

Measuring Household Finance in Thailand

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Bank of Thailand

Finance and Development: Data, Research and Policy Design

June 8, 2017

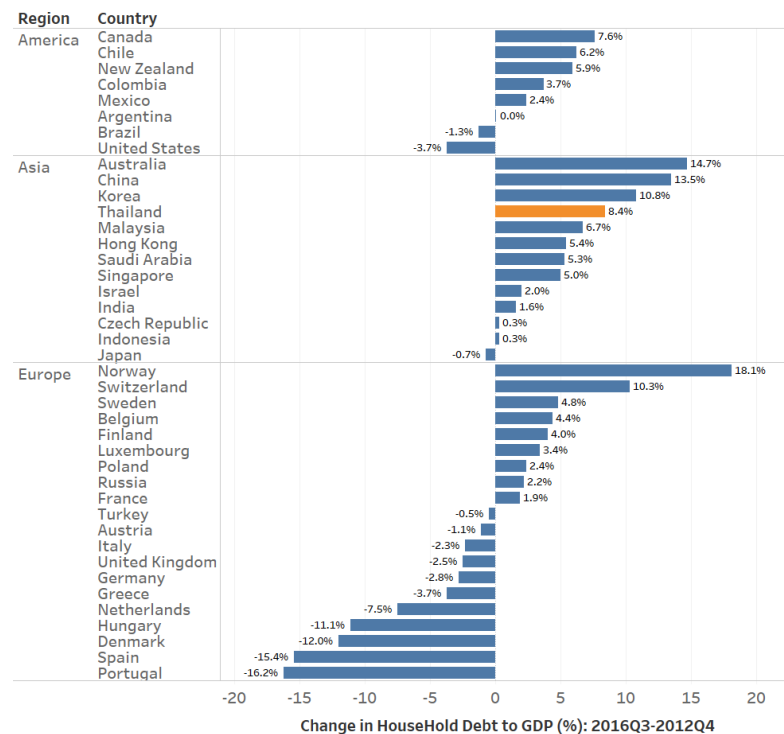
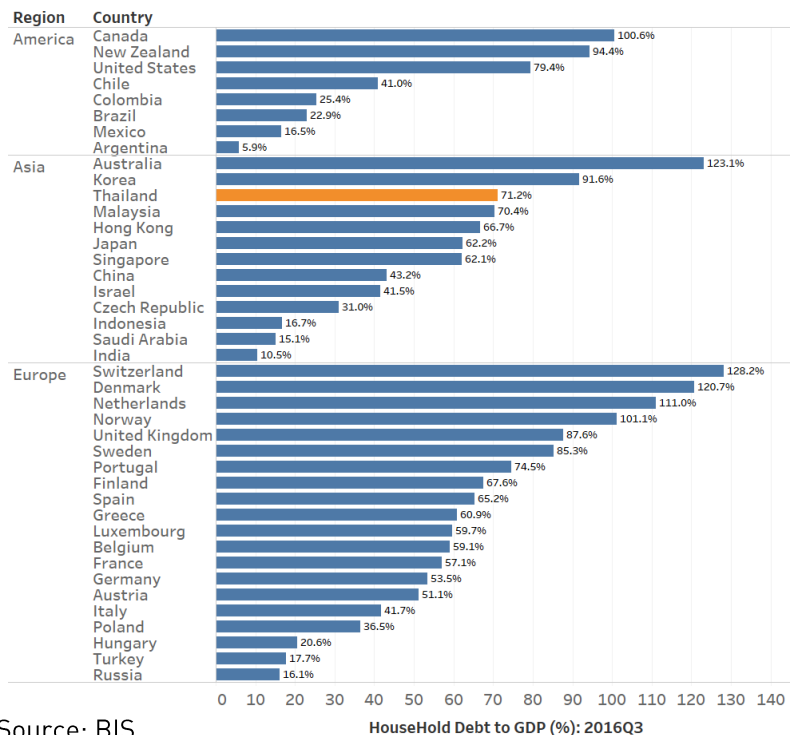


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- **Analysis Framework and Structure**
- **Overall picture on Thai Household Finance data and surveys**
- **Illustrative Example: Thailand's Household Debt**
 - Helicopter view:
 - Prevalence
 - Intensity
 - Financial Health
 - Distribution
 - Extensive margin
 - Intensive margin
- **Key Take Aways**

Should high and rising household debt in Thailand be worrying?

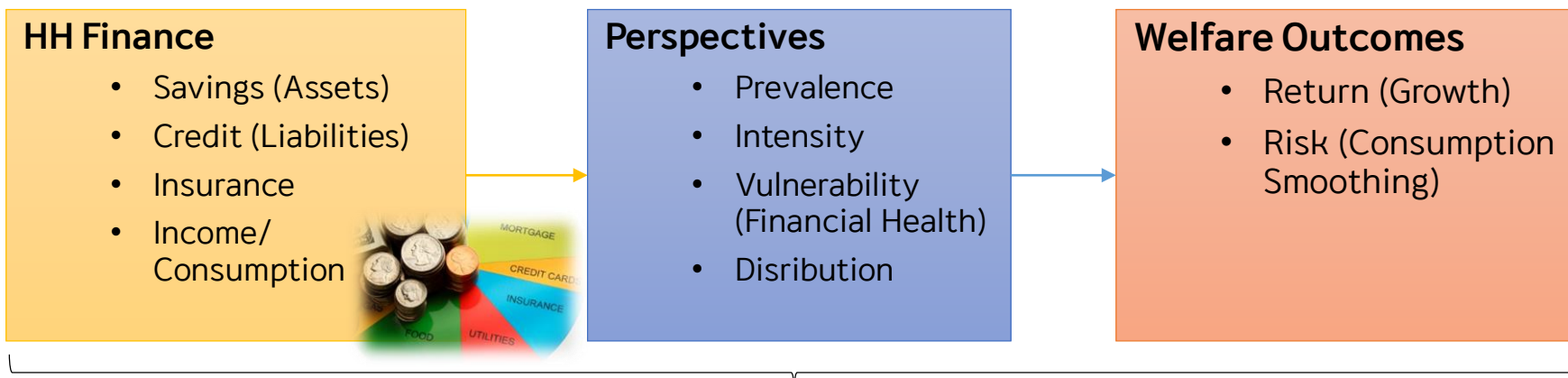
Thailand's Debt to GDP ratio ranked among the top... ..and among the fastest rise in the region



Source: BIS


- **Macro literatures:** High household debt could slowdown growth, more vulnerable to shocks, implications to financial stability
- **Micro literatures:** Thin... but critical for understanding prevalence, intensity and distribution of household debt ... important for policy design

Analysis Framework and Structure of the full paper*




Ideal data/specification

- Granular (Household/transaction level)
- Wide Coverage
 - Population
 - Consolidated Portfolio of each household
 - Overtime/ high frequency



On collaborative datasets

- **Administrative data:** BOT aggregate data, NCB
- **Household Surveys:** Socio-Economic Survey (SES), Townsend Thai Survey, Agricultural Household Survey (AHS), BOT SES, Panel SES

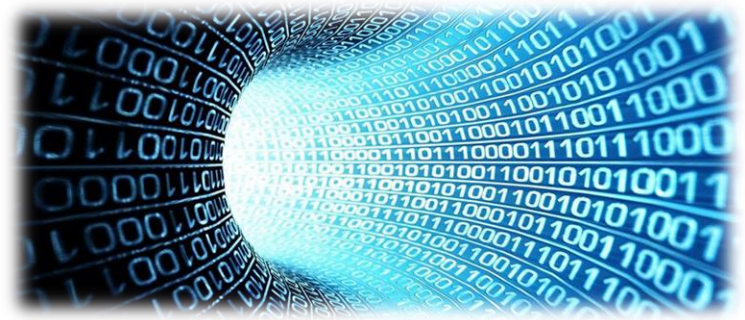


* Chantararat, Samphantharak, Suwanik (2017). *Household Finance and Vulnerabilities: Evidence from collaborative Thai Household Surveys* Unpublished manuscript.

Pros/Cons of Household Admin & Surveys

Administrative Data

- **Pros: Population; Accuracy**
- **Cons: Only formal sector**



Household Surveys

- **Pros: Research-driven data collection; Appropriate for policy design; Informal sector included**
- **Cons: Sampling design; Data Collection**

Overall picture:

Thai Household Finance Data and Surveys

Overall picture on Thai Household Finance Data and Surveys

	Administrative data		Household Surveys					
	Financial Institutions (BOT)	National Credit Bureau (NCB)	Socio-Economic Survey (SES)	Panel SES	BOT SES	Townsend Thai Resurvey		Agricultural Household Survey (AHS)
						Annual	Monthly	
Type of Data	Cross Sectional Data Over Time	Panel Data (In early stage for household debt analysis)	Cross Sectional Data Over Time	Panel Data	Cross Sectional Data Over Time	Panel Data	Panel Data	Cross Sectional Data Over Time
Frequency	Quarterly	Quarterly/Yearly	Yearly (Assets and Liabilities are observed every 2 years)	2005, 2006, 2007, 2010, 2012	Irregular (2006, 2010, 2013, 2016)	Yearly	Monthly	Yearly
Period	2003 - 2016 (2546 - 2559 B.E.)	2010 - 2016 (2553 - 2559 B.E.)	1957 - 2016 (2500 - 2559 B.E.) (1988 - 2004 every 2 years and every year since 2006)	2005 - 2012 (2548 - 2555 B.E.)	2006 - 2016 (2549 - 2559 B.E.)	1997 - 2015 (2540 - 2558 B.E.)	1997 - 2015 (Household Financial Account 1997 - 2012)	2004 - 2015 (2547 - 2558 B.E.)
Sample Size	Data collected from every financial institutions (Commercial Banks, SFI, Nonbank, Coop)	49.01 mio accounts across Thailand (74% of household formal debt covering 90 financial institutions and more)	52,000 households across Thailand (13,000 households per quarter)	6,000 households across Thailand (same samples from SES)	10,000 households across Thailand	2,760 households (Urban 1,530, Rural 1,230) covering 6 provinces*	682 households covering 4 provinces**	30,000 agricultural households across Thailand
Granularity	Aggregate basis reported from financial institutions	Individual basis (able to link an account to multiple financial institutions)	Household basis covering income, expenses, assets and liabilities	Household basis covering income, expenses, assets and liabilities (less detailed than SES)	Household basis (more details of Household Finance than SES)	Household basis covering income, expenses, assets and liabilities	Household basis covering income, expenses, assets and liabilities	Household basis covering agricultural activities, income, expenses, assets and liabilities
Limitation	<ul style="list-style-type: none"> No data on household/ individual basis No informal sector 	<ul style="list-style-type: none"> No data on income No informal sector 	Might not represent high income households	Low frequency	<ul style="list-style-type: none"> Might not represent high income households Low frequency 	Might not be national representative	Might not be national representative	Low frequency
Uniqueness	Aggregate data of the country	Panel Data covering loan-level accounts across Thailand	<ul style="list-style-type: none"> Surveys covering households across Thailand Covers decades of data 	Panel surveys covering households across Thailand	<ul style="list-style-type: none"> Surveys covering households across Thailand More details of hh finance than SES 	The highest-frequency Panel surveys on Thai households	The highest-frequency Panel surveys on Thai households	<ul style="list-style-type: none"> Focus on agricultural households across Thailand Detailed agricultural production activities

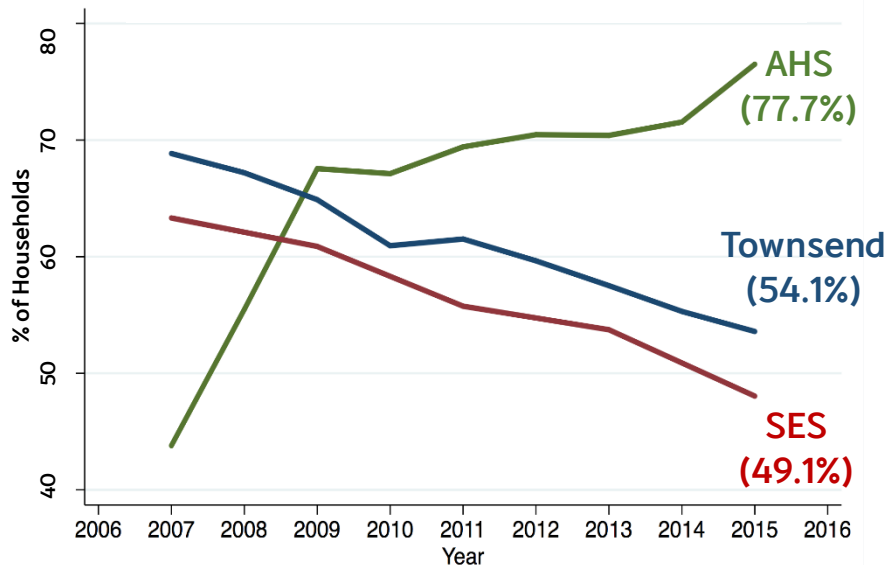
* 6 Provinces, i.e., Chachoengsao, Lopburi, Buriram, Srisaket, Satul, Phrae

** 4 Provinces, i.e., Chachoengsao, Lopburi, Buriram, Srisaket

Illustrative Example:
Household Debt in Thailand

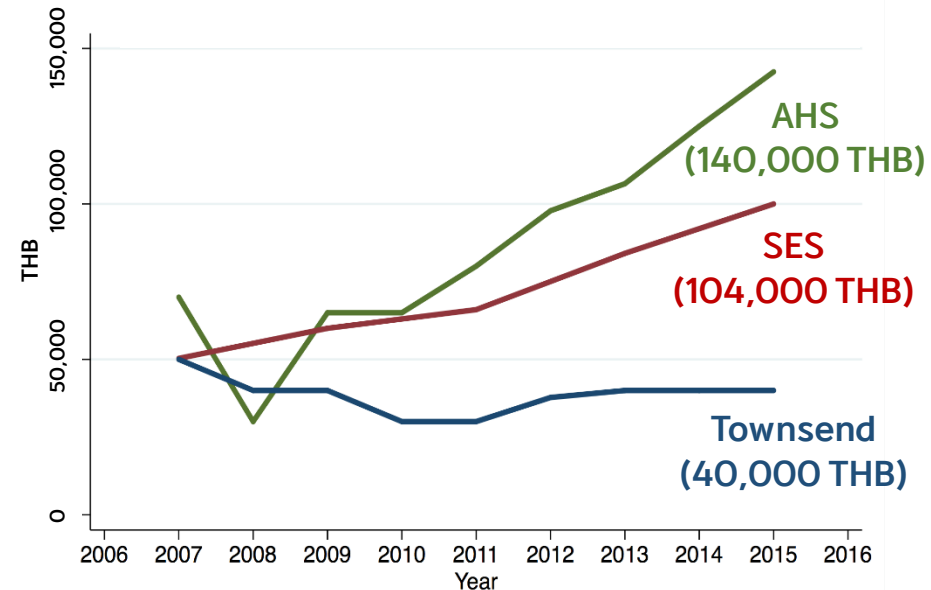
Helicopter View of Thailand Household Debt: Prevalence and Intensity

**Debt Prevalence Overtime
(% of Households)**



% Indebted households slowly declines overtime, while agricultural households in opposite direction

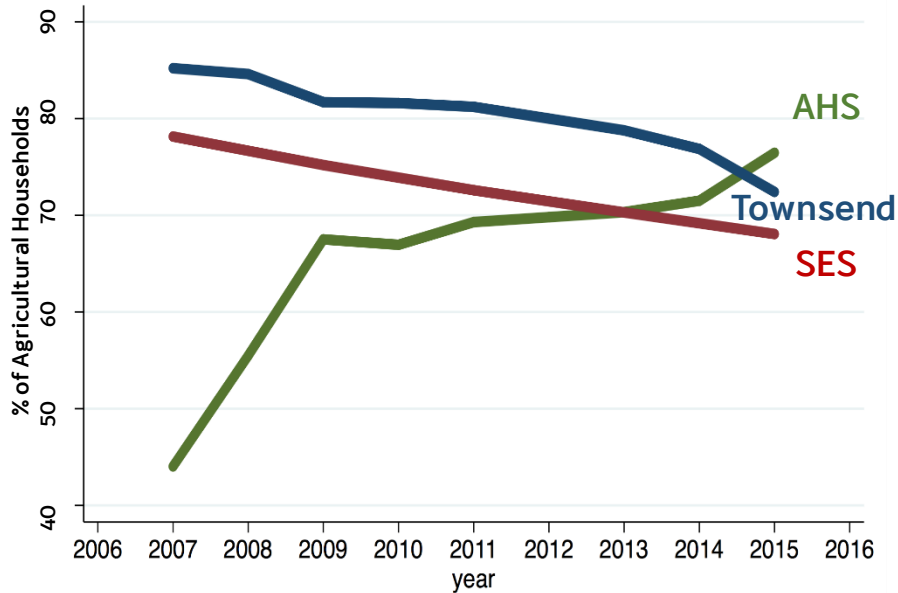
**Debt Intensity Overtime
(of Indebted Households)**



Median Debt Value in rising trend

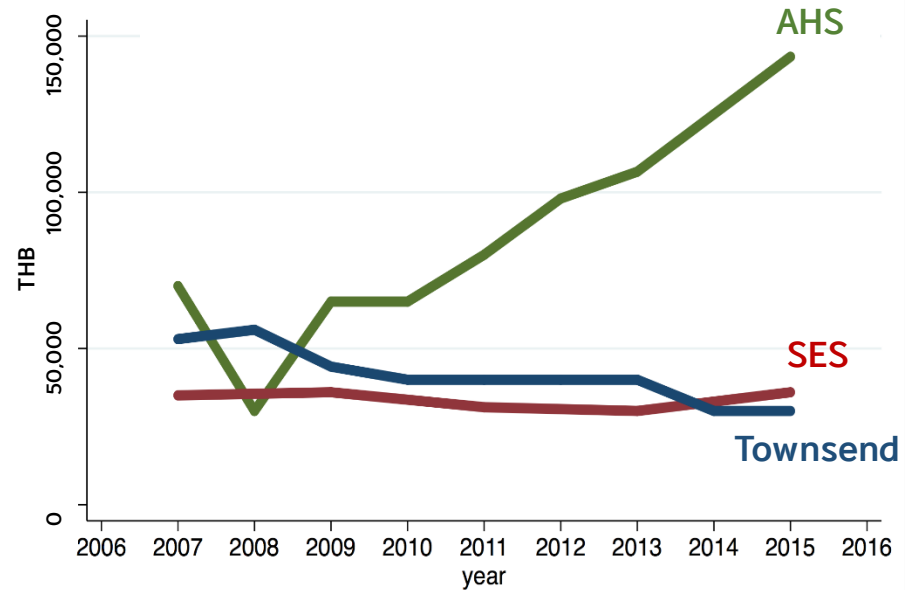
Helicopter View of Thailand Household Debt: Prevalence and Intensity

Debt Prevalence Overtime
(% of Agricultural Households)



% Indebted Agricultural Households still high across surveys

Debt Intensity Overtime
(of Indebted Agricultural Households)



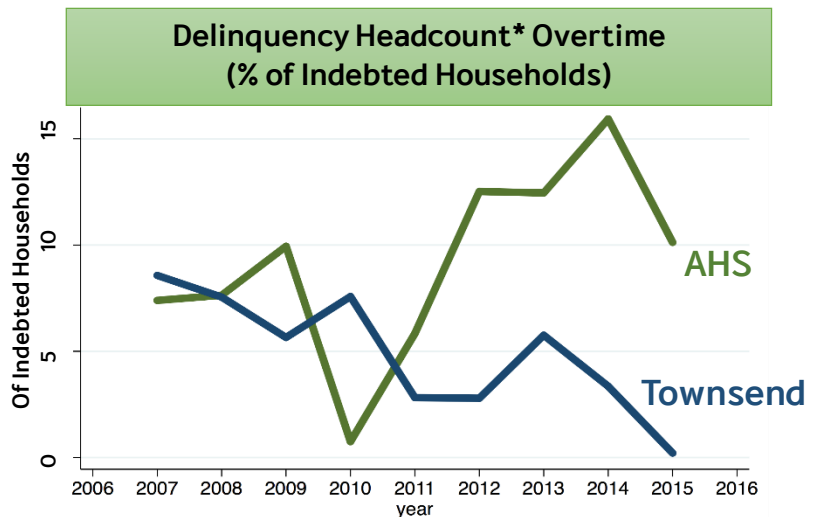
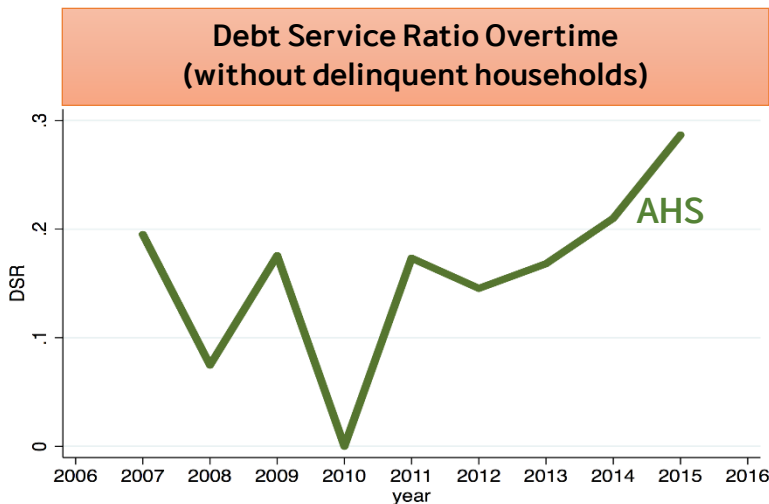
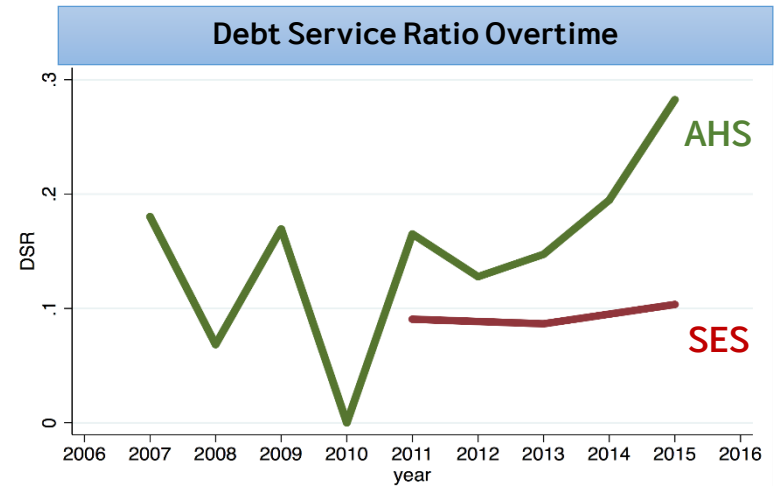
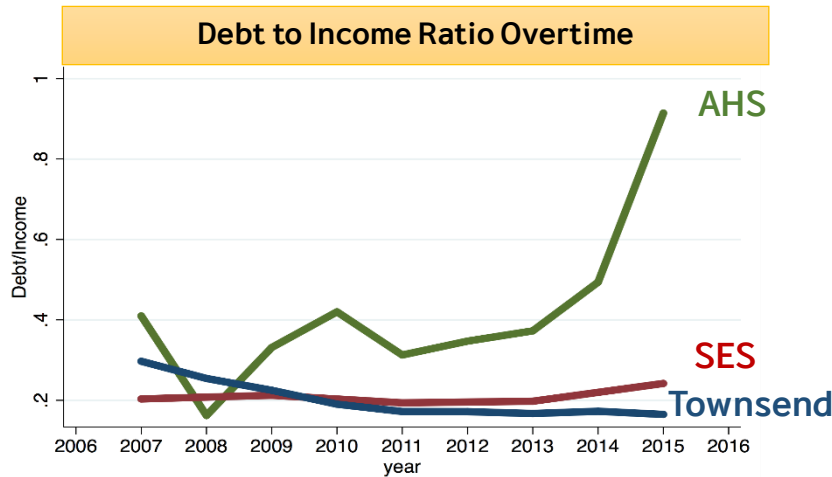
Median Debt Value on the rise
In both AHS and SES

2007 - 2015	SES	Townsend	AHS
% Agricultural Households of Surveyed Households	20.76%	20.58%	100%

Source: SES, Townsend Thai Survey, AHS

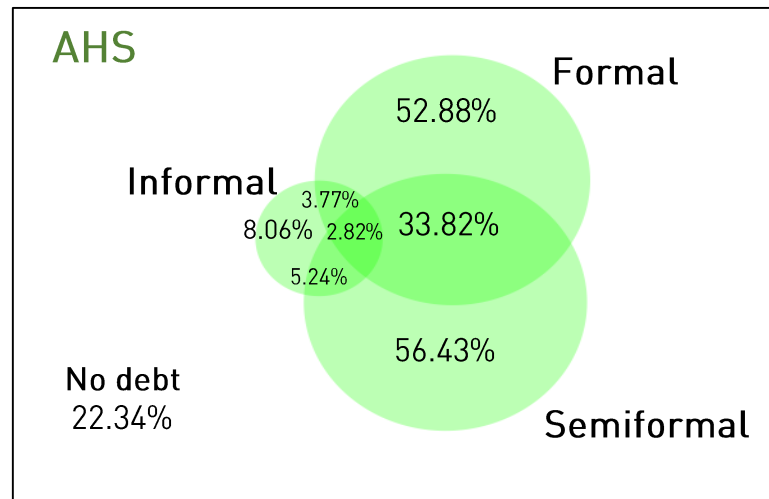
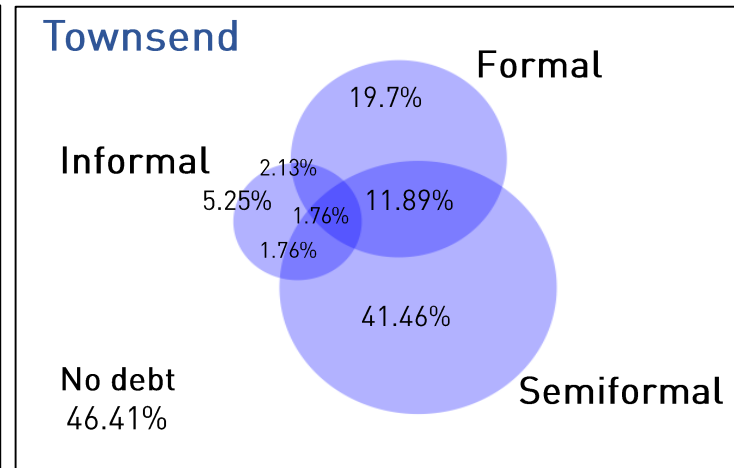
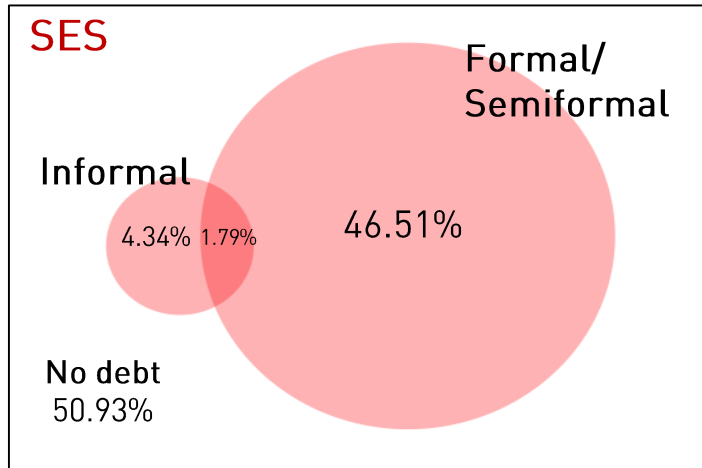
Helicopter View of Thailand Household Debt: Financial Health

Household's Financial Health fluctuates overtime especially for agricultural households



Distributional View: 2015 Debt Portfolio

- **Source of Debt: Only small proportion of informal debt**
- **Number of Sources: Not many households have various sources of debt**



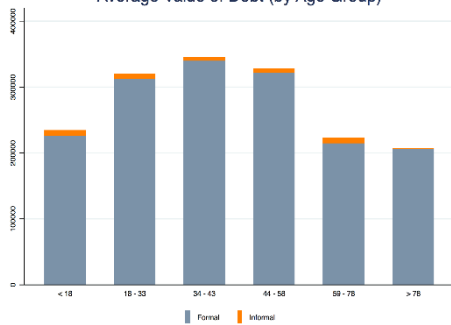
SES

Highest average value of debt per household:

Middle-aged adults, Professional, Highest income, Urban households

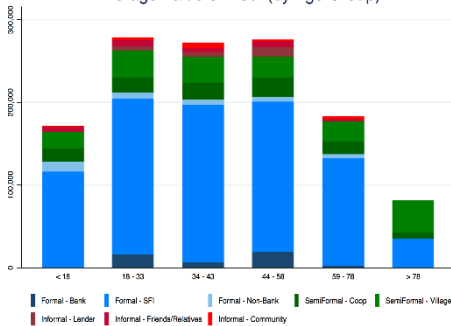
Age Group

Average Value of Debt (by Age Group)



Source: SES

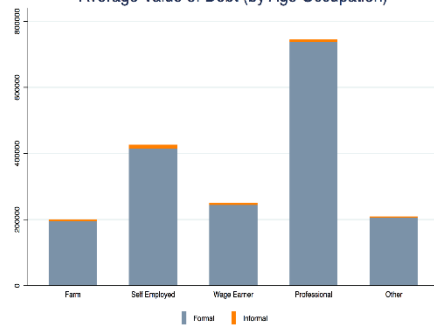
Average Value of Debt (by Age Group)



Source: AHS

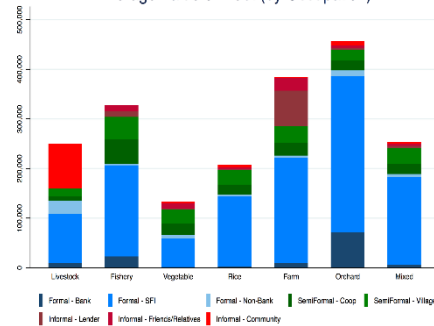
Occupation Group

Average Value of Debt (by Age Occupation)



Source: SES

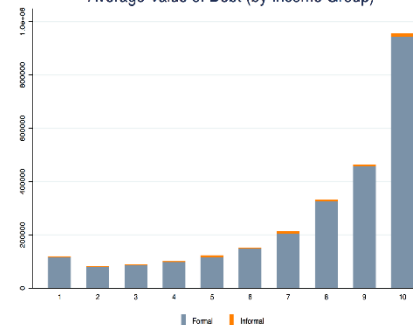
Average Value of Debt (by Occupation)



Source: AHS

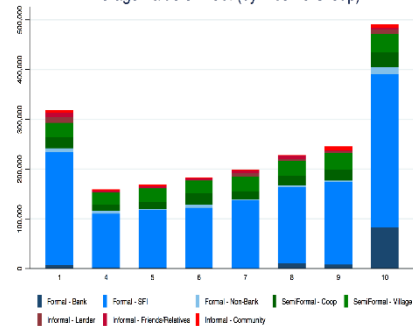
Income Group (By Decile)

Average Value of Debt (by Income Group)



Source: SES

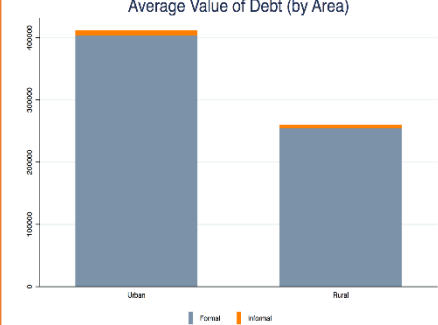
Average Value of Debt (by Income Group)



Source: AHS

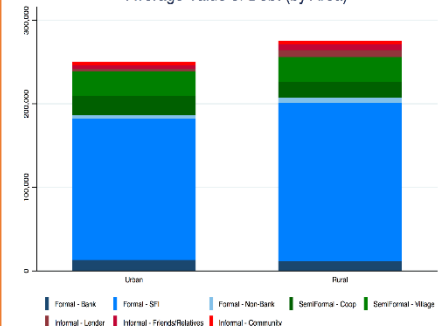
Area

Average Value of Debt (by Area)



Source: SES

Average Value of Debt (by Area)



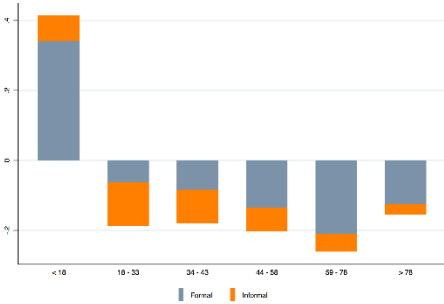
Source: AHS

SES

- **Deleveraging:** Formal and Informal debt by every occupation group, every income group, both areas
- **Leveraging:** Adolescent households

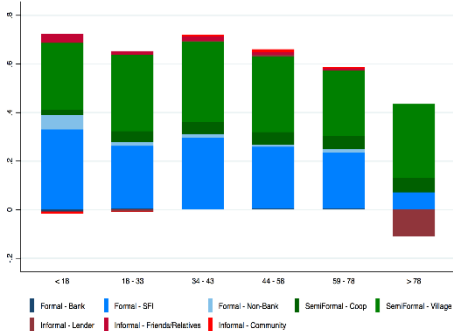
Age Group

Growth of debt prevalence by Age Group (2007 – 2015)



Source: SES

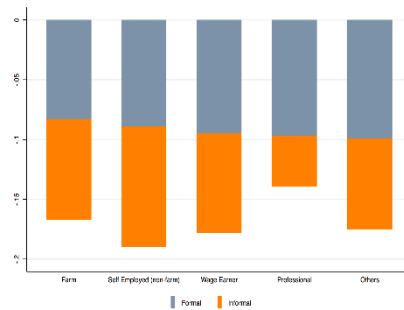
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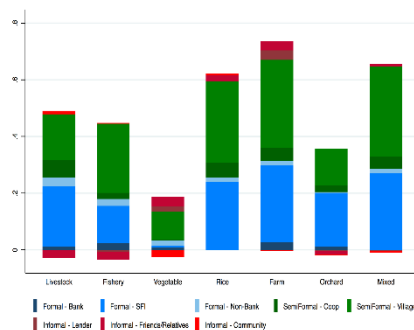
Occupation Group

Growth of debt prevalence by Occupation (2007 – 2015)



Source: SES

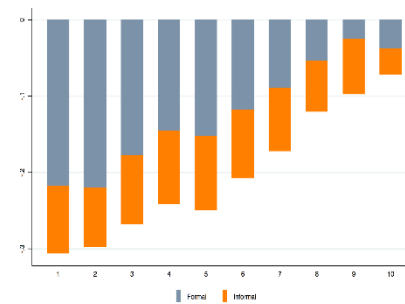
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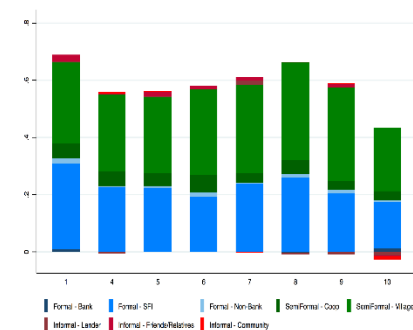
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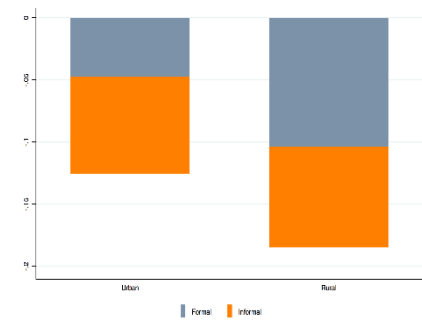
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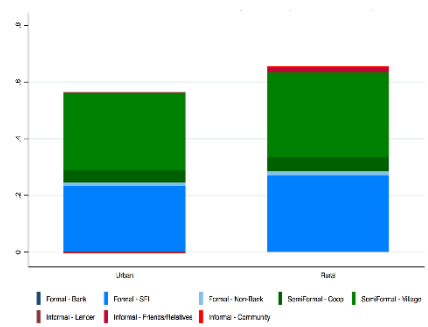
Area

Growth of debt prevalence by Area (2007 – 2015)



Source: SES

Growth of debt prevalence by Area (2007 – 2015)

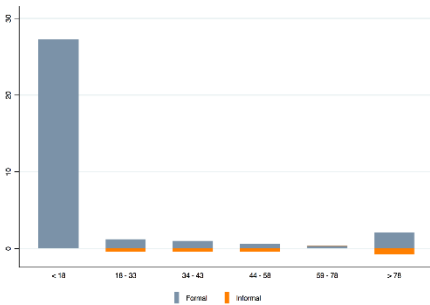


Source: AHS

Quite similar to Extensive margin except rising formal debt value
 (However, in AHS, increases in particular group only)

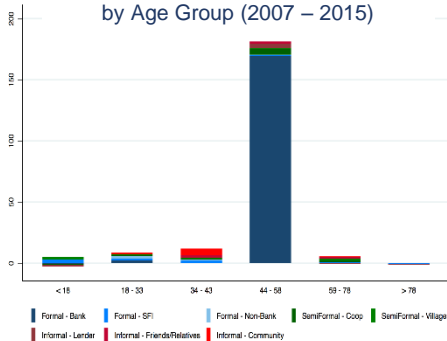
Age Group

Growth of debt Intensity by Age Group (2007 – 2015)



Source: SES

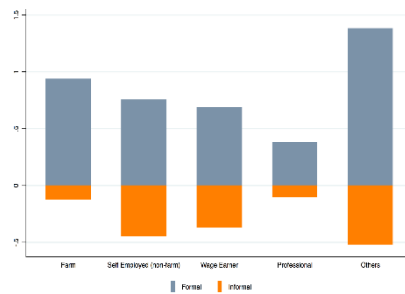
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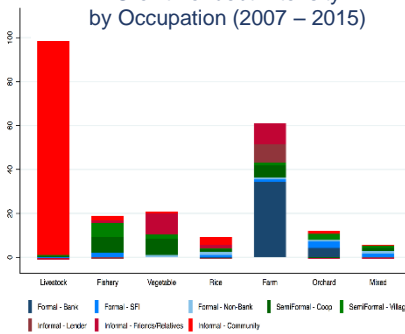
Occupation Group

Growth of debt Intensity by Occupation (2007 – 2015)



Source: SES

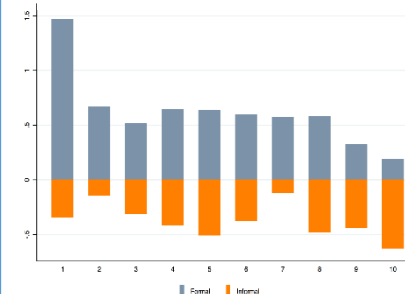
Growth of debt Intensity by Occupation (2007 – 2015)



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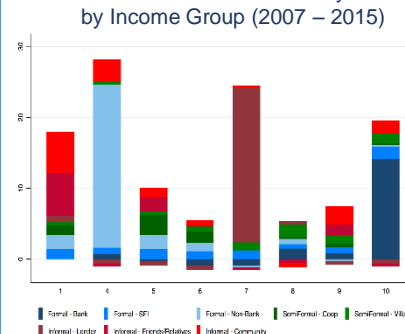
Income Group (By Decile)

Growth of debt Intensity by Income Group (2007 – 2015)



Source: SES

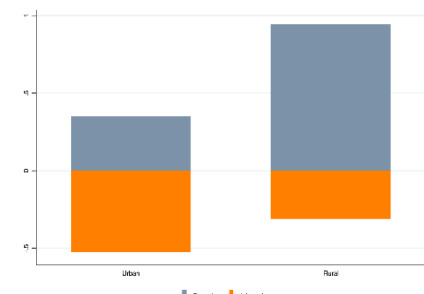
Growth of debt Intensity by Income Group (2007 – 2015)



Source: AHS

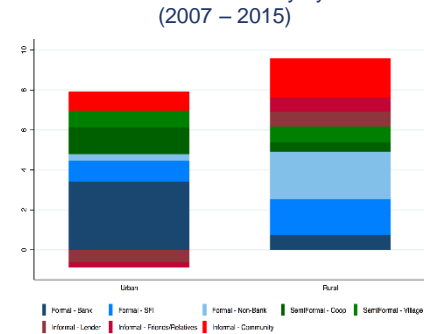
Area

Growth of debt Intensity by Area (2007 – 2015)



Source: SES

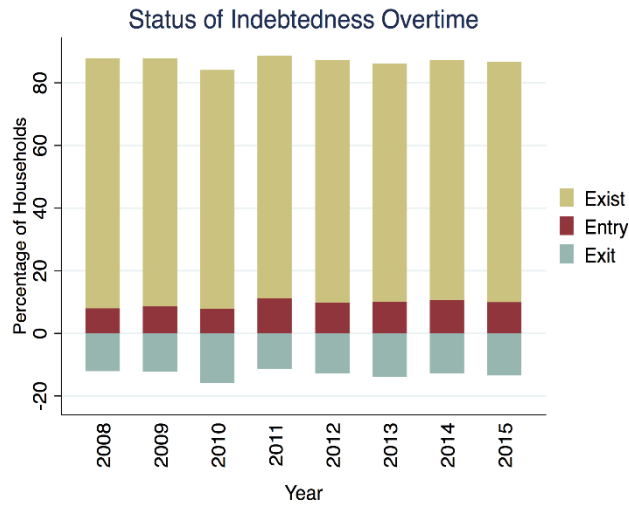
Growth of debt Intensity by Area (2007 – 2015)



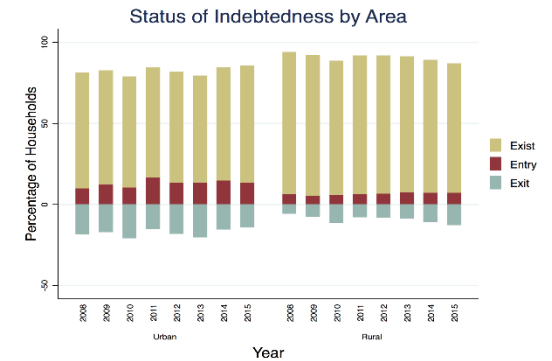
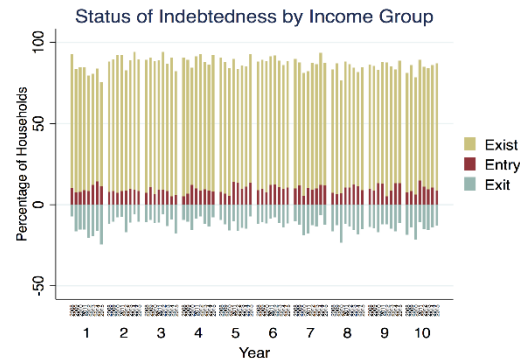
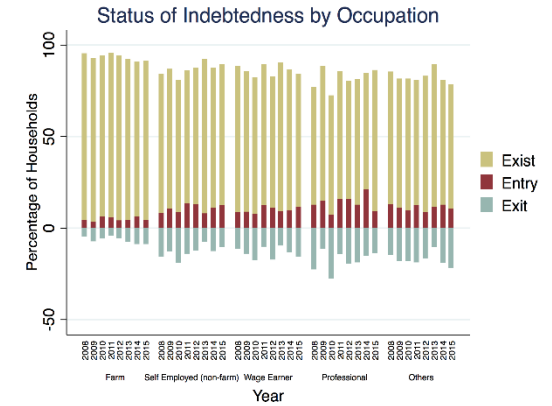
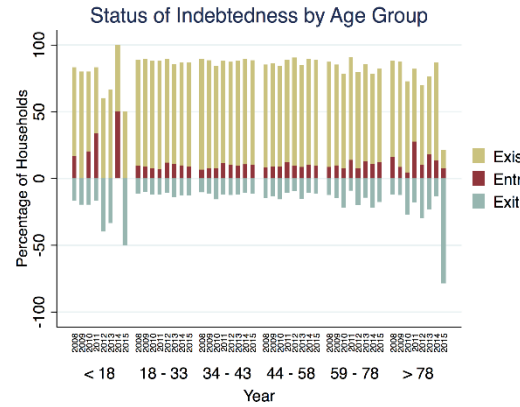
Source: AHS

Debt Headcount Growth Decomposition: Townsend Thai Survey

Exist, Entry and Exit proportion relatively stable across years



Higher exit proportion on the youngest and oldest group



Debt Headcount Growth Decomposition: Townsend Thai Survey

Formal Debt Composition



Sticky Formal Debt

Semiformal Debt Composition



**Lots of Households switch to
Semiformal Debt**

Informal Debt Composition



No pattern in Informal Debt

Key Take Aways

- **Each Survey has its own Pros & Cons**
 - Collaborative surveys are crucial to understand the micro level of households
- **What we learned so far**
 - Debt prevalence declines, but not for agricultural households
 - Informal debt declines overtime
 - Proportion of semiformal debt becomes larger overtime, driven by village fund
 - Household debt is substantially heterogeneous across age, income, occupation and areas. Should not generalize from aggregate numbers
- **Granular data critical in understanding prevalence, intensity and distribution as well as in designing policies**

STAY TUNED!!!
for the discussion paper

“Chantararat, Samphantharak, Suwanik
(2017), *Household Finance and
Vulnerabilities: Evidence from
collaborative Thai Household Surveys*”

Thank you!



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