2129 Rayburn House Office Building
Washington, DC 20515

July 8, 2020

To: House Financial Services Committee Task Force on Artificial Intelligence:

I am a fellow at the Aspen Institute's Tech Policy Hub and a computer scientist. I admire the Committee's quick actions to protect borrowers during the COVID-19 crisis, and the Task Force's forward-looking inquiries into fairness in algorithmic lending. I very much appreciated the Task Force's excellent hearing on Feb 12, 2020 about debiasing algorithmic lending.

I write to request that you use your oversight authority to solicit information on a related topic: price discrimination in housing loans due to different predicted price shopping behavior in borrowers.

A 2019 UC Berkeley study found that people of color are systematically charged higher interest rates on housing loans, both by face-to-face lenders and by algorithmic lending models. One of the potential mechanisms for this discrimination was lower price-shopping behavior by people of color. Whether to price-shop is often not a choice: people of color are more likely to live in financial services deserts and are less likely to have the internet service necessary to compare interest rates between online loan products.

However, there is evidence that even price shopping may not help underrepresented borrowers get fair rates.

Algorithmic pricing models are increasingly using data about potential borrowers to predict whether or not they will shop around for cheaper rates. If the potential borrower is found less likely to shop around, they are offered a higher initial loan price. The likelihood of a borrower to shop around is known as a 'competitiveness' score.

This means that even if a borrower who lived in a financial services desert did shop around for rates, it might not help. They would see the same high rates everywhere, thanks to algorithms profiling them on where they live, where they shop, what types of accounts they have open, and other personal data.

This practice of using a machine learning model to predict the price-shopping behavior of a particular borrower is relatively new, but it has the potential to perpetuate systemic discrimination against underrepresented borrowers.

Because of the relative novelty of this practice, there is a lack of reliable data about how many lenders are including a 'competitiveness' score in their pricing system, and which personal borrower data might be used to calculate such a score.

I respectfully request that the Committee call for a GAO report detailing:

- the extent to which predicted price-shopping is used to price loans amongst lenders practicing algorithmic lending;
- the types of data used to decide whether a borrower is likely to shop around; and
- the disparate impact effects of this practice on protected groups, including people of color and women.

Thank you for your consideration.

Sincerely,
Samara Trilling
Aspen Tech Policy Fellow

Notes:

1. Bartlett, Robert P., et al. "Consumer Lending Discrimination in the FinTech Era." SSRN Electronic Journal, 2017, 10.2139/ssrn.3063448.

2. "On average black borrowers tend to shop around less than white borrowers (27.4% versus 41.2%) in looking for mortgages. 31.8% of blacks choose lenders recommended by friends and families, compared to 25.1% of white borrowers doing the same." Cheng, Ping & Lin, Zhenguo & Liu, Yingchun. (2015). Racial Discrepancy in Mortgage Interest Rates. The Journal of Real Estate Finance and Economics. 51. 10.1007/s11146-014-9473-0.

3. Friedline, Terri, and Mathieu Despard. "Why Physical Banks Are Still Necessary to Maintain Financial Health." The Atlantic. The Atlantic, March 13, 2016. https://www.theatlantic.com/business/archive/2016/03/banking-desert-ny-fed/473436/.

   Rogers, Kaleigh. "Internet Service Providers Systematically Favor White Communities Over Communities of Color." Vice. vice, February 23, 2018. https://www.vice.com/en_us/article/8xdd7b/internet-service-providers-systematically-favor-white-communities-over-communities-of-color.