# NATASHA SARIN
Curriculum Vitae

## Office Contact Information

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## Employment

University of Pennsylvania Law School
*Assistant Professor of Law, July 2018–Present*

The Wharton School, University of Pennsylvania
*Assistant Professor of Finance (secondary), July 2018–Present*

## Education

Harvard University Department of Economics, Ph.D., 2018
Field: Finance
Advisors: Howell Jackson, David Scharfstein, Jeremy Stein, Lawrence Summers

Harvard Law School, J.D., c*um laude,* 2014
Dean's Scholar Prize, Corporate Finance
Justice Elena Kagan Supreme Court Reading Group

Yale University, B.A. with Distinction, 2011
2007 George Hume Senior Essay Prize

## Teaching Experience

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| Spring 2019 | Consumer Financial Regulation (Seminar) |
| Spring 2017 | The Financial System and the Central Bank, Harvard University<br>TF for Prof. Jeremy Stein, Certificate of Distinction for Excellence in Teaching |
| 2013–2017 | The Future of Globalization, Harvard University<br>TF for Prof. Robert Lawrence and Prof. Lawrence Summers |
| 2013–2017 | Inside Government, Harvard Law School<br>TF for Prof. Lawrence Summers and Prof. Cass Sunstein |

## Professional Activities

*2020–2021 Academic Year (includes scheduled):*

National Bureau of Economic Research Summer Institute, Research on Income and Wealth, Red Rock Finance Conference, NYU Tax Policy Seminar, Yale Law and Economics Seminar, NYU Household Finance Conference, Federal Reserve

*2019–2020 Academic Year (includes scheduled):*

National Bureau of Economic Research Summer Institute, Household Finance, IMF Stress Testing Conference, Kansas City Federal Reserve Board, Chicago University Law and Economics Seminar, University of Michigan Law and Economics Seminar, Georgetown Law and Economics Seminar, NYU Stern Women in Finance Conference, American Economics Association Annual Meetings, American Finance Association Annual Meetings, Chicago Booth Household Finance Conference, Chicago Booth Financial Regulation Conference, UCLA Tax Policy Conference, Duke Law and Economics Colloquium

*2018–2019 Academic Year:*

Northwestern Law and Economics Colloquium, Philadelphia Federal Reserve Board, Society for Empirical Legal Studies (Awarded Theodore Eisenberg Prize), American Association of Law Schools Conference: Financial Regulation Roundtable, Stanford Law Behavioral Law and Economics, Berkeley Law, Economics, and Business Workshop, University of Texas Law and Economics Seminar, New York University/University of Pennsylvania Law and Finance Conference, Wharton Finance, Boulder Consumer Financial Decision-Making Conference, Chicago Law Review Annual Symposium: Rethinking the Chicago School of Antitrust

*2017–2018 Academic Year:*

Consumer Financial Protection Bureau, Brookings Kiessling Seminar, American Law and Economics Association, University of Pennsylvania Law School, University of Virginia Law School

*2016–2017 Academic Year:*

Brookings Papers on Economic Activity Symposium, Institute of International Finance, Harvard Law School, Georgetown McDonough Business School

*Refereeing: Quarterly Journal of Economics, Journal of Finance, Review of Finance*

*Bar Admission:* California (2015)

## Working Papers

***Social Security and Trends in Inequality***
**(with Sylvain Catherine and Max Miller)**

Recent influential work finds large increases in inequality in the U.S., based on measures of wealth concentration that notably exclude the value of social insurance programs. This paper revisits this conclusion by incorporating Social Security retirement benefits into measures of wealth inequality. Wealth inequality has not increased in the last three decades when Social Security is accounted for. When discounted at the risk-free rate, real Social Security wealth increased substantially from $5.6 trillion in

1989 to just over $42.0 trillion in 2016. When we adjust for systematic risk coming from the covariance of Social Security returns with the market portfolio, this increase remains sizable, growing from over $4.6 trillion in 1989 to $34.0 trillion in 2016. Consequently, by 2016, Social Security wealth represented 58% of the wealth of the bottom 90% of the wealth distribution. Redistribution through programs like Social Security increases the progressivity of the economy, and it is important that our estimates of wealth concentration reflect this.

***What Private Equity Does Differently: Evidence from Life Insurance***

How do private equity firms impact their portfolio companies? We study this question using comprehensive data on their investments in the life insurance industry, which grew ten-fold from $23 billion to $250 billion between 2009 and 2014. Private equity-backed insurers exhibit superior returns. But there is no evidence that this is a consequence of general partners' skill. Rather, private equity firms increase the asset risk of their subsidiaries without commensurate capital charges and decrease tax liabilities. Results based on high-frequency event studies and matching techniques support a causal interpretation. Indeed, private equity firms deliver these changes to their subsidiaries within days of taking over. This improves insurers' performance, but also introduces risks that rating agencies appear to ignore.

***Price Regulation in Two-Sided Markets: Empirical Evidence from Debit Cards***
**(with Vladimir Mukharlyamov)**

This paper studies the impact of price regulation in two-sided markets, where intermediaries must get both sides of the market on board. Since platforms such as debit card networks can only succeed by simultaneously convincing consumers to use cards and merchants to accept them, they often subsidize one side of the market to generate supracompetitive profits from the other side (Rochet and Tirole 2003). Using a novel dataset on card processing fees, we show a regulation restricting banks' ability to charge high processing fees (the Durbin Amendment of the 2010 Dodd-Frank Act) transferred value from the previously subsidized side of the market—consumers—to merchants. Our evidence adds empirical support to the concern that market failures in two-sided markets are hard to identify, and even harder to correct.

***Relaxing Household Liquidity Constraints through Social Security***
**(with Sylvain Catherine and Max Miller)**

More than a quarter of working-age households in the United States do not have sufficient savings to cover their expenditures after a month of unemployment. We explore proposals to alleviate financial distress arising from the COVID-19 pandemic. We show that giving workers early access to just 1% of their future Social Security benefits allows most households to maintain their current consumption for at least two months. Unlike other approaches (like early access to retirement accounts, stimulus relief checks, and expanded unemployment insurance), access to Social Security serves the needs of workers made vulnerable by the crisis, but does not increase the overall liabilities of the federal government or have distortionary effects on the labor market.

***The Cost of Doing Business: Financial Crime and Punishment Post-Crisis***
**(with Dorothy Lund)**

In this paper, we take important first steps in determining how corporate crime, and financial institution crime in particular, is responding to the DOJ's enforcement regime and its shifting priorities. Specifically, we proxy for financial crime using three novel sources: the Financial Crimes Enforcement Network (FinCEN) Suspicious Activity Reports (SARs), consumer complaints made to the Consumer Financial Protection Bureau (CFPB), and whistleblower complaints made to the Securities and Exchange Commission (SEC). Each source reveals a steep increase in complaints or reports indicative of financial institution misconduct. We also examine levels of public company recidivism, which are also on the rise. And we document a potential cause: recidivist companies are much larger than non-recidivist companies, but they receive *smaller* fines than non-recidivist companies (measured as a percentage of assets and revenue). In theory, high fines can supply adequate deterrence by themselves, but our results indicate that it might not be politically feasible to levy a sufficiently high fine to deter future incidents of corporate crime. Put differently, for large companies, criminal penalties may be just another cost of doing business—and quite a reasonable cost at that.

## Published and Forthcoming Research Papers

***Dynamic Regulation***, *Southern Calif. Law Review* (forthcoming)

There is widespread consensus that the Great Recession did not have to be as Great: Had regulators acted earlier, its consequences would have been less severe. Two explanations are typically offered for early inaction. The first is that crises occur unexpectedly, so there is little time to respond aggressively. The second is that even regulators who suspected a downturn was imminent lacked the legal authority to intervene. This Article disputes these myths. First, empirical evidence demonstrates that there was over a year between the first tremors in financial markets and the crash. Second, legal analysis illustrates that regulators had at their disposal significant authority to bolster banks. In fact, they used this authority with respect to small banks, but not large, systemically important firms.

There is an alternative explanation for the tepid initial response to the crisis. Regulators' default is inaction until regulatory measures of bank health signal distress. These measures are slow to update—in many cases, the day before banks failed, their regulatory capital measures suggested no cause for concern. In the absence of significant change, regulators will inevitably be fire-fighting future financial crises ex-post; rather than successfully policing financial markets ex-ante. The next crisis can be prevented. But to do so will require an overhaul of the financial regulatory regime. This Article proposes a way forward. It advocates for automating aggressive action when financial markets indicate that distress is likely. Such reform will finally make costly bank failures a relic of the past.

***What's in Your Wallet (and What Should the Law Do About it?)***, *Chicago Law Review*

In traditional markets, firms can charge prices that are significantly elevated relative to their costs only if there is a market failure. However, this is not true in a two-sided market (like Amazon, Uber, and Mastercard), where firms often subsidize one side of the market and generate revenue from the other. This means consideration of one side of the market in isolation is problematic. The Court embraced this view in Ohio v. American Express, requiring that anticompetitive harm on one side of a two-sided market be weighed against benefits on the other side.

Legal scholars denounce this decision, which, practically, will make it much more difficult to wield antitrust as a tool to rein in two-sided markets. This inability is concerning as two-sided markets are growing in importance. Furthermore, the pricing structures used by platforms can be regressive, with those least well-off subsidizing their affluent and financially-sophisticated counterparts.

In this Article, I argue that consumer protection, rather than antitrust, is best suited to tame two-sided markets. Consumer protection authority allows for intervention on the grounds that platform users create unavoidable externalities for all consumers. The Consumer Financial Protection Bureau ("CFPB") has broad power to curtail "unfair, abusive, and deceptive practices." This authority can be used to restrict practices that decrease consumer welfare, like the anti-steering rules at issue in Ohio v. American Express.

***Tax Reform for Progressivity: A Pragmatic Approach***, *The Hamilton Project*

In the coming decades, federal spending will need to grow just to enable the government to continue to provide the services it does today. One important weakness in the tax system that funds this spending is insufficient tax compliance: In 2020 the IRS will fail to collect more than $630 billion, or nearly 15 percent of tax liabilities. Illegal tax evasion generates unfair differences in tax payments across otherwise similar individuals and firms.

The tax code also presents many legal opportunities for tax avoidance. Taxpayers differ in their ability to benefit from these opportunities, generating further inequities. Tax avoidance can also lead taxpayers to engage in socially unproductive activities (e.g., avoiding realization of capital gains in order to benefit from stepped-up basis).

***Making Consumer Finance Work***, *Columbia Law Review*

The financial crisis exposed major fault lines in banking and financial markets more broadly. Policymakers responded with far- reaching regulation that created a new agency—the Consumer Financial Protection Bureau—and changed the structure and function of these markets.

Consumer advocates cheered reforms as welfare enhancing, while the financial sector declared that consumers would be harmed by interventions. With a decade of data now available, this Article examines the successes and failures of the consumer finance reform agenda. Specifically, it marshals data from every zip code and bank in the United States to test the efficacy of three of the most significant postcrisis reforms: in the debit, credit, and overdraft markets.

The results are surprising. Despite cosmetic similarities, these reforms had very different outcomes. Two (changes in the credit and overdraft markets) increase consumer welfare, while the other (in the debit market) decreases it. These findings run counter to prior work by prominent legal scholars and encourage reevaluation of our (mis)conceptions about the efficacy of regulation.

The evidence leads to several insights for regulatory design. First, banks regularly levy hidden fees on consumers, obscuring the true cost of financial products. Regulators should restrict such practices. Second, consumer finance markets are regressive: Low-income customers often pay higher prices than their higher-income counterparts. Regulators should address this inequity. Finally, banks tend to discourage regulation by promising their costs will be passed through to consumers. Regulators should not be overly swayed by their dire warnings.

***Shrinking the Tax Gap: Approaches and Revenue Potential***, *Tax Notes*

Between 2020 and 2029, the IRS will fail to collect nearly $7.5 trillion of taxes it is due. It is not possible to calculate with precision how much of this "tax gap" could be collected. This paper offers a naïve approach. The analysis suggests that with feasible changes in policy, the IRS could aspire to shrink the tax gap by around 15 percent in the next decade—generating over $1 trillion in additional revenue by performing more audits (especially of high-income earners), increasing information reporting requirements, and investing in information technology. These investments will increase efficiency and are likely to be very progressive.

*Related:* VoxEU April 2020

***Understanding Bank Risk through Market Measures*****,** *Brookings Papers on Economic Activity*, 2017 **(with Lawrence H. Summers)**

Since the financial crisis, there have been major changes in the regulation of large financial institutions directed at reducing their risk. Measures of regulatory capital have substantially increased; leverage ratios have been reduced; and stress testing has sought to further assure safety by raising levels of capital and reducing risk taking. Standard financial theories would predict that such changes would lead to substantial declines in financial market measures of risk. We test this proposition using information on stock price volatility, option-based estimates of future volatility, beta, credit default swaps, earnings-price ratios, and preferred stock yields. Surprisingly, we find that financial market information provides little support for the view that major institutions are significantly safer than they were before the crisis and some support for the notion that risks have increased. This does not make a case against the regulatory approaches that have been pursued, but does caution against complacency. We believe that our findings are most consistent with a dramatic decline in the franchise value of major financial institutions, caused at least in part by new regulations. This decline in franchise value makes financial institutions more vulnerable to adverse shocks. We highlight that the ratio of the market value of common equity to assets on both a risk-adjusted and risk-unadjusted basis has declined significantly for most major institutions.

***On Market-Based Approaches to the Valuation of Capital,*** *Handbook of Financial Stress Testing*, (forthcoming) **(with Lawrence H. Summers)**

Market measures suggest banks are as risky as they were in the pre-crisis period. This appears attributable to a decrease in bank franchise value, rather than a byproduct of the current low interest rate environment, and cautions about the stability of the financial sector. However, stress test results reveal little cause for concern; in 2017, all 34 stressed institutions in the United States passed the tests, suggesting they will remain well-capitalized in the event of a downturn more severe than the Great Recession. Their passage paved the way for capital disbursements and ignited calls for deregulation. In this paper, we demonstrate that a market-based stress test approach produces results that are significantly less encouraging than the regulatory tests. While a pure market-based stress test is undesirable, we believe it is important to incorporate market information into the stress test methodology to facilitate more credible inferences about bank safety.

## Popular Press Articles

Natasha Sarin, "Tapping Social Security Would Be a Big Mistake," *Bloomberg*, May 12, 2020.

Natasha Sarin, "Protect Banks, Not Their Shareholders," *Bloomberg*, April 21, 2020.

Lawrence Summers and Natasha Sarin, "If business leaders are serious about doing good, they can start by paying their taxes," *The Washington Post,* January 30, 2020.

Lawrence Summers and Natasha Sarin, "Yes, our tax system needs reform. Let's start with this first step," *The Washington Post,* November 17, 2019.

Lawrence Summers and Natasha Sarin, "Be very skeptical about how much revenue Elizabeth Warren's wealth tax could generate," *The Washington Post,* June 28, 2019.

Lawrence Summers and Natasha Sarin, "A 'wealth tax' presents a revenue estimation puzzle," *The Washington Post,* April 4, 2019.

Natasha Sarin and Lawrence H. Summers, "Fair, comprehensive tax reform is the right path forward," *Boston Globe,* March 28, 2019.

Natasha Sarin and Lawrence H. Summers, "A broader tax base that closes loopholes would raise more money than plans by Ocasio-Cortez and Warren," *Boston Globe,* March 28, 2019.

Lawrence Summers and Natasha Sarin, "India just made a big mistake with its currency ban," *The Washington Post,* November 22, 2016.