



#### NATIONAL BANK OF CAMBODIA

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# Dollarization and Enterprises' Behaviors

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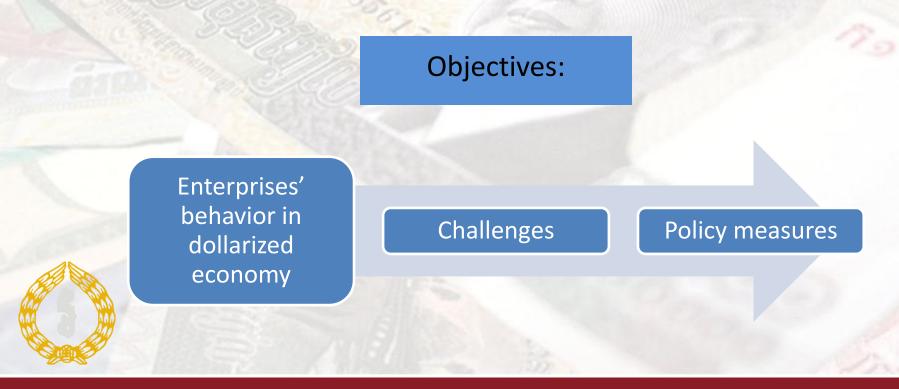
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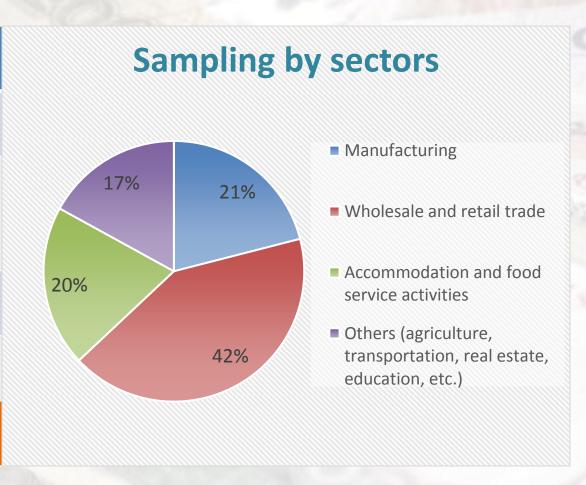
#### I. Rationalization

- Cambodia has been heavily dollarized for decades. But there is no specific study on enterprise dollarization.
- Role of enterprises may be significant for the transmission of dollarization in Cambodia.



## II. Data Description

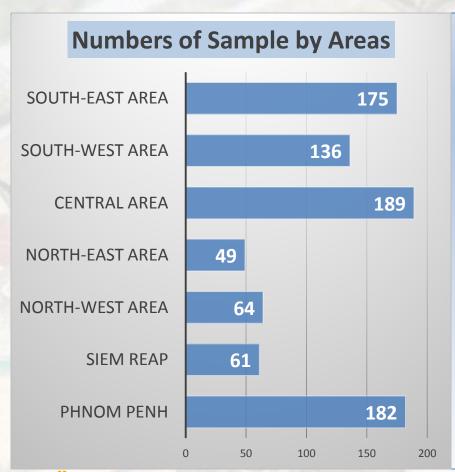
| Sampling             | Number |
|----------------------|--------|
| Large Enterprise     | 204    |
| Medium<br>Enterprise | 183    |
| Small Enterprise     | 251    |
| Micro Enterprise     | 218    |
| Total                | 856    |

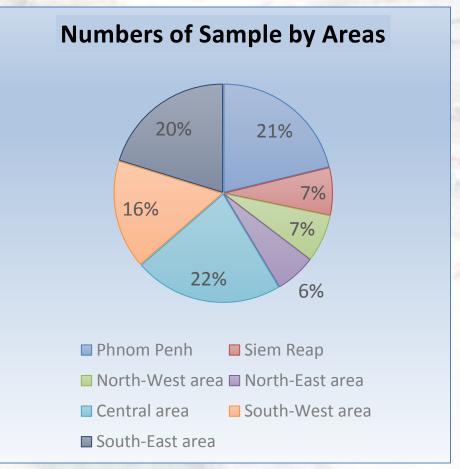




Industrial classification: Top three industries dominated more than 80% of the entire sample.

## II. Data Description







We categorized our samples in seven geographical differences.

- 1. Currency Usage in Operation
  - Average of shares of FX currencies:

| Area            | Revenues | Expenditures |  |
|-----------------|----------|--------------|--|
| Phnom Penh      | 69%      | 75%          |  |
| Siem Reap       | 66%      | 73%          |  |
| North-West Area | 69%      | 77%          |  |
| North-East Area | 31%      | 41%          |  |
| Central Area    | 35%      | 56%          |  |
| South-West Area | 52%      | 66%          |  |
| South-East Area | 46%      | 57%          |  |

- PP, SR and North-West area were dollarized more than 65% in both revenues and expenditures.
- In Central area, there was a gap between currency composition.
  - Enterprises had more foreign currency in their expenditures than revenues.

- 1. Currency Usage in Operation
  - Average of Shares of FX Currencies by Firm Sizes

|        | Revenues | Expenditures |
|--------|----------|--------------|
| Micro  | 39%      | 55%          |
| Small  | 47%      | 67%          |
| Medium | 47%      | 60%          |
| Large  | 70%      | 67%          |

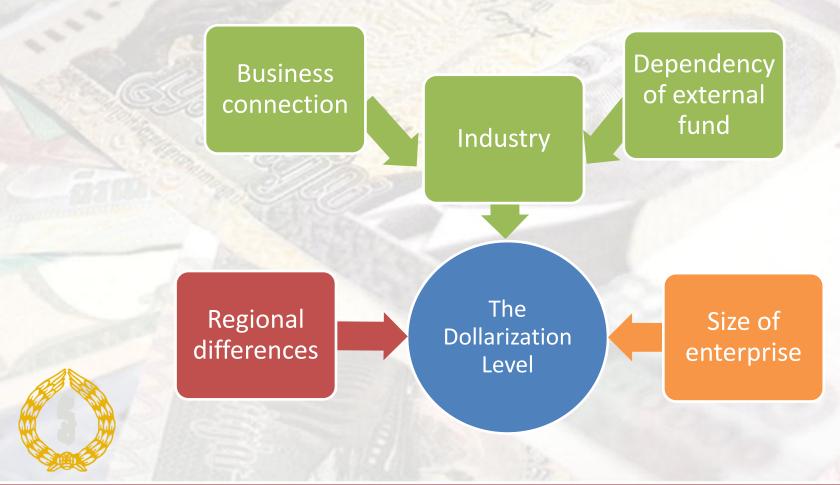
- The revenue of large enterprises was mostly dominated by FX currencies.
- The share of FX currencies decreasing as the firm size becomes smaller.
- For micro and small enterprises, they had larger shares of FX currencies in the expenditure than revenue.

- 1. Currency Usage in Operation
  - Average of Shares of FX Currencies by Industries

| 0 79                 | Revenue | Expenditures |
|----------------------|---------|--------------|
| Manufacturing        | 38%     | 47%          |
| Wholesale and Retail | 46%     | 71%          |
| Tourism              | 60%     | 54%          |
| Others               | 61%     | 72%          |

- Wholesale and retail trade sector needs to convert KHR to USD in their operation.
- The tourism sector was highly dollarized in both revenues and expenditures.

- 1. Currency Usage in Operation
  - The degree of dollarization varied through different aspects:



#### 2. Price Quotation

**Majority of Stability of** Easier to competitors exchange measure change their rate prices pricing into KHR More **Price Setting in** customers **Certain Currency** request **KHR** billing Follow the currency used **Customers**' for payment of input materials compliance and worker's wages 3 possible factors that enterprises would voluntarily changes fee to KHR

#### 3. Exchange Rate

- Prediction of future exchange rate values in 06 months, one year and five years:
  - Majority of respondents—have no idea on exchange rate movement
  - Small number of respondents—gave prediction (4000-4100 Riel/USD)
  - Exchange rate between USD-THB—Don't know Vs those predict with huge variation (it reflects that usage of THB is not common, so they don't care of the future exchange rate).



- 4. Borrowing Behavior of Enterprises
  - Almost all loans were made in USD.
  - 27 % of enterprises having loan operated in KHR— Enterprises tended to borrow in FX currency even some of them operating in local currency.
  - Why firms borrowed in FX Currency?

#### Previous finding

Firms tend to avoid currency mismatch by borrowing foreign currency loans if the large part of their incomes or assets are in foreign currency

#### New findings

#### Firms borrowed in FX:

- Lack of developed financial market in local currency,
- Payment of involved transaction required FX



Risk of currency mismatch



5. Currency Mismatch in Operation

Surplus of FX currency<sub>i</sub> (%) = 
$$\frac{Sales in FX_i - Expenditure in FX_i}{Total Sales_i} * 100$$

- Many enterprises had mismatches in the currency composition of their revenues and expenditures.
- Enterprises are more likely to face currency mismatches in rural areas.
- Most enterprises in wholesale and retail trade faced shortage of FX currency.
- Large enterprises are likely to have a surplus of foreign currency, compared to micro, small and medium sized enterprises.

#### IV. Conclusion

- Not only on loans, but revenue, expenditures and price quotation are also highly dollarized.
- The extents of dollarization vary across regions, firm size and industries.
- Risk of Exchange Rate Changes—Wide gap in the currency composition of revenues and expenditures for enterprises operating in Central area, those of small sizes, or those classified as the wholesale and retail trade
- Although, a lot of enterprises deal with multiple currencies in their operations, most of them do not recognize the risk of exchange rate changes and do not have hedging strategies.

#### IV. Conclusion

- There is demand for local currency loans.
- Banks should be encouraged to facilitate local currency loan provisions.
- Introduce hedging instruments to mitigate risk of currency mismatch.
- Limit: Could not analyze behaviors related to currency choices for loans since data does not capture a sufficient number of sample with local currency loans.
- Future study will explore factors behind foreign currency borrowing and potential demand for local currency loans.

## Thank You!

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