



EUROPEAN CENTRAL BANK

EUROSYSTEM

# **Discussion of “The unintended consequences of credit: The impact of housing credit on personal bankruptcy” by S. Agarwal and C. Song.**

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- **QUESTION:** Does an increase in (housing) credit leads to more bankruptcies?
- **DATA:**
  - Private sector housing market in Singapore.
  - Housing transactions + bankruptcy + bankruptcy related legal cases.
  - Sample period: 05/1996-02/2010.
- **IDENTIFICATION:**
  - Exploit changes in regulation.
  - “Difference-in-differences” approach.
  - Increase in LTV limit + exposure to LTV limit (proxied by house price and house size).

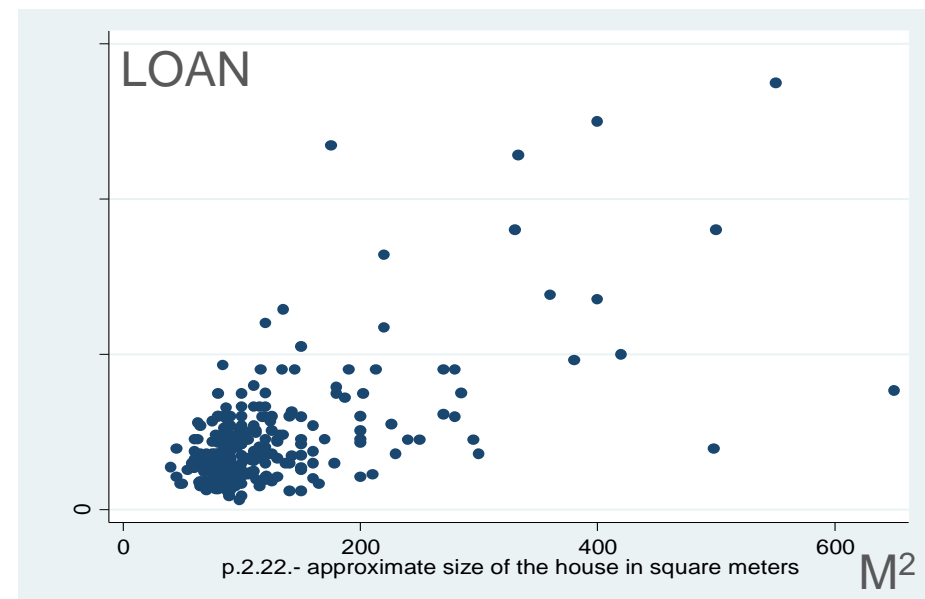
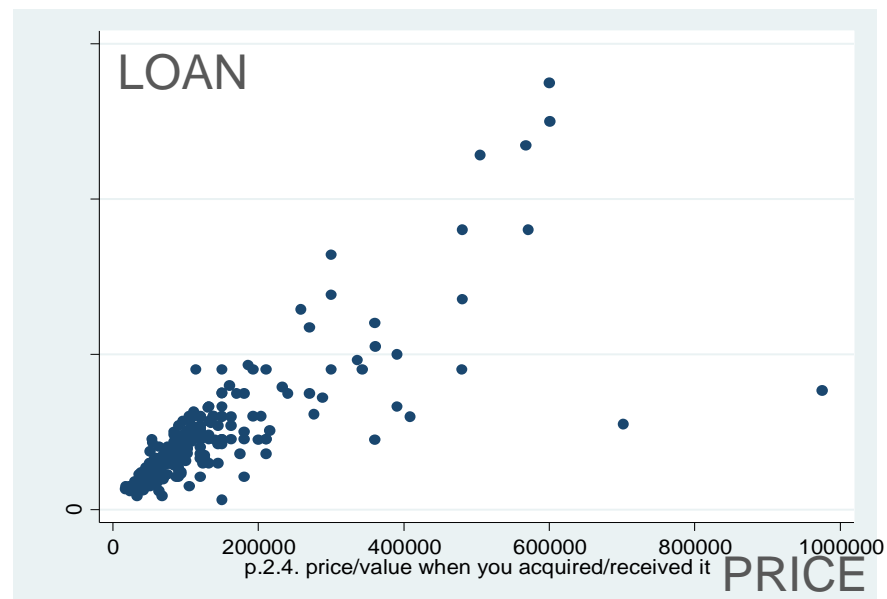
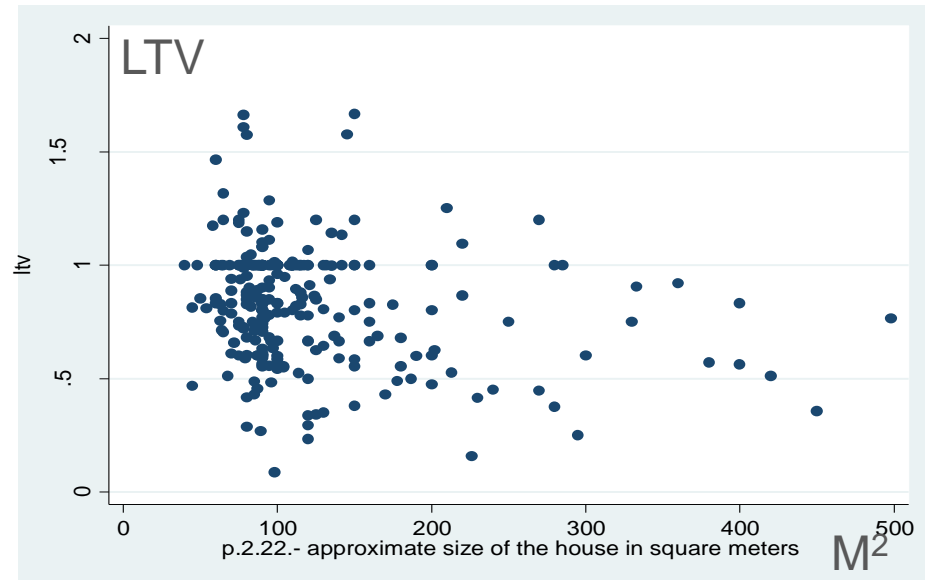
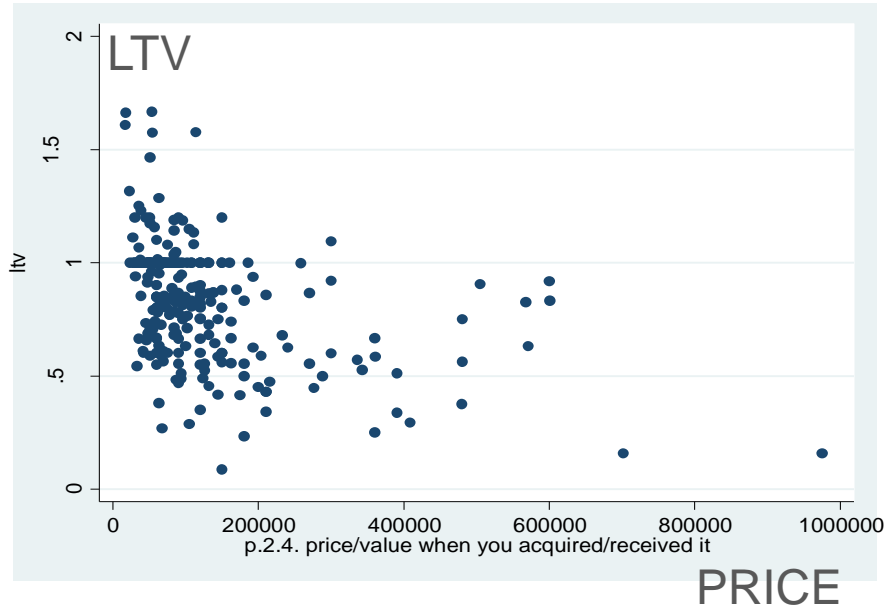
- **RESULTS**

- **Increase in LTV of 10 p.p.** results in an increase likelihood of bankruptcy of those buying relatively expensive houses by 0.15-0.20 p.p. respect to those buying relatively cheap houses.
  
- **Channels:**
  - Composition effect: buy more expensive houses.
  - Debt burden effect: increase on the burden of monthly payments (+).
  
- **Robustness checks/extensions:**
  - Irresponsible buyers.
  - Interest rate.
  - Speculators vs owner-occupied house buyers.
  - Selling behaviour.

## Identification strategy

- Key assumption: more expensive, bigger houses more exposed to LTV limit. No evidence is given.
- 07/2005: Change in LTV + change in minimum cash requirements. CPF plays an important role (i.e. 100,000\$ cash + \$200,000 CPF vs \$100,000 cash + \$0 CPF). More info would be interesting.
- Pre and post-treatment periods: 3 years, rationale, robustness checks?
- Common trend assumption: why not use simple graph of trends for treatment and control groups?

# Some evidence from Spain



## Channels

- Distinction between the two channels is not totally clear: the increase in debt burden might come from buying a more expensive house.
- Where do households who would have not bought with the original LTV but do now fit? (related to irresponsible buyers).

## Other comments

- Interest rates, what about other changes in the economy. Unemployment rate? (reinforce results).
- Table 2 and accompanying text.
- Policy recommendations? Effects on welfare?