Discussion of paper by Philip Lane & Gian Maria Milesi-Ferretti on

“Where Did All The Borrowing Go? A Forensic Analysis of the U.S. External Position“

Marcel Fratzscher
European Central Bank

SNB-IMF Conference on Exchange Rates
Zürich, 24-25 November 2008
The usual disclaimers apply.
1. Main points

- Stock-flow discrepancy in the U.S. balance of payments
  - US IIP relatively stable despite large US CA deficit
  - What is source of discrepancy: role of “residual adjustments”, i.e. past measurement errors in (a) financial flows, (b) capital gains, and/or (c) initial positions?

- Three key points of paper
  - Residual adjustments contributed to improve US external position: due to under-reported capital (portfolio) outflows and initial positions (in OI); and not capital gains …
Stock-flow discrepancy (Fig. 1.A)
Main points

• Three key points of paper

  • Residual adjustments contributed to improve US external position: due to under-reported capital (portfolio) outflows and initial positions (in OI); and not capital gains

  • Magnitude sizeable: 0.6-0.7% of GDP

  • New puzzle: how can US current account deficit exceed net capital flows to US by 0.6-0.7% of GDP?

\[
RESID_{it}^{rev} = (POS_{it}^{rev} - POS_{it-1}^{rev}) - F_{it}^{rev} - VAL_{it}^{P,rev}
\]
Stock-flow discrep. – valuation adj. (Fig. 2.A)
Sources of residual adjustment (Fig. 4.A)
Contribution

• Gourinchas & Rey (2007) Lane & Milesi-Ferretti (2007)
  • Attribute discrepancy to (relative) capital gains between US and foreign investors

• Curcuru, Dvorak and Warnock (2008)
  • Rates of return are similar for US and foreign residents
  • Data revisions are key: upward revisions of US financial assets (capital outflows) over time
Contribution

- Present paper
  - In vein of CDW 2008, but focus (a) on residual adjustment;
  - (b) alternative scenarios for attributing residuals;
  - (c) new puzzle: mismatch US current account position and outflows

- Interpretation of residual adjustment
  - Puzzle of (c) possibly due to both under-reporting of US exports and under-reporting of US external liabilities
  - Also Curcuru, Thomas and Warnock (2008)
2. First comment: forensic nature

- Forensic nature of analysis – find the culprit from circumstantial evidence – how sure can we be?
- Key are the underlying assumptions of scenarios:
  - What are they precisely (e.g. currency composition; type of investment; maturity; timing of flows, etc.)?
  - How plausible are they?
  - Can we say something about range of assumed parameters, and thus distribution of possible scenarios?
First comment: forensic nature

- Why make inferences based on assumptions?
- Could one follow traces to identify the culprit directly?
  - Look at micro evidence of US investors versus foreign investors
  - This would be a much more direct test for the most contentious of all issues – importance of valuation effects:
  - Are rates of return on US assets really not (much) higher than those on US liabilities?
Aggregate evidence on return differentials

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claims</td>
<td>9.56</td>
<td>9.73</td>
<td>13.57</td>
<td>12.32</td>
<td>19.84</td>
</tr>
<tr>
<td>Liabilities</td>
<td>11.88</td>
<td>12.50</td>
<td>14.53</td>
<td>14.24</td>
<td>13.73</td>
</tr>
<tr>
<td>Differential</td>
<td>-2.32</td>
<td>-2.77</td>
<td>-0.96</td>
<td>-1.92</td>
<td>6.11</td>
</tr>
<tr>
<td><strong>Bonds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claims</td>
<td>6.08</td>
<td>6.47</td>
<td>10.69</td>
<td>5.25</td>
<td>8.35</td>
</tr>
<tr>
<td>Liabilities</td>
<td>5.89</td>
<td>5.81</td>
<td>3.97</td>
<td>1.89</td>
<td>4.62</td>
</tr>
<tr>
<td>Differential</td>
<td>0.19</td>
<td>0.66</td>
<td>6.72</td>
<td>3.36</td>
<td>3.73</td>
</tr>
</tbody>
</table>

*Source: Table V of Curcuru, Dvorak and Warnock (2008)*
## Micro evidence on individual fund returns

### Annualised equity returns for investment funds, 2003-08

<table>
<thead>
<tr>
<th></th>
<th>mean return</th>
<th>std. dev.</th>
<th>assets (USD billion)</th>
<th>number of funds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>US funds in US</strong></td>
<td>8.6</td>
<td>30.9</td>
<td>4,017</td>
<td>4961</td>
</tr>
<tr>
<td><strong>Non-US funds in US</strong></td>
<td>7.0</td>
<td>35.9</td>
<td>106</td>
<td>896</td>
</tr>
<tr>
<td><strong>US funds in non-US</strong></td>
<td>15.1</td>
<td>36.2</td>
<td>1,974</td>
<td>2051</td>
</tr>
<tr>
<td>advanced econ.</td>
<td>15.5</td>
<td>37.6</td>
<td>93</td>
<td>143</td>
</tr>
<tr>
<td>emerging econ.</td>
<td>15.1</td>
<td>36.3</td>
<td>1,880</td>
<td>1908</td>
</tr>
<tr>
<td><strong>Non-US funds in non-US</strong></td>
<td>18.0</td>
<td>48.0</td>
<td>1,539</td>
<td>5599</td>
</tr>
<tr>
<td>advanced econ.</td>
<td>12.8</td>
<td>43.2</td>
<td>539</td>
<td>2040</td>
</tr>
<tr>
<td>emerging econ.</td>
<td>20.4</td>
<td>52.1</td>
<td>1,000</td>
<td>3559</td>
</tr>
</tbody>
</table>

Source: Fratzscher (2008)
Micro evidence on individual fund returns

- Monthly equity returns for large set of funds:
  - Returns on US assets much higher than on US liabilities
  - More similar to original Gourinchas-Rey differentials
  - Higher risk of US assets than US liabilities
  - i.e. US investors should be earning higher returns in the long-run to compensate for risk differentials
- The debate on the importance of capital gains seems far from resolved
3. Second comment: CA sustainability

- Policy relevance of paper’s argument: implications for sustainability of US current account deficit

- Concept/definition of sustainability:
  - Ability to record “large” current account deficits or surpluses for a sustained period of time
  - Key question: how much of a net debtor can the US become (e.g. same as, say, Australia)?
  - → we know little about what sustainable IIP could be, but probably much larger than current US IIP
3. Second comment: CA sustainability

- How “sustainable” or stable has US CA been in past?
- Also in present paper, much of the stock-flow discrepancy occurs in the 2002-07 sub-period
## CA sustainability

### Current account adjustment (in % of GDP)

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced economies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>-0.6</td>
<td>-1.1</td>
<td>-1.3</td>
<td>-0.9</td>
<td>-1.0</td>
<td>-0.6</td>
<td>-0.6</td>
</tr>
<tr>
<td>Euro area</td>
<td>0.8</td>
<td>0.2</td>
<td>0.0</td>
<td>0.3</td>
<td>-0.5</td>
<td>-0.5</td>
<td>-0.5</td>
</tr>
<tr>
<td>Japan</td>
<td>3.7</td>
<td>3.6</td>
<td>3.9</td>
<td>4.8</td>
<td>4.0</td>
<td>3.7</td>
<td>3.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>-2.1</td>
<td>-2.6</td>
<td>-3.4</td>
<td>-3.8</td>
<td>-3.6</td>
<td>-3.4</td>
<td>-2.9</td>
</tr>
<tr>
<td><strong>EMEs and developing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing Asia</td>
<td>2.4</td>
<td>4.1</td>
<td>4.9</td>
<td>4.1</td>
<td>2.9</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>3.6</td>
<td>7.2</td>
<td>9.4</td>
<td>11.3</td>
<td>9.5</td>
<td>9.2</td>
<td>10.0</td>
</tr>
<tr>
<td>Western Hemisphere</td>
<td>0.9</td>
<td>1.3</td>
<td>1.5</td>
<td>0.4</td>
<td>-0.8</td>
<td>-1.6</td>
<td>-1.6</td>
</tr>
<tr>
<td>Central &amp; Eastern Europe</td>
<td>-5.0</td>
<td>-4.3</td>
<td>-5.6</td>
<td>-6.0</td>
<td>-6.7</td>
<td>-7.1</td>
<td>-7.0</td>
</tr>
<tr>
<td>Oil exporters</td>
<td>10.0</td>
<td>15.2</td>
<td>15.6</td>
<td>12.2</td>
<td>14.5</td>
<td>10.2</td>
<td>8.7</td>
</tr>
</tbody>
</table>

*Source: World Economic Outlook, October 2008.*
4. Ongoing CA adjustment

• What may happen in future – esp. after financial crisis?
  • Residual adjustment has turned negative in 2006-07 (Fig. 4)
  • Sharp adjustment in US CA deficit already occurring…
  • … and this despite huge USD exchange rate fluctuations
  • See latest WEO projections – possibly still not fully reflecting all of US CA deficit reduction
5. Conclusions

- Neat paper on debated issue
  - Focus on residual adjustments and allocation to various financial account categories
  - Key result: Residual adjustments due to under-reported capital (portfolio) outflows and initial positions (in OI); and not capital gains; Magnitude sizeable: 0.6-0.7% of GDP
  - New puzzle: how can US current account deficit exceed net capital flows to US by 0.6-0.7% of GDP?
  - Suggestions to focus on assumptions and implications for policy