

# Financial Dollarization: A Survey on Branches of Commercial Banks and MDIs

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The views expressed in this presentation are those of the author and do not necessarily represent the views of the NBC and JICA.

# Introduction

- Banks (Commercial bank and MDIs) play a great role in capital allocation and risk-sharing.
  - Banks can be a factor to transmit dollarization.
  - Banks can also be a factor to realize **de-dollarization**.
- We barely know about Cambodian banks
  - How much do banks have KHR, USD, and THB?
  - Why do they not extend KHR loans?
- Bank behaviors are not same.
  - Some banks have nation-wide branch networks.
  - Some banks rely on equity and borrowings (mostly in USD).



# Introduction

## Quantitative analysis

- We collected financial data from bank branches.
- We aim at providing the real picture of financial dollarization from various aspects.
  - Historical changes of currency compositions of loans and deposits.
  - Internal capital allocation of USD and KHR.
  - Regional differences.
  - Factors behind the FX currency provision.

## Qualitative analysis

- We conducted face-to-face interview on branch managers.
- We analyze qualitative data, such as opinion, perception, and expectation of branch managers.
  - Are interest rates on KHR deposit and loans higher?
  - Borrowers of KHR currency loans are risky?
  - Why?



# Survey Design and Data

We surveyed 15 financial institutions in 2015.

- 10 commercial banks and 5 MDIs.
- The period from 2009 to 2013.

We collected **three types** of data

1. Consolidated financial statements (15 banks)
2. Branch-level financial statements (524 branches)
  - Balance sheet, and Income statements
  - Those cover the information of currency compositions of loans, deposits, interbank placement, interest income, expense, etc.
3. Perceptions of branch managers (570 branches)
  - Face-to-face interview



# Survey Design and Data

## Caveats on analysis using our data

- Banks did not provide financial statements of all branches.
- The branches targeted by perception survey are not necessarily identical to the branches which we collected financial data from.
  - Inconsistency might come up between branch-level and bank-level, and between analysis on financial statements and interview data
- There is missing data
  - Some of banks only provided us with consolidate financial statements.
  - Others provided only branch-level data.



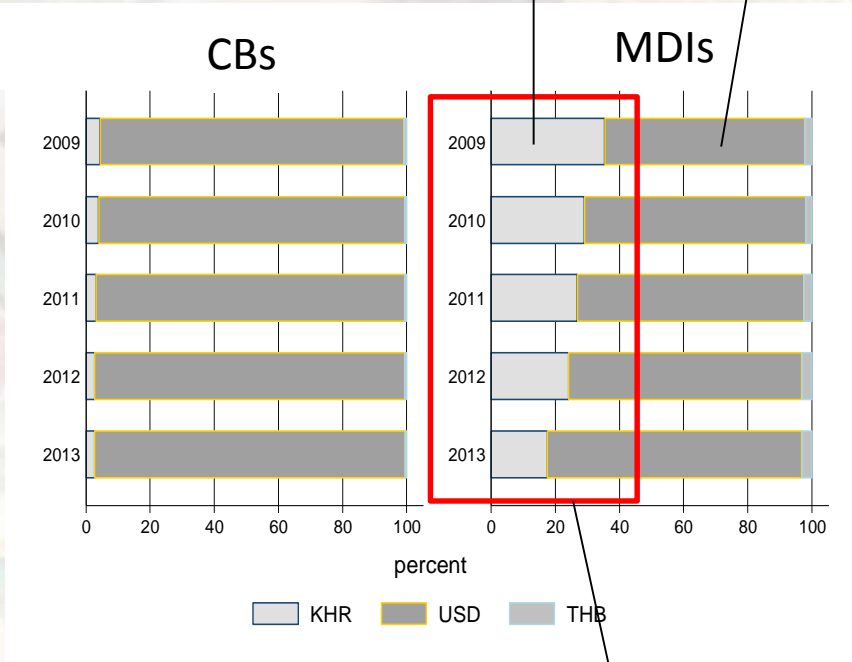
# Survey Results

## **1. Currency Compositions of loans and deposits in the banking sector (Consolidated financial data at bank- level)**



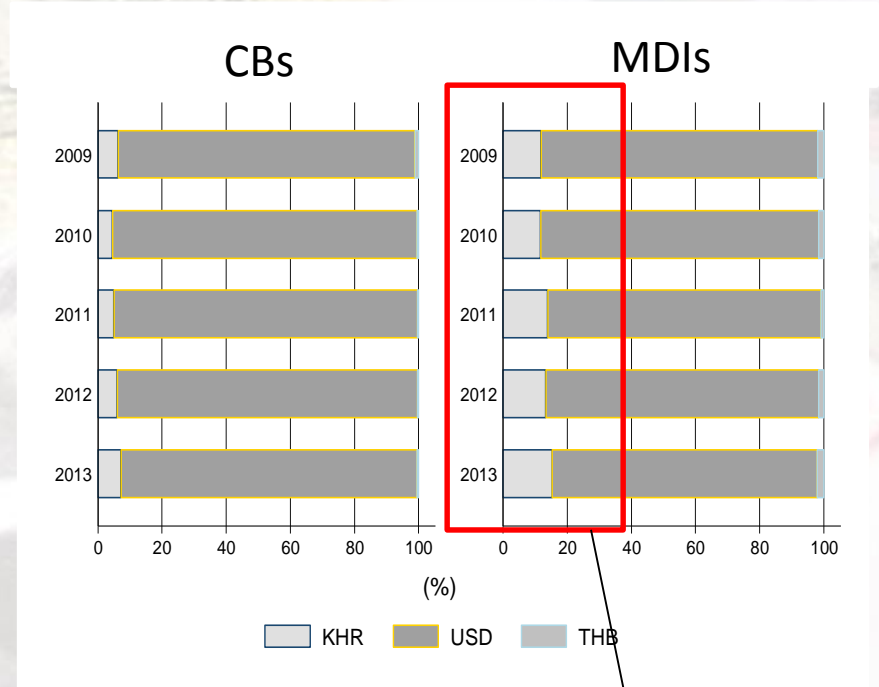
# Currency Compositions of Assets and Liabilities

## Loans



However, shares of FX loans increased.

## Deposits



Shares of KHR Deposits increased in MDIs.



- Shares of KHR deposit have not decreased over the period even in CBs.
  - KHR deposits have been increasing at the same pace as FX deposits even in CBs.
- However, MDIs tend to increase the shares of FX loans despite the increase in shares of KHR deposits.
  - This might be the consequence of risk-hedging behaviors.
  - Recently MFI's major funding sources shifted toward deposits, which make them more risk-averse.
  - They were adjusting the currency composition of loans with that of liabilities.





# Survey Results

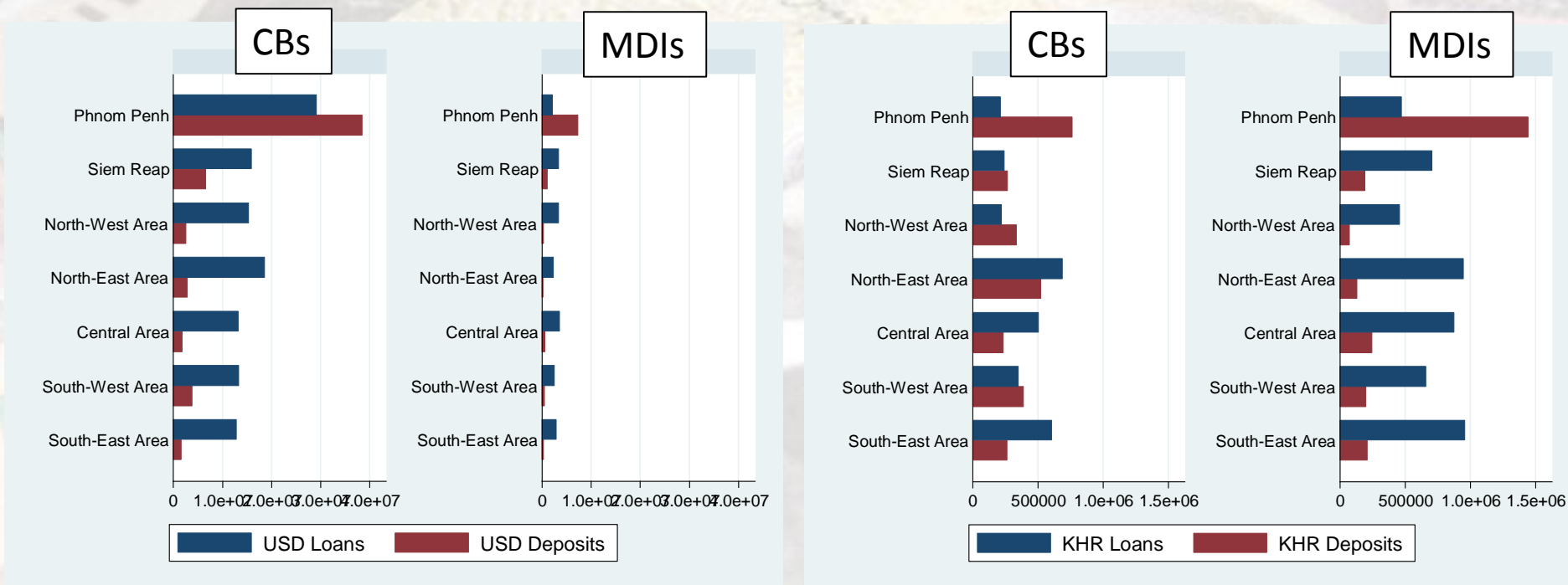
## 2. Behaviors of Fund Allocations by Currencies (Branch-level financial data)



# Figure: Fund allocations by regions and by currencies

## FX

## KHR

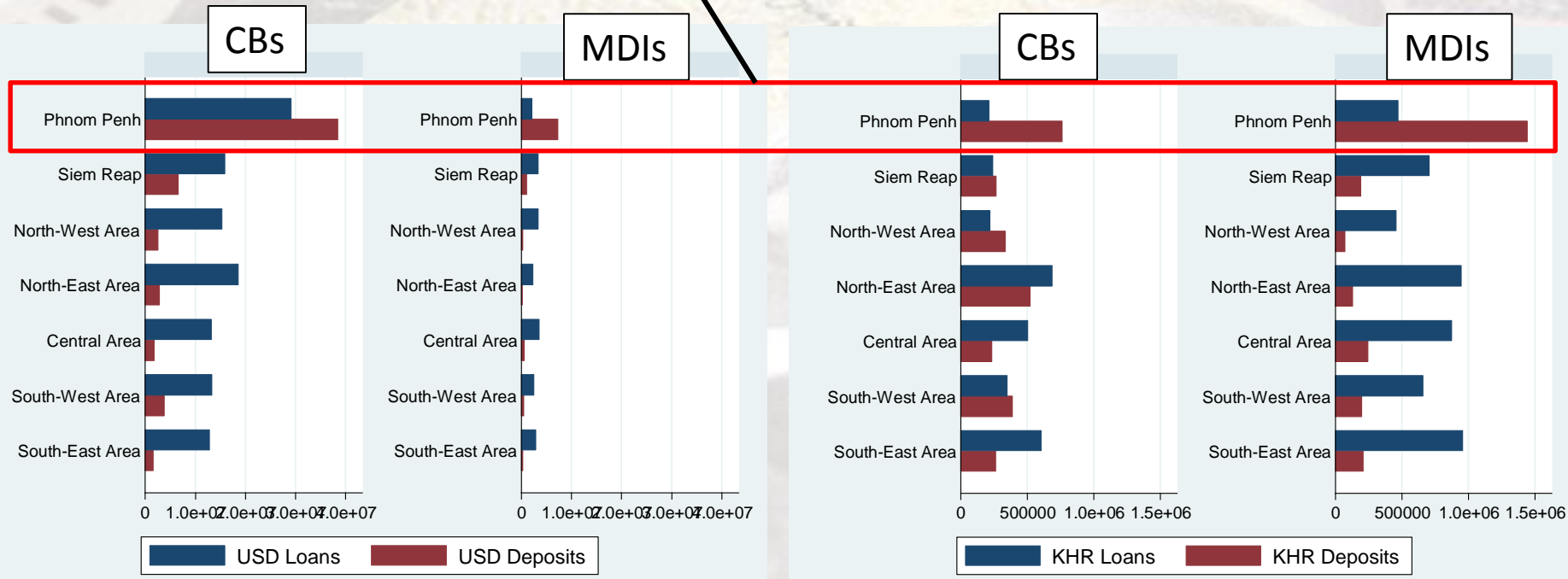


*Note:* These figure show averages of amounts of deposits and loans per branch in each region.

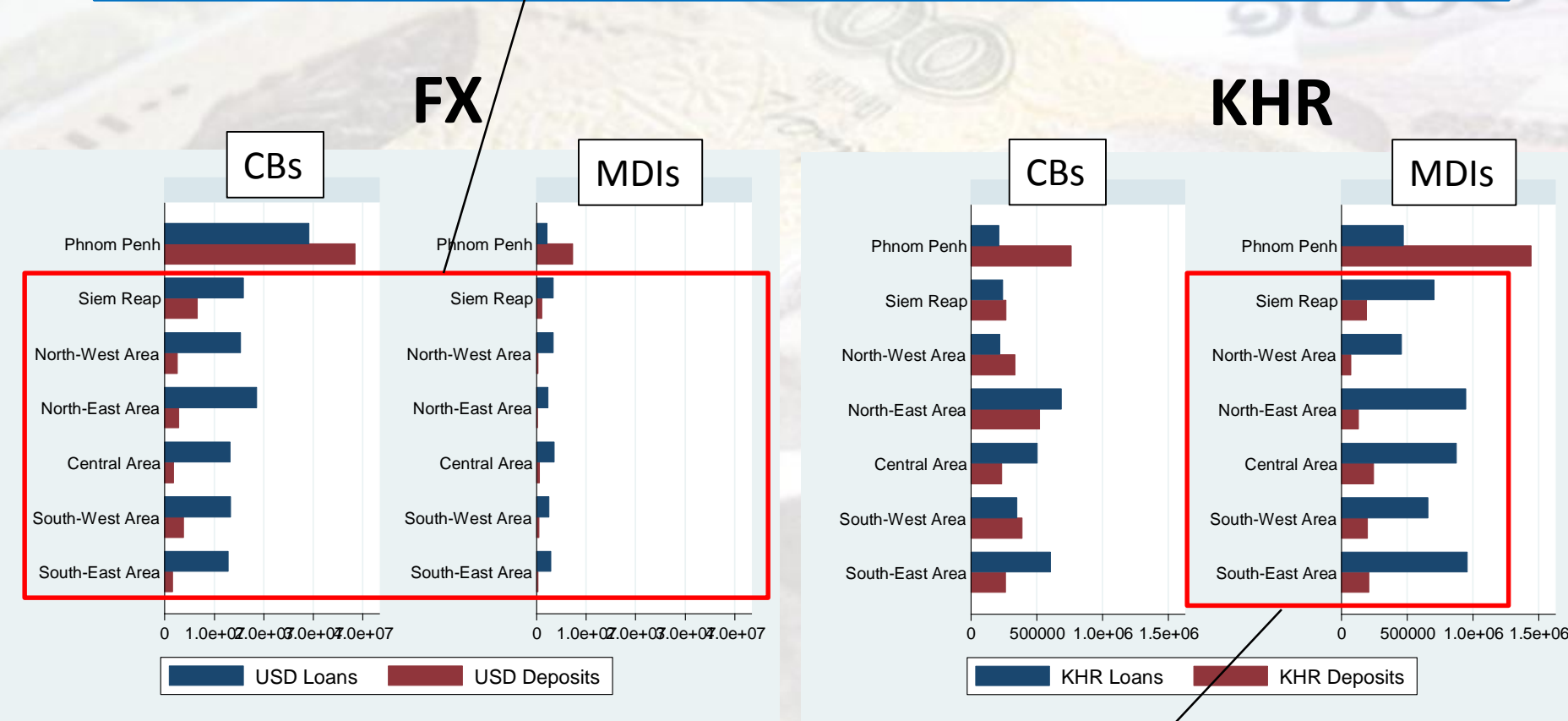
# Banks collect funds within Phnom Penh.

## FX

## KHR



Banks internally allocate excess funds from Phnom Penh to rural areas.



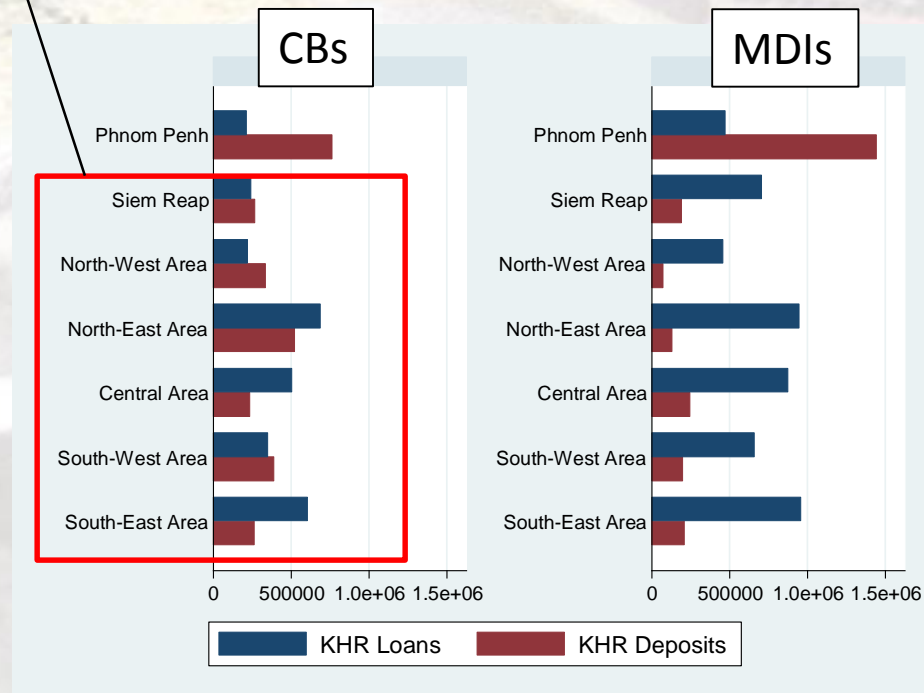
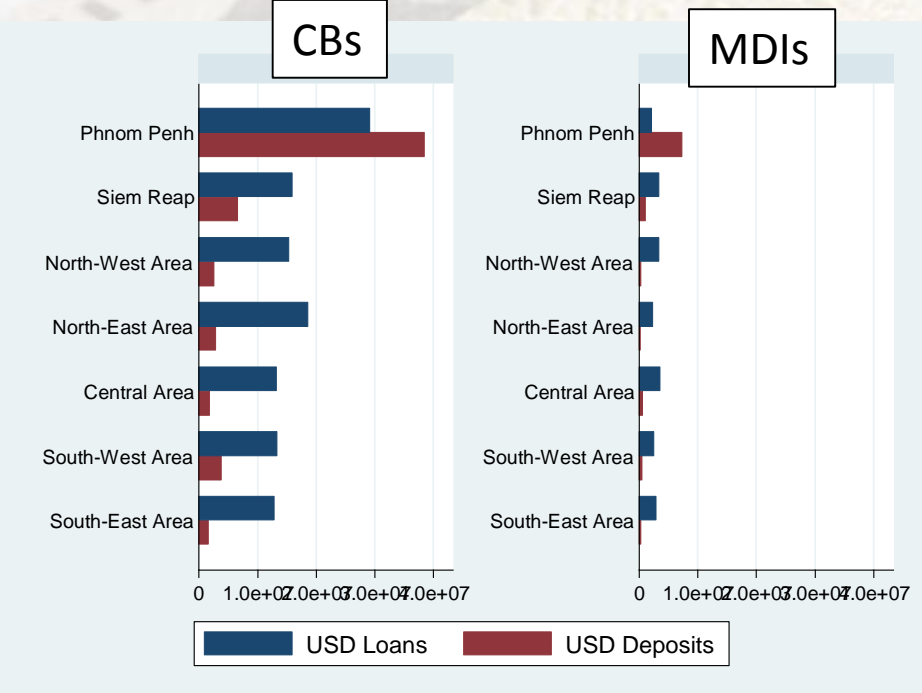
MDIs even mobilize excess KHR funds.



# Capital allocation of KHR are **not active** in CBs.

## FX

## KHR



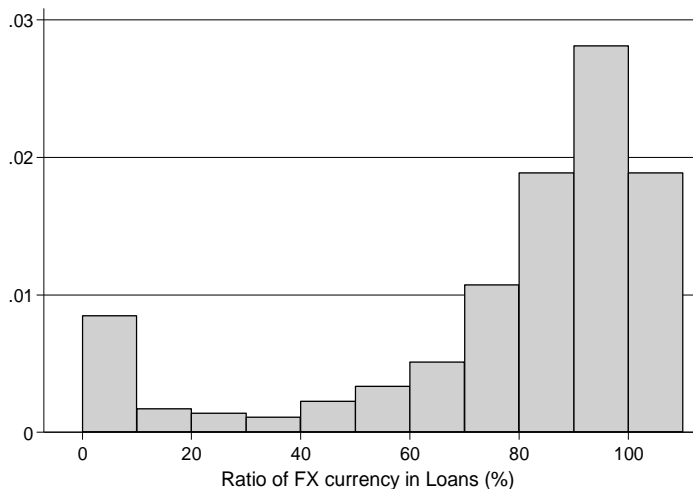
# Survey Results

## **3. Regional Differences in Financial Dollarization (Branch-level financial data)**



# Regional Differences in FX loans

All branches



By regions

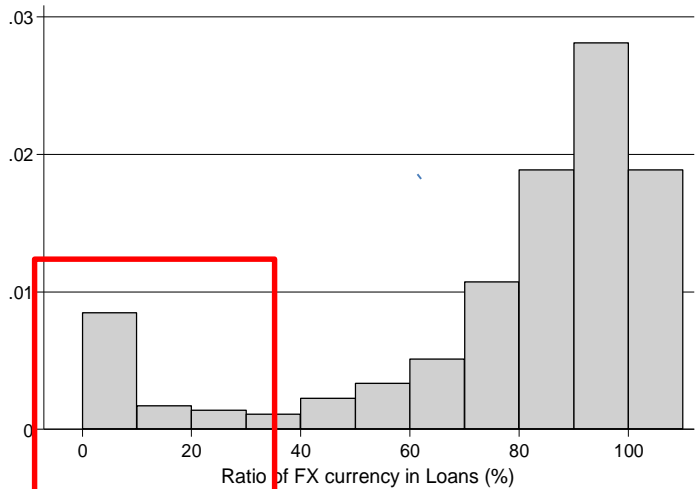


Graphs by Area



In rural areas, many branches provide and focus on KHR loans.

### All branches



Some branches mainly extend KHR loans

### By regions



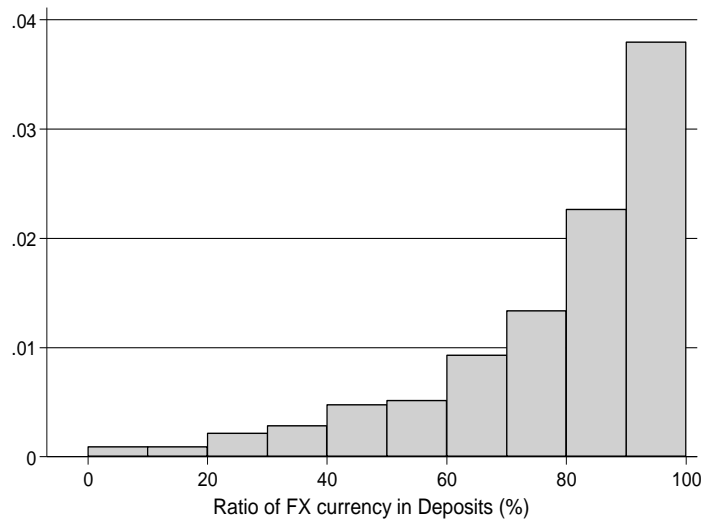
Graphs by Area



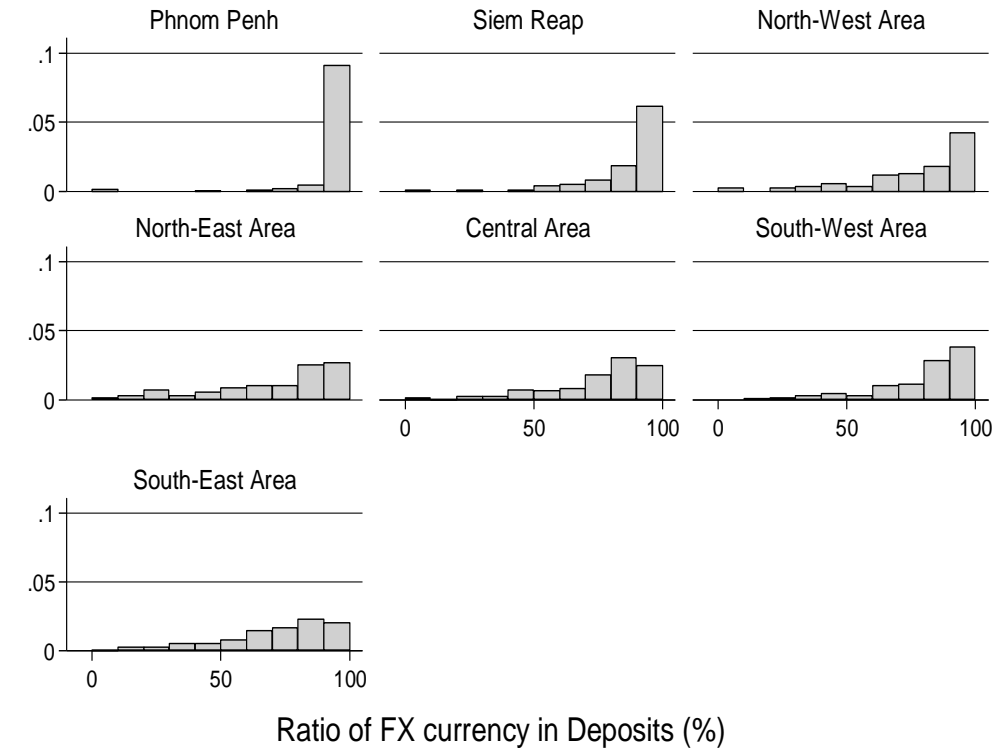


# Regional Differences in FX Deposits

All branches



By regions

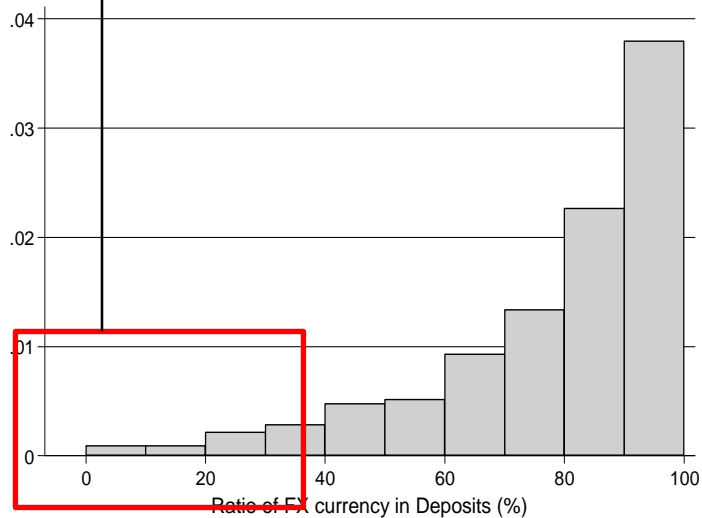


Graphs by Area

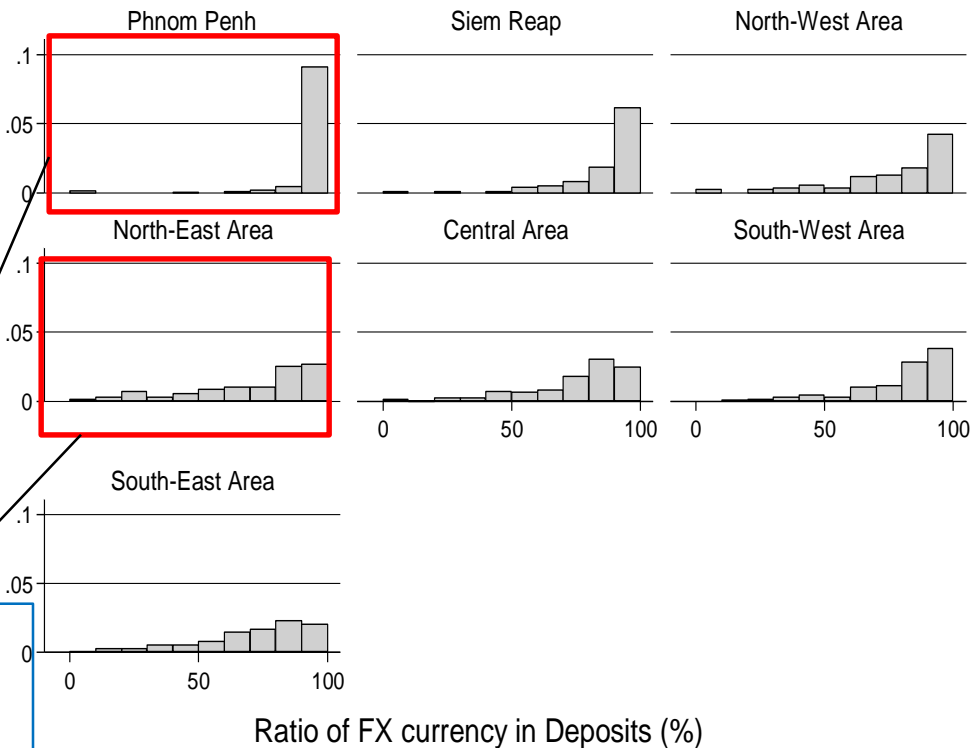


Compared to loans, local currency deposits are still not common.

All branches



By regions



However, KHR deposits are preferred in rural areas, compared with urban areas.



Graphs by Area

# Survey Results

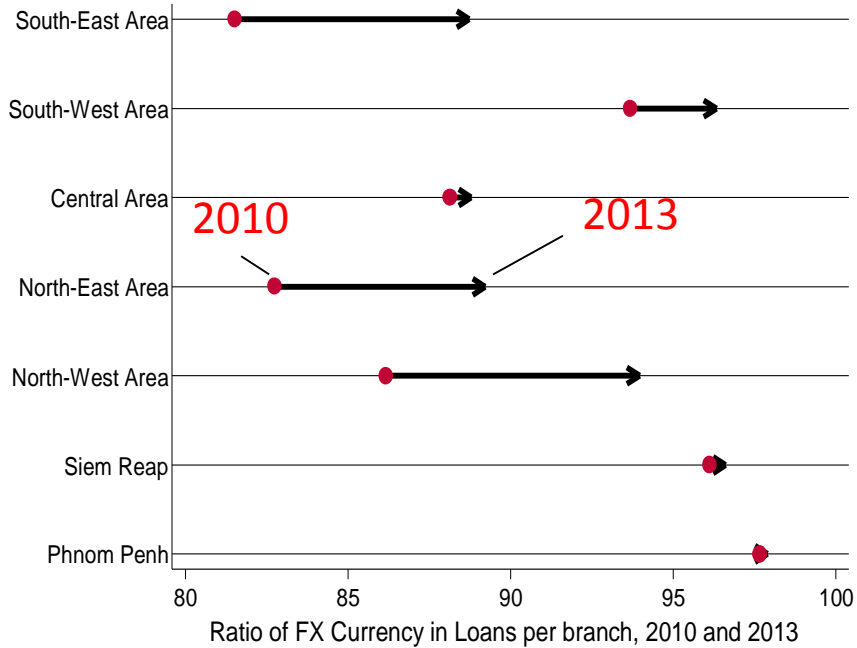
## 4. Historical Changes of Regional Financial Dollarization (Branch-level financial data)



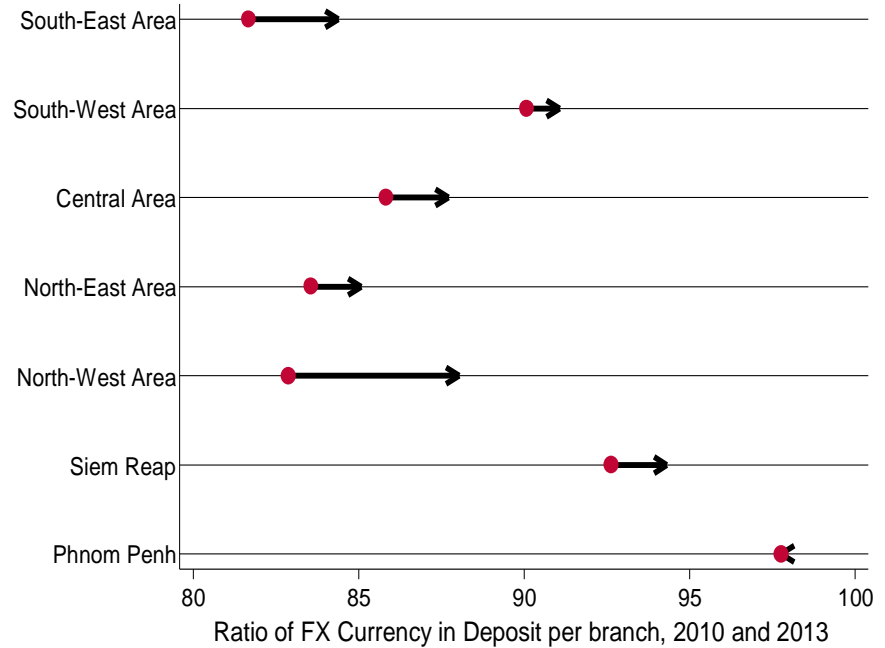
## In the case of Commercial Banks

➤ FX currency shares have been increasing.(2010-2013)

### Ratio of FX Loans



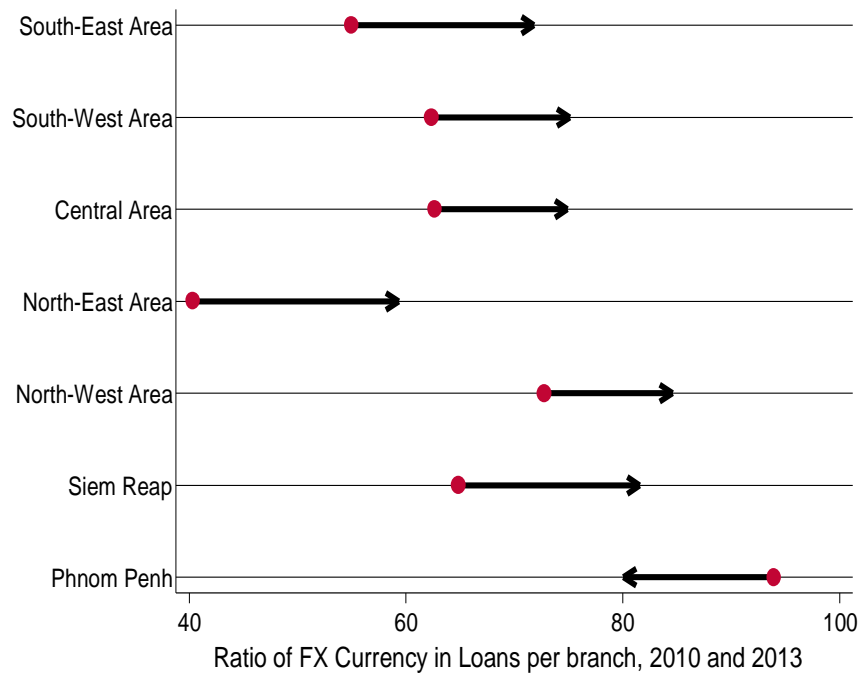
### Ratio of FX Deposits



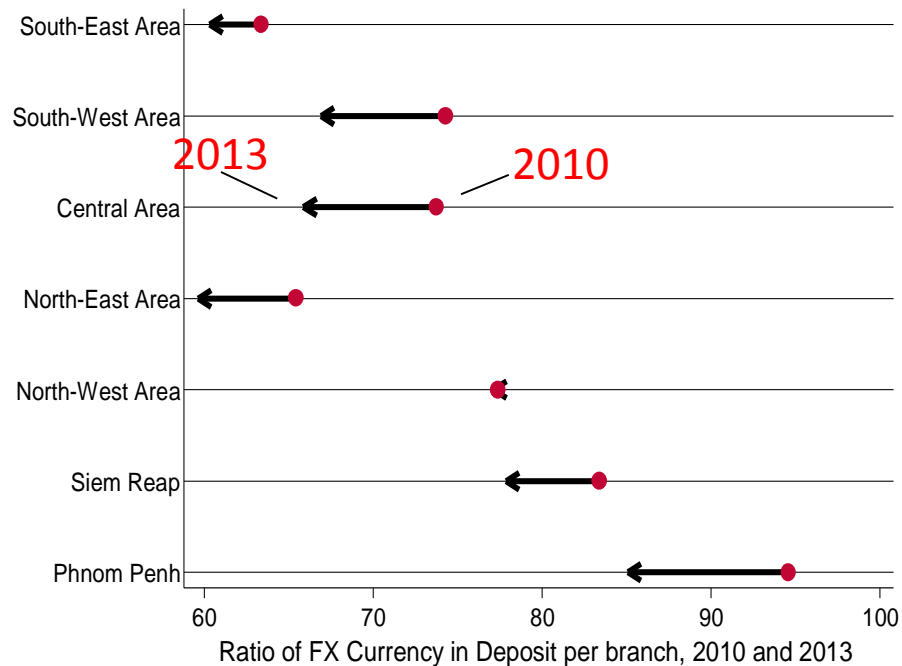
## In the case of MDIs

- FX currency shares **increased** in loan, too.
- However, FX currency shares **decreased** in MDI deposits.
- Increases of KHR deposits in rural areas might reflect the progress in financial inclusion.

### Ratio of FX Loans



### Ratio of FX Deposits



# Survey Results

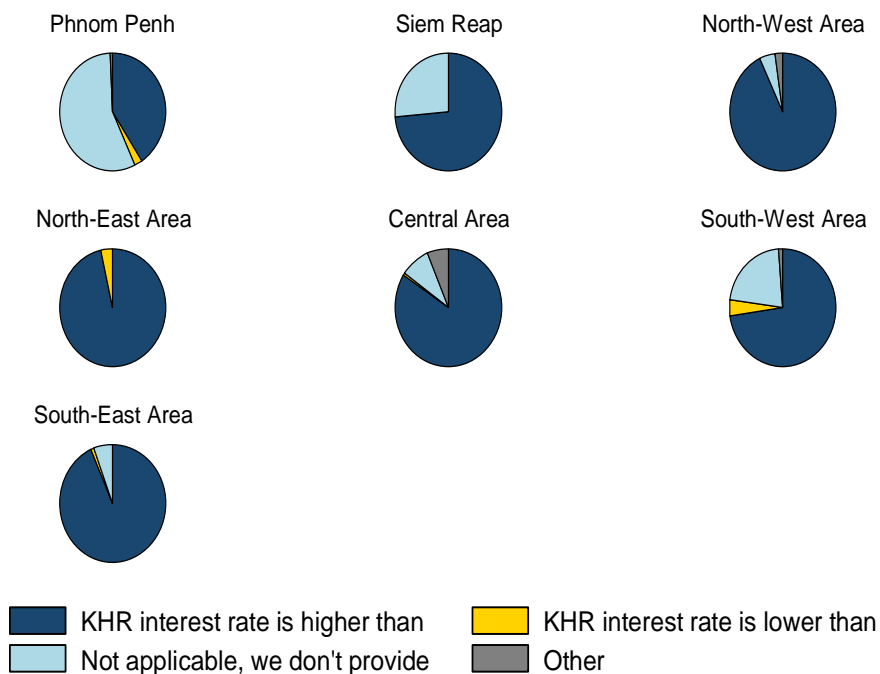
## 5. Perceptions of KHR loan provisions (Face-to-face interview)



Interest rates on KHR loans are higher because of **exchange rate risks**.

Probably, it indicates that borrowers are more sensitive to interest rate differential.

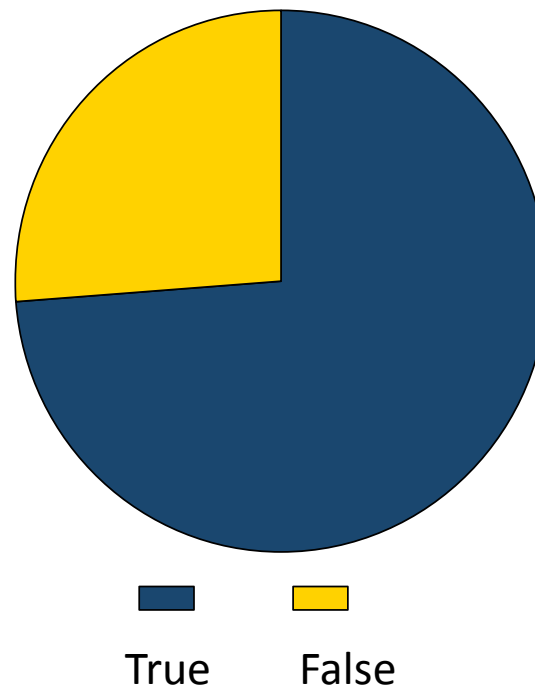
Q. Interest rates on KHR loans are higher or lower?



Graphs by Area

Why?

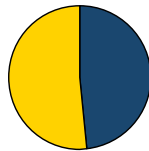
A. Due to exchange rate risks



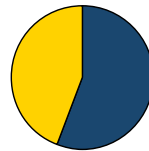
Customers might not care about the exchange rate risks. Customers with KHR income might be exposed to exchange rate risks.

*Q. Do you think that customer borrow FX loans because they want to avoid exchange rate risks.*

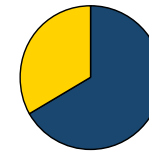
Phnom Penh



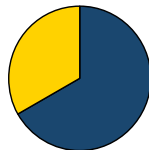
Siem Reap



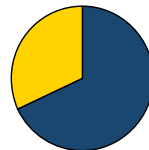
North-West Area



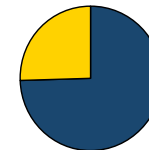
North-East Area



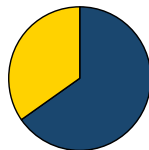
Central Area



South-West Area



South-East Area



■ No ■ Yes

Graphs by Area





# Conclusion

Our main findings in this study are as follows:

1. MDIs use local currency in their operations, compared to CBs.
2. local currency in deposits have been also increasing.
3. Financial institutions tend to allocate excess funds to branches which was short of funds. Meanwhile, commercial banks do not allocate excess KHR funds, even though they have excess KHR funds.
4. In rural areas, there are demands for local currency deposits and loans.
5. Shares of FX currency in MFI deposits have decreased in both rural areas and urban areas.
6. However, MDIs tend to provide FX loans at a more rapid pace than KHR loans
7. Financial institutions set interest rates on KHR loans higher in order to hedge exchange rate risks.



# Conclusion

## Limitations and Challenges

- Our study still have limitation on data availability.
  - Because some banks are not able to disaggregate the data.
- Should encourage banks to improve data managements capacity.
  - Should understand the situation of branch-level and region-level loan and deposit provisions, by collecting data.
- Next survey should cover more banks and MFIs.
  - Because small banks are suitable to be a driver to provide KHR loans.



**Thank you for paying attention**  
**Please see our paper for the detail.**

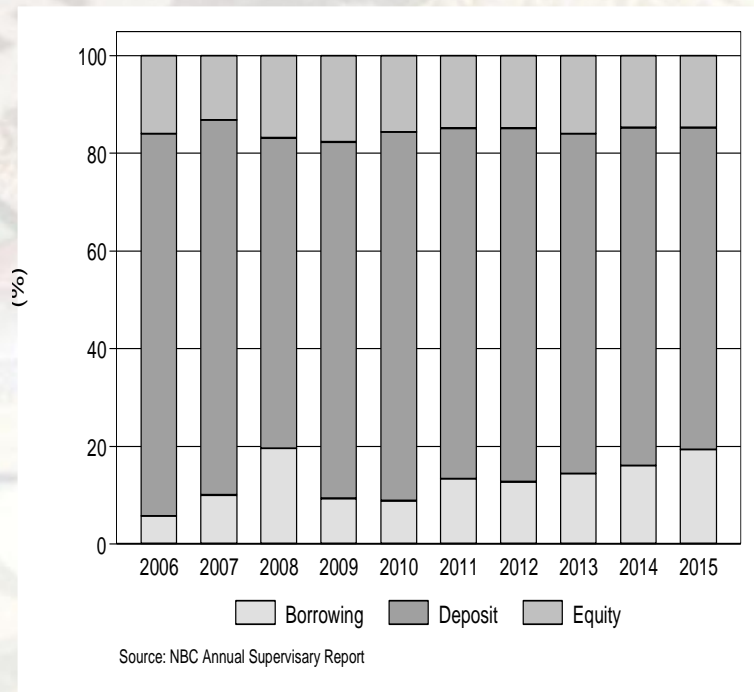


# Appendix: Trend and Current situation of Financial Dollarization (Macro data)

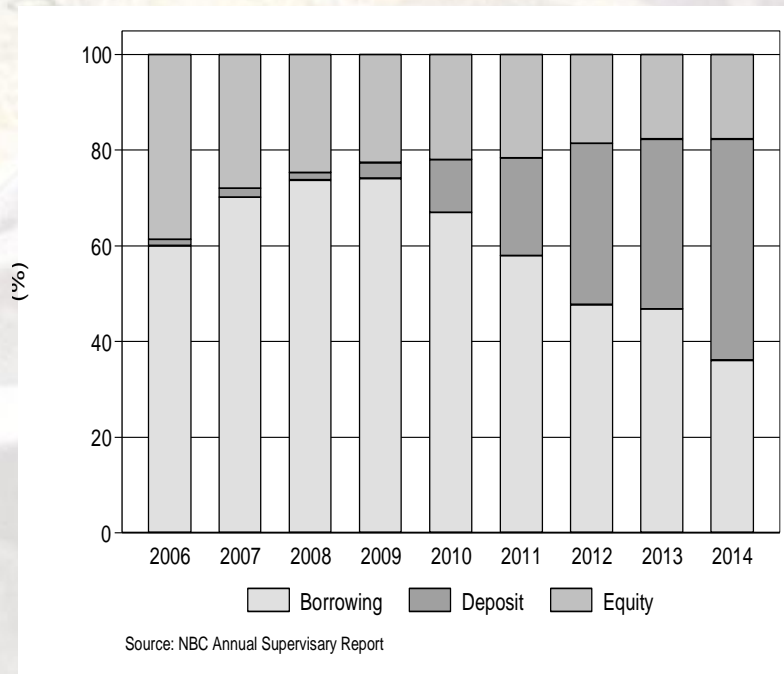


# Recent Changes in funding structures

## Commercial Banks

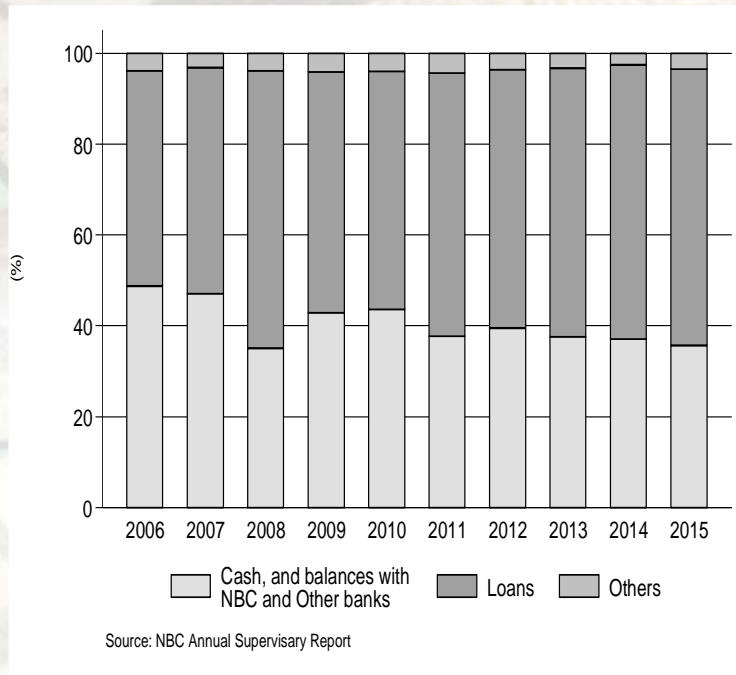


## MDIs

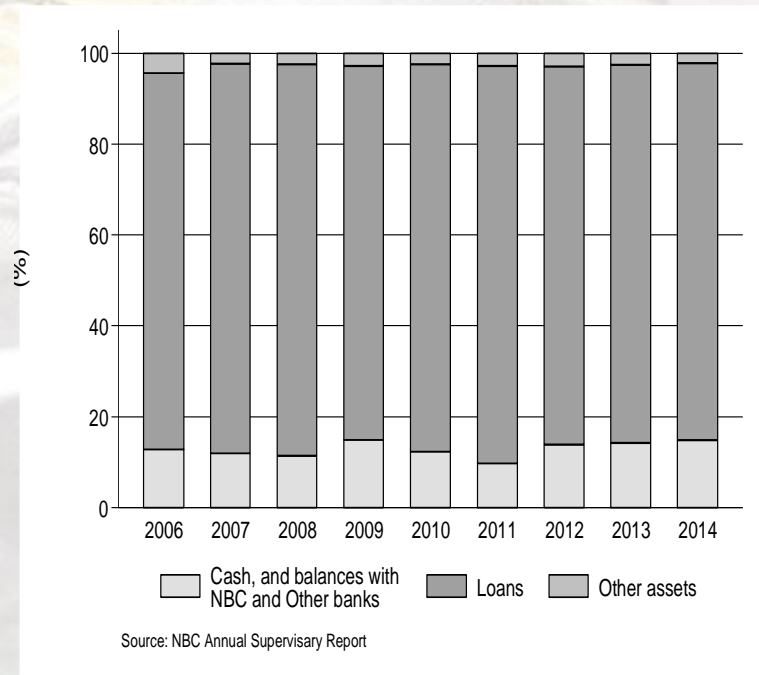


# Recent Changes in Asset structures

## Commercial Banks

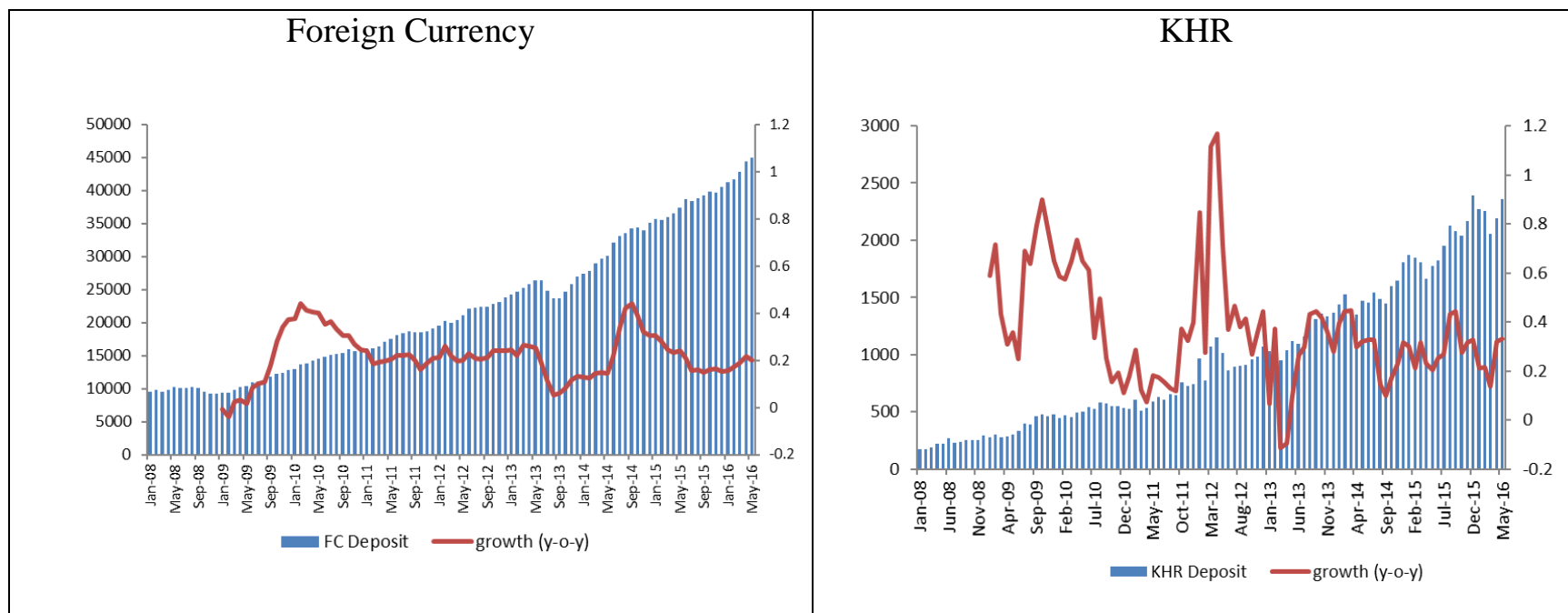


## MDIs



# KHR deposits have also increased at the same pace as or faster than FX deposits

Figure 1: Amounts and Growth of Deposits by Currencies



Source: Data provided by National Bank of Cambodia, and Authors' calculation.

