Fiscal Stimulus and Household Debt Through the Lens of 80-million Loan Accounts

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Big picture

New research frontier from a rare access to NCB data

- Wealth of information is yet to be explored by researchers

- Data is currently used by banks to evaluate individual borrowers, but never at the national coverage

Potential to provide economic insights and policy implications

- This paper evaluates the first-car rebate program.

- Paper mentions other fiscal stimulus programs: recent low-cost housing program, exemption of real-estate transfer fee, the rice-paddy pledge program

- Why not macro-prudential measures?

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Evaluating the first-car rebate program

Noble effort to evaluate a fiscal stimulus program with such widespread and long-lasting impact

- At the onset, few people foresaw the magnitude of impact on traffic, household consumption, banking industry, car industry, used and new.

Careful analysis with room for improvement to strengthen the results

- Discussion from a bank's perspective

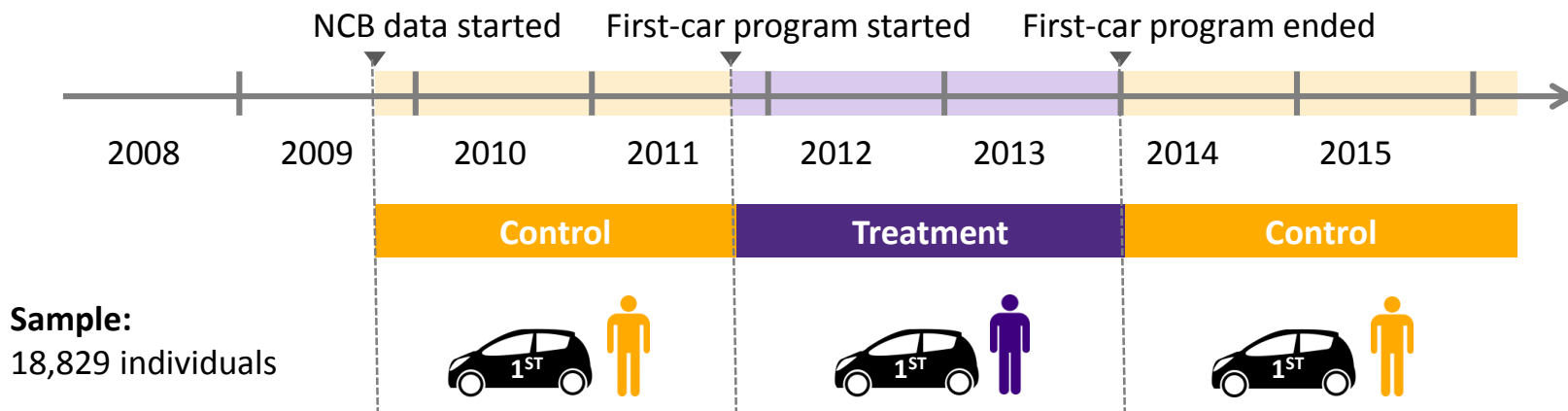**Interpreting the results for policy implications**

- Now that we find its side effects, do we tell policymakers not to use it?

- What are the trade-offs for this policy?

- Is there anything policymakers could do to prevent side effects?

Debt, Environment, Household Consumption, Car Industry, Traffic, Banking, Others
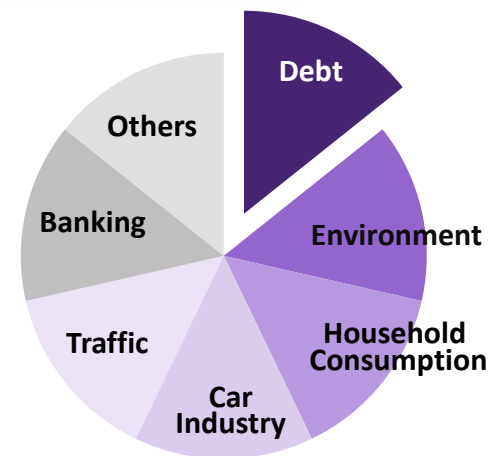
Shouldn't the emphasis be on policy, instead of data?

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Research methodology

Challenge: Choosing the right comparison to get at the true effect of the program

NCB data started	First-car program started	First-car program ended

2008	2009	2010	2011	2012	2013	2014	2015

Control | **Treatment** | **Control**

Sample:
18,829 individuals

Assumption: Treatment and Control are similar except for the first-car rebate participation

Result
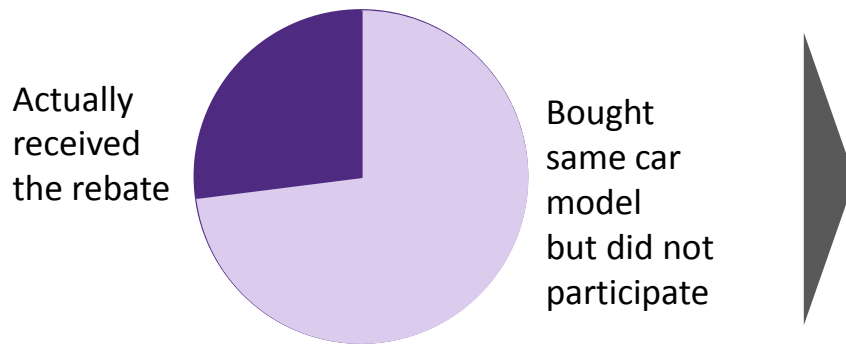
Prob of Delinquency

Control   Treatment
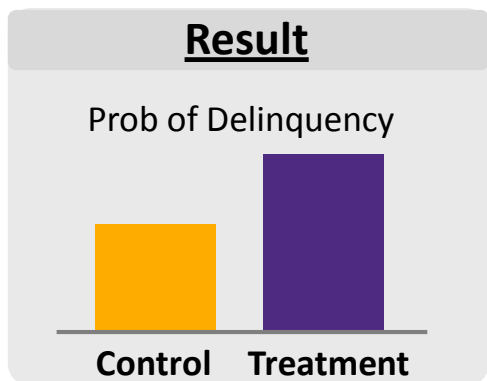
Potential problems:

1. Mis-identification of the Treatment group

2. Too many moving parts

3. Interpreting the results for banking implications

# ❶ Mis-identifying the Treatment group

Over-counting the treatment group may be a larger problem than previously thought.

Treatment as defined in the paper = individuals that purchased a qualified car model during Sep 11 – Dec 13 and the purchase was the first car since Dec 09
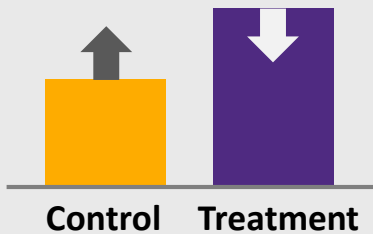
Actually received the rebate

Bought same car model but did not participate

Non-participants in the Treatment group performed worse in terms of loan repayment.

%NPL by group

After 12 Mo.   After 24 Mo.

Result

Prob of Delinquency

Control   **Treatment**
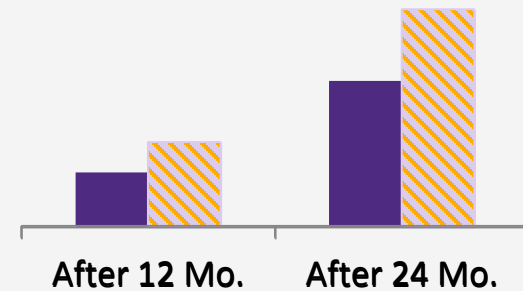
Suggestion
- **Merge with more data sets**
- **Add policy variables in NCB data in the future**
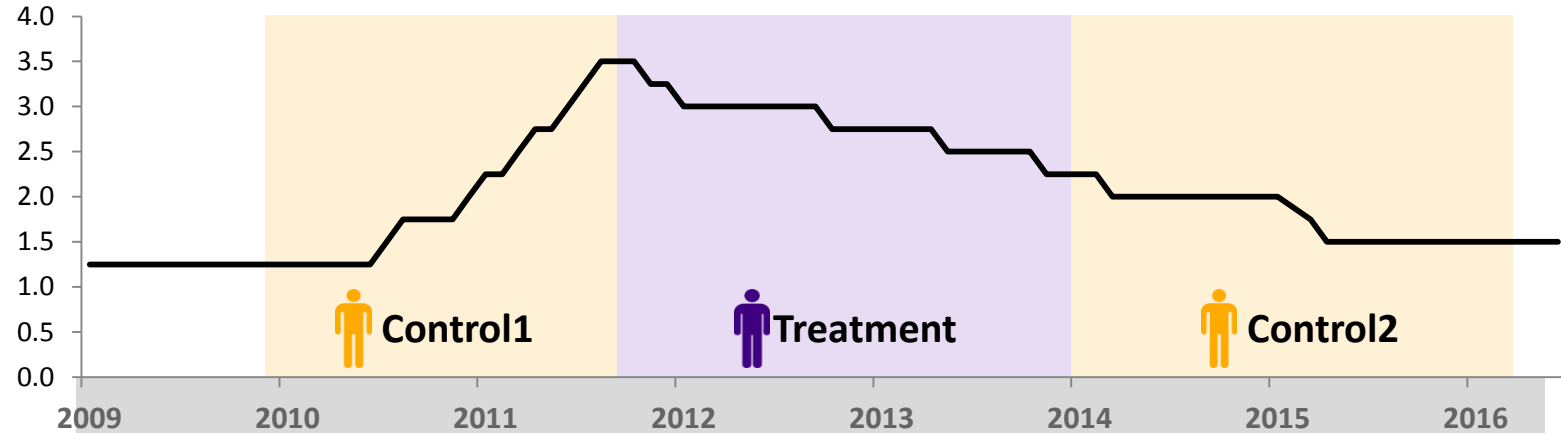
*Diagrams are not to exact scale.

Too many moving parts

Several determinants of hire purchase repayment behavior changed over time.

BOT's policy interest rate

Unit: %

Eco-car timeline:

3 eco-car models available at launch

11 eco-car models available

Introduction of the first eco-car model (March 09)

8 eco-car models available at the end of program

Suggestion • **Distinguish between Control1 and Control2**

Source: Bank of Thailand

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Interpreting the results for banking implications

Results: Higher delinquency among program participants

Customer types:

NCB	Scoring & Underwriting 1
Non NCB	Scoring & Underwriting 0

Lower accuracy

Share of first car customers

100%

Control1   Treatment   Control2   **Time**

Non NCB

*Diagrams are not to exact scale.
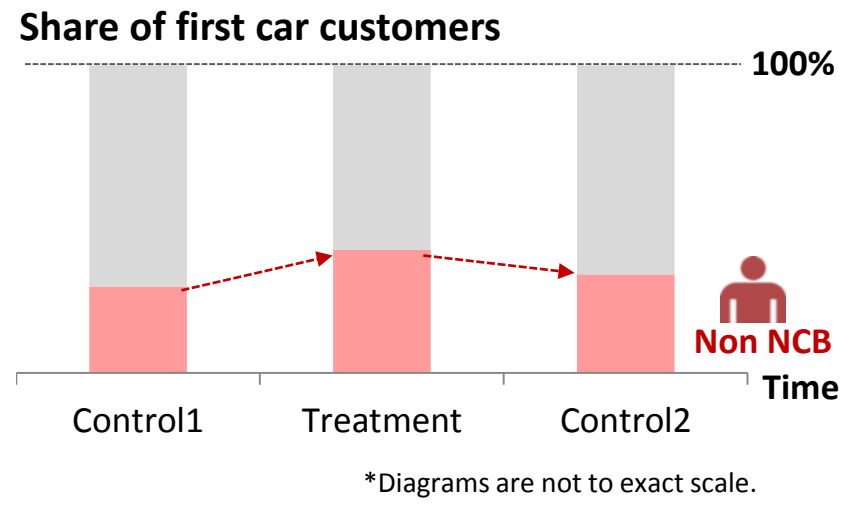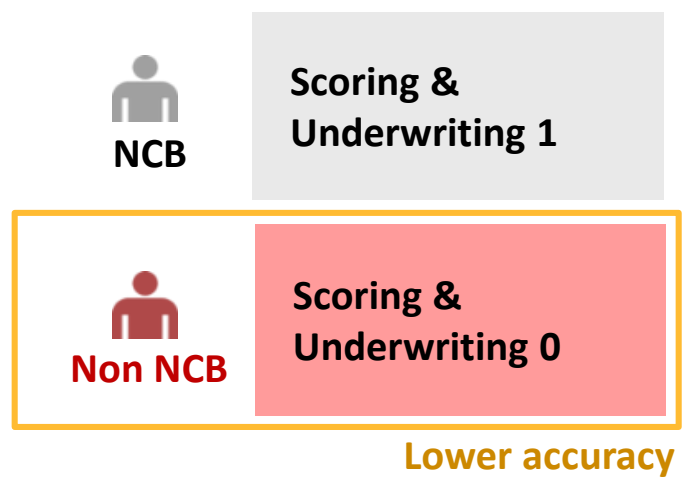
Implication: Banks may have failed to detect bad vs good borrowers with this program

Suggestion

- **Banks to improve on the model for Non-NCB customers**
- **Broadening NCB coverage to utility bills, co-ops, etc.**
- **Regulator to consider macro-prudential policy adjustment in response to future fiscal stimulus measures**

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In Conclusion

- Ask a bigger question to get a more complete picture for policy analysis

- NCB to broaden coverage and other variables, if utilized for evaluating policies

- Merge with other data sets for deeper and broader analysis

- Potential implications for macro-prudential measures in response to a fiscal stimulus program

- More collaboration between researchers, banks, and regulators on NCB data and others, provided that confidentiality conditions are strictly followed

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