



Monetary Statistics

Financial Programming and Policies
Vang Vieng, Lao PDR
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TAOLAM

Outline

- I. Introduction
- II. Central Bank Accounts
- III. Commercial Bank Accounts
- IV. Monetary Survey

Introduction

Why are monetary statistics important?

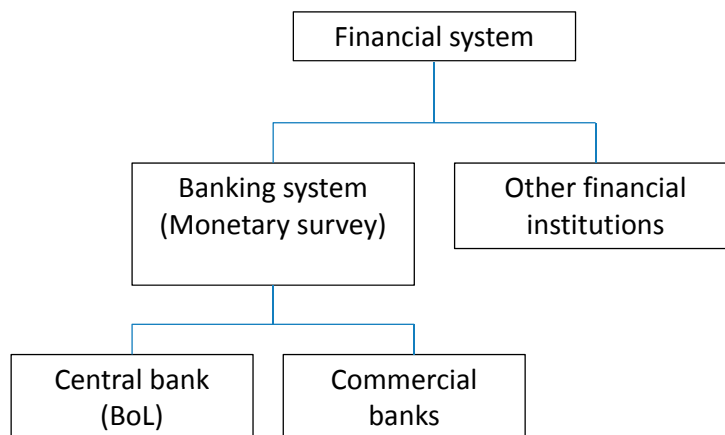


Monetary statistics accounts are critical for analysis of monetary conditions and formulation as well as implementation of monetary policy

But: understanding links between monetary policy and inflation, real economic activity, external account and foreign exchange rate will require going beyond monetary accounts

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Scope of the Financial System



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Financial System in Lao PDR

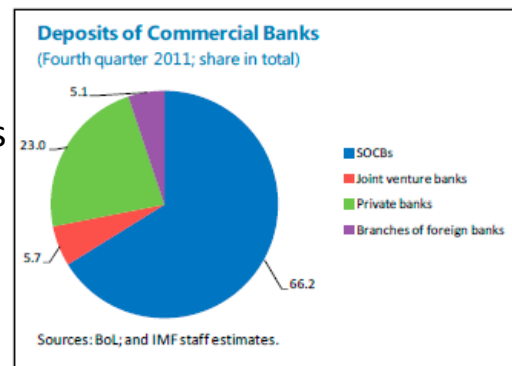
Central bank = Bank of Lao P.D.R. (BoL)

Commercial banks =

- ✓ State-owned commercial banks
- ✓ Private commercial banks

Other financial institutions =

- ✓ Microfinance institutions
- ✓ Financial leasing companies
- ✓ Insurance companies



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Central Bank Accounts

Selected functions of the central bank that have a direct impact on its balance sheet include

- ✓ Issuing of currency
- ✓ regulating the money supply (monetary policy)
- ✓ acting as banker of the government
- ✓ holding the country's foreign reserves (exchange rate policy)

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Balance Sheet of Central Bank

$$RM = NFA + NDA$$

Assets	Liabilities
Net foreign assets (NFA)	Reserve money (RM)
Net domestic assets (NDA)	Currency issued
Net claims on the government (NCG)	Held in banks
Claims on commercial banks	Held outside banks
Claims on other resident sectors	Deposits (reserves) of commercial banks with central bank
Outstanding CB securities (liabilities → Increase: minus sign Decrease: plus sign)	Other deposits
Other items net	

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Balance Sheet of Central Bank

Assets

- ▶ Net foreign assets
 - holding the country's foreign reserves (exchange rate policy)
- ▶ Net claims on government
 - acting as banker of the government
- ▶ Claims on commercial banks / Issuance of BoL securities
 - regulating the money supply (monetary policy)

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Balance Sheet of Central Bank

Liabilities

- ▶ Currency issued
 - Issuing of currency
- ▶ Deposits of commercial banks with central bank
 - regulating the money supply (monetary policy)

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Balance Sheet of Central Bank

Why is Reserve Money (RM) important?

- The central bank can control reserve money because it is 'created' on its own balance sheet
- As we will see below when we consider the endogenous money creation process, some components of reserve money have an important influence over the creation of bank credit to the rest of the economy
- Bank credit is important for aggregate demand conditions, and it is a key part of broad money

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Balance Sheet of Bank of Lao PDR

What are the main components of the balance sheet of the Bank of Lao PDR?

Exercise:

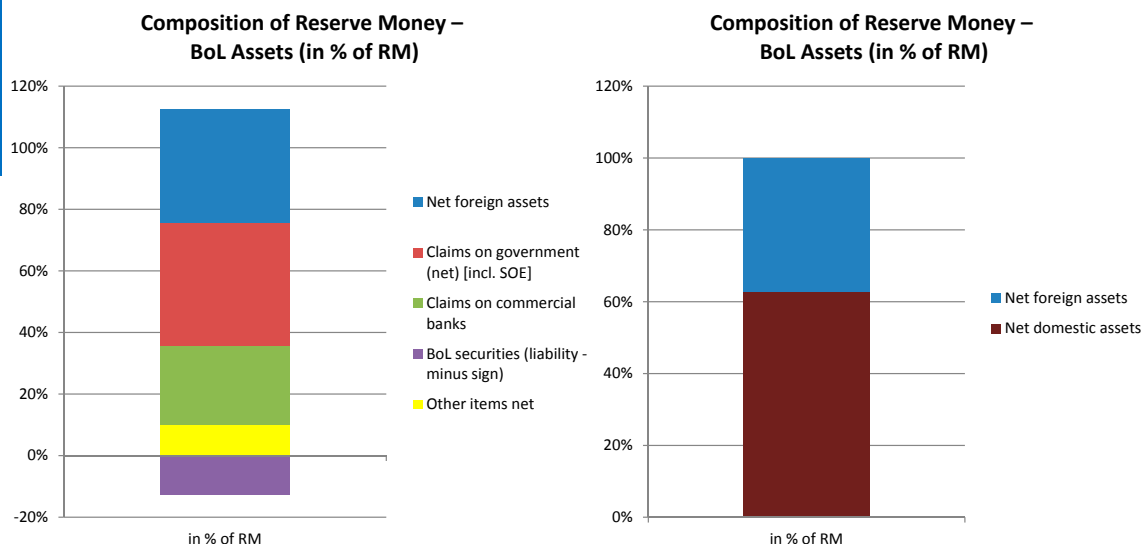
We will use monetary table in Article IV report to portray the BoL balance sheet for December 2012 in the form depicted in the previous slide; with this data, you can:

- ▶ analyze the relative importance of the individual asset and liability components by expressing them in percent of reserve money
- ▶ compare the composition of the BoL balance sheet with that of the Bank of Thailand

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Balance Sheet of Bank of Lao PDR

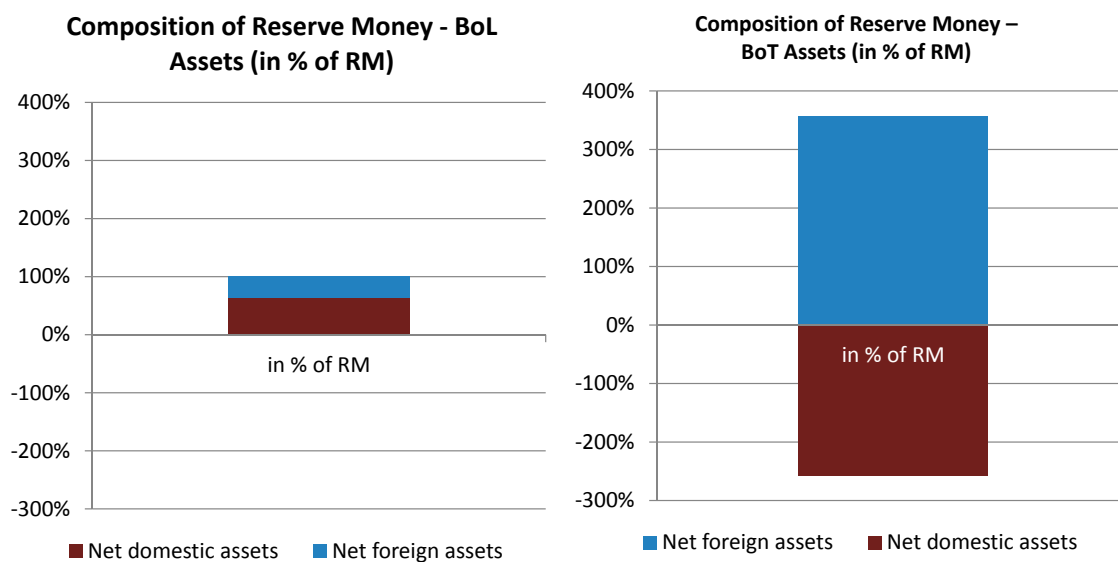
Main Components of BoL Balance Sheet: Assets



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Balance Sheet of Bank of Lao PDR

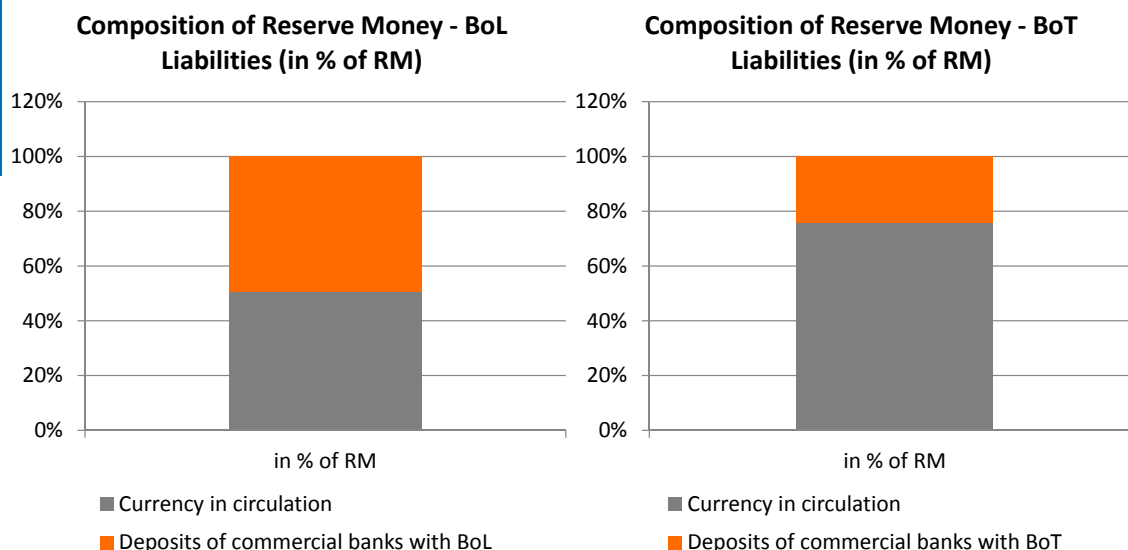
Comparison with Bank of Thailand Balance Sheet



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Balance Sheet of Bank of Lao PDR

Main Components of BoL Balance Sheet: Liabilities



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Central Bank Balance Sheet Examples

- Example: On the first day of its operations, central bank decides to issue domestic currency (Kip 100) in exchange for foreign currency.

<u>Assets</u>		<u>Liabilities</u>	
CB's Net Foreign Assets	100	Base money	100
Foreign exchange	100		
CB's Net Domestic Assets			

- Example: Next, central bank sells BoL securities (worth Kip 30).

<u>Assets</u>		<u>Liabilities</u>	
CB's NFA	100	Base money	70
Foreign exchange	100		
CB's NDA	-30		
Outstanding CB securities liabilities → increase = minus	-30		

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Commercial Bank Accounts

Selected functions:

- Facilitate savings by offering deposits
- Offer loans by transforming deposits into loans
- Commercial banks are an important channel for the transmission of monetary policy

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Commercial Bank Accounts

Analytical Balance Sheet of Commercial Banks

Assets	Liabilities
Net foreign assets (NFA)	Deposits
Net domestic assets (NDA)	Demand deposits
Claims on the central bank	Time and saving deposits
o Currency held in vaults	Foreign currency deposits
o Deposits at the central bank	Liabilities to the central bank
o Holding of CB securities	
Domestic credit	
o Net credit to the government	
o Credit to private sector	
Other items net	

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Commercial Bank Accounts

Commercial Bank Balance Sheet Example

Central bank sells Kip 100 in BoL securities to commercial banks:

Commercial Bank Balance Sheet

Assets		Liabilities	
Net Foreign Assets	...	Deposits	...
Net Domestic Assets	0	Demand deposits	...
Claims on central bank	0	Time and saving deposits	...
Currency held in vaults		Foreign currency deposits	...
Reserves	-100	Liabilities to the central bank	...
Holding of CB securities	+100		
Domestic credit	...		
To the government	...		
To other resident sector	...		
Other items net	...		

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Commercial Bank Accounts

Commercial Bank Balance Sheet Example (cont.)

Central bank sells Kip 100 in BoL securities to commercial banks:

Central Bank Balance Sheet

Assets		Liabilities	
Net Foreign Assets	...	Reserve money (RM)	-100
Net Domestic Assets	-100	Currency issued	...
Net claims on the gov.	...	Held in banks	...
Claims on commercial banks	...	Held outside banks	...
Claims on other res. sector	...	Deposits of commercial banks	-100
Outstanding CB securities (liability → Increase: minus Decrease: plus)	-100	Other deposits	...
Other items net	...		

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Monetary Survey

Consolidated balance sheet for the banking system:

- Add up balance sheets for the central bank and commercial banks, but ...
- ... before doing so, consolidate common items on the two balance sheets!

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Monetary Survey: Consolidation of Central Bank and Commercial Bank Balance Sheets

Central Bank	
Assets	Liabilities
Net Foreign Assets	Reserve money (RM)
Net Domestic Assets	Currency issued
Net claims on the government	Held in banks
Claims on commercial banks	Held outside banks
Claims on other resident sector	Deposits of commercial banks
Other items net	Other deposits
Commercial Banks	
Assets	Liabilities
Net Foreign Assets	Deposits
Net Domestic Assets	Demand deposits
Claims on the central bank	Time and saving deposits
Currency held in vaults	Foreign currency deposits
Deposits at the central bank	Liabilities to the central bank
Domestic credit	
Other items net	

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Monetary Survey: Consolidation of Central Bank and Commercial Bank Balance Sheets

Central Bank	
Assets	Liabilities
Net Foreign Assets	Reserve money (RM)
Monetary survey	
Assets	Liabilities
Claims on commercial banks	Held outside banks
Net Foreign Assets	Broad money (M2)
Claims on other residential sector	Deposits of commercial banks
Of the central bank	Narrow money (M1)
Other items net	Other deposits
Of the commercial banks	Currency in circulation
Net Domestic Assets	Demand deposits
Commercial Banks	
Assets	Liabilities
Net credit to the government	Quasi money
Credit on the other resident sector	Time and saving deposits
Net Foreign Assets	Deposits
Net Domestic Assets	Foreign currency deposits
	Demand deposits
Claims on the central bank	Time and saving deposits
Currency held in vaults	Foreign currency deposits
Reserve deposits at the central bank	Liabilities to the central bank
Domestic credit	
Other items net	

Main Components of Monetary Survey in Lao PDR

What are the main components of the monetary survey in Lao PDR?

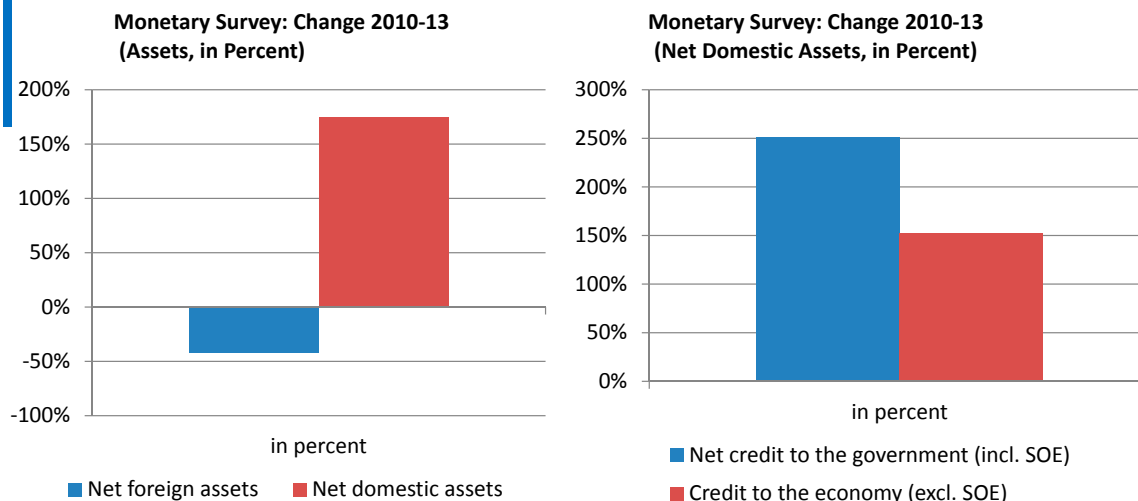
Exercise:

We will use monetary table in Article IV report to take a closer look at the changes in the monetary survey from December 2010 to 2013:

- ▶ Look at the absolute changes (in kip) and relative changes (in %) to identify the main changes between 2010 and 2013
- ▶ Next, speculate and try to form a picture of what happened, i.e., what were the driving forces behind these changes. Are they sustainable?

Monetary Survey in Lao PDR

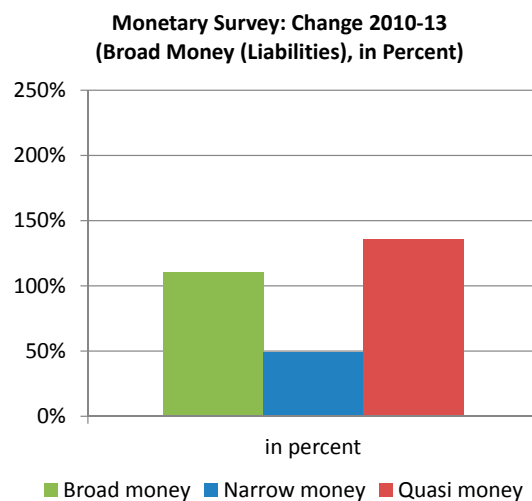
Main Components of Monetary Survey: Assets



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Monetary Survey in Lao PDR

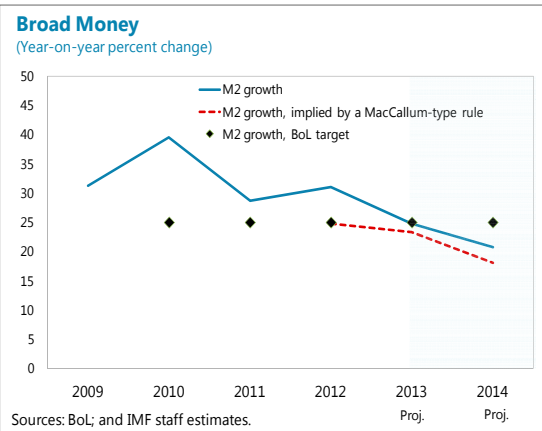
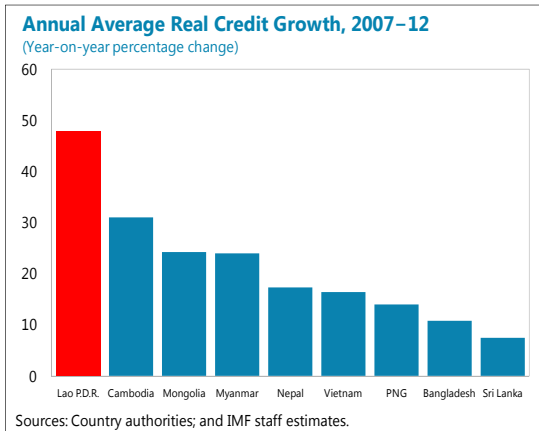
Main Components of Monetary Survey: Liabilities



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Monetary Survey in Lao PDR

Regarding sustainability of credit growth, you may want to consider:



You may also want to take a look at Box 3 in the IMF Article IV report (Lao P.D.R.: Normal Financial Deepening or Excessive Credit Growth?).

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Monetary Survey and “Money”

Why is M2 “money”?

Because it is what the economy can use to make payments and economic transactions:

- Currency in circulation: “cash”
- deposits constitute a means of payment, as one can write checks, or make transfers, or withdraw cash against deposits upon demand (depending on the type of deposit)



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Thank You!

In the next monetary lecture, we are going to discuss how the money creation process works and how this is related to the monetary survey.