



## The Wealth and Debt of Thai Households: Risk Management and Financial Access

ความมั่งคั่งและหนี้สินครัวเรือนไทย:  
การบริหารความเสี่ยงและการเข้าถึงบริการทางการเงิน

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Bank of Thailand Symposium  
3 October 2007

## Motivation

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- Rising household debt
- A changing economic landscape: Ongoing financial deregulation and financial innovation will bring both increased risks and opportunities to households
- Economic policy is ultimately about raising household welfare and living standards: financial development may bring more risk management tools and means of accumulating wealth.

## Research Objectives

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- Are households excessively indebted? What is the household balance sheet?
- Does financial access help households manage risk in the forms of economic and interest rate shocks?
- Do Thai households have adequate financial access?

## Presentation Outline

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- 1.Motivation
- 2.Research questions
- 3.Theoretical Framework
- 4.Data
- 5.Household Wealth and Debt: Risk Management
  1. Household Balance Sheet : Debt and Assets
  2. Economic shocks
  3. Econometric Model : Does Financial Access Help Households Manage Risk?
- 6.Financial Access:
  1. Where do we stand?
  2. Where are the gaps in financial access?
- 7.Conclusion and Policy Implications

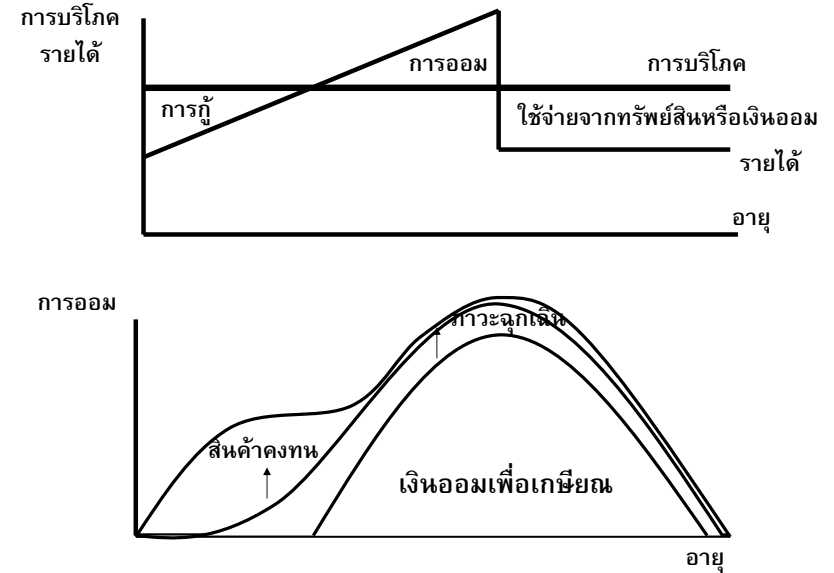
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## กรอบแนวคิดทฤษฎีวิถีจักรชีวิตกับการออมของครัวเรือน Life Cycle Hypothesis Framework

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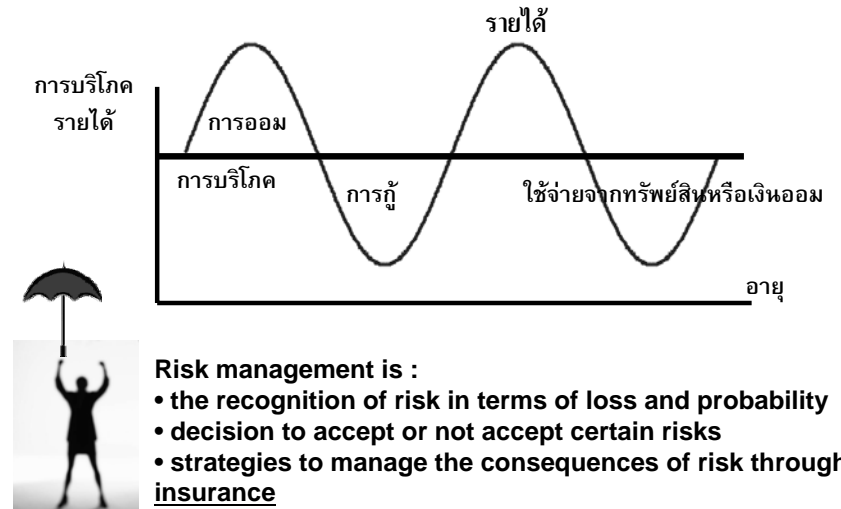
## What is Risk?

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## What is Risk Management? Insurance

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## What is Insurance?

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- **Self-insurance is a method whereby a certain amount of savings is set aside to compensate for possible future loss.**
- **Cross-insurance refers to the sharing of risk, defined as the transfer of the risk of a loss, from one entity to another, in exchange for a premium.**
- **Financial access helps with both self-insurance (by allowing household to save) and cross-insurance (by linking households that can share risk)**
- **The objective of insurance is to smooth consumption in the face of different shocks.**

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## Survey Data

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- Socioeconomic Survey + BOT Survey on Savings and Financial Access in 2006Q4.
- Collaborative project between National Statistical Office (NSO) and Bank of Thailand (BOT).
- The survey samples 11,162 households from all regions and provinces in Thailand:
  - 3,208 households from the Central region
  - 2,759 households from the Northern region
  - 2,954 from North-eastern region; and 1,536 from the Southern region.
  - Approximately 6,980 sampled households are from the urban area and 4,182 households from rural areas.
  - Sampling weights are calculated by the NSO to obtain statistics at the national level.

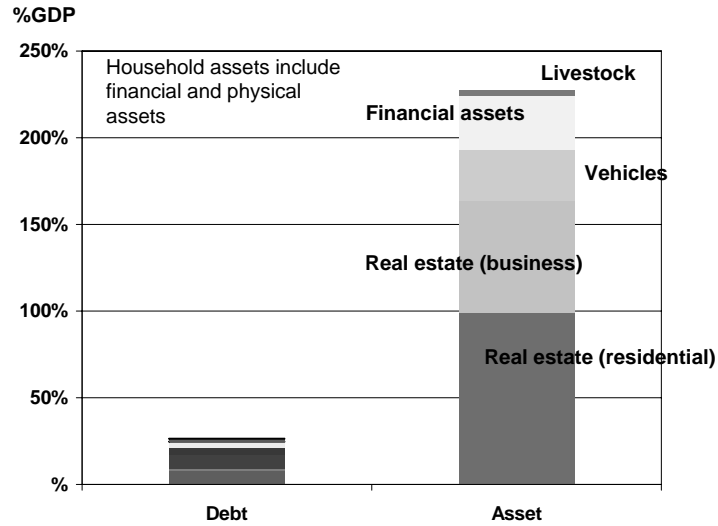
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# Aggregate Household Balance Sheet

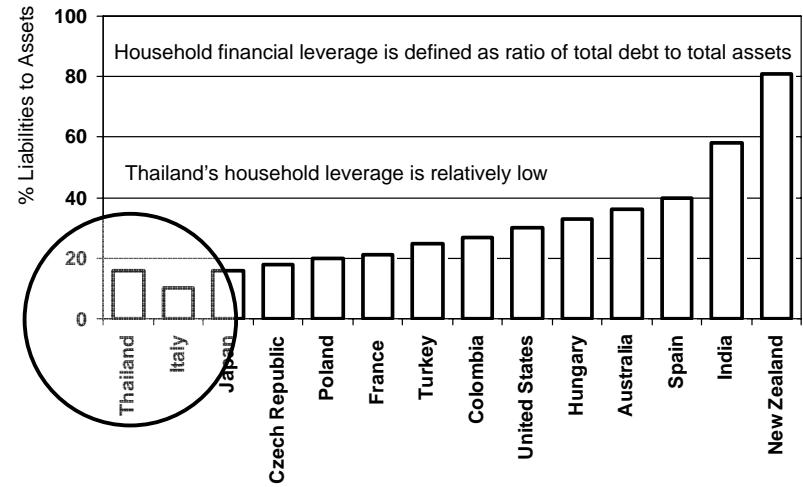
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Source: NSO SES 2006Q4

# International Comparison : Household Leverage

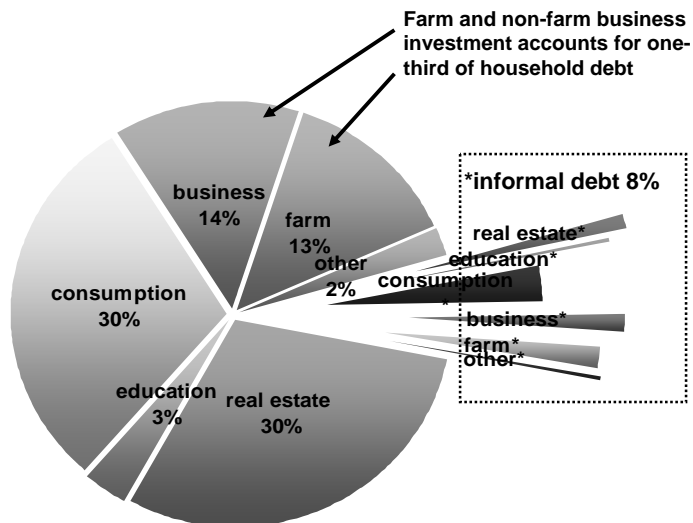
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Source: CEIC, IMF staff calculations based on data from central bank, National Statistical Office of Thailand. Note: Data for Columbia, India and Japan are as of end-2004; Thailand end-2006.

# Composition of Aggregate Household Debt

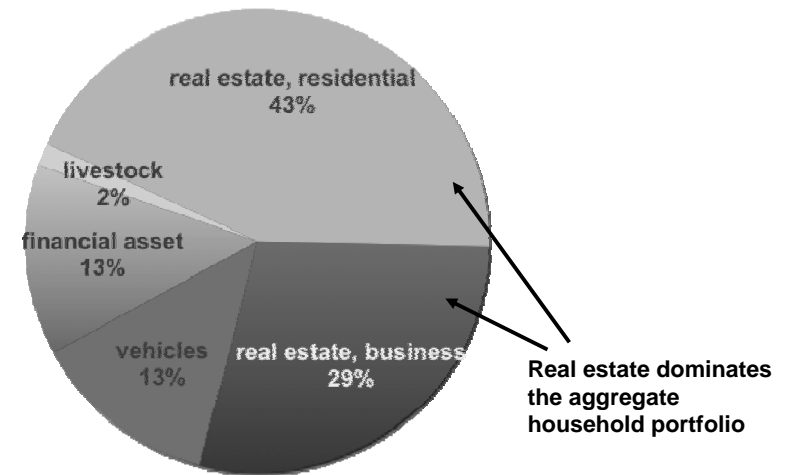
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Source: NSO SES 2006Q4

# Aggregate Household Asset Portfolio

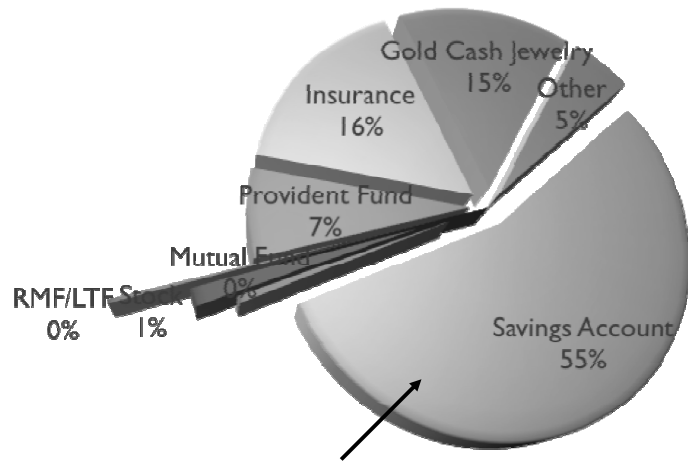
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Source: NSO SES 2006Q4

### Aggregate Household Portfolio Financial Assets

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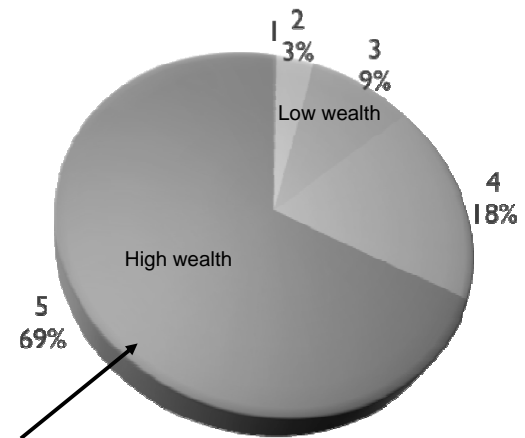


Saving deposits dominate the aggregate household financial portfolio

Source: NSO SES 2006Q4

### Distribution of Wealth by Wealth Quintiles

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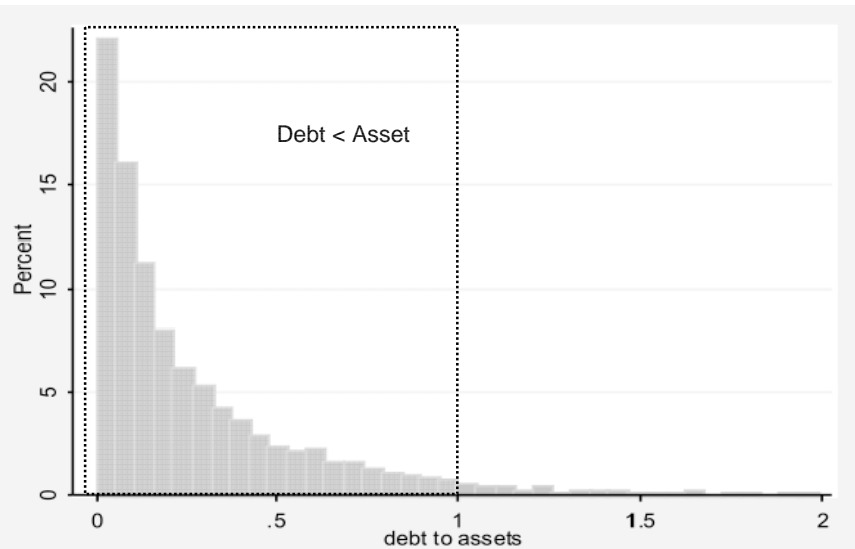


The top wealth quintile holds more than two-thirds of aggregate household wealth

Source: NSO SES 2006Q4

### Distribution of Debt to Assets : Most Households Show Low Leverage

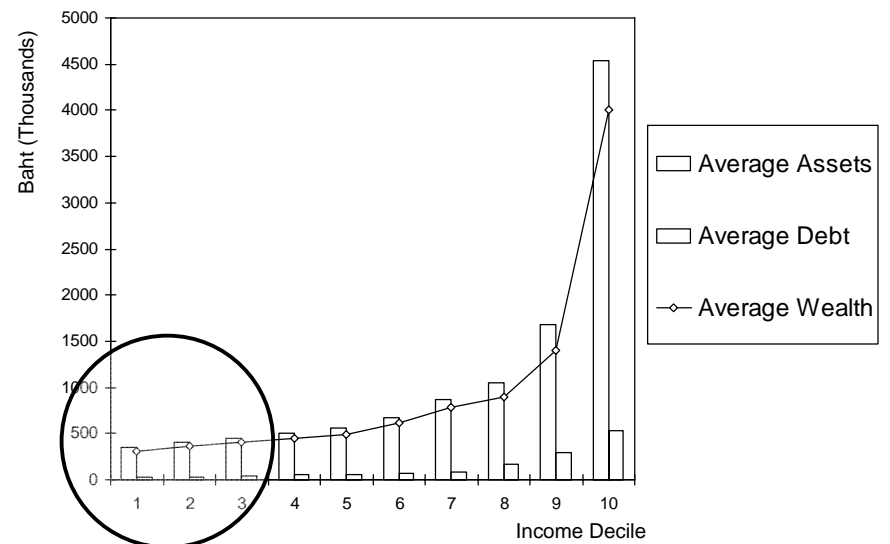
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Source: NSO SES 2006Q4

### Household Wealth, Debt, and Asset by Income Groups: Low Income Show Higher Leverage

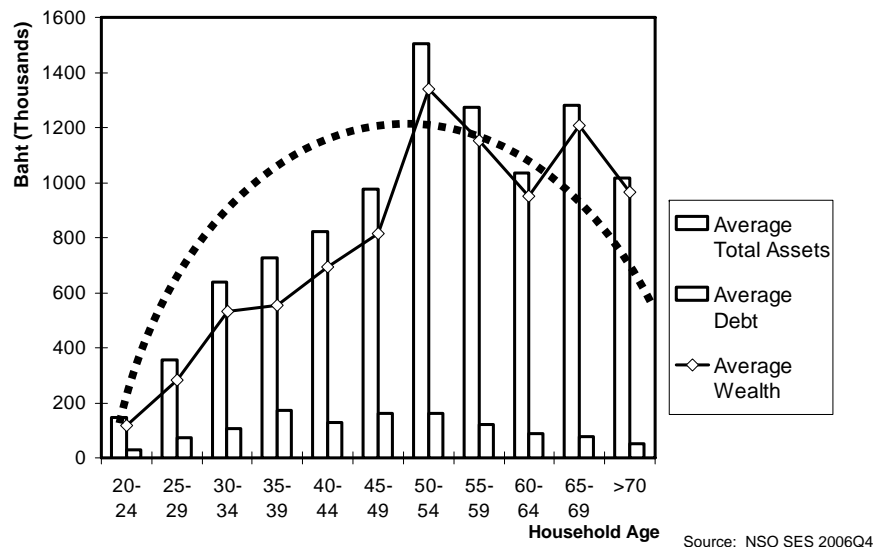
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Source: NSO-BOT SES 2006Q4

## Wealth Accumulation Follows Life Cycle Theory

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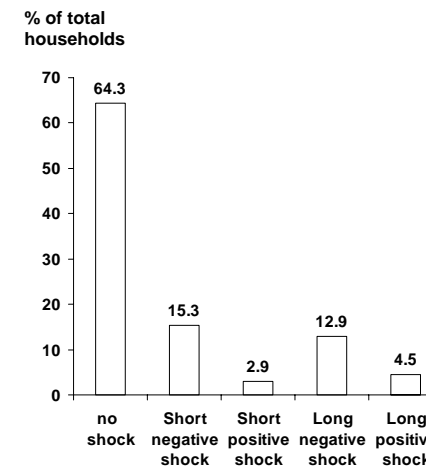
## Measurement of Shocks and Stress

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- **Motivation:**
- **To understand how different households respond to shocks and risks.**
- **How does the household balance sheet change and why are some households better at protecting themselves from shocks.**
- 
- **Shocks to households**
  - Economic shock
  - Interest rate shock
- **Stress faced by households**
  - Cash-flow stress (consumption)
  - Loan repayment stress

## Economic Shock

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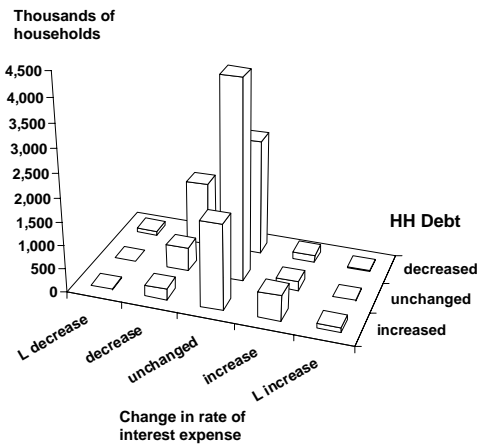


- Households are asked 2 questions:
  - a) For the past 12m, what was the economic condition of the household like compared to the average experience?
  - b) For the next 12m, what would the economic condition of the household be compared to the average experience?

Past \ Future	worse	stable	better
worse	Neg/ L 12.9%	Neg/ S 10.7%	Neg/ S 4.5%
stable	Stable 3.0%	Stable 50.2%	Stable 11.2%
better	Pos/ S 0.4%	Pos/ S 2.6%	Pos/ L 4.5%

## Interest Rate Shock

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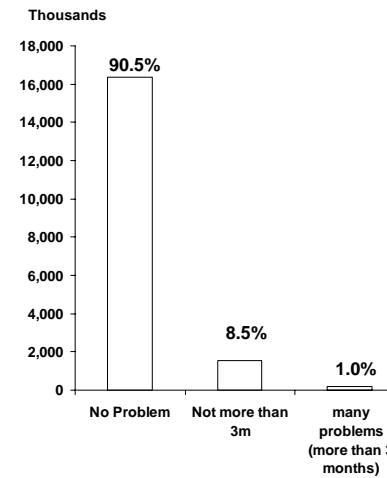


- Households are asked a question: For the past 12 months, how did the household rate of interest on debt change?

	HH	Share of indebted HH	Shock
Largely decreased	120,196	1.02%	Positive shock 18.85%
Decreased	2,101,749	17.83%	
Unchanged	8,514,783	72.24%	No shock 72.24%
Increased	904,054	7.67%	Negative shock 8.70%
Largely increased	145,839	1.02%	

## Cash-flow Stress

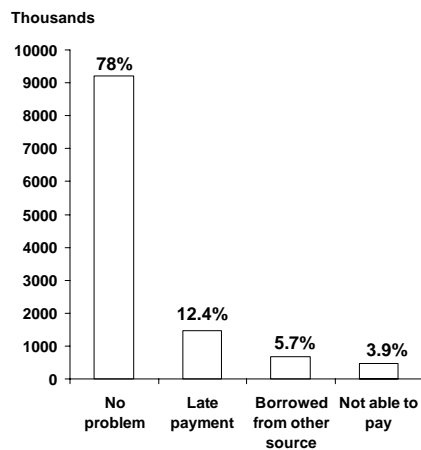
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- Households are asked whether in the past 12 months, do they experience a problem paying the usual household expenses e.g. house rent, water, electricity, school fees etc.
- If the answer is other than “no problem”, the household is considered to have cash-flow stress.

## Loan Repayment Stress

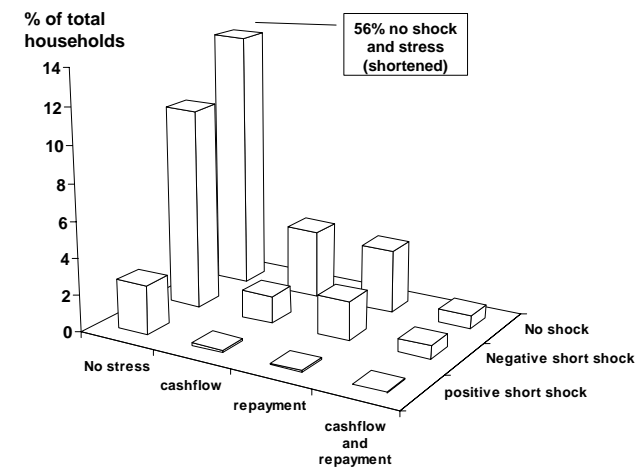
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- Households are asked whether in the past 12m, which of the following problems do they experience most (regarding loan repayment)
- If the answer is “late payment” or “not able to pay”, the HH is considered to have loan repayment stress.

## Economic shock and stress faced by households

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## Econometric Model of Cash-Flow Stress

$$\blacksquare \text{ Cash-Flow Stress} = f(?)$$

Cash-Flow Stress = {0,1,2}

2: Cash Flow Problems > 3 months

1: Cash Flow Problem < 3 months

0: No Stress

Leverage

Economic Shock

Interest Shock

Financial Access

Income, Age,

Job, Edu

## Model of Loan Repayment Stress

$$\blacksquare \text{ Loan Repayment Stress} = f(?)$$

Loan Repayment Stress = {0,1,2}

2: Unable to repay

1: Late

0: No Repayment problem

Leverage

Economic Shock

Interest Shock

Financial Access

Income, Age,

Job, Edu

## Findings from Econometric Models

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### ▪ Cash-Flow Stress

- Economic shocks result in stress
  - Long shocks matter more
- Interest shocks matter only when interacted with leverage
- Financial access proxies help risk management
  - Past refusal of credit
  - Access to emergency credit
- Education also helps

### ▪ Loan Repayment Stress

- Similar results
- Leverage and interest rate shocks matter more





## The Wealth and Debt of Thai Households: Risk Management and Financial Access

- **Financial Access of Thai Households:  
Concept, Measurement, and Policy Issues**

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## Financial Access

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- **Importance of Access to Financial Services**
- **Risk Management**
- **Wealth Accumulation**
- **Income Generating Economic Activities**
- ⇒ **Enhance Household Well-being**
- ⇒ **Contribute to Economic Development**

**Everyone who has the ability to use financial services  
should have appropriate financial access.**

## What is Financial Access?

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- **Financial Access is:**

**Opportunity to make use of financial services**

**Financial Access Include:**

**Financial Access = Usage + Self Exclusion**

## Main Questions

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1. How is the current state of financial usage of Thai households?
2. Do Thai Households have sufficient financial access to basic services such as savings and loans from banks? What are the main obstacles?
3. How can we improve financial access for Thai Households?

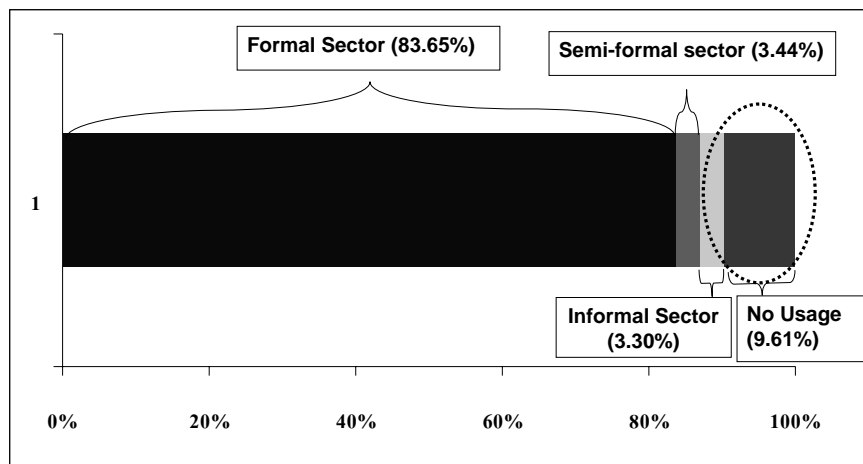
## Main Findings

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- Majority of Thai households have access to financial services in the formal sector
- Small segment of low-income Thai households still do not have access to basic savings accounts in Banks
- Substantial proportion of Thai Households lack access to loan and credit services from Banks
- Inadequate Financial Literacy

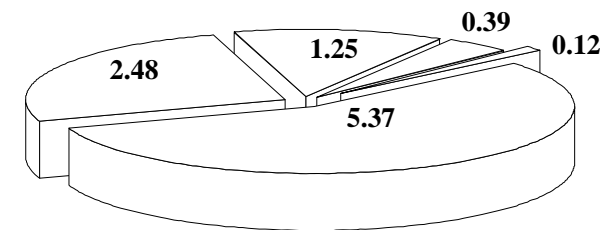
## Financial Usage Strand Ranking from Formal to Informal Sector and No Usage

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## The Financially Excluded: 9.61 % of Thai Households

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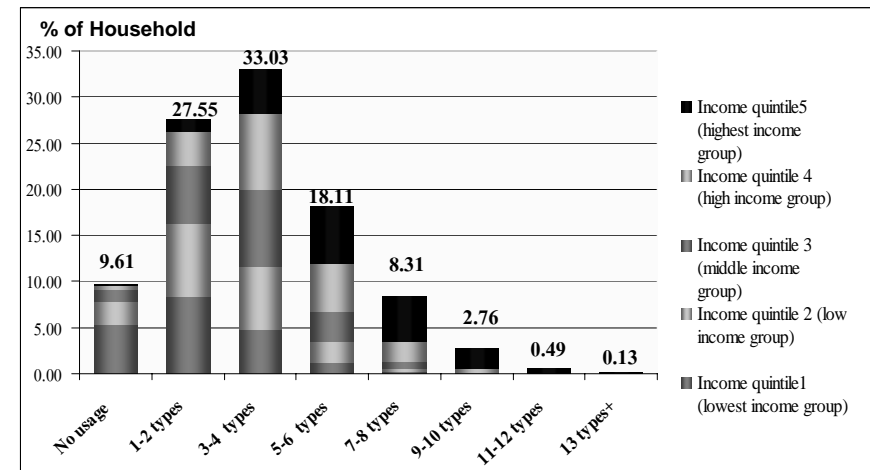
- Lowest Income
- Low Income
- Middle Income
- High income
- Highest Income

**Number of Financial Products**  
(Average Number of products by province)

- 1-2 types
- 2-3 types
- 3-4 types
- 4-5 types



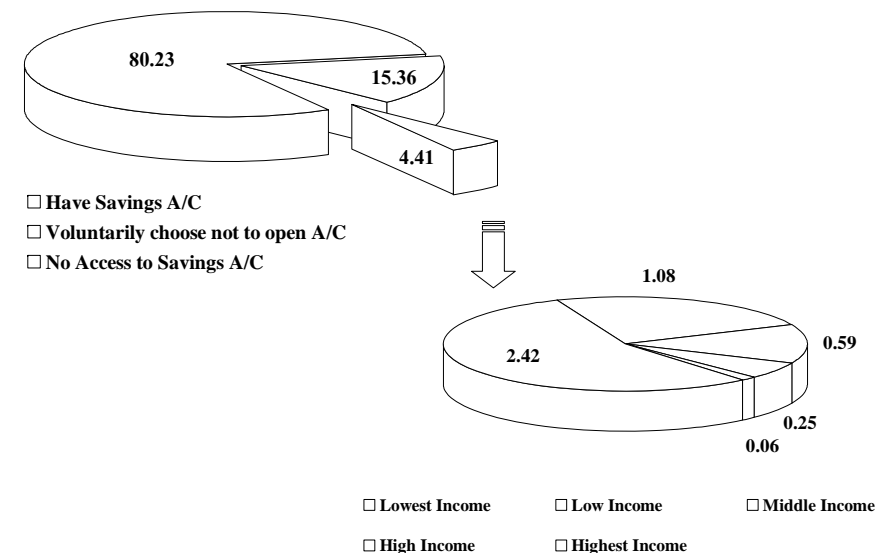
**Depth of Financial Usage**  
**Number of Products Used by Households**



**Overview: Financial usage of Thai Household**

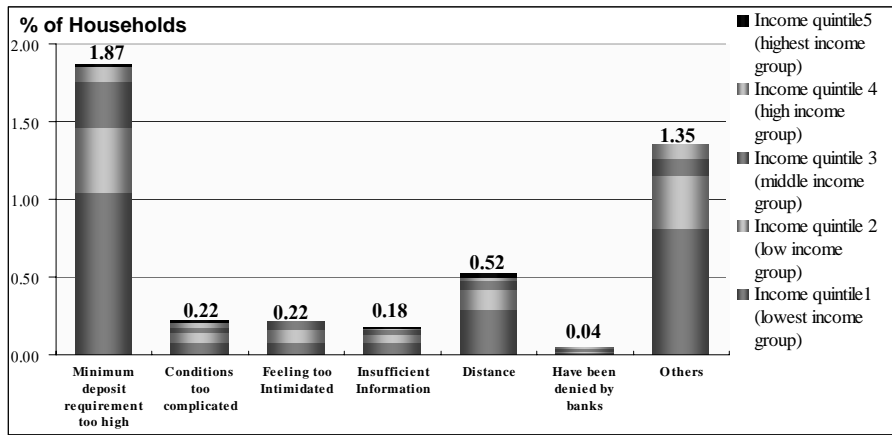
- Majority of Thai Households (83.65%) Use Financial Services from Formal Sector
- 9.61% of households do not use financial services from any financial institutions.
  - Low Income
  - Rural Areas
  - Labourers
  - Economically inactive
  - Agricultural Sector
- Majority of Households use 3-4 types of products

**Access to Saving Accounts in Commercial Banks and SFIs (%)**



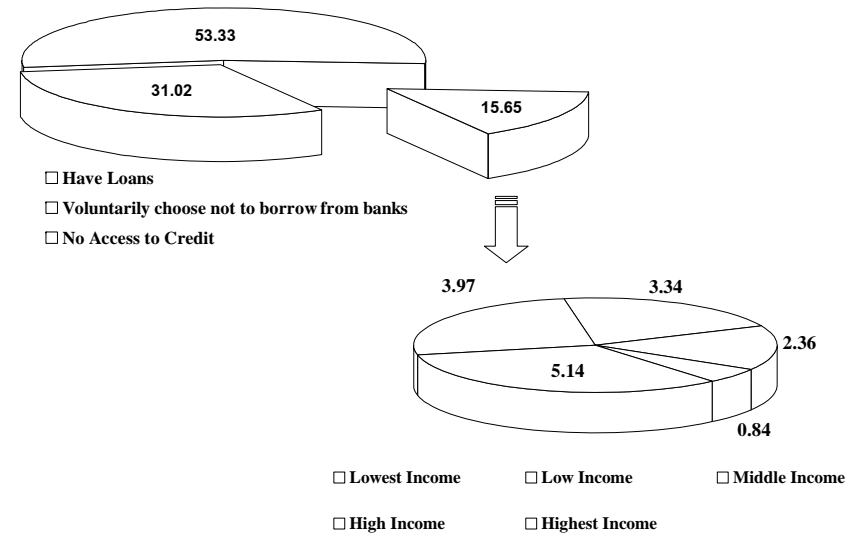
## No Access to Savings Accounts from Commercial Banks and SFIs

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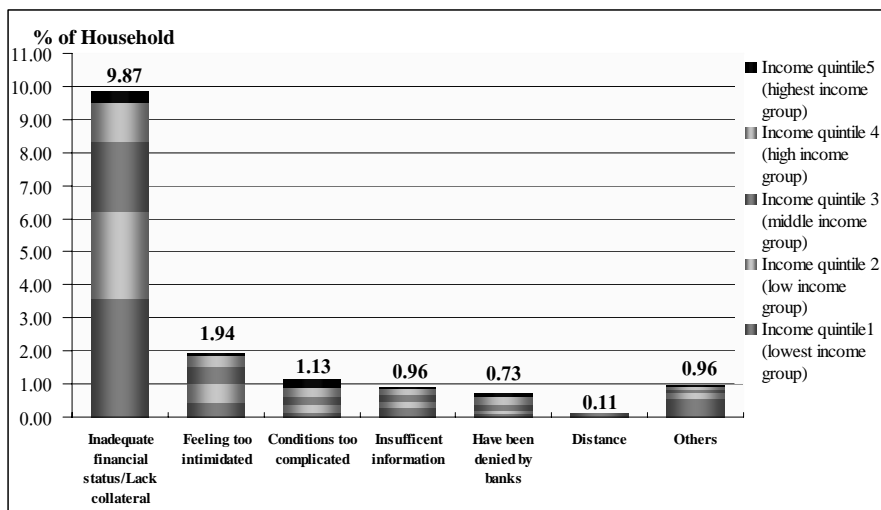
## Access to Loans/Credit from Commercial Banks and SFIs (%)

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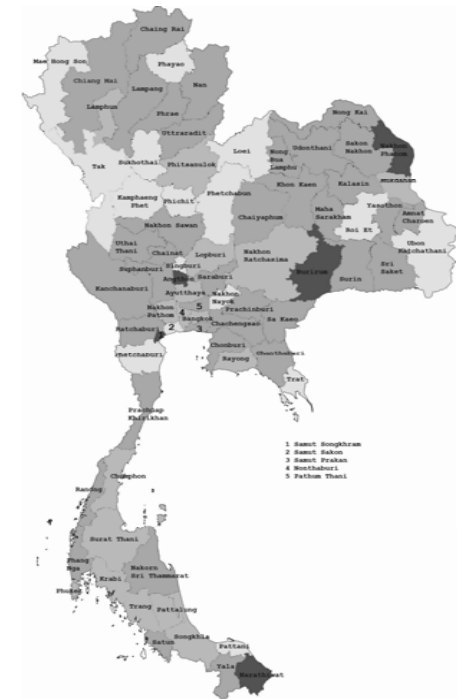
## No Access to Loans/Credits from Commercial Banks and SFIs

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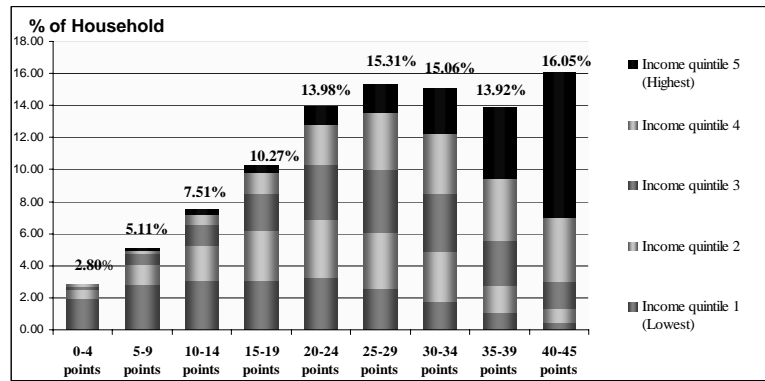
## Financial Literacy (by Province)

- Very Low (15-20 points)
- Low (20-25 points)
- Moderate (25-30 points)
- Sufficient (30-35 points)



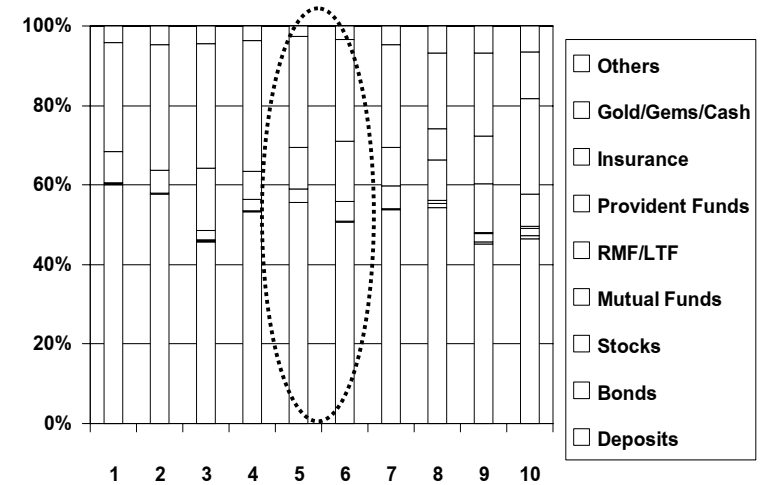
## Households Financial Literacy

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## Financial Assets Portfolios by Income Group : Low Diversification

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## Summary of Main Findings

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- 4% of households still lack access to savings accounts
- Main barriers to access to savings accounts:
  - Minimum deposit requirement too high
  - Inadequate information and financial literacy
- 15% of households lack access to loans and credit services from Banks
- Main barriers to access to loan/credits
  - Inadequate financial status/lack of collateral
  - Insufficient information and financial literacy

## Financial Access and Households Characteristics

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Financial Access	Household Characteristics
Complete Access	<ul style="list-style-type: none"> <li>• High-highest income groups,</li> <li>• Professional, technical and managerial sector</li> <li>• Live in Bangkok</li> </ul>
Partial Access	<ul style="list-style-type: none"> <li>• Middle income group</li> <li>• Unspecified employment</li> <li>• Entrepreneurial, trade and industry sector</li> <li>• Urban areas outside Bangkok</li> </ul>
No Access	<ul style="list-style-type: none"> <li>• Low-lowest income groups</li> <li>• Labour worker</li> <li>• Agricultural sector</li> <li>• Economically inactive</li> <li>• Rural areas outside Bangkok</li> </ul>

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## Policy Implications

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### ➤ Development of Innovative Financial Services

- **Savings:**      **Simple Product Terms and conditions**
- **More information provision**
  
- **Credits:**      **More information provision**
- **Better Credit History Data**



**Improve Credit History Data  
in Financial Sector**

## Policy Implications

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- **Financial Literacy**
- **Partnership between Public Sector, Private Sector, and Education Sector in Promoting Financial Education**
  
- **Better Information Provision**
- **Development of Product Information to be Disseminated in a Standardized Format**
- **Clear and Effective Communication on Policy Issues from Public Sector**

## Policy Implications

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- **Monetary Policy**
- **Monetary policy transmission to the household will become more effective**
- **Central bank communication can help to shape household expectations and allow households to prepare accordingly**