RIETI BBL Seminar Handout

“Japanese Current Account: Post-Tohoku Earthquake”

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http://www.rieti.go.jp/jp/index.html
Japanese Current Account: Post-Tohoku Earthquake

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Main Points

• Japanese Current Account started to deteriorate before the Tohoku Earthquake, after the Lehman Crisis.

Decline in Current Account Accelerated after Tohoku, owing to rapid increases in mineral imports, especially that of natural gas imports.
Main Points

• Over the medium-term, Japanese total saving rates have been declining, and will continue to decline as the population ages and as government deficits remain, Japan’s current account should worsen.

My model shows that the current yen-dollar exchange rate is appropriately, or still slightly overvalued. The yen can get weaker.
The Japanese Current Account

UNIT: 100 million Yen
Components of Current Account

The current account started to decline from mid-2007.
Main cause, a plummeting to zero of the merchandise trade balance.
Another sharp decline in the current account starting in March 2011, as the merchandise trade balance turned sharply negative after the Earthquake.
Income inflows (from past accumulation of international net wealth) has actually increased since the earthquake.

In Japan, the current account in services (financial services, consulting, etc.) has always been in deficit and is still in deficit, nothing new here.
Merchandise Trade Balance: Post-Lehman—Pre-Earthquake

Total merchandise exports started to decline from late 2007, while total merchandise imports remained high, contributing to the decline in the merchandise trade surplus (collapse in world demand).

Then, total merchandise imports started to fall, stabilizing the trade balance until the Earthquake in 2011.
Post-Earthquake Trade Balances

Since the Earthquake, merchandise exports remained stable. In fact, merchandise exports increased slightly in 2012.

Merchandise imports, however, surged, contributing to the sharp deterioration in the merchandise trade balance and the current account.
Post-Earthquake Trade Balances By Commodity

In exports, most commodities remained constant. In fact, machinery exports increased slightly.

In imports, mineral imports increased especially sharply while machinery imports also increased somewhat.
Still More Disaggregated View

Focusing just on merchandise imports, we can see that the surge in imports is largely due to the surge in mineral imports and somewhat due to the increase in machinery imports.
With regards to narrow merchandise import categories, imports of liquified natural gas increased throughout.
EXPORTS OF MACHINERY, TRANSPORT EQUIPMENT (by Category)
Exports: Decline in Passenger Motor Cars Had Big Impact Initially, although Motor Cars Exports Recovered Quickly
Saving-Investment Approach

While the proximate cause of the deterioration of the Japanese current account is the surge in mineral oil imports, owing to the fall in energy production because of the shutdown of nuclear power plants, the current account deterioration should also show up in a smaller saving-investment gap.
Macroeconomists—as opposed to trade economists—are more familiar at looking at the Current Account from the Saving-Investment Identity:

\[ \text{CAS} = \text{TS} - \text{TI} = \text{S(private)} + \text{S(public)} - \text{I(private)} - \text{I(public)}. \]
The deterioration in the current account should show up as either a fall in saving or a rise in investment.
Next graph shows the quarterly changes in the Japanese Current Account since 2005.

Generally, the overall decline in the Current Account since 2008 and beyond is driven by the decline in total saving.
After the earthquake, the fall in saving, and the rise in reconstruction investment both contributed to the decline in the current account.
Contribution to Changes in the Current Account (Change from Previous Year)
Exchange Rate Effects on the Current Account

• Actual exchange rates, especially real exchange rates are both determined in the economy, so we cannot say that “changes” in the exchange rate caused changes in the current account. In fact, the current account deficit and the real exchange rate appreciation (since 2007) had simultaneous causes (negative foreign demand shocks).
Exchange Rate Effects: the Appreciation of the Yen After 2008, which continued on to 2013 Coincided with the Deterioration in Japan’s Current Account
Real Effective Exchange Rates: This pattern can even be seen in the real effective exchange rates. Notice the sharp appreciation of the yen until mid-2013.
A Measure of the Equilibrium Real Yen-Dollar Exchange Rate (from Dekle, 2013)
In Real Terms Maybe Yen was Undervalued between 2006 and 2008, and the Overvalued from then on. Yen may be correctly valued or slightly overvalued today. Equilibrium should be 115-120 yen to the Dollar.
Holy Grail—Micro- Macro. Integration of the shocks to productivity from the earthquake with the Saving-Investment Balance Approach
Use Approach of Dekle, Kiyotaki, and Jeong (2013). Shocks can result in the change in the trade balance of particular commodities, capital inflows, and the current account balance, through a general equilibrium macroeconomic-trade model.
Example: Productivity Shock (Earthquake Shock) results in exit of low productivity (marginal products) from exporting, appreciation of real exchange rate, and current account deterioration
Projections of the Japanese Current Account

Household Saving will Continue to Fall

Corporate Saving will Fluctuate

Government Saving will Fall
Investment May Stay Flat or Rise ("Olympics" Public and Private Investment)

Many Simulations show that Japan will start to run fairly large current account deficits by 2020 (in 5 years)
Would not want to have large government debt and large current account deficits at the same time.
Thank you!