Discussion of
"Policy Intervention in Debt Renegotiation: Evidence from the Home Affordable Modification Program [HAMP]"

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Big Picture

- **HAMP** was introduced in March 2009 with the stated goal of helping 3-4 million homeowners avoid foreclosure.

- **Mechanism:** Pay servicers when they permanently modify loans that meet several specific conditions.

  - $1000 payment in year 0 for permanent modification

  - $1000 payments in years 1-3 if homeowner stays current

  - *Standard compensation? 20-50 bp of outstanding loan balance*

- **Rationale:** Reduce deadweight loss and/or negative externalities associated with foreclosures. (Make voters happy?)

- This paper explores **(1)** whether HAMP was successful at reducing foreclosures, **(2)** why actual modification rates are lower than those forecast, **(3)** whether homeowners engaged in strategic behavior, **(4)** whether servicers are equally willing to undertake modifications, and **(5)** whether HAMP impacted home prices and consumption.

Main Findings

- HAMP increased trial and permanent modifications under HAMP. Surprising? No, but it tells us that incentive payments were large enough to induce effort from (some) servicers.

- HAMP differentially decreased foreclosure rates within the treatment group over the authors' sample period. This resulted in higher home price growth but no higher consumption.

- HAMP modifications did not crowd out private modifications.

- The large number of HAMP eligibility criteria eliminated incentives for strategic defaults by homeowners but increased administrative costs associated with undertaking a modification ➔ tradeoff.

- The fact that low-modification servicers before HAMP remain low-modification servicers after HAMP ➔ incentive payments were not large enough to induce effort by all servicers and/or overcome their organizational constraints ➔ adminstration forecasts were naive.

Spoiler Alert

- This is not going to be one of my mean discussions. If you traveled to Austin to watch me be mean to Sumit, I apologize.

- The authors have done a LOT of work with using a LOT of data. **There are 10 appendices!**

- I have three sets of comments, more concerned with extensions and interpretation than identification:

1. Treatment group vs. control group

2. HAMP vs. private modifications within treatment group

3. Hetergeneity in servicer modification rates

Empirical Strategy

- When studying extensive margin, authors estimate coefficients on

  - **Post**

  - *Eligible for* **Treatment**

  - *Eligible for* **Treatment x Post**

- This is an "Intention to Treat" difference-in-difference.

- When *Eligible for Treament* sample is properly defined, coefficient captures effect of HAMP modifications plus any differential spillovers onto private modifications within this group *(plus any differential outcomes within this group that are unrelated to modifications).*

- When the authors are estimating a differential modification rate, it will be biased downward if the *Eligible for Treatment* sample is too large (i.e., if it includes loans that are not eligible for HAMP).

- Of course, there are offsetting effects. Predicted modifications from HAMP = estimated coefficient × {number *Eligible for Treatment*}.

Treatment vs. Control

- HAMP modifications are limited to loans that meet five conditions:

	Eligible	Not Eligible
1.	Originated < Jan. 1, 2009	Originated > Jan. 1, 2009
2.	**Owner occupied**	**Investment or vacation**
3.	**Unpaid balance < $729,750**	**Unpaid balance > $729,750**
4.	First-lien mortgage payment > 31% gross monthly income	First-lien mortgage payment < 31% gross monthly income
5.	Pass NPV test	Fail NPV test

- Authors' preferred treatment group consists of owner-occupied loans with unpaid balance < $729,750 ➔ **~ 18 million loans**

- Author's preferred control group consists of non-owner-occupied loans ➔ **~ 3 million loans**

Treatment vs. Control (2)

- To pass NPV test, **EPV [CF to mortgage holder | modification]** must be greater than **EPV [CF to mortgage holder | status quo]**.

- According to GAO estimates reported in footnote 11:

  - Homeowners at risk of default   **> 10 million**
  - Homeowners with unaffordable loans   **> 8 million**
  - Subset expected to apply for modification   **5.5 million**
  - Subset expected to pass NPV test   **4 million**

- Two implications:

  - Authors' "Eligible for Treatment" group = **18 million > 4 million**.

  - This subset of loans should have been modified in the absence of HAMP. Incentive payments seem to only partially overcome frictions limiting efficient modifications. **What are the frictions that prevented this modifications pre-HAMP?**

Treatment vs. Control (3)

- Their other empirical strategy? Focus on owner-occupied loans with unpaid balance of $729,750 +/- $100,000.

  - This is cleaner, but reduces their sample to 190,000 loans.

- Alternative empirical strategy? Compare homeowners T and C:

  - T has first-lien > 31% and no second-lien

  - C has first-lien < 31% but first-lien + second-lien > 31%?

  - Variation? When LTV > 80%, taking out loan with LTV = 80% and another loan for the rest allows the borrower to avoid PMI

- Or, the authors could compare homeowners that barely pass the NPV test to homeowners that barely fail it.

- This begs the question: How much discretion do servicers have when performing the NPV calculation? Are they drawing on their own experiences or assumptions from the government?

Servicer Heterogeneity

- After documenting differences in modification rates across servicers before HAMP, the authors show these differences persist during HAMP, and then treat them as exogenous variation in the intensity of HAMP treatment across geographic regions.

- If the government is going to rely on intermediaries to carry out government policy, it should understand how intermediaries will respond, both individually and collectively.

- Authors' measure is based on servicer FEs in model that controls for loan and borrower characteristics.

- Are different servicers using systematically more or less optimistic assumptions in their NPV calculations?

- What if the authors estimate a separate model predicting private modifications for each large servicer? Do modification decisions have similar loadings on loan and borrower characteristics?

HAMP vs. Private

- **Claim:** "Servicers modified more loans in the treatment group—with the more promising candidates for modification channeled under HAMP to take advantage of program incentive payments—leaving modifications in the control group relatively unchanged."

- Trial modification under HAMP has option value. Does it matter whether servicers channel more promising loans to HAMP?

- Table 4 shows that modifications in the treatment group were less likely to get a rate deduction or extension and more likely to have interest rate capitalization. Interesting differences between HAMP and private modifications are claimed but left unreported.

- In Table 2, authors use loan and borrower characteristics to predict who receives trial and permanent modifications under HAMP. How about also predicting private modifications before HAMP?

Conclusion

- To an outsider, this appears to be a well-executed paper evaluating a significant government program.

- I believe the main result that loan modifications went up and foreclosures went down.

- I was pleasantly surprised by the lack of evidence of crowding out or distortions, but I would like to see more on the choice between HAMP and private modifications.

- Disconnect between government forecast and actual reduction in foreclosures may reflect overestimate of loans that would pass NPV test or overestimate of elasticity of servicer effort with respect to incentive payments for largest servicers. Which is it?

- How do benefits compare to costs? Did HAMP create a dynamic moral hazard problem?

- Does the intensity of HAMP treatment explain voting in 2012?