

# Analyzing the External Sector

## Overview

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## Overview

- I. Basic Structure of Balance of Payment
- II. Useful Concepts & Indicators
  1. Exchange Rate
  2. What Determines Exchange Rate?
  3. Real (Effective) Exchange Rate
  4. External Competitiveness

# I. Basic Structure of Balance of Payment

Above the line

Current Account

Capital and Financial Account

Overall Balance

Below the line

Financing

3

## Basic Structure of Current Account Balance (Real Transactions)

Trade Balance (Goods) = Exports - Imports

Trade Balance (Services) = Exports - Imports

Net Income (e.g., Interest, Dividends and Profit Repatriation)

Net Transfers (Official, Private)

Current Account Balance

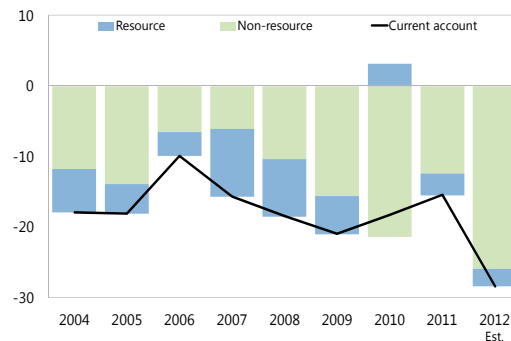
4

## Taking a First Look at the Current Account in Lao P.D.R.

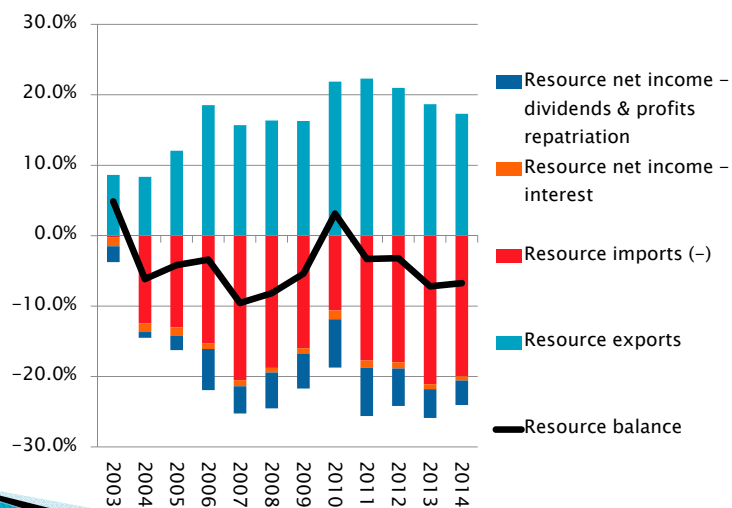
➤ What do you see?

➤ What is the resource balance and why is it negative for most years?

**Current Account Balance**  
(In percent of GDP)



## Composition of the Resource Balance (in % of GDP)



## Basic Structure of Financial and Capital 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)*

**Financial and Capital Account Balance**

7

## IMF Presentation of Financial Account in Lao PDR

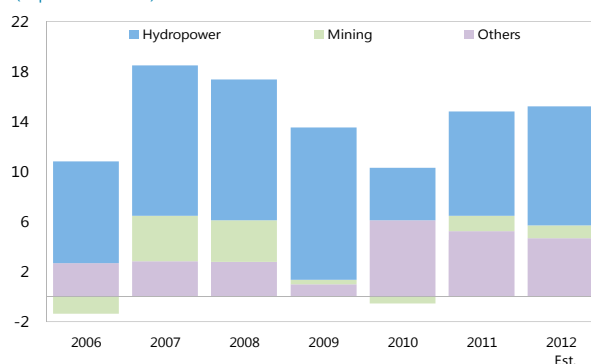
Table 2. Lao P.D.R.: Balance of Payments, 2010–14

	2010	2011	2012 Est.	2013 Projection	2014 Projection
(In millions of U.S. dollars; unless otherwise indicated)					
<b>Capital and financial account</b>	1,353	1,198	2,670	2,876	3,006
Public sector	155	145	308	390	556
Disbursements	231	220	412	541	711
Amortization	-77	-74	-104	-151	-155
Banking sector (net)	-29	23	39	240	39
Private sector	1,227	1,030	2,323	2,246	2,411
Foreign direct investment (net) 1/	671	1,210	1,399	1,846	2,011
Of which: Mining and hydropower projects	250	783	969	1,343	1,552
Of which: Mining projects	-37	102	94	81	-30
Hydropower projects	287	681	875	1,262	1,582
Other private flows and errors and omissions	556	-180	925	400	400

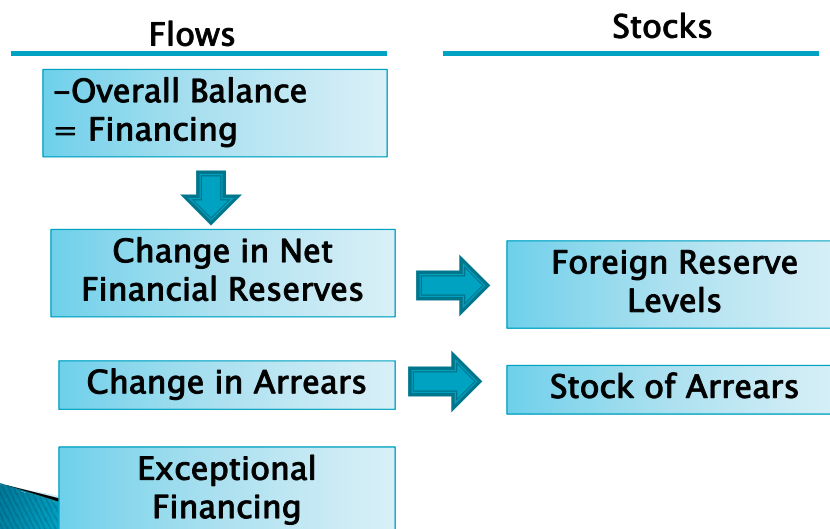
## Role of FDI for Financial Account in Lao PDR

### FDI, Private Sector

(In percent of GDP)



## Basic Structure: Financing



## Reserve Adequacy

- In relation to trade: import coverage
  - Rule of thumb: reserves should cover 3 months of imports

- In relation to capital flows: how vulnerable is country to sudden capital outflow?

International Reserves

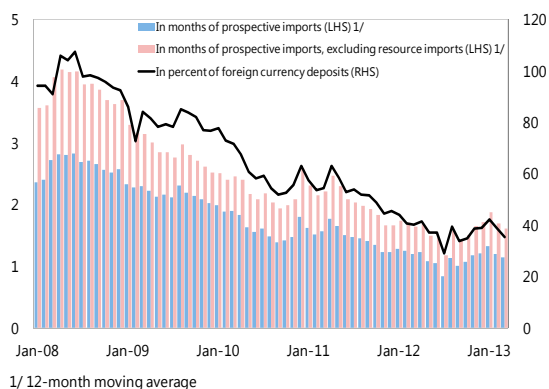


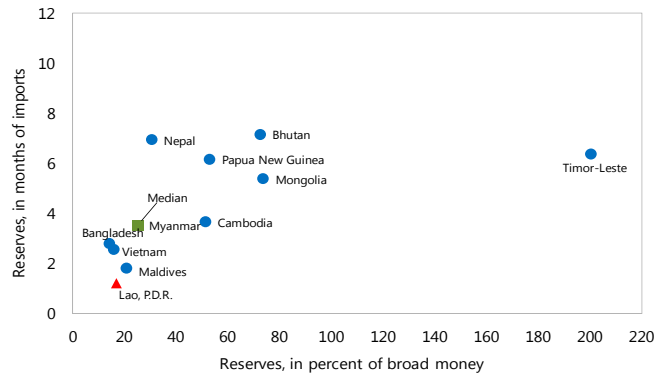
Table 1: Measures of International Reserves Coverage, Lao P.D.R.

	2000-08	2009	2010	2011	2012	2013
	Average					Latest
Gross International Reserves						
In millions of US dollars	295.3	632.9	728.3	677.4	739.6	532.0
In months of prospective imports	2.2	2.0	1.8	1.2	1.2	0.8
In months of prospective imports, excluding resource imports	2.8	2.5	2.6	1.7	1.7	1.2
In percent of foreign currency deposits	81.3	76.8	63.9	45.4	39.0	25.5
In percent of broad money	50.8	35.4	28.1	19.9	16.5	9.9
In percent of external debt service	551.4	670.4	611.4	671.8	452.3	224.0

Sources: Data provided by the Lao P.D.R. authorities; and IMF staff estimates and projections.

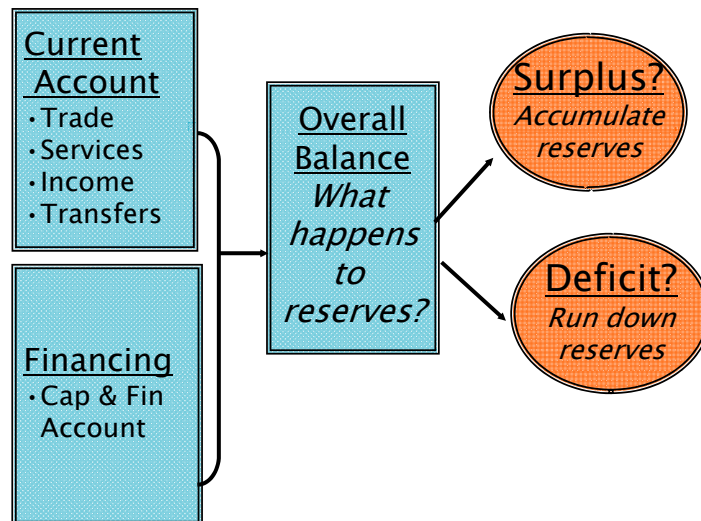
### Reserves: South and East Asian LICs

End 2012



Sources: Country authorities; IMF WEO.

### Putting It All Together ...



## Exercise

Analysis:

- ▶ What were the key developments in Lao's BOP?
- ▶ What, if any, are the risks going forward?

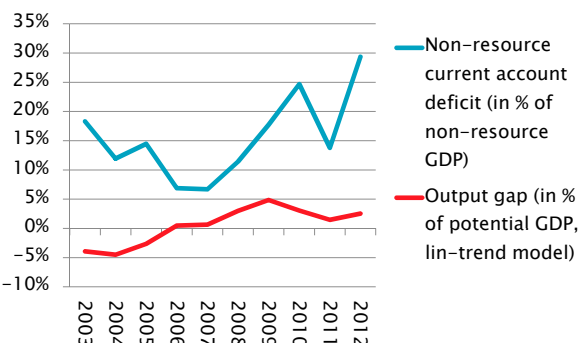


15

## Consider Role of Demand Conditions as Measured by Output Gap

- Positive output gap indicates demand is strong
- This is associated with large non-resource current account deficit
- Note: demand drives both output gap and current account deficit

Output Gap and Current Account Deficit



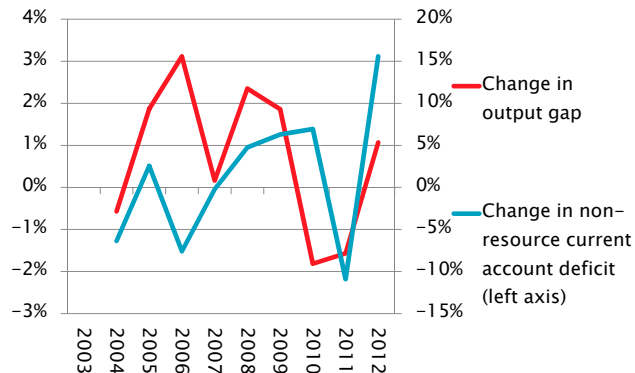


➤ Relationship is even stronger when we consider *changes*:

➤ *Increase* in output gap means demand conditions become stronger

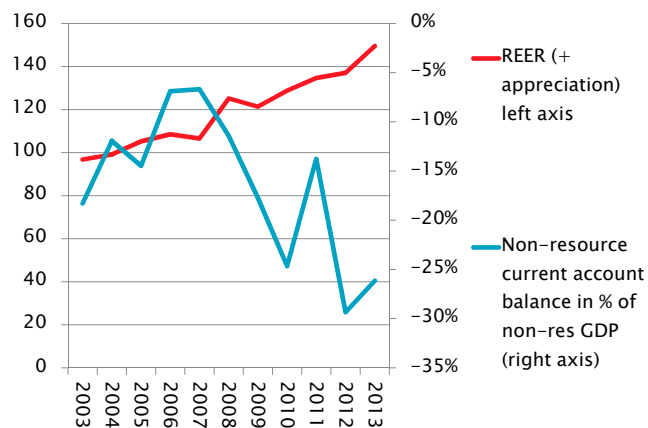
➤ This is associated with *widening* of current account deficit

Change in Output Gap and Current Account Deficit (in % of Non-Resource GDP)



## Recall the Role of the Real Exchange Rate

REER and Current Account Balance in Lao P.D.R.



For your analysis, you may want to ask yourself:

- ▶ What are the common driving forces behind strong demand and the real appreciation? Think of the natural resource boom and the broader macroeconomic picture—the task here is to create a ‘story’ that ties together different facts into one comprehensive picture and identifies causes and effects.
- ▶ What risks does this create? That is, what could go wrong?



19

## II. Useful Concepts & Indicators

### Exchange Rate

Kip-US dollar exchange rate:

- Devaluation
- Appreciation
- What determines the exchange rate?
- Role of exchange rate for external competitiveness



20

## What Determines Exchange Rate?

- Availability of foreign exchange

Depends on ...

- Balance of Payment (in general)
- Overall balance (in particular)



21

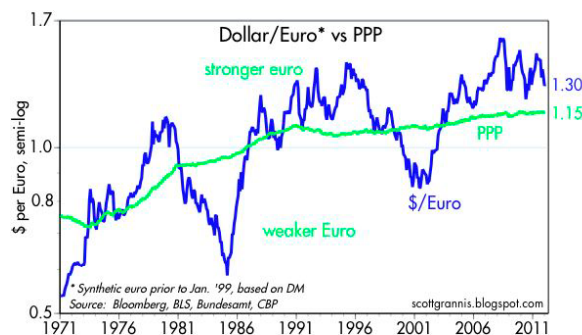
## What Determines Exchange Rate? (cont.)

- Price differential:

Similar good in two countries should cost about the same

→ exchange rate corrects for price differential

→ Called 'Purchasing Power Parity'

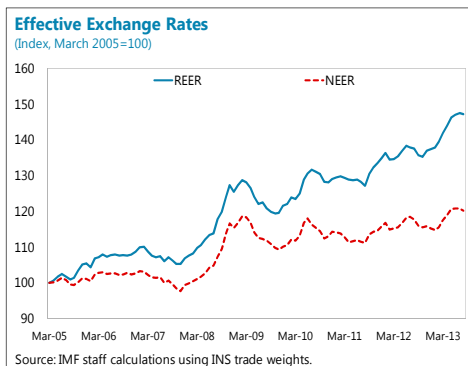


22

## Real (Effective) Exchange Rate

Comparing the price level in Lao PDR with that of other countries, all expressed in kip:

$$RER = \frac{CPI_{Lao}^{kip}}{CPI_{US\$}^{kip} \cdot \frac{kip}{US\$}} = \frac{CPI_{Lao}^{kip}}{CPI_{US\$}^{US\$}}$$



23

## External Competitiveness

Example of role of real exchange rate for exports:

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

Price  
effect (-)

Foreign income  
effect (+)

where:

- ▶ ER = nominal exchange rate (in home currency per \$)
- ▶ PD = domestic price level (in home currency)
- ▶ PD\* = foreign price level (in \$)
- ▶ YR\* = foreign income (proxied by real GDP)

Thank You!

The concepts discussed here  
provide you with an introduction  
to the external sector but there is  
much more!