The Global Financial Crisis and the Global Monetary System

Maurice Obstfeld
University of California, Berkeley, CEPR, and NBER

Bank of Canada/Banque du Canada
June 2011

Main themes

- The explosive broadening and deepening of global financial market activity has again made reform of the international monetary and financial system an urgent priority
- In line with much greater globalization, the reforms needed are farther-reaching than in past decades and require a higher degree of globalized governance

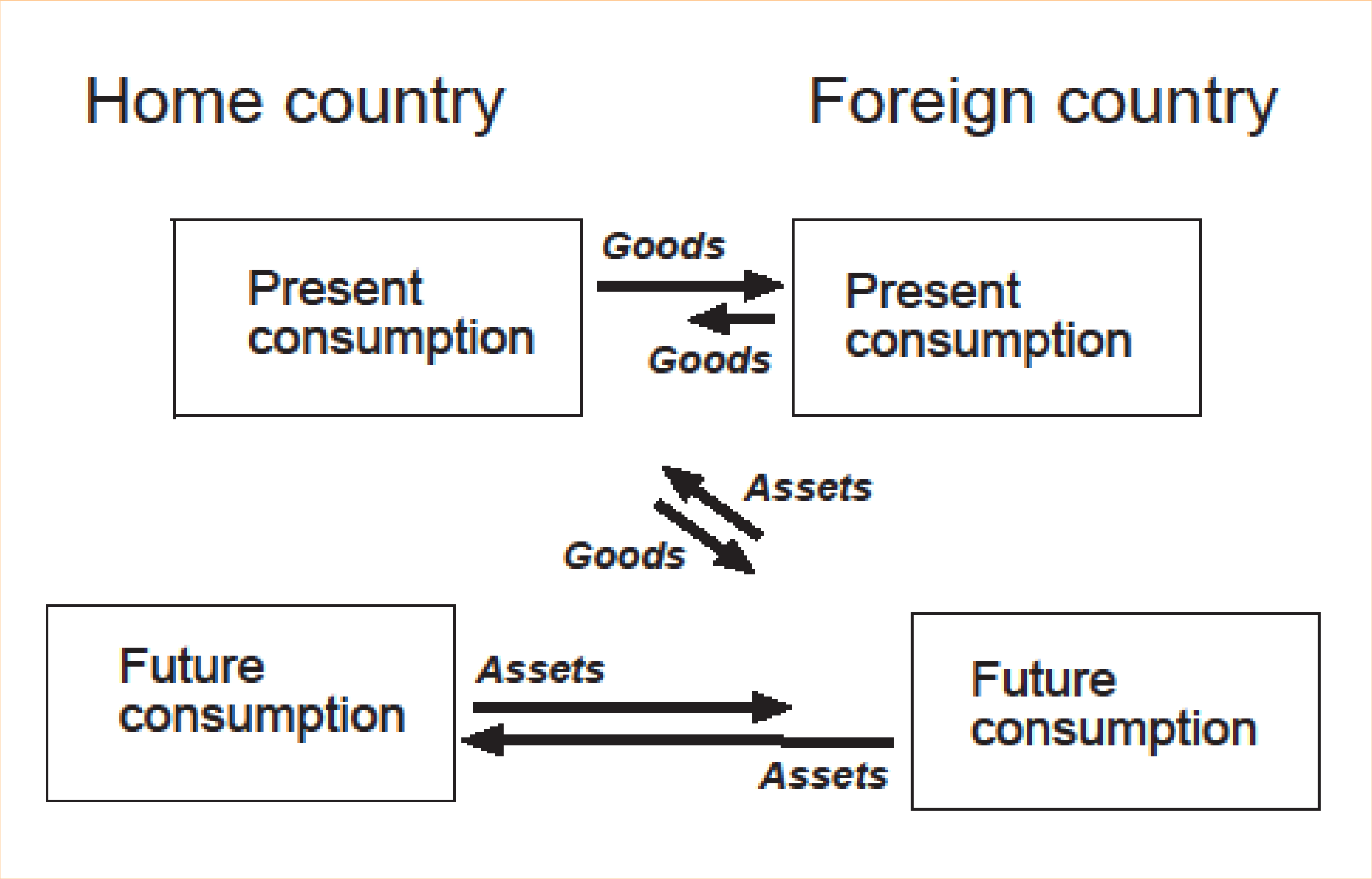
Outline

1. New patterns of financial globalization
2. New views on external vulnerability
3. Need for international liquidity
4. Problems of the euro zone
5. Complementary reforms

1. New patterns of financial globalization

- The volume of ***intertemporal*** trade has expanded.
- The volume of ***intratemporal*** trade has expanded even more.
- Both carry risks, but the explosion in gross asset positions creates the most pressing risks.

Intra- versus intertemporal trade

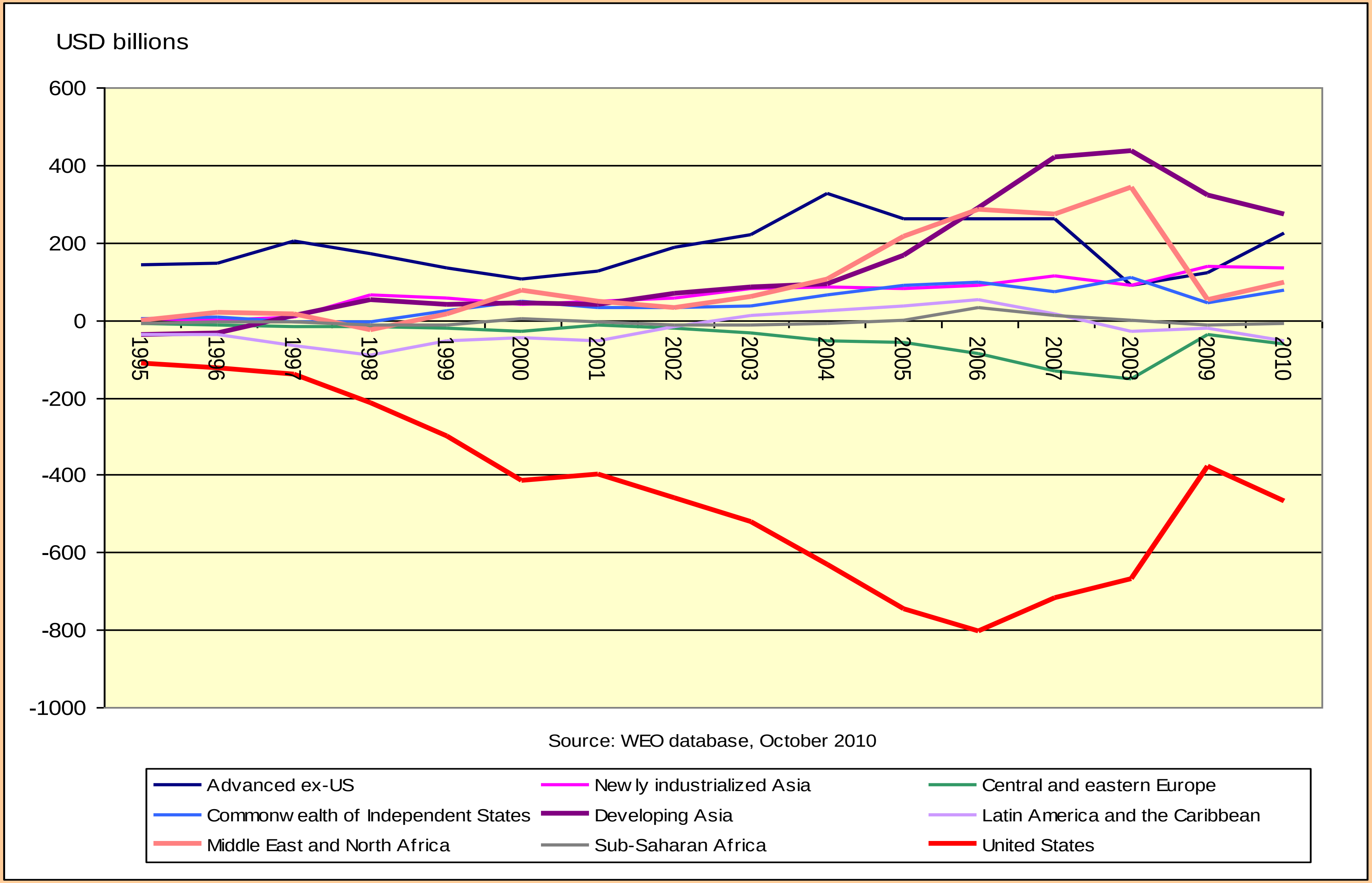


- Home exports goods (net) and imports assets (net); it has a ***surplus*** on current account
- Foreign has a ***deficit*** on current account

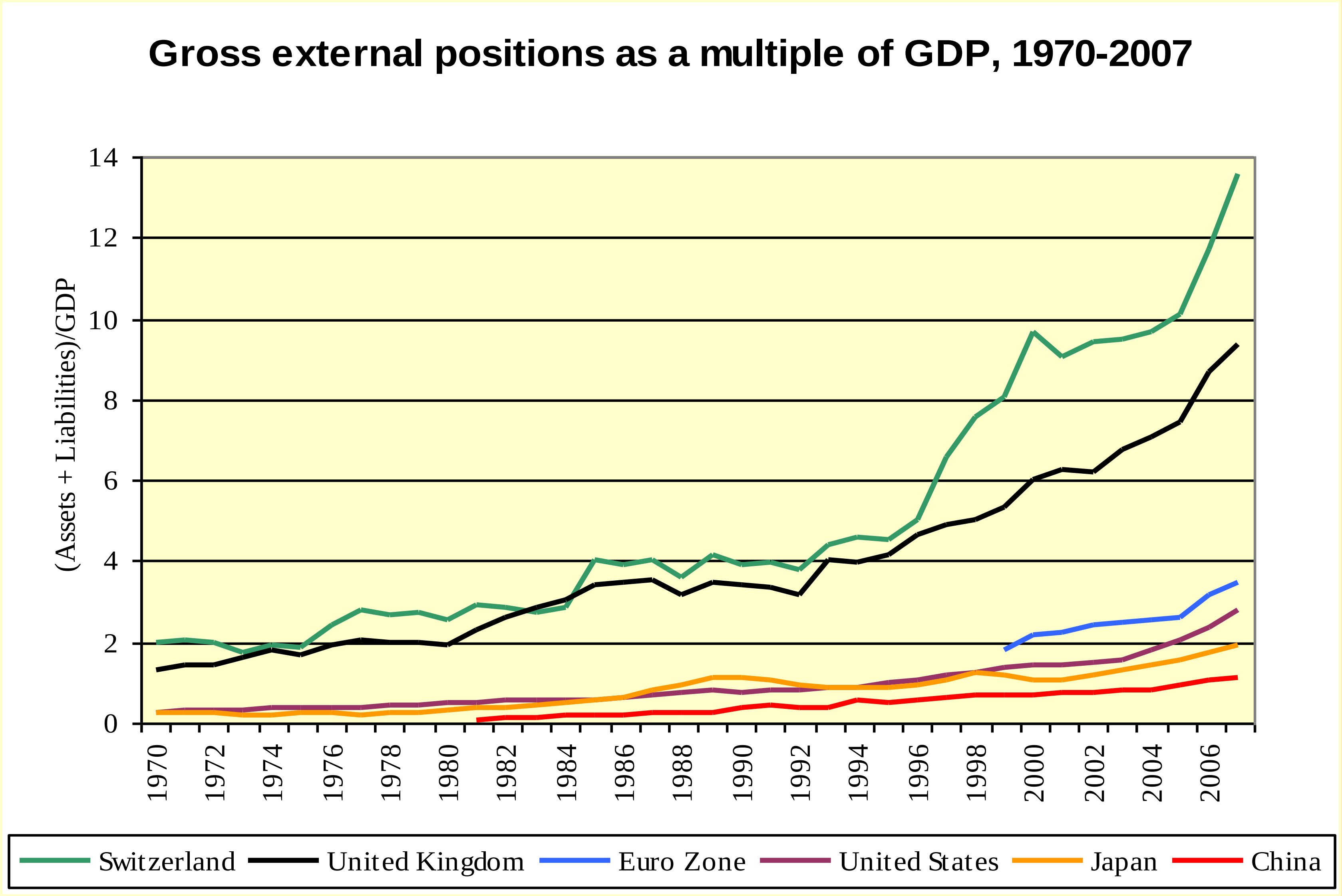
Evidence on asset trade patterns

- The dispersion of national current account (saving-investment balances) has risen
- Gross foreign assets and liabilities have increased as well, for some countries exponentially
- As a result, NIIPs much more volatile and the current account flow can be a small part of the change

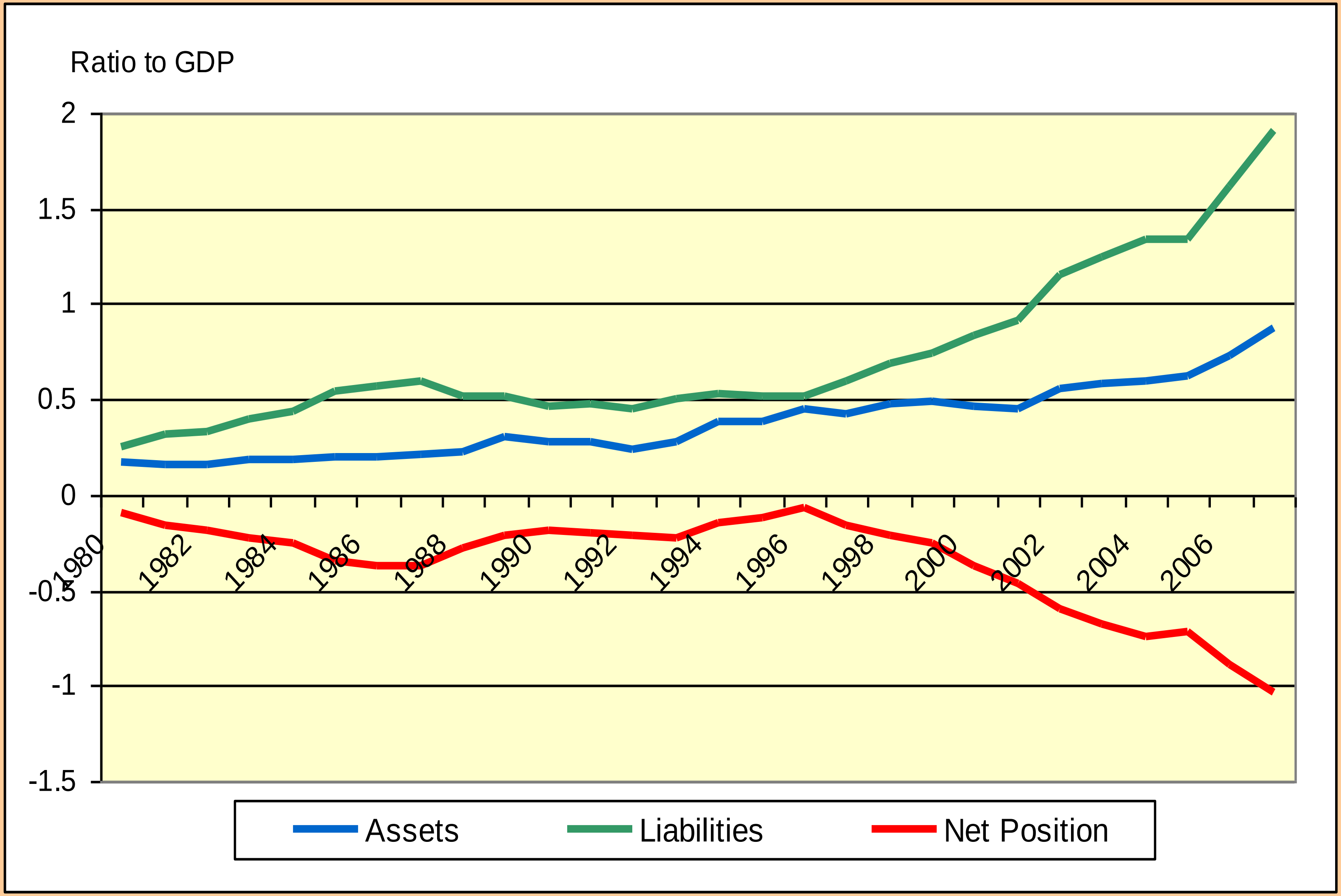
Evolution of Global Imbalances, 1995-2010



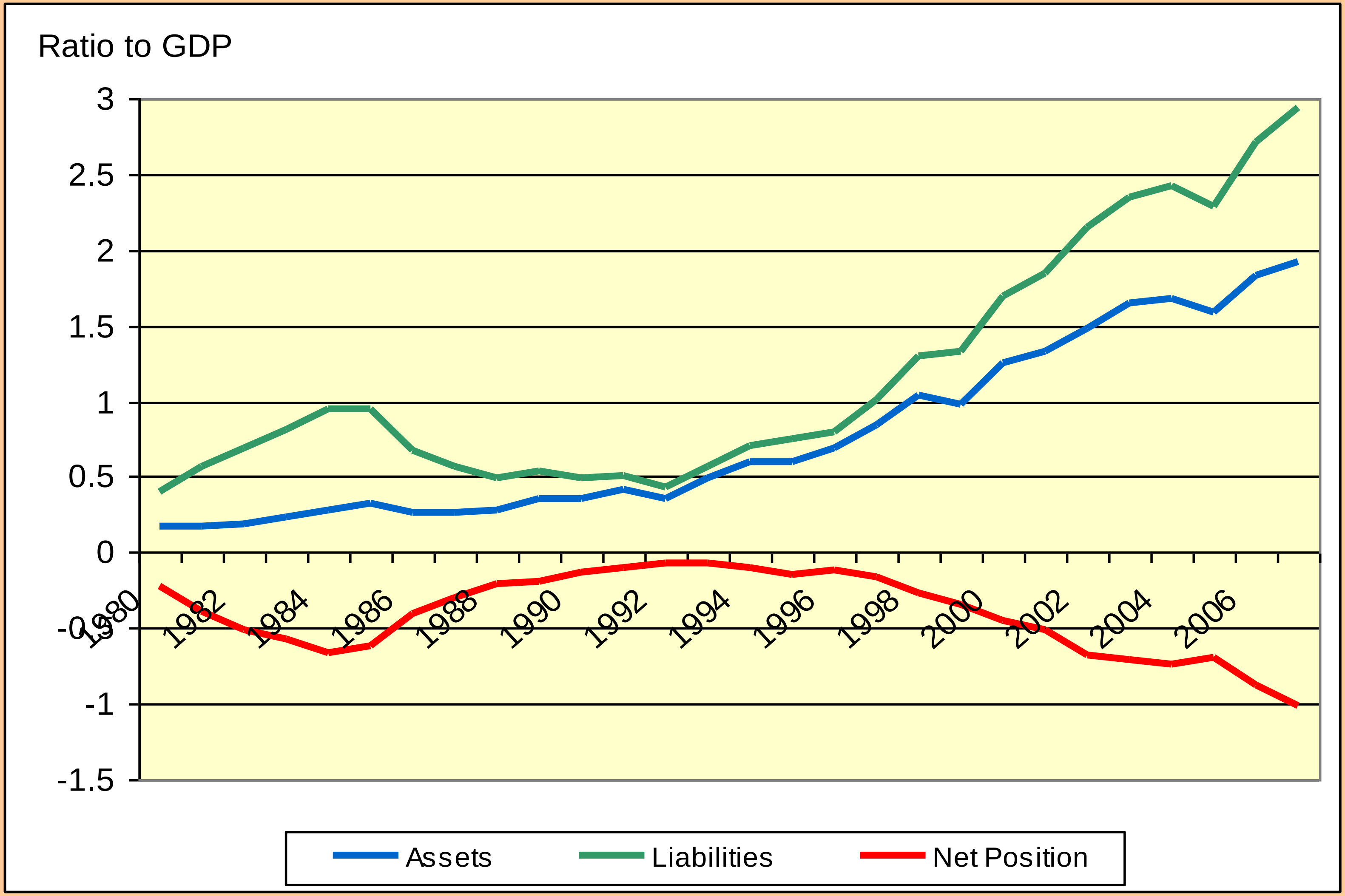
Lane/Milesi-Ferretti on Gross Asset Positions



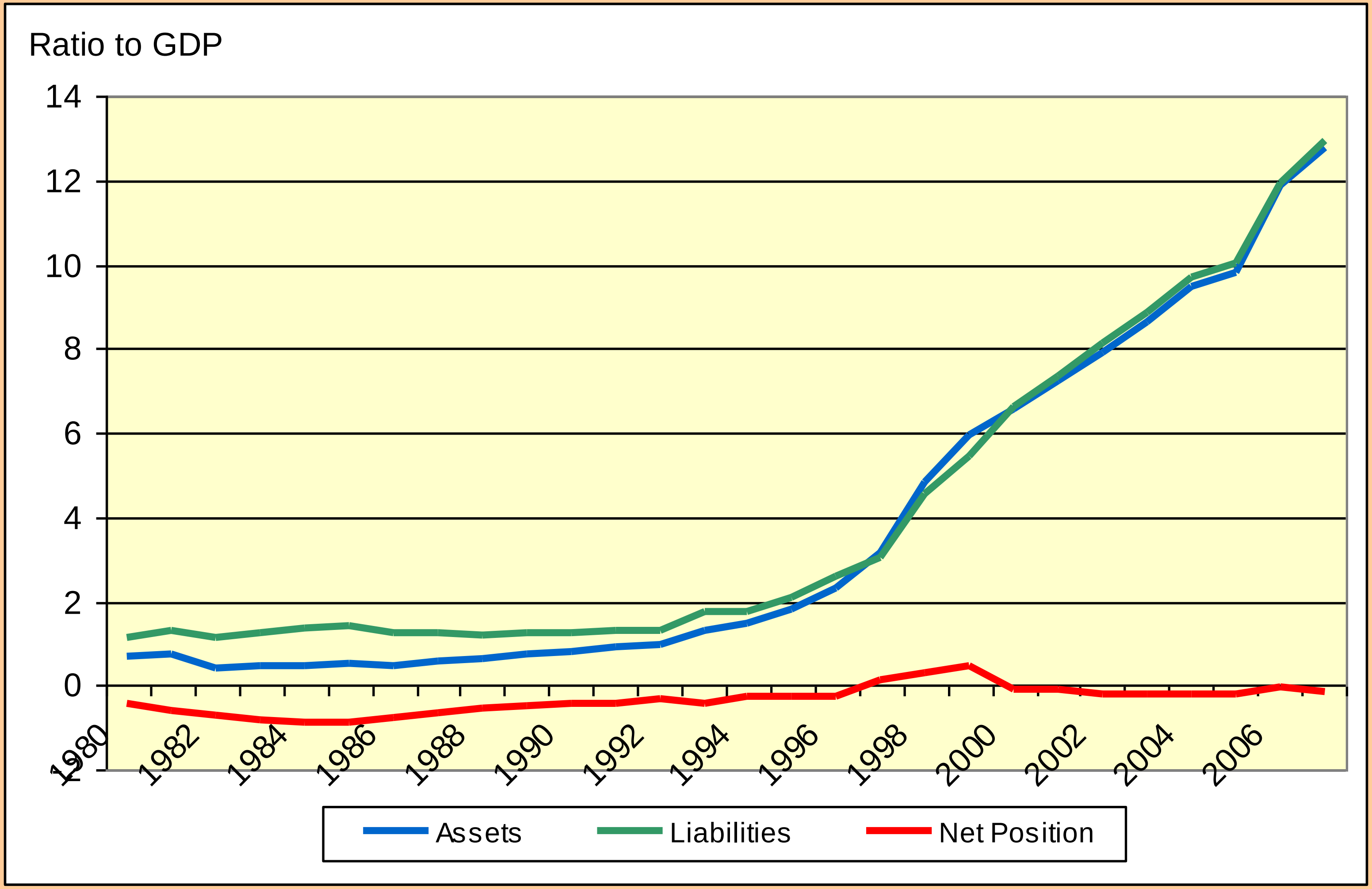
Greece: Gross External Assets and Liabilities



Portugal: Gross External Assets and Liabilities

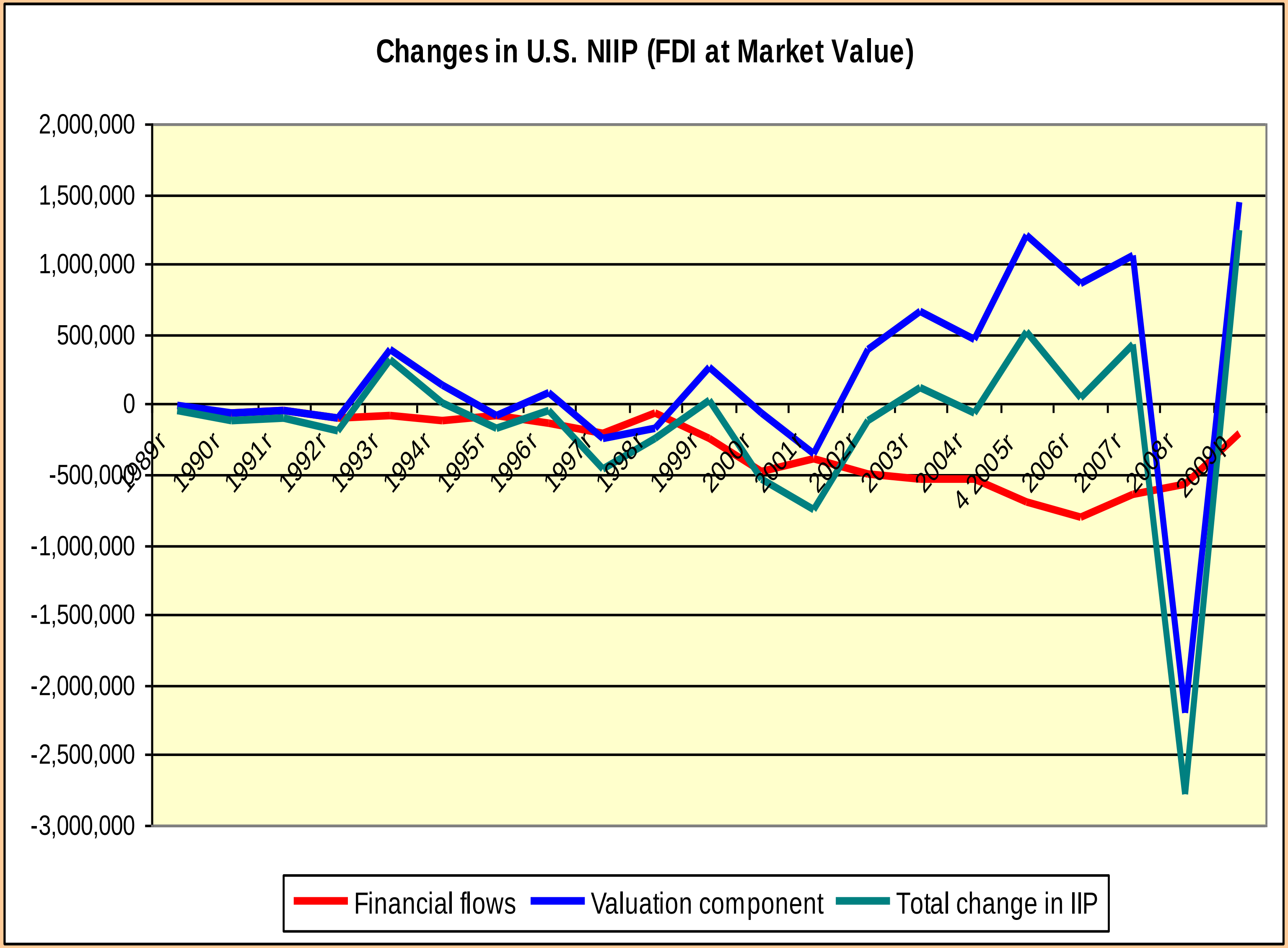


Ireland: Gross External Assets and Liabilities



2. New views on external vulnerability

- Traditional analysis of emerging market economies focuses on current account reversals and the ability to repay net foreign debts through export surpluses
- Newer view looks at richer countries too, capital gains/losses on NIIP, and the possibility of broader balance sheet crises, akin to bank runs



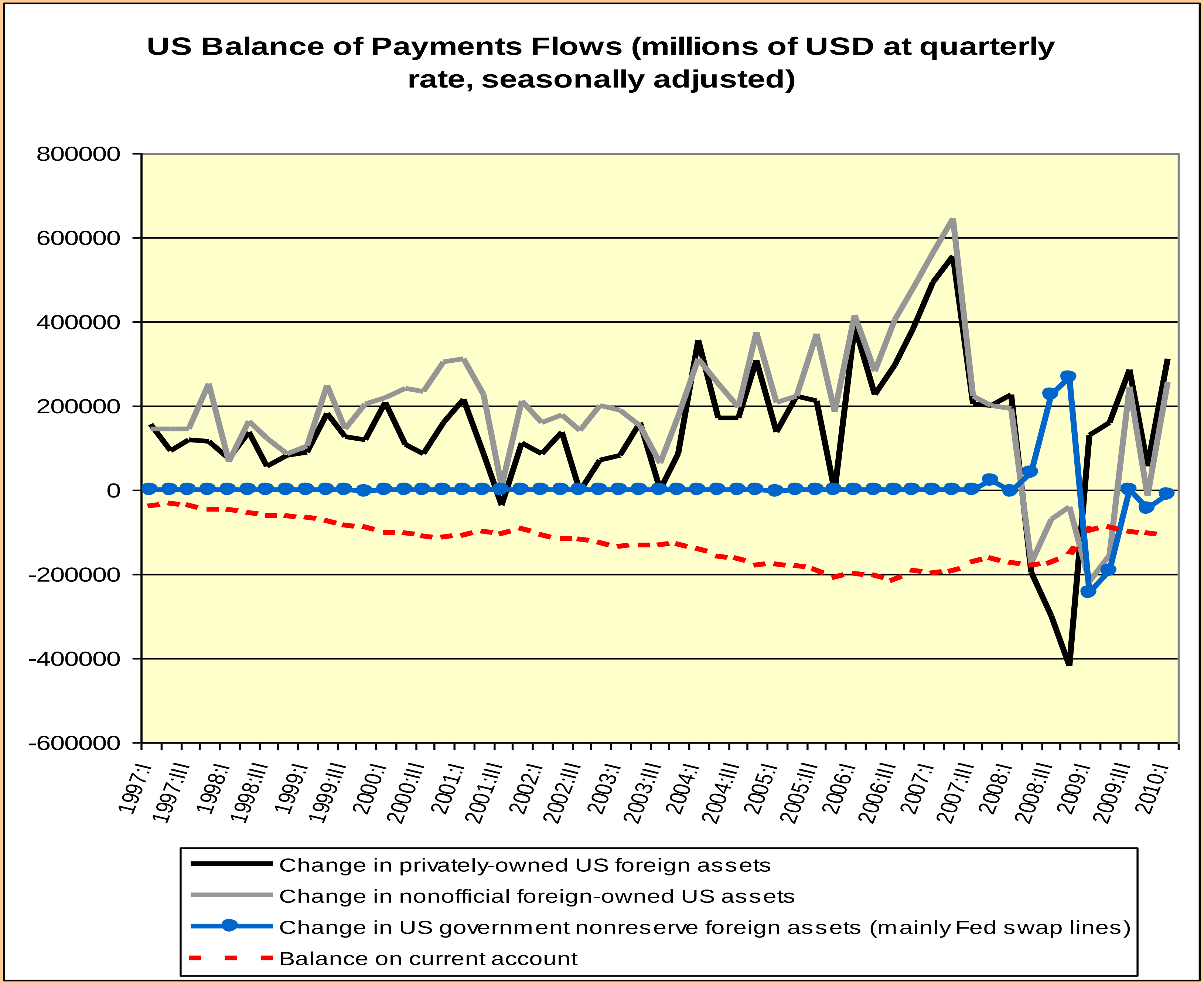
Changes in U.S. NIIP (FDI at Market Value)
2,000,000
1,500,000
1,000,000
500,000
0
-500,000
-1,000,000
-1,500,000
-2,000,000
-2,500,000
-3,000,000
1989r
1990r
1991r
1992r
1993r
1994r
1995r
1996r
1997r
1998r
1999r
2000r
2001r
2002r
2003r
2004r
4 2005r
2006r
2007r
2008r
2009p
Financial flows
Valuation component
Total change in IIP

Gross positions and NIIP volatility

- Valuation changes can cause changes in NIIP that swamp current account effects
- For the U.S. these were huge over the course of the crisis
- Important for smaller counties too
- Banco de Portugal data: over 2009-2010, $CA/GDP = -9.9\%$, $\Delta NIIP/GDP = +2\%$

Why current accounts still matter

- Indicates market vs. autarky real interest
- Implications for global aggregate demand.
- Expected return on foreign lending should be positive over medium-term!
- Large net flows signal changes in net worth across countries with effects on asset markets in presence of financial frictions
- **But:** “sudden stop” analysis must now consider structure of full balance sheet
- U.S. example after Lehman collapse


US Balance of Payments Flows (millions of USD at quarterly rate, seasonally adjusted)
800000
600000
400000
200000
0
-200000
-400000
-600000
1997:I
1997:III
1998:I
1998:III
1999:I
1999:III
2000:I
2000:III
2001:I
2001:III
2002:I
2002:III
2003:I
2003:III
2004:I
2004:III
2005:I
2005:III
2006:I
2006:III
2007:I
2007:III
2008:I
2008:III
2009:I
2009:III
2010:I
Change in privately-owned US foreign assets
Change in nonofficial foreign-owned US assets
Change in US government nonreserve foreign assets (mainly Fed swap lines)
Balance on current account

Perils of large gross positions

- Higher leverage raises counterparty risks, which may proliferate contagiously
- Larger real transfer from debtors to creditors (Fisherian debt deflation)
- Examples: euro zone, “dollarized” countries
- Large gross liabilities may end up being assumed by the state, causing fiscal distress

3. Need for international liquidity

- Two main issues raised by recent crises:

  1. Multiple-currency support for financial institutions (lender of last resort); risks attach to ***gross*** asset positions of banks, etc.

  2. Possible large-scale need of rich-country governments (sovereign debt or intervention support)

1. Global LLRs

- In 2007-2009 (and after), Fed extended swap lines to foreign central banks
- Other central banks emulated
- Some European banks needed *U.S. dollar* liquidity which ECB could not provide
- Channeling dollars through foreign central banks relieved Fed of the credit risk
- Reduced USD appreciation pressures (intervention)
- The amounts lent in this way were large

2. Sovereign support for the rich

- Crises in smaller euro zone countries but also in Iceland
- Last rich-country SBAs with IMF had been UK, Italy, Spain, Portugal in late 1970s; Portugal 1983-85
- Euro zone crises so virulent because no devaluation/inflation option
- As we have seen there and in EMEs, default expectations can raise government borrowing rates in a self-fulfilling cycle

Possible for U.S., U.K., Japan?

- All can print currency to pay debts, largely denominated in own currencies
- But high inflation expectations, which raise borrowing rates, could force higher inflation, perhaps through curbs on central bank independence
- Or as Reinhart & Rogoff suggest, financial repression

Why is Japan not yet in even more trouble?

- It is a current account surplus, foreign creditor country; if it had to ring-fence its financial markets, its interest rates would ***fall*** to autarky levels
- The Lawson doctrine has been discredited but its ***converse*** may hold: Countries without current account deficits have less to fear from government deficits
- Not so for U.S. and U.K.

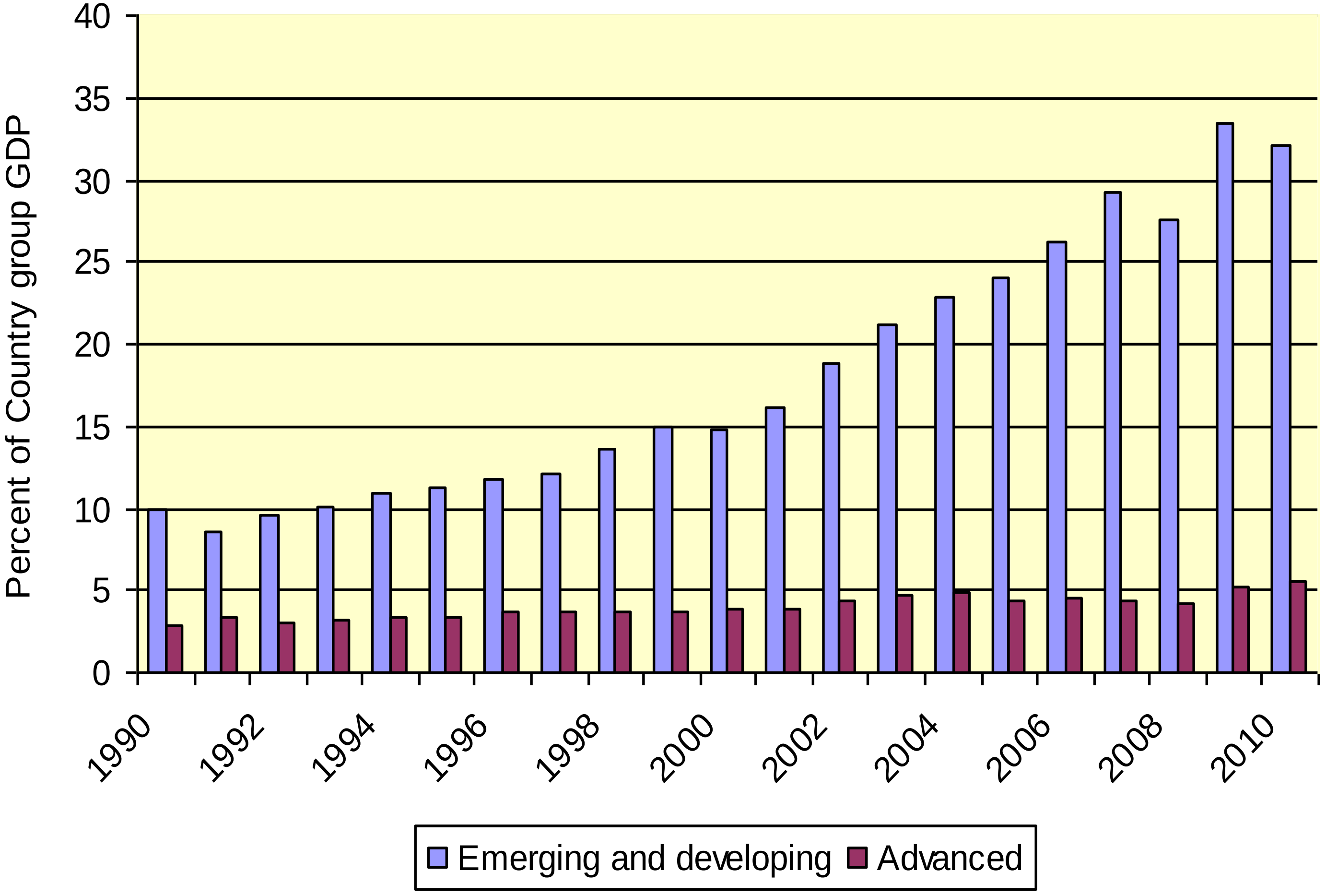
Lending to Sovereigns

- Province of IMF
- More flexibility has been attained through FCL, PCL
- But IMF needs expanded resources
- How to avoid stigma?
- Perhaps programs with systemic triggers

Self-insurance through reserves?

- Many policy makers concluded that reserves were helpful in the crisis
- In many countries including EMS's, were used for unconventional LLR operations – not for conventional FX intervention. Wave of the future?
- The path of reserves has resumed its upward trend

Global Foreign Exchange Reserves



Drawbacks of reserves

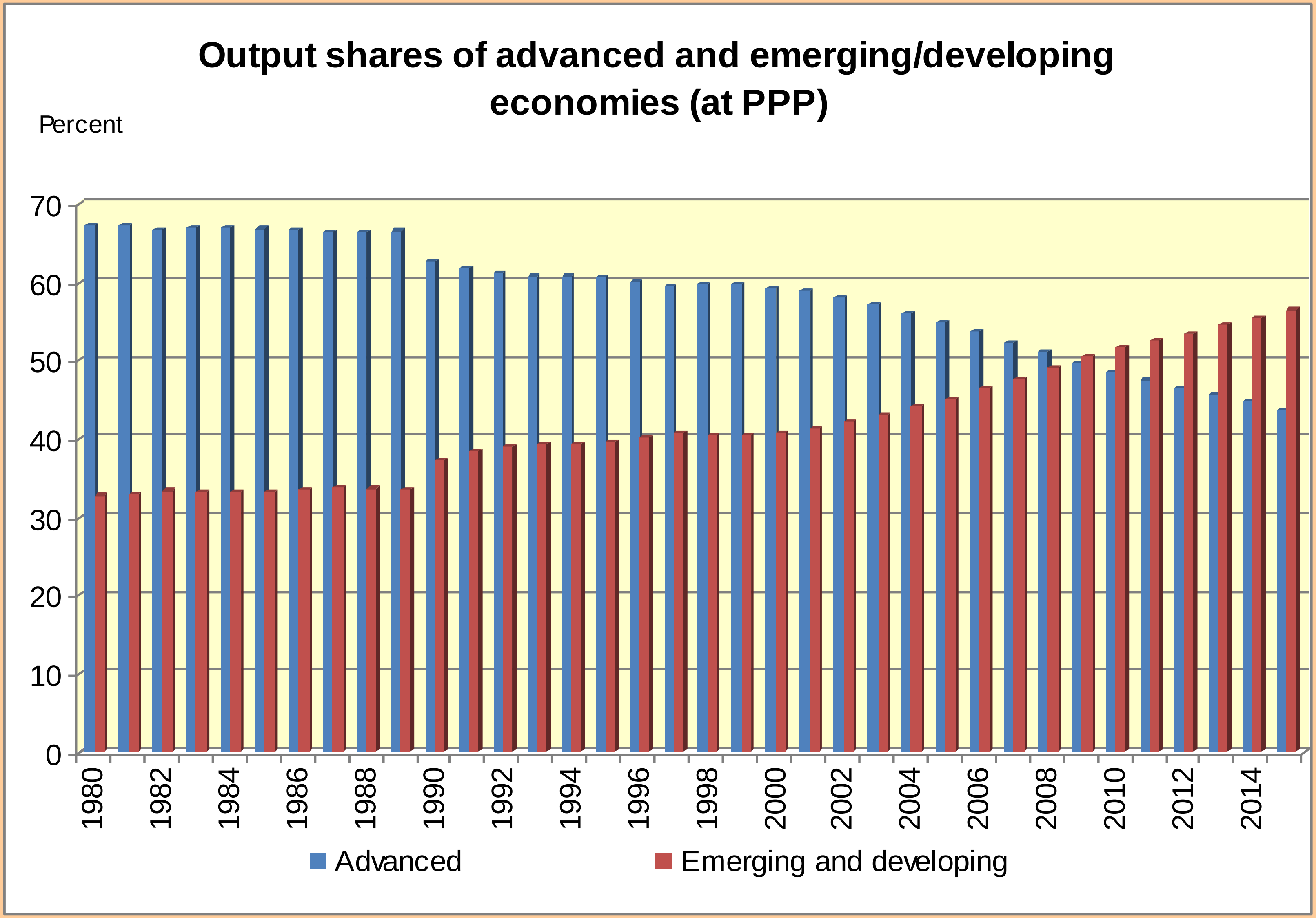
- Some drawbacks are purely domestic (carry cost, sterilization costs, illusion of security)
- Others raise systemic issues:

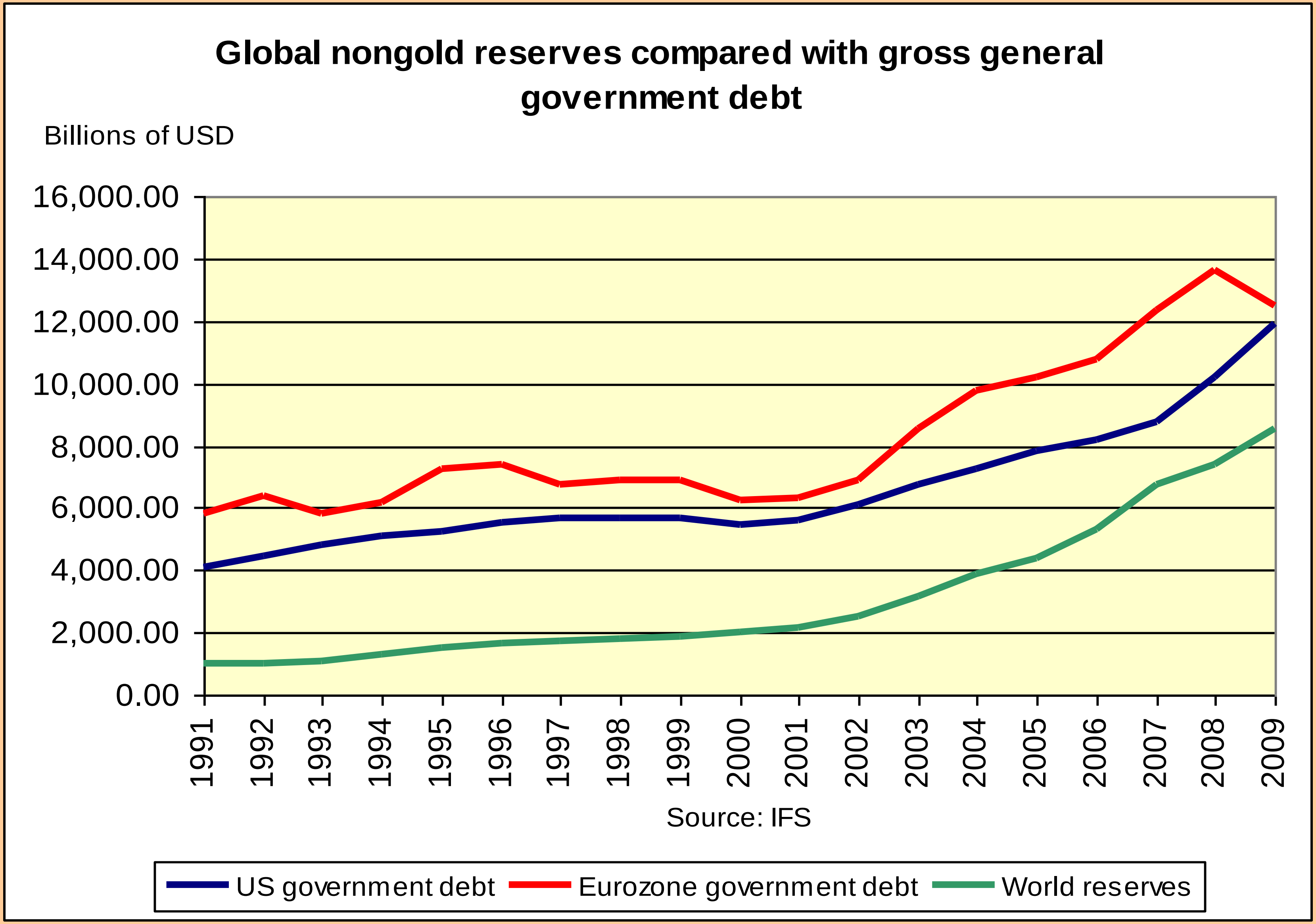
  --Not *outside* liquidity

  --Exchange rate and interest rate effects (case of China)

  --Engine of deflation?

  --Keeping up with regional Joneses; case of Korea
- Updated Triffin paradox of Farhi, Gourinchas, Rey (2011): as emerging markets grow, creditworthy governments cannot continue to satisfy their demand for "safe" debt without eventually rendering that debt risky
- (Analogously, Greenspan worried in 2000 that Fed would be unable to hold enough "safe" US gov't debt to conduct monetary policy!)


Output shares of advanced and emerging/developing economies (at PPP)
Percent
70
60
50
40
30
20
10
0
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
Advanced
Emerging and developing



Global nongold reserves compared with gross general government debt
Billions of USD
16,000.00
14,000.00
12,000.00
10,000.00
8,000.00
6,000.00
4,000.00
2,000.00
0.00
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Source: IFS
US government debt
Eurozone government debt
World reserves

Role of SDRs?

- Source of *unconditional* liquidity—but not *outside* liquidity
- Some have suggested these could replace dollars in international reserves
- At present they are basically claims to a reserve pool – which itself is limited
- SDRs cannot "replace" that pool
- Substitution account—fiscal obstacles

Permanent swap lines (1)

- Central banks could run permanent swap lines to others; maybe through IMF, maybe BIS
- Would mimic ad hoc swaps of 2007-2009
- Available only to monetary authorities with sufficient political independence, meeting regulatory criteria
- Also needs fiscal backup from IMF or BIS members, enhanced prudential surveillance

Permanent swap lines (2)

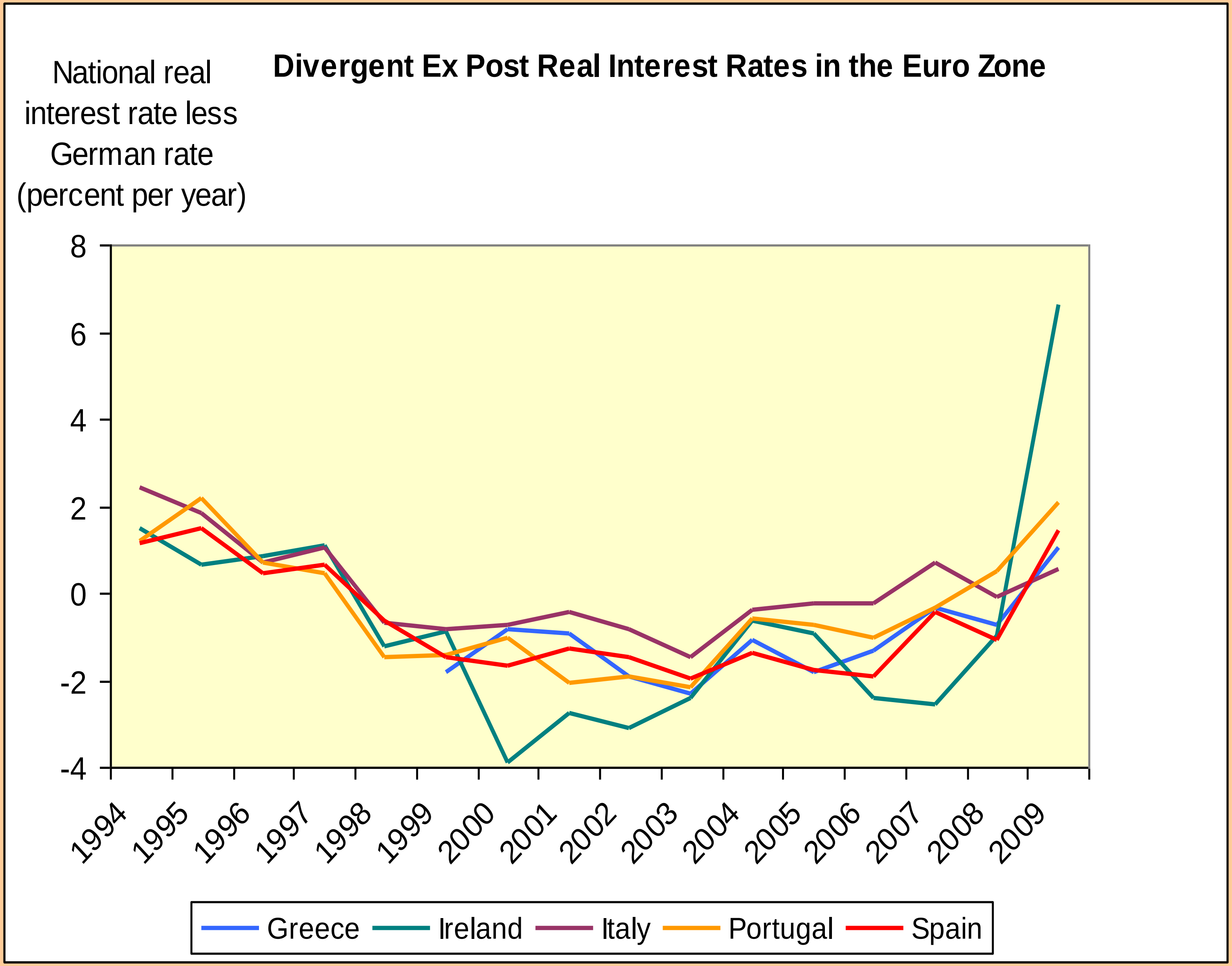
- Countries would not need to hold large reserve stocks
- There would be no issue of switching between currencies
- Ted Truman suggests SDRs should be sellable directly to central banks for outside liquidity
- More reserve pooling still useful—perhaps through greater SDR allocations, but not necessarily
- Credit limits? Cost of facilities? Useful as regulatory tools? Political feasibility/credibility?

4. Problems of the euro zone

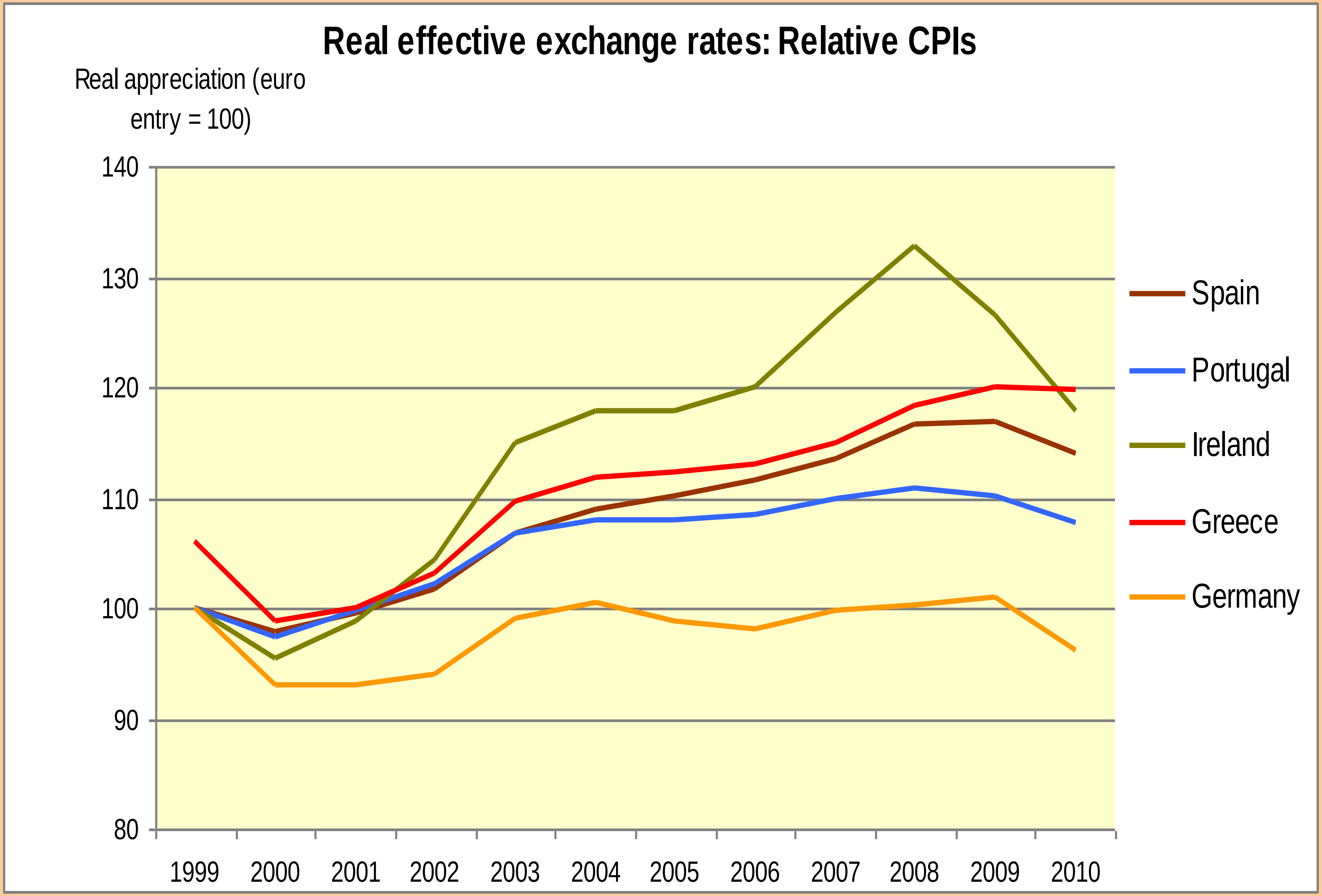
- The euro zone’s crisis illustrates both the need for LLR support (provided by ECB) and for sovereign support (provided by EU, reluctantly by ECB, and by IMF)
- Currency mismatch problems absent, but absence of devaluation is a major factor

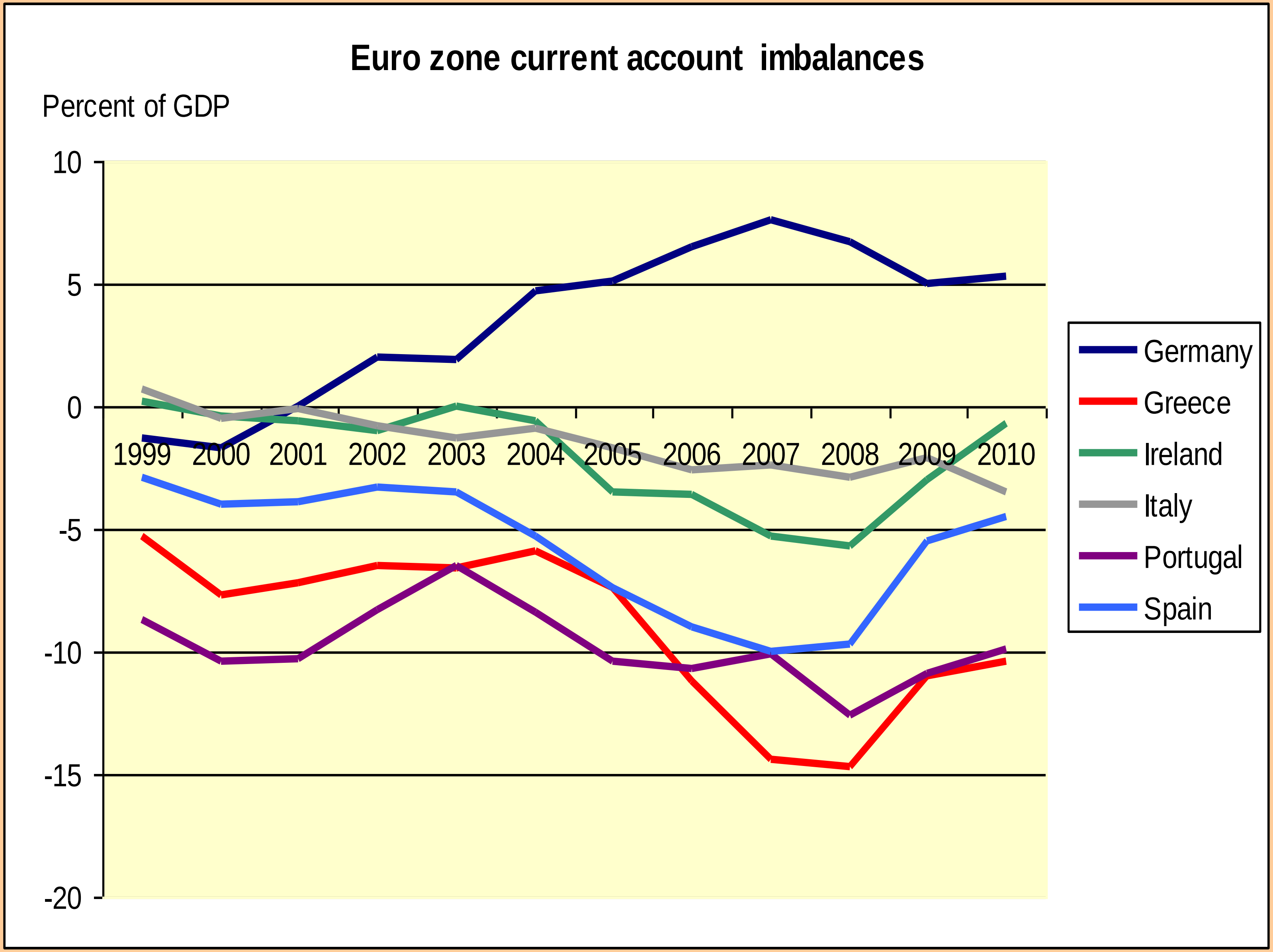
Impact of monetary unification

- Within euro zone, real interest rates starting early in the decade were driven by inflation divergences and helped drive big current account deficits and leverage booms
- For some countries, these gross and net flows were precursors to sovereign debt crises
- Unemployment remains a major peril (including its fiscal consequences, e.g. in Spain)



Divergent Ex Post Real Interest Rates in the Euro Zone
National real interest rate less German rate (percent per year)
8
6
4
2
0
-2
-4
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Greece
Ireland
Italy
Portugal
Spain


Real effective exchange rates: Relative CPIs
Real appreciation (euro entry = 100)
140
130
120
110
100
90
80
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Spain
Portugal
Ireland
Greece
Germany



Euro zone current account imbalances
Percent of GDP
10
5
0
-5
-10
-15
-20
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Germany
Greece
Ireland
Italy
Portugal
Spain

A problem of globalized finance

- In euro zone big exposures largely confined to EU
- Only internal evaluation available
- But similar issues of financial-stability externalities arise on a global scale
- Imagine Greece was “euroized,” with open capital markets, but not a member of euro zone – how different would matters be now?
- Euro zone’s lack of fiscal capacity raises parallel issue at global level too, though perhaps less strongly

5. Complementary reforms

- Deal with moral hazard on part of private market actors and governments
- Enhanced international cooperation over financial regulation, enforcement
- Sovereign restructuring regime – when to introduce?
- Cross-border resolution regime
- Greater fiscal resource pooling, not just in euro zone, would accompany these
- Governance of IMF ever more critical if its powers/resources are extended

Some lessons

- Global imbalances have grown and remain important
- But increasingly, so are gross asset positions
- Global institutions of surveillance, suasion, and liquidity support are still inadequate
- Their enhancement requires more global fiscal pooling – not just in euro zone
- Globalized finance and trade cannot proceed safely far beyond the boundaries of globalized governance – an autonomy, stability, globalization trilemma