Flag Tag: Credit File Disaster Flags As Social Insurance Tags

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Abstract

This paper finds 59.2 million people had a 'disaster flag' on their US credit file (2010 - 2020) with broad geographical use during the COVID-19 pandemic. Disaster flags mask adverse credit file data with the aim of protecting credit access following disasters such as hurricanes & wildfires. Flags are voluntarily applied by lenders to borrowers' credit files. I describe the selection of lenders and borrowers into applying these flags over twenty years and estimate the effects of flags on credit access using a difference-in-difference design. There is adverse selection into flag use: people using flags are ex-ante riskier and defaults masked by flags are riskier than non-flagged defaults. I find small average effects of flags on credit scores (1.5-2pp) driven by larger (10-15pp), temporary effects for those with pre-disaster defaults or sub-prime credit scores. Finally, the paper considers a counterfactual social insurance regime automatically masking all new defaults during natural disasters and finds doing so would have limited predictive loss.

Data

Credit file data from the University of Chicago Booth School of Business's TransUnion Consumer Credit Panel (BTCCP). BTCCP is an anonymized 10%, monthly representative sample of people with USA TransUnion credit files (2000 - 2021).

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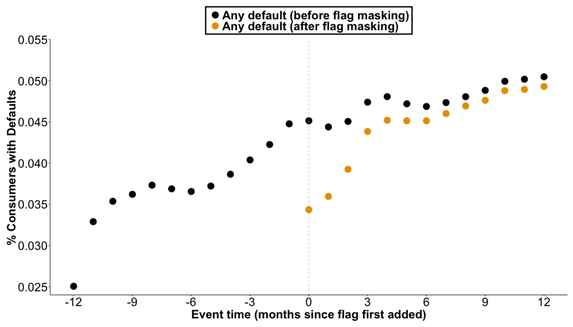
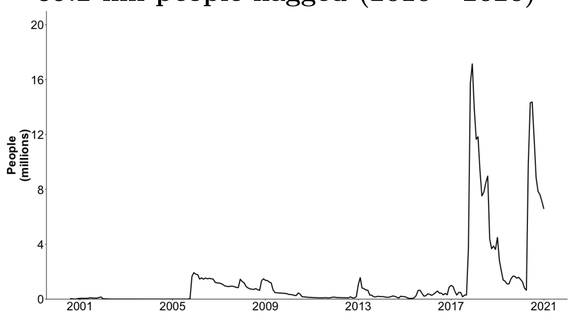
What are disaster flags?

Flags voluntarily applied by lenders to accounts on borrower's credit files following disasters (e.g. hurricanes, wildfires, COVID-19). While applied, flags temporarily mask adverse data on accounts:



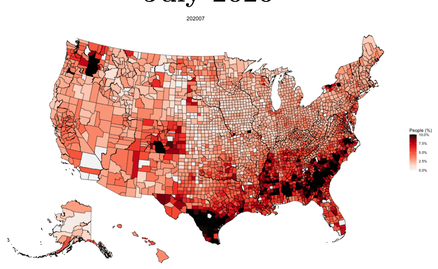
Flag use common in recent years

59.2 mn people flagged (2010 - 2020)

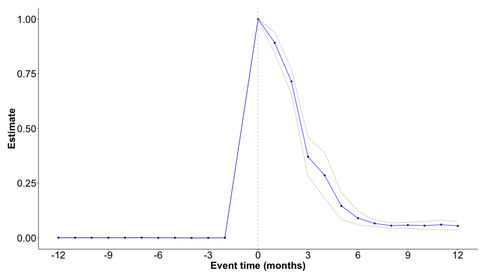


Flags are used across USA

July 2020



Flags typically only remain on credit files for $\leq$ 3 months.

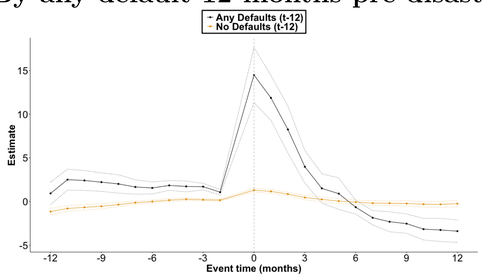


Flags temporarily ↑ financially-distressed consumers' credit scores

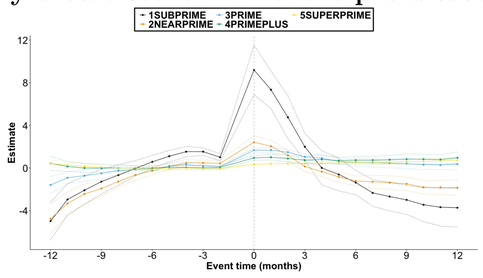
Difference-in-difference estimates of ATT on credit score (VantageScore) using control group matched by geography & credit file portfolio. ATT 'small' 1.5-2 pp. Average effects driven by those financially-distressed pre-disaster (10-15pp):

Effects of flags on credit score...

...By any default 12 months pre-disaster.

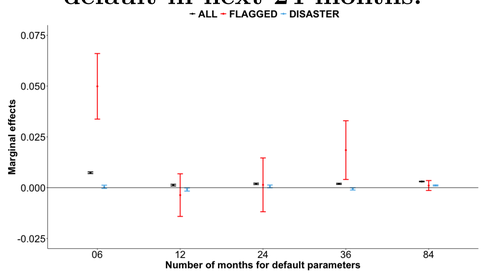


...By credit score 12 months pre-disaster.



Flagged defaults riskier than non-flagged defaults. Disaster defaults no riskier.

Coefficients on default parameters from logistic regression predicting any new default in next 24 months.



Limited predictive loss from counterfactual regime requiring masking all disaster defaults

Measures of predictive performance show very small differences between baseline (AUROC = 0.8790) and a counterfactual masking all defaults in counties affected by natural disasters (AUROC = 0.8777-0.8764) despite this masking 6.66-18.42% of US defaults.

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