlighted the explanatory power of the VIX index for gross capital flows, and are strongly suggested by Figure 11, where fluctuations in the VIX Index are (inversely) associated with shifts in bank leverage.

Section A.4 addresses the extent to which global "supply push" variables are responsible for driving cross-border banking sector flows, in comparison to the local "demand pull" factors. By comparing the R^2 statistics obtained with the full set of time fixed effects, we can ascertain how much of the variation in the data are accounted for by local factors and by global factors. We find that local factors account for only a modest amount of the variation, while global factors account for an overwhelming part of the variation.

4 Concluding Remarks

Our framework has examined global liquidity in terms of the aggregate cross-border lending through the banking sector. The evidence in our paper suggests that the global "supply push" factors in the form of the leverage cycle of the global banks have been the key determinants of global liquidity before 2008. Our findings reinforce the argument in Borio and Disyatat (2011), Obstfeld (2012a, 2012b) and Gourinchas and Obstfeld (2012) on the importance of *gross* capital flows between countries in determining financial conditions, and complement the net external asset approach of Lane and Milesi-Ferretti (2007) and Gourinchas and Rey (2007),[6] and other studies based on portfolio flows (such as Hau and Rey (2009). Our approach is in keeping with the renewed focus on the banking sector in the European context (see Allen, Beck, Carletti, Lane, Schoenmaker and Wagner (2011), Lane (2013) and Lane and Pels (2011)).

Our findings open up a number of avenues for future research, both theoretical and empirical. We have highlighted the role of financial intermediaries in their use of wholesale bank funding. Cross-border banks intermediate such funding, and the composition of their liabilities can be expected to reflect the state of the financial cycle and risk premiums ruling

[6] The post-crisis evidence is updated in Gourinchas, Govillot and Rey (2010) and Gourinchas, Rey and Truempler (2012)