Overview: External Sector
In Myanmar

Introductory Workshop to
Financial Programming and Policies
Yangon, Myanmar
January 19–23, 2015

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IMF-TAOLAM training activities are supported by funding of the Government of Japan
Outline

I. External Sector Overview

II. Useful Concepts & Indicators

III. Balance of Payments Developments in Myanmar

IV. External Sector Considerations
External Sector Overview

Basic structure of Balance of Payments

- Current Account
- Capital and Financial Account
- Errors and omissions

Overall Balance

Financing
External Sector Overview

Basic Structure of current account balance (real transactions)

- **Trade Balance (Goods)** = Exports - Imports
- **Trade Balance (Services)** = Exports - Imports
- **Net Income** (e.g., Interest, Profit Repatriation)
- **Net Transfers** (Official, Private)

**Current Account Balance**
External Sector Overview

Basic Structure of capital and financial account balance (financial transactions)

**Capital Account** *(e.g., Debt forgiveness)*

**Financial Account**

*Direct Investment*

*Portfolio Investment*

*Other Investment* *(e.g., net loans—disbursements minus repayment; currency and deposits)*

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Financial and Capital Account Balance
External Sector Overview

Basic structure: financing

**Flows**

- Overall Balance = Financing

**Stocks**

- Change in Net Financial Reserves
- Foreign Reserve Levels
- Change in Arrears
- Stock of Arrears
- Exceptional Financing
External Sector Overview

Current Account
- Trade
- Services
- Income
- Transfers

Overall Balance
What happens to reserves?

Surplus?
Accumulate reserves

Deficit?
Run down reserves

Financing
- Cap & Fin Account

Putting it all together ...
Outline

I. External Sector Overview

II. Useful Concepts & Indicators

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Useful Concepts & Indicators

The exchange rate

Kyat-US dollar exchange rate:

- Devaluation
- Appreciation

What determines the exchange rate?

For what does the exchange rate matter?

But first, two different ways of measuring the exchange rate ...
Useful Concepts & Indicators

Measuring the Exchange Rate as Kyat/US$ Rate

Kyat/US$ Exchange Rate

- Graph showing the Kyat/US$ exchange rate from 2012 to 2014, with a noticeable increase from early 2013 to mid-2014.


- The exchange rate starts at around 850 in 2012 and rises to over 1,050 by 2014.
Useful Concepts & Indicators

Measuring the Exchange Rate as US$/$Kyat Rate

US$/kyat Exchange Rate


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Useful Concepts & Indicators

What determines the exchange rate?

- Availability of foreign exchange
  Depends on ...
  → Balance of Payments
  → Central bank intervention

*Sources: Myanmar authorities; and IMF staff calculations.*
Useful Concepts & Indicators

Fundamental exchange rate factor: price differentials

Similar good in two countries should cost about the same

→ exchange rate corrects for price differential

→ Called ‘Purchasing Power Parity’
Useful Concepts & Indicators

Real Exchange Rate

Comparing the price level in Myanmar with that of other countries, all expressed in US$:

\[
RER = \frac{CPI_{Myanmar}^{kyat} \cdot US$^{kyat}}{CPI_{USA}^{US$}} = \frac{CPI_{Myanmar}^{US$}}{CPI_{USA}^{US$}}
\]

What does it mean if the real exchange rate increases?

- Goods in Myanmar become more expensive relative to their counterparts in the USA
- Kyat becomes more expensive in terms of US dollars

This is called a real appreciation: what do you think is the impact on the economy? (Think in terms of competitiveness ...)

Useful Concepts & Indicators

Nominal Effective Exchange Rate (NEER)

The NEER is a weighted average of indexed nominal bilateral rates

- Bilateral cross rates are expressed in foreign currency per domestic currency and indexed to 100 [note: an increase in US$/kyat rate means the kyat appreciates against the US dollar]
- The more “important” a competitor, the higher the weight of its currency

Diagram:
- Exchange Rates
- Weights
- Averaging formula
- NEER
Useful Concepts & Indicators

Myanmar NEER and US$/kyat Exchange Rate

Nominal Effective & US$/kyat Exchange Rate (2012:4=100)

![Graph showing the nominal effective and US$/kyat exchange rate from 2012 to 2014. The exchange rate decreases over time, with the red line representing the nominal effective rate and the blue line the US$/kyat rate.](image-url)
Myanmar Real Effective Exchange Rate

Effective Exchange Rate Developments (2012:4=100)
Useful Concepts & Indicators

For what does the exchange rate matter?
External competitiveness

Export volume = \( f(\text{PD}/\text{PD}^* \cdot \text{ER}); \text{YR}^*; \ldots) \)

where:

- \( \text{ER} \) = nominal exchange rate (in home currency per $)
- \( \text{PD} \) = domestic price level (in home currency)
- \( \text{PD}^* \) = foreign price level (in $)
- \( \text{YR}^* \) = foreign income (proxied by real GDP)
Useful Concepts & Indicators

Reserve adequacy

- In relation to trade: import coverage
  - Rule of thumb: reserves should cover 5-6 months of imports (IMF analysis)
Useful Concepts & Indicators

- In relation to capital flows: vulnerability to sudden capital outflows?

![Gross Reserve Coverage, 2013](chart)

1/ The coverage for Myanmar is based on IMF staff projection for FY2013/14.
I. External Sector Overview

II. Useful Concepts & Indicators

III. Balance of Payment Developments in Myanmar

IV. External Sector Considerations
# Balance of Payment Developments in Myanmar

Table 3. Myanmar: Balance of Payments, 2010/11–2015/16
(In millions of US$, unless otherwise indicated)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Current account</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade balance</td>
<td>-617</td>
<td>-1,083</td>
<td>-2,390</td>
<td>-3,090</td>
<td>-3,472</td>
<td>-3,771</td>
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<tr>
<td>Exports, fob</td>
<td>645</td>
<td>-195</td>
<td>-2,120</td>
<td>-2,677</td>
<td>-2,473</td>
<td>-3,197</td>
</tr>
<tr>
<td>Of which: Gas</td>
<td>8,829</td>
<td>10,241</td>
<td>10,344</td>
<td>12,205</td>
<td>14,966</td>
<td>16,666</td>
</tr>
<tr>
<td>Imports, mostly cif</td>
<td>2,523</td>
<td>3,503</td>
<td>3,666</td>
<td>4,206</td>
<td>5,805</td>
<td>6,037</td>
</tr>
<tr>
<td>Nonfactor services, net</td>
<td>-8,184</td>
<td>-10,437</td>
<td>-12,464</td>
<td>-14,882</td>
<td>-17,440</td>
<td>-19,863</td>
</tr>
<tr>
<td>Income, net</td>
<td>-1,156</td>
<td>-882</td>
<td>-757</td>
<td>-1,286</td>
<td>-2,136</td>
<td>-1,992</td>
</tr>
<tr>
<td>Of which: Interest due</td>
<td>-306</td>
<td>-560</td>
<td>-94</td>
<td>-220</td>
<td>-219</td>
<td>-240</td>
</tr>
<tr>
<td>Transfers, net</td>
<td>231</td>
<td>490</td>
<td>533</td>
<td>907</td>
<td>1,085</td>
<td>1,286</td>
</tr>
<tr>
<td>Official</td>
<td>64</td>
<td>41</td>
<td>28</td>
<td>205</td>
<td>229</td>
<td>258</td>
</tr>
<tr>
<td>Private</td>
<td>167</td>
<td>449</td>
<td>504</td>
<td>702</td>
<td>857</td>
<td>1,028</td>
</tr>
<tr>
<td><strong>Capital and financial account</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct investment, net</td>
<td>1,430</td>
<td>2,066</td>
<td>5,110</td>
<td>5,110</td>
<td>5,365</td>
<td>6,116</td>
</tr>
<tr>
<td>Other investment</td>
<td>2,249</td>
<td>2,057</td>
<td>2,800</td>
<td>2,621</td>
<td>3,350</td>
<td>3,850</td>
</tr>
<tr>
<td>MLT debt disbursements</td>
<td>114</td>
<td>4</td>
<td>926</td>
<td>555</td>
<td>965</td>
<td>1,516</td>
</tr>
<tr>
<td>Repayments due</td>
<td>-386</td>
<td>-600</td>
<td>-159</td>
<td>-206</td>
<td>-235</td>
<td>-250</td>
</tr>
<tr>
<td>Other flows 1/</td>
<td>-933</td>
<td>5</td>
<td>1,384</td>
<td>1,934</td>
<td>1,050</td>
<td>750</td>
</tr>
<tr>
<td><strong>Errors and omissions</strong></td>
<td>-1,257</td>
<td>-1,908</td>
<td>-580</td>
<td>-536</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Overall balance</strong></td>
<td>-443</td>
<td>-925</td>
<td>2,140</td>
<td>1,484</td>
<td>1,893</td>
<td>2,344</td>
</tr>
<tr>
<td><strong>Financing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross official reserves (increase: -)</td>
<td>443</td>
<td>925</td>
<td>-2,140</td>
<td>-1,484</td>
<td>-1,893</td>
<td>-2,344</td>
</tr>
<tr>
<td>Change in arrears (increase: +)</td>
<td>528</td>
<td>997</td>
<td>-6,056</td>
<td>-4,792</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Exceptional financing (positive: +)</td>
<td>0</td>
<td>0</td>
<td>6,056</td>
<td>4,792</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Balance of Payment Developments in Myanmar

Analyze Myanmar’s BOP developments both in US dollar terms and in percent of GDP:

Your task!
Let’s generate a BOP forecast for 2014/15:
We need a BOP forecast both in US dollar terms and in % of GDP:

• The first step is generating a forecast for the kyat/US$ exchange rate (which we need for computing the GDP ratios): consider the monthly development of the exchange rate and extrapolate it to the end of the fiscal year

• The second step is adding the BOP forecast in US dollar terms: this is complicated and for now we simply use the IMF forecast in the last Article IV report

• What do you see? Consider ...
  ✓ ... the main developments in 2014/15 projected by the IMF
  ✓ what does this imply for the build up of reserves?
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Main considerations

From a macroeconomic viewpoint, analysis of external sector often focuses on:

- External sustainability
- Growth contribution
External Sector Considerations

External sustainability

Key question: if country runs current account deficits, are they sustainable?

This issue matters for Myanmar!
Consider Thailand crisis:

- Large deficits prior to crisis
- Inability to finance deficits was critical cause of crisis
- ... and led to currency crisis
External Sector Considerations

External sustainability

Consider Mongolia crisis:

- Mongolia has large natural resource exports
- Current account surplus prior to crisis
- Sharp drop in international commodity prices during GFC led to current account and currency crisis
External Sector Considerations

External sustainability
Important factor for sustainability of current account deficits is how they are financed:

• Stable financing source lowers risk of crisis

• FDI is a fairly stable financing source

• This is (mostly) good news for Myanmar!
External sustainability
Another important factor for sustainability of current account deficits is levels of foreign exchange reserves:

- They serve as a buffer in case of a crisis
- Does Myanmar have sufficient reserves?
External Sector Considerations

Growth contribution
Large expansion of manufacturing sector was key driver of growth in Asia!
- Export-driven growth strategy
- Manufacturing-related FDI inflows
- External competitiveness is key for this strategy to work
External Sector Considerations

Growth contribution
Real exchange is common indicator for external competitiveness

- Real appreciation undermines external competitiveness
- Is Myanmar’s real appreciation since mid-2000s a problem?

![Selected Peers: Real Effective Exchange Rates](chart)

*Sources: Authorities; and IMF staff calculations.*
Outlook

Next, we will explore in more detail ...

• ... the monetary sector, which helps with analyzing inflation and the exchange rate.