Lecture 18
Global imbalances

Anne Epaulard

Outline of the lecture

1. Global imbalances: past episodes; size...
2. Are they sustainable?
3. Adjustment scenarios
Global imbalances: nothing new?

- Early 1970s: tensions over external imbalances caused the end of the Bretton Woods system.
- In the 1980s: widening current account positions led to intensive international coordination with concrete policy commitments under the G5/G7 Plaza (1985) and Louvre (1987) agreements focusing on exchange rates.
- In the 1990s, external imbalances in emerging economies: a series of financial crises across nearly all large emerging economies.

The gold standard era (until 1914)

- In the period preceding the First World War:
  - high mobility of capital across countries,
  - stability in exchange rates.
- Large flow of investment from industrial countries (UK, France) to emerging markets (US, Canada, Australia, India).
- The main difference with the current situation: flows are now running from poor to rich countries.
The Bretton Woods era

- Fixed exchange rates (like gold standard),
- Strong restrictions on cross-border capital flows:
  - the system did not allow large transfers of net savings between countries through trade.
  - a country running a large trade deficit would normally, in agreement with the IMF, engineer a devaluation of its currency in order to regain competitiveness and reduce the deficit.
- The Bretton Woods system arrangement was ended through the exhaustion of international reserves in the anchor country.

The oil shocks of the 1970s

- Major terms of trade shock: transfer of resources from oil-importing countries to oil producers.
- Latin American countries ran large deficit (debt denominated in US $ at floating US interest rates)
- Non sustainability become apparent with the rise in interest rates in the United States.
- Reduction in absorption among Latin American countries in the late-1970s and mid-1980s
- Impact on the oil-exporting countries (Saudi Arabia ran a current account deficit in the mid 1980s).
The US deficit in the 1980s

- Large deficit in the US in the early 80’s
- Counterparts: Japan, Germany and the Netherlands.
- The unwinding of the imbalances:
  - Gradual depreciation of the US dollar, .... It took some time for the US current account to improve (J curve effect)

The emerging markets crises of the 1980s and 1990s

- In the 1980s and 1990s, many emerging markets were affected by severe financial debt crises, which had sizeable real effects (with output losses sometimes amounting to 20% of GDP).
- One particular aspect of these crises is that they corresponded to the classical case of (relatively) rich lenders investing in poorer debtor countries.
- Most of these episodes ended in a disorderly fashion for the debtors.
- For the creditors the losses were relatively contained (currency composition of the debt).
Global imbalances

<table>
<thead>
<tr>
<th></th>
<th>Region</th>
<th>Orderly unwinding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Creditor</td>
<td>Debtor</td>
</tr>
<tr>
<td>Gold standard</td>
<td>advanced</td>
<td>emerging</td>
</tr>
<tr>
<td>Bretton woods</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>1970s</td>
<td>emerging</td>
<td>emerging</td>
</tr>
<tr>
<td>1980</td>
<td>advanced</td>
<td>advanced</td>
</tr>
<tr>
<td>1990s</td>
<td>advanced</td>
<td>emerging</td>
</tr>
<tr>
<td>2000s</td>
<td>emerging</td>
<td>advanced</td>
</tr>
</tbody>
</table>

Measuring today’s Global imbalances

Flows
(i) the magnitude of absolute current account balances,
(ii) their concentration across countries, and
(iii) their persistence over time.

Stocks
(iv) Net and gross asset positions
(v) Foreign exchange reserves
Today’s Global imbalances

Sum of current account balances in the world

The sizable U.S. current account deficit mirrors the surpluses in Asia and the oil exporters...
Today’s Global imbalances

Average persistence of global current account balances

Today’s Global imbalances

Net (left) and gross (right) asset position
Today’s Global imbalances:
largest debtors and creditors in 2006

<table>
<thead>
<tr>
<th>Country</th>
<th>USD bn</th>
<th>% GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>-2,546</td>
<td>-20</td>
</tr>
<tr>
<td>Euro area</td>
<td>-1,009</td>
<td>-10</td>
</tr>
<tr>
<td>Australia</td>
<td>-380</td>
<td>-55</td>
</tr>
<tr>
<td>Mexico</td>
<td>-319</td>
<td>-41</td>
</tr>
<tr>
<td>Brazil</td>
<td>-284</td>
<td>-13</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>-269</td>
<td>-47</td>
</tr>
<tr>
<td>Turkey</td>
<td>-151</td>
<td>-33</td>
</tr>
<tr>
<td>Poland</td>
<td>-124</td>
<td>-41</td>
</tr>
<tr>
<td>Indonesia</td>
<td>-106</td>
<td>-38</td>
</tr>
<tr>
<td>South Korea</td>
<td>-95</td>
<td>-12</td>
</tr>
<tr>
<td>Hungary</td>
<td>-84</td>
<td>-86</td>
</tr>
<tr>
<td>New Zealand</td>
<td>-82</td>
<td>-85</td>
</tr>
<tr>
<td>Sweden</td>
<td>-57</td>
<td>-34</td>
</tr>
<tr>
<td>Thailand</td>
<td>-58</td>
<td>-34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>USD bn</th>
<th>% GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>1,532</td>
<td>34</td>
</tr>
<tr>
<td>Switzerland</td>
<td>565</td>
<td>99</td>
</tr>
<tr>
<td>China</td>
<td>267</td>
<td>13</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>119</td>
<td>36</td>
</tr>
<tr>
<td>Singapore</td>
<td>101</td>
<td>69</td>
</tr>
<tr>
<td>Algeria</td>
<td>43</td>
<td>42</td>
</tr>
<tr>
<td>Venezuela</td>
<td>37</td>
<td>28</td>
</tr>
<tr>
<td>Iran</td>
<td>35</td>
<td>19</td>
</tr>
<tr>
<td>Libya</td>
<td>34</td>
<td>68</td>
</tr>
<tr>
<td>Argentina</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>Syria</td>
<td>13</td>
<td>49</td>
</tr>
<tr>
<td>Botswana</td>
<td>8</td>
<td>78</td>
</tr>
<tr>
<td>Nigeria</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Bolivia</td>
<td>7</td>
<td>55</td>
</tr>
<tr>
<td>Oman</td>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>

Foreign exchange reserves

Today’s Global imbalances /
foreign exchange reserves
Today’s Global imbalances

- Aggregate current account positions as a share of global output are twice as large as in the mid-1980s.
- Gross foreign asset positions have increased fourfold since the mid-1980s,
- net foreign asset positions have increased threefold.
- Reserve accumulation has reached a never-seen pace in the past decade, (a puzzle in a world of increasingly freely floating exchange rates).

Then and now / Globalization

- Ten years ago:
  - Global economic limited to a tripolar world: US; EU; Japan
  - Emerging markets: peripheral areas of production.
- Now:
  - Economic liberalization and post cold war political transformation have removed borders between the centre and the periphery.
  - Reduced temporal and spatial distances: (falling transportation costs, the growing use of IT) markets have reduced spatial and temporal.
  - Slicing up of production chains allows emerging economies to specialize in specific parts of the value-added ladder.
Then and now / Financial globalization

- Ten years ago: International financial flows with emerging economies were mostly the counterpart of trade flows.
- Today: Gross international asset positions rose above global GDP in the early 2000s and are now around 1.3 times as large. Surge in international portfolios was made possible by:
  - a strong rise in overall financial wealth,
  - a secular decline in investors’ home bias,
  - acceleration of financial innovation.

![Gross global capital flows have surged since 1995.](source: IMF; International Financial Statistics)

Then and now (till 2007) / good economic conditions

- Ten years ago: considerable uncertainty over global macroeconomic environment.
  - High business cycle volatility, financial crises in emerging markets (Asia, Russia, Brazil, Turkey)
  - Instability in pockets of the developed industrial financial markets (Long-Term Capital Management)
  - Concerns about inflation

- [2004 – 2007] global macroeconomic environment looked very stable,
  - Global economic growth around 5% per annum
  - Decreased in business cycle volatility
  - Low inflation in spite of the strong growth environment.
  - Financial market volatility and risk aversion at record lows.
Outline of the lecture

1. Global imbalances: past episodes; size ...
2. Are they sustainable?
3. Adjustment scenarios

Causes of current global imbalances

☐ A puzzle: money should flow from rich to poor countries (where marginal return to invest should be higher)
☐ The “savings glut”
  ▪ Uncertainty in emerging economies: precautionary saving
    □ Individual uncertainty (no safety net, no social security, no health care insurance …) and poorly developed banking sector
    □ Aggregate uncertainty (explain the building up of reserve)
  ▪ Oil revenues
    □ Oil producing countries learnt there lessons: more caution now than before (investment funds)
☐ The “consumption and investment boom” in the US
  ▪ Low private saving
  ▪ Public deficit
The US benefits from the situation

- Financial inflows from abroad have:
  - boosted US asset prices
  - kept US long-term interest rates low,
  (higher consumption and investment in the US)

- Return on US gross foreign assets exceeds that on US gross foreign liabilities.

- Foreign claims on the US denominated in dollars / US assets abroad denominated in foreign currency:
  - Decline in the $ = boost to the dollar equivalent of foreign assets = reduction in US net foreign liabilities (measured in US $).

Current global imbalances
shall we worry about them?

- Some see current imbalances as an (equilibrium) market-driven outcome in a world operating under a new paradigm:
  - emergence of new players,
  - deepening financial globalization,
  - Stable macroeconomic environment.

- new paradigm: the sustainability of external imbalances becomes hard to measure, as traditional metrics of sustainability may not apply in an era of enhanced financial integration.
Current pattern of global imbalances is not sustainable

- at unchanged real effective exchange rates, large current account imbalances will persist.
- This implies:
  - implausible accumulation of foreign liabilities on the US side
  - implausible accumulation of assets on the Chinese and Japanese sides
  - US net foreign liabilities in 2006: 8% percent of world GDP (26% of U.S. GDP)
  - US net foreign liabilities in 2011 (predicted): 15% of world GDP (over 51% of US GDP).
- At some stage, foreign investors will begin to demand ever higher returns on the US assets that they buy.
- But when is too much too much?

Current account adjustments will take place

- via movements in exchange rates:
  - significant depreciation in the $;
  - appreciations in the currencies of other countries,
- via a rebalancing of demand and saving across the globe:
  - More saving in the US
  - Higher consumption in other countries (China)
Policy led or market driven adjustment?

- Market sentiment can change abruptly and the risk of a market-led adjustment is that it might involve global recession, abrupt and excessive changes in key exchange rates and asset prices.
- To reduce the risk of such an outcome, policymakers need to initiate a policy-induced adjustment in the near future.

Unwinding of global imbalances: a multilateral issue

- Multilateral consultations at the IMF initiated in 2006.
- They have not achieved significant results.
- The US is focusing on its bilateral relationship with China,
- The Europeans were getting vocal about the yen.
Outline of the lecture

1. Global imbalances: definition; data
2. Are they sustainable?
3. Adjustment scenarios

Real Effective Exchange rate movements

Real effective exchange rate change required to reduce U.S. current account deficit to 3 per cent of GDP in the medium term (percent change; + implies appreciation, - implies depreciation)

<table>
<thead>
<tr>
<th>Source</th>
<th>US dollar</th>
<th>Japanese yen</th>
<th>Chinese Yuan</th>
<th>Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin Baily</td>
<td>-15 to -20</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Ray Barrell, Dawn Holland and</td>
<td>-11 to -19</td>
<td>+10 to +14</td>
<td>+3 to +7</td>
<td>-3</td>
</tr>
<tr>
<td>Ian Hurst</td>
<td></td>
<td></td>
<td></td>
<td>+6</td>
</tr>
<tr>
<td>Bill Cline (a)</td>
<td>-18</td>
<td>+11 to +13</td>
<td>+11 to +18</td>
<td>0</td>
</tr>
<tr>
<td>Thomas Snider and Monica</td>
<td>-16</td>
<td>+18</td>
<td>+5</td>
<td>+2</td>
</tr>
<tr>
<td>Fuentes (b)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ronald MacDonald and Freihike</td>
<td>-11*</td>
<td>+6</td>
<td>+27</td>
<td>0</td>
</tr>
<tr>
<td>Dias</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chris Ercog (c)</td>
<td>-3 to -25</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
</tbody>
</table>
Bilateral real exchange rate movements

Table 2
Bilateral real exchange rate change against the U.S. dollar consistent with the REER movements in Table 1 (percent change; + implies appreciation)

<table>
<thead>
<tr>
<th></th>
<th>Japanese yen</th>
<th>Chinese Yuan</th>
<th>Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin Baily</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Ray Barrell, Dawn Holland and Ian Hurst</td>
<td>+24</td>
<td>+16</td>
<td>+16</td>
</tr>
<tr>
<td>Bill Cline</td>
<td>+28 to +39</td>
<td>+31 to +44</td>
<td>+20</td>
</tr>
<tr>
<td>Thomas Stolper and Monica Fuentes</td>
<td>+25</td>
<td>+10</td>
<td>+15</td>
</tr>
<tr>
<td>Ronald MacDonald and Preélike Doss</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Chris Eng</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
</tbody>
</table>

The impact of the financial crisis on global imbalances

- Japanese Yen appreciated up since 2007 (is it enough?)
- US Dollar depreciated (is it enough?)
- Chinese Rìmínbì hasn’t move much (when will it happen?)
- US current account deficit getting smaller (5% of GDP in 2008)
- Oil price went down
- US households’ saving rate is up (but what about fiscal deficit?)
OECD Forecast, March 2009