

Economic Research



- [**Inflation and Labor Market Expectations Move Lower**](#)
- [**Household Debt Climbs, Led by Rising Mortgage Debt**](#)
- [**Are U.S. Tariffs Turning Vietnam into an Export Powerhouse?**](#)

[**LIBERTY STREET ECONOMICS**](#)

[**The Transmission of Monetary Policy and the Sophistication of Money Market Fund Investors**](#)

[To what extent are changes in the federal funds rate transmitted to cash investors, and are there differences in the pass-through between retail and institutional investors? The authors describe the impact of recent rate increases on the yield paid by money market funds to their investors and show that the impact varies depending on an investor's sophistication.](#)

BY MARCO CIPRIANI, JEFF GORTMAKER, AND GABRIELE LA SPADA

[**Online Estimation of DSGE Models**](#)

[The estimation of dynamic stochastic general equilibrium \(DSGE\) models is computationally demanding. As these models change to address new challenges, they become even more complex and difficult to estimate—so much so that current estimation procedures are no longer up to the task. This post discusses a new technique for estimating these models that belongs to the class of sequential Monte Carlo algorithms, an approach used to estimate the New York Fed DSGE model.](#)

BY MICHAEL CAI, MARCO DEL NEGRO, EDWARD HERBST, ETHAN MATLIN, RECA SARFATI, AND FRANK SCHORFHEIDE

[**Mind the Gap in Delinquency Rates**](#)

[The data source for the Quarterly Report on Household Debt and Credit from the New York Fed's Center for Microeconomic Data is the New York Fed Consumer Credit Panel \(CCP\). The Bank began acquiring the CCP 2008, in part, to better understand consumer](#)

delinquency. This post analyzes two alternative measures of delinquency in the Quarterly Report and clarifies how they differ from delinquency rates typically reported by lenders.

BY ANDREW HAUGHWOUT, DONGHOON LEE, JOELLE SCALLY, AND WILBERT VAN DER KLAUW



Does a Data Quirk Inflate China's Travel Services Deficit?

Increased travel spending by Chinese residents is acting to reduce the country's trade surplus because such spending is counted as a services import. However, there appears to be a quirk in the Chinese data that results in a significant understatement of the offsetting spending by visitors to China (a services export). If so, China's deficit in travel services is smaller than officially reported, and its trade surplus correspondingly larger.

BY MATTHEW HIGGINS, THOMAS KLITGAARD, AND ANNA WONG



At the New York Fed: Research Conference on FinTech

FinTech refers to the evolving intersection of financial services and technology. In March, the New York Fed hosted "The First New York Fed Research Conference on FinTech" to understand the implications of FinTech developments on issues that are relevant to the Fed's mandates, such as lending, payments, and regulation. In this post, the authors review the principal themes and findings of the conference.

BY ALAN BASMAJIAN, BRAD GROARKE, VANESSA KARGENIAN, KIMBERLEY LIAO, ERIKA OTA-LIEDTKE, JESSE MANIFF, AND ASANI SARKAR

RESEARCH TOPICS



Joining the New York Fed as a Research Economist

The New York Fed is looking for new Ph.D.s and experienced economists to join its Research Group. We are now accepting applications for Ph.D. positions with a summer-fall 2020 start date.



Early Benchmarked Employment Data

Monthly releases of early benchmarked employment figures for New York State, New Jersey, Puerto Rico, and the U.S. Virgin Islands, as well as the metropolitan areas in New York and Northern New Jersey

Measuring the Natural Rate of Interest

The Laubach-Williams and Holston-Laubach-Williams models provide estimates of the natural rate of interest, or r-star, and related variables for the United States and other advanced economies. We share quarterly estimates as well as the replication code and documentation for both models.



U.S. Economy in a Snapshot

U.S. Economy in a Snapshot is a monthly presentation designed to give you a quick and accessible look at developments in the economy.

Oil Price Dynamics Report

Our oil price decomposition, weekly, examines what's behind fluctuations in oil prices: demand supply factors, or some of the two?



reported recent factors, combination



Underlying Inflation Gauge (UIG)

The New York Fed Staff UIG measures capture sustained movements in inflation from information contained in a broad set of price, real activity, and financial data. We share estimates and downloadable data on a monthly basis.



Nowcasting Report

Weekly report tracks the evolution of the New York Fed Staff Nowcast of GDP growth and the impact of new macroeconomic data releases on the forecast.



Empire State Manufacturing Survey

Business activity increased modestly in New York State, according to firms responding to the August 2019 Empire State Manufacturing Survey.



Business Leaders Survey

Activity in the region's service sector continued to expand, according to firms responding to the Federal Reserve Bank of New York's August 2019 *Business Leaders Survey*.

Supplemental Survey Report

Supplementary questions to the August 2019 *Empire State Manufacturing Survey* and *Business Leaders Survey* focused on the effects of recent changes in trade policies—and specifically tariffs—on businesses in the region.



The Labor Market for Recent College Graduates

Labor market conditions remained favorable for recent college graduates through mid-2019. The unemployment rate edged up slightly to 3.8 percent and the underemployment rate edged down to 41.0 percent—its lowest level since the early 2000s.

RECENT PUBLICATIONS

Do Monetary Policy Announcements Shift Household Expectations?

The authors use daily survey data from Gallup to assess whether households' beliefs about economic conditions are influenced by surprises in monetary policy announcements. They find that surprises about the federal funds target rate have statistically significant and instantaneous effects on economic confidence. In contrast, surprises about forward guidance and asset purchases do not have similar effects on household beliefs, perhaps because they are less well understood.

DANIEL J. LEWIS, CHRISTOS MAKRIDIS, AND KAREL MERTENS, STAFF REPORT 897

Firm-to-Firm Relationships and the Pass-Through of Shocks: Theory and Evidence

Using transaction-level U.S. import data, the author shows that a firm-to-firm relationship's price becomes more responsive to exchange rate shocks both as the relationship ages and as it trades more intensively. To understand how old relationships differ from new ones, the

author documents a set of stylized facts about the life cycle of a relationship. His findings suggest that aggregate mark-ups and the responsiveness of prices to shocks co-vary negatively with an economy's relationship creation rate, which falls in recessions.

SEBASTIAN HEISE, STAFF REPORT 896, AUGUST 2019

Corporate Credit Provision

Productive firms can access credit markets directly by issuing corporate bonds, or in an intermediated manner by borrowing through loans. The authors study the cyclical properties of corporate credit provision through these two types of debt instruments in major advanced economies. They argue that the cyclicity of corporate credit is intimately related to the cyclicity of the types of financial intermediaries active in the provision of credit.

NINA BOYARCHENKO AND PHILIPPE MUELLER, STAFF REPORT 895, AUGUST 2019

A Dynamic Theory of Collateral Quality and Long-Term Interventions

Although collateralization typically increases capital market liquidity, negative shocks to collateral quality may lead to sharp increases in borrowing costs and market breakdowns. This has motivated regulators to intervene in asset markets and lower policy rates to support lending activity. The authors develop a dynamic model where lending is subject to adverse selection and collateral quality is persistent but determined by hidden effort. Their framework offers a laboratory to study the dynamic effects of regulatory interventions.

MICHAEL JUNHO LEE AND DANIEL NEUHANN, STAFF REPORT 894, AUGUST 2019

Online Estimation of DSGE Models

As the DSGE models used by central banks become more complex, improved algorithms for Bayesian computations are necessary. The authors provide a framework for performing parallel and online estimation of DSGE models using sequential Monte Carlo (SMC) techniques. Rather than starting from scratch each time a DSGE model has to be re-estimated, the SMC algorithm makes it possible to mutate and re-weight posterior draws from an earlier estimation so that they approximate a new posterior based on additional observations.

MICHAEL CAI, MARCO DEL NEGRO, EDWARD HERBST, ETHAN MATLIN, RECA SARFATI, AND FRANK SCHORFHEIDE, STAFF REPORT 893, AUGUST 2019

Who Sees the Trades? The Effect of Information on Liquidity in Inter-Dealer Markets

The authors focus on how differences in the availability of post-trade information from the market-making stage in the inter-dealer market impact overall market liquidity. They consider exogenous information disclosure policies first and then examine what might result from the strategic sale of post-trade information.

RODNEY J. GARRATT, MICHAEL JUNHO LEE, ANTOINE MARTIN, AND ROBERT M. TOWNSEND, STAFF REPORT 892, JULY 2019

Tying Down the Anchor: Monetary Policy Rules and the Lower Bound on Interest Rates

This paper uses a standard New Keynesian model to analyze the effects and implementation of various monetary policy frameworks in the presence of a low natural rate of interest and a lower bound on interest rates.

THOMAS M. MERTENS AND JOHN C. WILLIAMS, STAFF REPORT 887, MAY 2019

Understanding the Evolution of Student Loan Balances and Repayment Behavior: Do Institution Type and Degree Matter?

To help inform the policy debate regarding student debt, the authors analyze the evolution of student loan balances and repayment behavior. They find that student loan growth and performance has varied across degrees, institutions, and time. Among their findings: Student loan balances at college exit for those pursuing undergraduate certificates and associate's and post-bachelor's degrees at private institutions increased sharply in the 2000-10 period relative to loans for corresponding degrees at public institutions.

META BROWN, RAJASHRI CHAKRABARTI, WILBERT VAN DER KLAUW, AND BASIT ZAFAR, ECONOMIC POLICY REVIEW, FORTHCOMING

