

The Macroeconomics of External Adjustment

COMPNET

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- 1995-2007: sharp rise in global capital flows; introduction of euro
- 2004-2007: global credit boom (especially in Europe), widening of net imbalances
- 2008+: sharp reversal in gross flows and net flows
- Boom-bust cycle in capital flows central to understanding the euro crisis debate (and reform proposals)

Understanding External Imbalances in Euro Area

- Structural growth issues masked by large external imbalances, especially during 2003-2007
- Real estate booms in Ireland and Spain
- Delayed adjustment in Portugal, Greece
- Lack of productivity/output growth in traded sectors

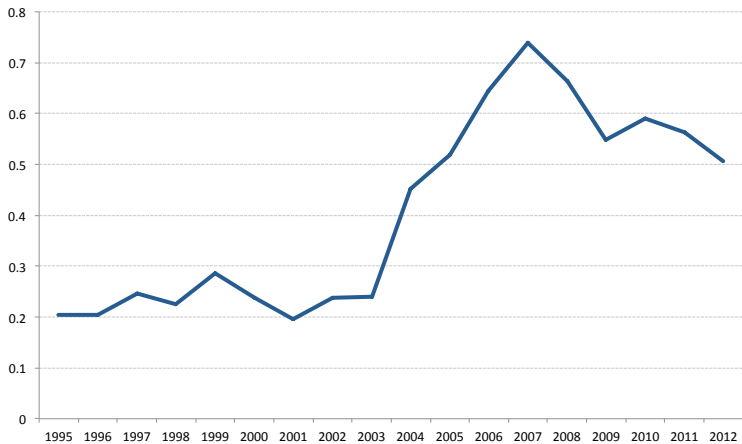


Figure: Euro Area: Current Account Dispersion. Note: Standard Deviation of current account balances. Source: IMF WEO dataset.

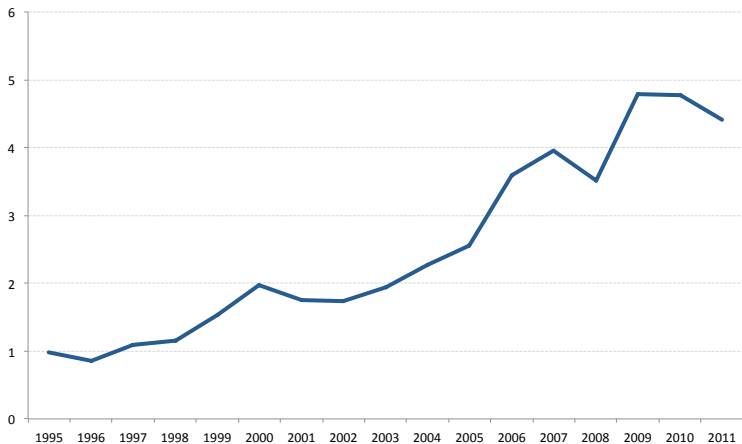


Figure: Euro Area: NIIP Dispersion. Note: Standard Deviation of net international investment positions. Source: Updated version of dataset described in Lane and Milesi-Ferretti (2007).

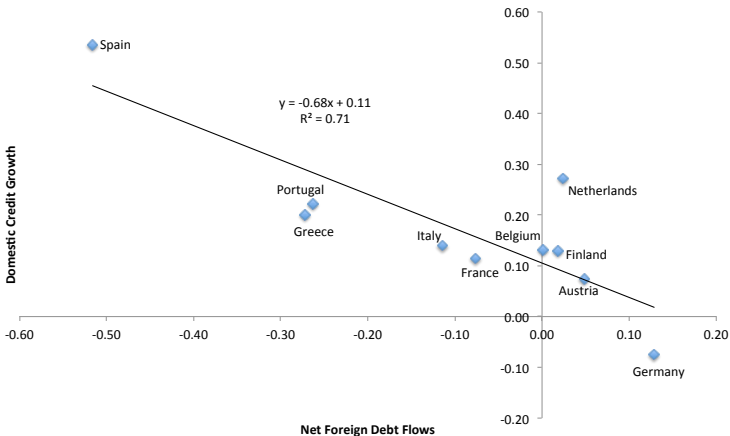


Figure: Euro Area: Domestic Credit Growth and Net Foreign Debt Flows, 2003-2008. Note: Based on Lane and McQuade (2012).

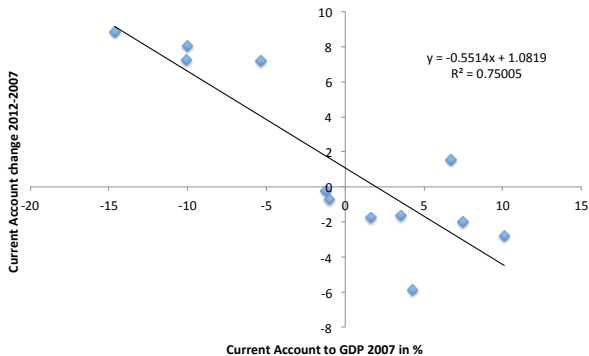


Figure: Dimensions of Current Account Adjustment, 2007 to 2012. Note: Change in current account between 2007 and 2012 against 2007 current account balance.

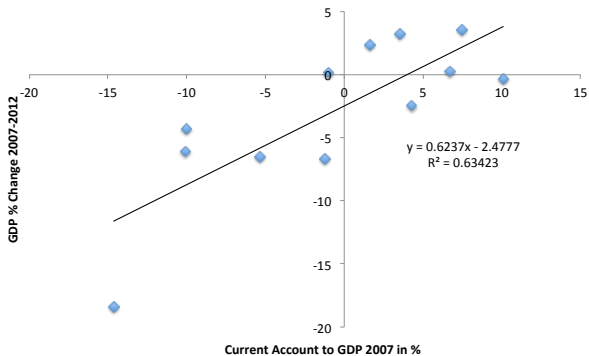


Figure: Dimensions of Current Account Adjustment, 2007 to 2012. Output growth rate between 2007 and 2012 against 2007 current account balance.

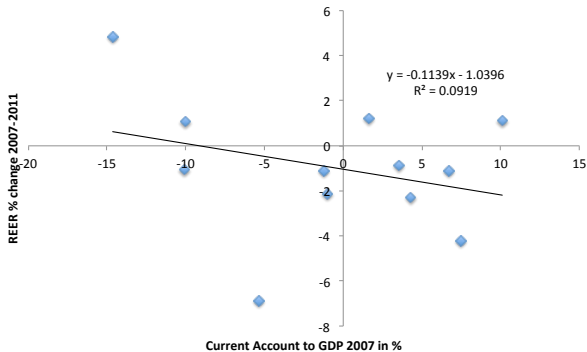


Figure: Dimensions of Current Account Adjustment, 2007 to 2012. Note: Change in real exchange rate between 2007 and 2012 against 2007 current account balance.

Table: Growth Differential: Nontraded versus Traded Sectors

Country	2003-2007	2007-2009
Austria	-0.04	0.09
Belgium	0.10	0.16
Finland	0.01	0.31
France	0.15	0.04
Germany	-0.10	0.23
Greece	0.16	-0.06
Ireland	0.35	-0.10
Italy	0.03	0.17
Luxembourg	0.11	0.34
Netherlands	-0.03	0.10
Portugal	0.09	N/A
Spain	0.16	0.14

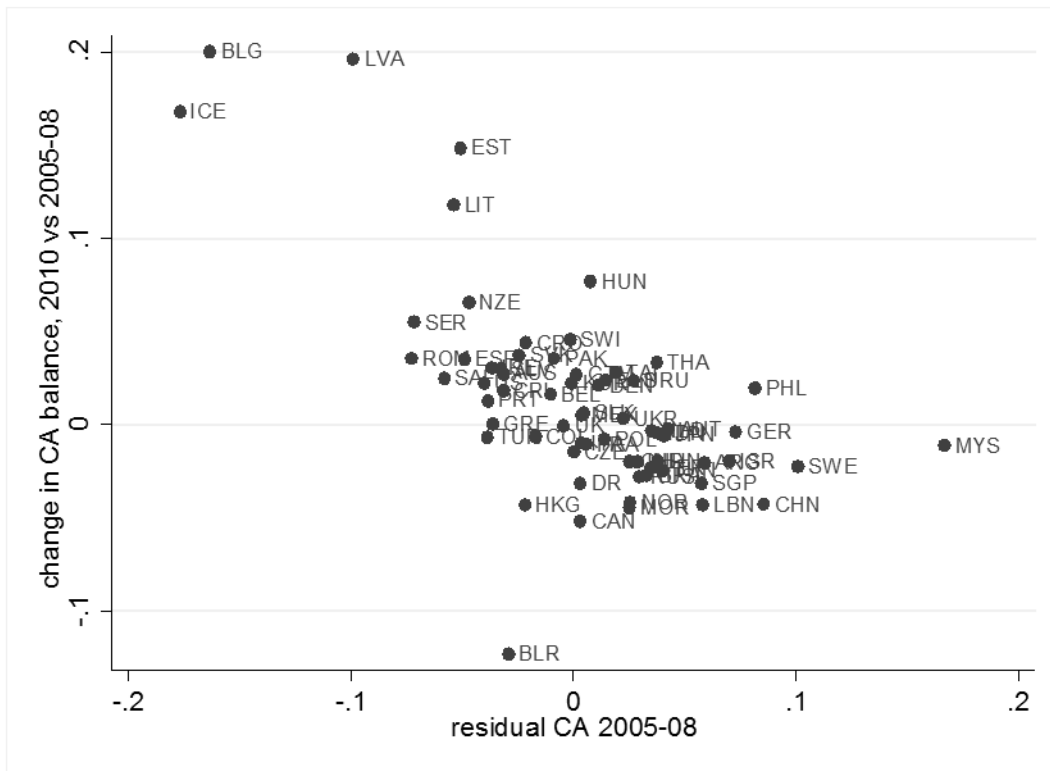
Note: Cumulative growth differentials. Allocation of sectors to traded and nontraded sectors follows Galstyan and Lane (2009). Source: Calculation based on sectoral data drawn from OECD STAN database.

Table: Real Exchange Rate Adjustment, 2007.Q4 to 2012.Q2

	EA17			N=36	
	CA	HICP	PGDP	HICP	PGDP
Austria	3.5	1.0	0.1	-2.2	-1.1
Belgium	1.6	2.7	0.2	-0.4	-0.2
Finland	4.3	3.7	0.2	-1.1	-1.0
France	-1.0	-0.7	0.03	-4.6	-3.7
Germany	7.5	-2.5	-0.1	-6.4	-6.1
Greece	-14.6	3.8	0.2	1.6	0.1
Ireland	-5.4	-7.2	-0.6	-11.0	-16.8
Italy	-1.2	2.4	0.1	-1.9	-2.6
Luxembourg	10.1	2.9	0.4	1.2	6.0
Netherlands	6.7	0.1	-0.04	-2.1	-3.3
Portugal	-10.1	-0.5	-0.1	-2.6	-3.5
Spain	-10.0	0.4	-0.1	-1.8	-4.0
Correlation		0.08	0.35	0.005	0.29

Note: 2007 current account balance. Real effective exchange rates based on HICP and GDP deflators. Correlations refer to correlation between change in real exchange rate and the initial current account balance. Source: European Commission's Price and Cost Competitiveness Database.

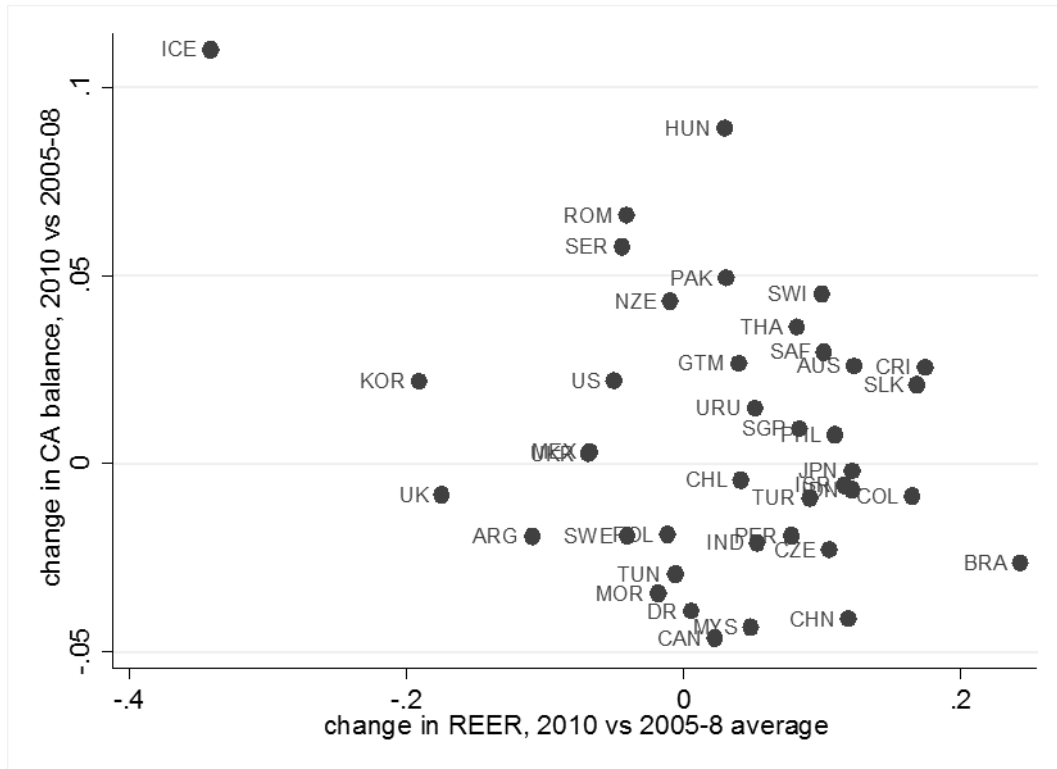
Figure 4. Change in Current Account Balance and Current Account Gap



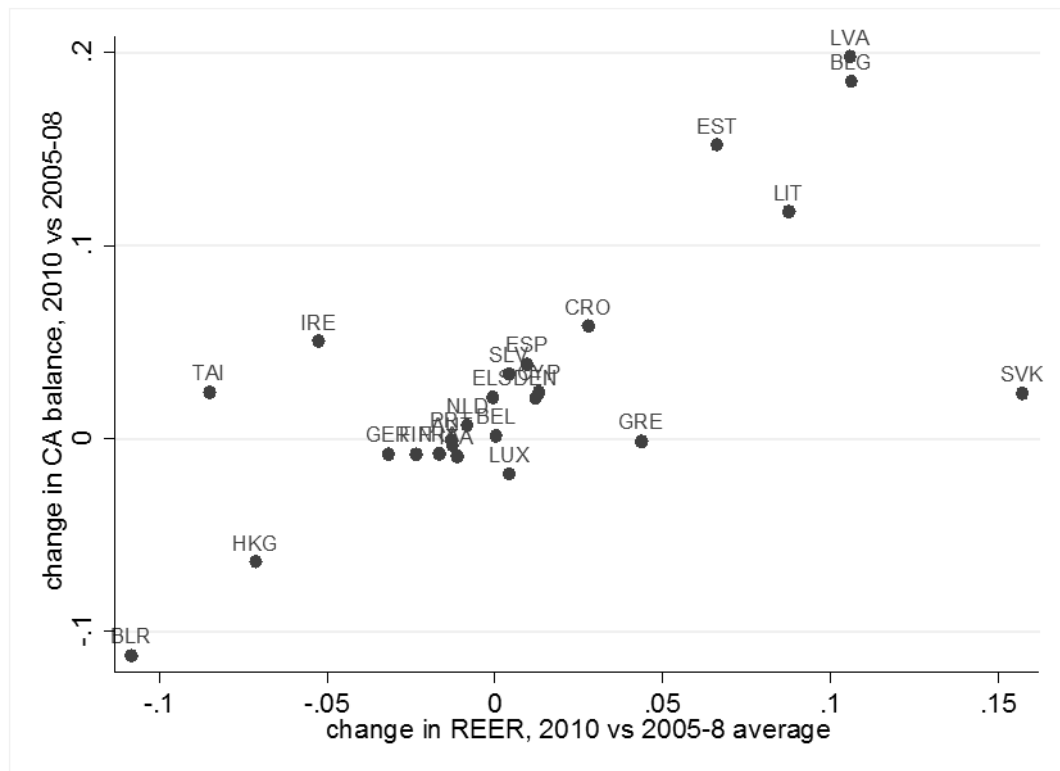
Note: Scatter of changes in the current account balance between 2005-08 and 2010 against the 2005-08 residual from the current account balance regression reported in column (1) of Table 1.

Figure 5. Current account/GDP and real exchange rate: change between 2005-08 and 2010

A. No peg



B. Peg



Note: "change in REER 2010 vs 2005-08 average" is the log change in the CPI-based real effective exchange rate index between the 2005-08 average and 2010. "Change in CA balance, 2010 vs 2005-08" is the difference between the CA/GDP ratio in 2010 and the 2005-08 average. Source: authors' calculations based on International Monetary Fund, International Financial Statistics, Balance of Payments Statistics, World Economic Outlook.

Figure 6. Current account/GDP and real domestic demand, change 2005-08 to 2010

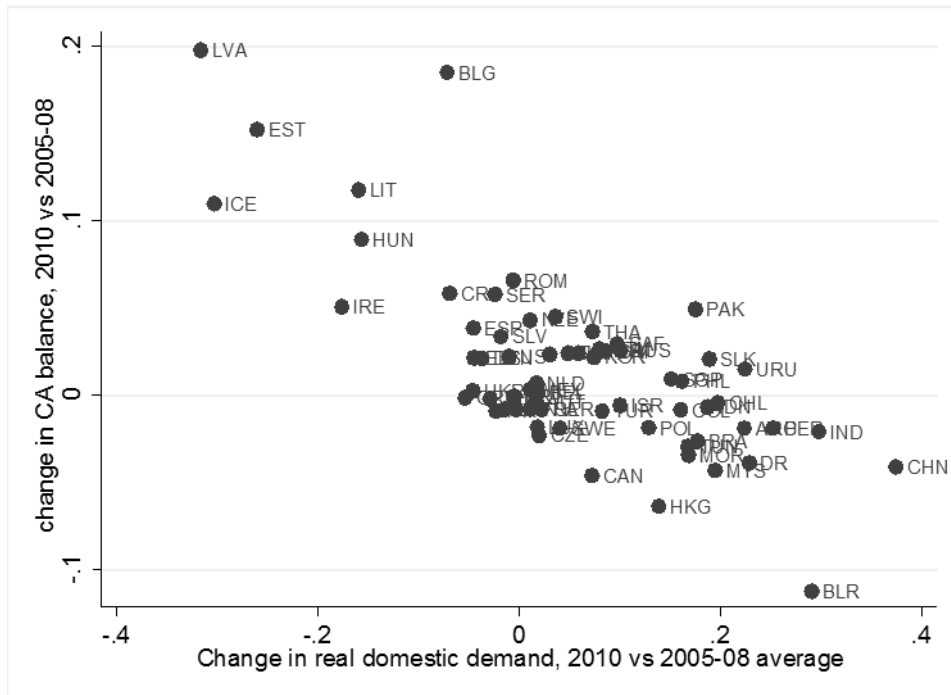
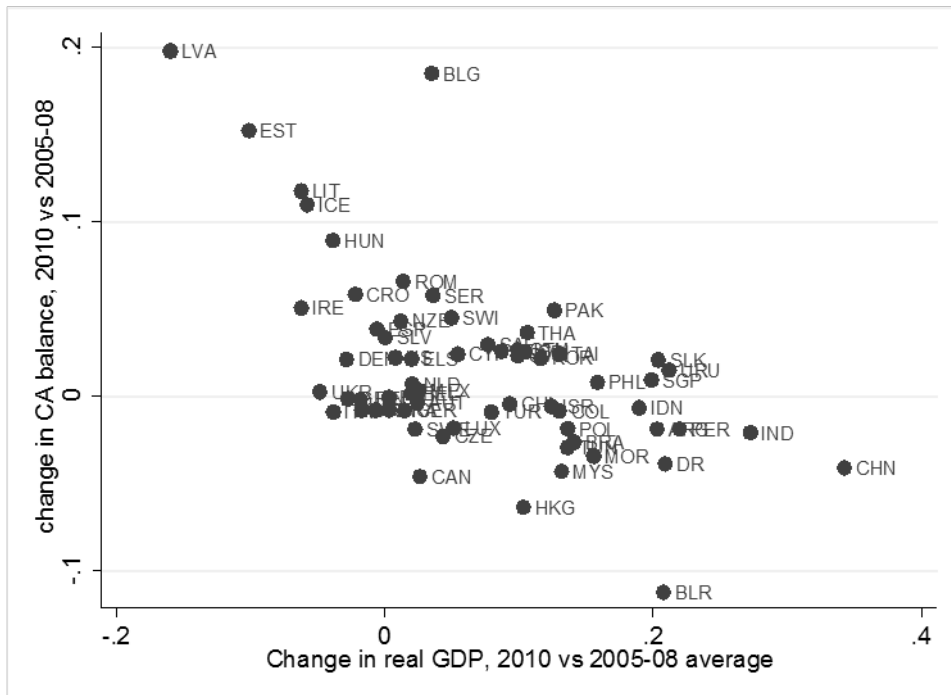
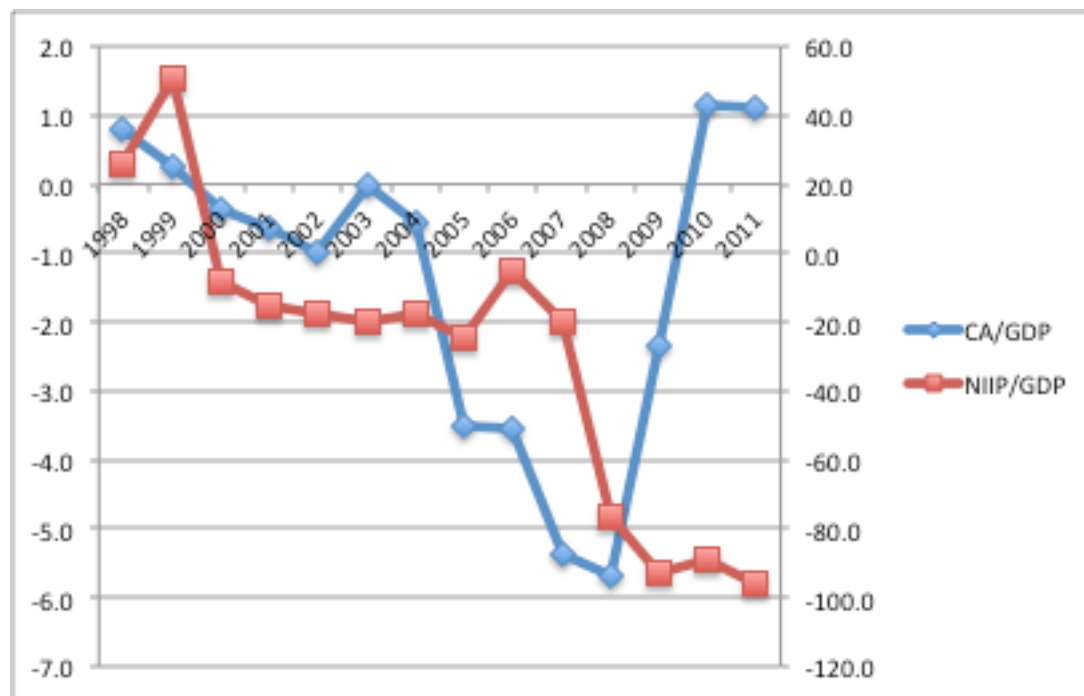


Figure 7. Current account/GDP and real output, change 2005-08 to 2010



Note to Figures 6-7: “change in real domestic demand, 2010 vs 2005-08 average” is the log change in real domestic demand between the 2005-08 average and 2010. The change in real GDP, 2005-08 to 2010 is defined analogously. “Change in CA balance, 2010 vs 2005-08” is the difference between the CA/GDP ratio in 2010 and the 2005-08 average. Source: authors’ calculations based on International Monetary Fund, Balance of Payments Statistics and World Economic Outlook.

Ireland: CA/NIIP



External Adjustment: Analytical Issues

- “Sudden Stops” versus “Soft Landings”
- Composition of external balance sheet (debt liabilities versus equity liabilities; currency exposures)
- “Expenditure Switching” versus “Expenditure Reduction”
- Transfer problem
- Flexible exchange rates versus pegged exchange rates versus currency union
- Behaviour of effective exchange rate indices

- Limited scope for real exchange rate movements in short run under a peg / currency union
- International price elasticities increasing over time
- Extensive margin of trade kicks in over longer time horizon
- (Real exchange rate and FDI location decisions)

Confounding Factors

- Current account deficits and domestic credit booms (Lane and McQuade 2012)
- Current account deficits and fiscal procyclicality
- Current accounts and sectoral composition of activity
- External adjustment; banking adjustment; fiscal adjustment; sectoral adjustment
 - myriad interaction effects
 - external balance sheet versus sectoral balance sheets
- Real exchange rate, relative price levels and real interest rate

“Workhorse” Model

- Traded/Nontraded sectors (Obstfeld/Rogoff 2005; Blanchard 2007)
- P_N/P_T a key relative price
- Sectoral productivity reforms (A_T versus A_N): implications for real exchange rate and external balance
- Traded sector: export sector; import-competing sector; imports
- Entry/exit in traded and nontraded sectors; endogenous tradability

Some Relevant Literature

- Chen, Milesi-Ferretti and Tressel, “External Imbalances in the Euro Area,” *Economic Policy*, January 2013
- IMF, *Pilot External Balance Assessment*, 2012.
- Lane and Milesi-Ferretti, “External Adjustment and the Global Crisis,” *Journal of International Economics*, November 2012
- Lane and Milesi-Ferretti, “The Transfer Problem Revisited,” *Review of Economics and Statistics*, 2004.
- Lane and Pels, “External Imbalances in Europe,” *Moneda y Credito*, 2012.
- Lane and McQuade, “Domestic Credit Growth and International Capital Flows,” forthcoming.
- Lane, “Capital Flows in the Euro Area,” forthcoming.
- Lane, “External Imbalances and Macroeconomic Policy,” *New Zealand Economic Review*, forthcoming.