Student loans have received considerable media attention in recent months, as researchers and policymakers voice growing concern about the heavy debt loads assumed by students and, in many cases, their parents. Additionally, college enrollments have increased, and there is concern about the availability of federal, state, and local aid to support the large number of students taking up postsecondary education.

To inform the public and policymakers, the Liberty Street Economics blog recently examined two timely education topics: the student loan market and the relationship between cuts in public funding for higher education and university tuition costs.

In their post, “Grading Student Loans,” Meta Brown, Andrew Haughwout, Donghoon Lee, Maricar Mabutas, and Wilbert van der Klaauw examine the overall student loan debt market as of third-quarter 2011, and find it likely that delinquency rates for these loans are understated.

As the bloggers observe, student loans receive special accounting treatment that is not applicable to other types of consumer debt, such as credit card debt or auto loans. In the case of federally backed student loans, which represent a majority of total lending, repayment is deferred until the student graduates, and can be pushed back by six months. Therefore, these loans are not included in the past-due balance on credit reports, but they do appear in the total balance upon which the delinquency rate is derived. The result is an understatement of delinquent student loans, because a significant proportion of borrowers and balances is not yet in the repayment cycle.

Tuition costs have also been on the rise, particularly for public universities and colleges. Since 2000, state and local appropriations for these institutions have declined, while net tuition has increased substantially, both in real terms and relative to tuition growth at private institutions. In their post, “Soaring Tuitions: Are Public Funding Cuts to Blame?” Rajashri Chakrabarti, Maricar Mabutas, and Basit Zafar note that, as a share of total revenues for America’s public institutions of higher education, state and local appropriations have fallen every year over the past decade while college enrollment has increased.

Rising student debt levels and academic research have brought greater scrutiny to the question of whether the federal government’s expansion of student-aid programs is driving up college tuition. However, the bloggers suggest that public universities are increasing tuition to make up for decreasing state funding.
EPR Article Suggests Ways to Reduce Weaknesses and Risk in Tri-Party Repo Market

The 2007-09 financial crisis shed light on weaknesses in the design of the U.S. tri-party repo market—weaknesses that could rapidly elevate and propagate systemic risk. A recent article in the Economic Policy Review describes some of the key mechanics of the market, focusing on two that have contributed to its fragility and impacted reform efforts: the collateral allocation process and the repo “unwind” process.

In “Key Mechanics of the U.S. Tri-Party Repo Market,” Adam Copeland, Darrell Duffie, Antoine Martin, and Susan McLaughlin explain that collateral allocation in the tri-party repo market currently takes a considerable amount of time and is complicated by the need for coordination between multiple players. The time required to allocate collateral therefore makes it difficult to settle new and expiring repos simultaneously and to reduce dealers’ reliance on credit from their clearing banks.

Another impediment to reform, according to the study, is the unwind process, or the settlement of expiring and continuing repos that occurs before new ones can be settled and continuing ones can be “rewound.” The time gap between the daily unwind and rewind drives much of dealers’ demand for intraday credit from their clearing banks. The gap leads to a twice-daily transfer of exposure from a dealer’s investors to its clearing banks and vice-versa. This “handoff” can create a perverse dynamic if the dealer comes under stress, as cash investors and the clearing bank may want to be the first to reduce their exposure to the dealer. Indeed, a reengineering of the tri-party repo settlement process designed to be much less reliant on intraday credit is a main goal of current market reform.

The authors conclude that by improving the collateral allocation process and eliminating the time gap between the unwind and rewind of repos, weaknesses in the tri-party repo market could be reduced, as could the amount of financial system risk.

The article is available at www.newyorkfed.org/research/epr/2012/1210cope.html.

Author Antoine Martin of the Research and Statistics Group

Author Adam Copeland of the Federal Reserve Bank of New York’s Research and Statistics Group

and local appropriations, and that deeper cuts in public funding may be associated with correspondingly greater tuition hikes, particularly in recent years. They note that this finding is troubling, since public universities and colleges may face even greater financial strain in the years to come, as federal funds from the American Recovery and Reinvestment Act wind down. For the college student, this means shouldering more of the financial burden, including the possibility of taking out even larger student loans.

The blog posts are available at libertystreeteconomics.newyorkfed.org.
New Study Explores Allocation of Government’s Economic Stimulus Package to New York and New Jersey

The 2009 American Recovery and Reinvestment Act (ARRA) was designed to spur economic growth and strengthen the fiscal condition of state governments through a combination of tax cuts and increased federal aid to the states. In a recent study in *Current Issues in Economics and Finance* (vol. 18, no. 6), James Orr and John Sporn show that in New York and New Jersey, as in other states, the spending portion of the act supported a variety of social services and infrastructure investments; however, the funds allocated to New York were largely concentrated in expanded funding for Medicaid, while a sizable share of the stimulus funds in New Jersey went to extending unemployment insurance (UI) benefits.

The study, entitled “The American Recovery and Reinvestment Act of 2009: A Review of Stimulus Spending in New York and New Jersey,” begins with a look at the size and structure of the program. ARRA provided roughly $540 billion in federal spending and about $300 billion in tax cuts, making it the largest fiscal stimulus program in the past four decades. New York received roughly $35 billion in stimulus spending and New Jersey about $12 billion. On a per capita basis, the authors note, these amounts were broadly consistent with the national average.

Within each funding category—including health, education, housing assistance, and infrastructure investment—the distribution of funds generally followed formulas governing existing federal transfers to state governments. Spending on some programs, however, was shaped by the nature and extent of the downturn in individual states. According to Orr and Sporn, spending in New York was allocated largely to an expansion of Medicaid funding, reflecting the high rate at which the state was reimbursed for Medicaid expenses prior to ARRA’s introduction and the relatively broad coverage and wide participation in the state’s Medicaid program.

In New Jersey, by contrast, spending was concentrated heavily in unemployment insurance. ARRA funds supported additional weeks of UI benefits for covered workers as well as broader eligibility for benefits. Orr and Sporn suggest that the concentration of funds in this category reflected New Jersey’s steep unemployment rate among insured workers and the state’s high weekly benefit amounts.

Overall, stimulus spending boosted revenues in New York State and New Jersey significantly in 2010 and 2011. By the end of 2011, however, most of the ARRA funds had been paid out. In the future, the authors note, New York and New Jersey can no longer count on these federal transfers to strengthen their fiscal positions.
Most Downloaded Publications

Listed below are the most sought-after Research Group articles and papers from the New York Fed’s website and from the Bank’s page on the Social Science Research Network site (www.ssrn.com/link/FRB-New-York.html).

New York Fed website, third-quarter 2012:


- “The Minimum Balance at Risk: A Proposal to Mitigate the Systemic Risks Posed by Money Market Funds,” by Patrick McCabe, Marco Cipriani, Michael Holscher, and Antoine Martin (Staff Reports, no. 564, July 2012) – 4,514 downloads


SSRN website, third-quarter 2012:

- “The Pre-FOMC Announcement ‘Drift,’” by David Lucca and Emanuel Moench (Staff Reports, no. 512, September 2011) – 915 downloads


For lists of the top-ten downloads, visit www.newyorkfed.org/research/top_downloaded/index.html.

Publications and Other Media


- EPR Executive Summaries—online versions of selected Economic Policy Review articles, in abridged form.


- Second District Highlights—a regional supplement to Current Issues.

- Staff Reports—technical papers intended for publication in leading economic and finance journals, available only online.

- Publications and Other Research—an annual catalogue of our research output.

- The Research Group of the Federal Reserve Bank of New York—a guide for economists interested in joining the Group, as well as an overview of our staff, structure, and functions.

- Liberty Street Economics—a blog that enables our economists to engage with the public on important economic topics quickly and frequently.
Top Blog Posts of Q3

Our Liberty Street Economics blog publishes on economic topics twice a week—more frequently when there is a post on a newly released report or on a pressing topic.

Listed below are the top five posts in the third quarter.

■ “The Puzzling Pre-FOMC Announcement 'Drift','’ by David Lucca and Emanuel Moench, July 11 – 23,535 downloads

Lucca and Moench show that since 1994, more than 80 percent of the equity premium on U.S. stocks has been earned over the twenty-four hours preceding scheduled Federal Open Market Committee announcements, which occur only eight times a year.

■ “The Untold Story of Municipal Bond Defaults,” by Jason Appleson, Eric Parsons, and Andrew Haughwout, August 15 – 13,758 downloads

The authors find that in the municipal bond market, defaults occur more frequently than what the major rating agencies report.

■ “If Interest Rates Go Negative…Or, Be Careful What You Wish For,” by Kenneth Garbade and Jamie McAndrews, August 29 – 10,691 downloads

Garbade and McAndrews examine what might happen if the interest rate paid by the Federal Reserve on excess reserves were fixed below zero.

■ “Interest on Excess Reserves and Cash 'Parked' at the Fed,” by Gaetano Antinolfi and Todd Keister, August 27 – 7,117 downloads

Antinolfi and Keister use the structure of the Fed’s balance sheet to illustrate why lowering the interest rate paid on reserve balances to zero would have no meaningful effect on the quantity of balances that banks hold on deposit at the Fed.


Cetorelli summarizes our blog series on banks and financial intermediation and previews key findings.

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Recently Published


Papers Presented


“Unemployment during the Great Recession: The Role of the Housing Bust,” Fatih Karahan. European Economic Association and Econometric Society 2012 Parallel Meetings, held at the University of Malaga, Malaga, Spain, August 28.


New Titles in the Staff Reports Series

Macroeconomics and Growth

No. 563, July 2012
Federal Reserve Liquidity Provision during the Financial Crisis of 2007-2009
Michael Fleming

This paper examines the Federal Reserve’s unprecedented liquidity provision during the financial crisis of 2007-2009. It first reviews how the Fed provides liquidity in normal times. It then explains how the Fed’s new and expanded liquidity facilities were intended to enable the central bank to fulfill its traditional lender-of-last-resort role during the crisis while mitigating stigma, broadening the set of institutions with access to liquidity, and increasing the flexibility with which institutions could tap such liquidity. The paper then assesses the growing empirical literature on the effectiveness of the facilities and provides insights as to where further research is warranted.

No. 566, August 2012
Mismatch Unemployment
Ayşegül Şahin, Joseph Song, Giorgio Topa, and Giovanni L. Violante

Şahin et al. develop a framework where mismatch between vacancies and job seekers across sectors translates into higher unemployment by lowering the aggregate job-finding rate. The authors use this framework to measure the contribution of mismatch to the recent rise in U.S. unemployment by exploiting two sources of cross-sectional data on vacancies, JOLTS and HWOL, a new database covering the universe of online U.S. job advertisements. Mismatch across industries and occupations explains at most one-third of the total observed increase in the unemployment rate, whereas geographical mismatch plays no apparent role. The share of the rise in unemployment explained by occupational mismatch is increasing in the education level.

Microeconomics

No. 565, August 2012
Housing Markets and Residential Segregation: Impacts of the Michigan School Finance Reform on Inter- and Intra-District Sorting
Rajashri Chakrabarti and Joydeep Roy

Chakrabarti and Roy study the impacts of the Michigan school finance reform of 1994 (Proposal A) on spatial segregation. The reform was a state initiative intended to equalize per-pupil expenditures between Michigan school districts and reduce the role of local financing. The authors find that Proposal A was responsible for increases in the value of housing stock in the lowest-spending school districts, and for improvements in several socioeconomic indicators in these districts, implying a decline in neighborhood sorting. They also find that the reform affected dispersion of incomes and educational attainment within school districts, increasing within-district heterogeneity in the lowest-spending school districts, while decreasing the same in the highest-spending districts. However, there is continued high demand for residence in the highest-spending communities, suggesting the importance of neighborhood peer effects (“local” social capital) and implying that even a comprehensive government aid program can fail to make a large impact on residential segregation.

No. 568, August 2012
Do Informal Referrals Lead to Better Matches? Evidence from a Firm’s Employee Referral System
Meta Brown, Elizabeth Setren, and Giorgio Topa

Using a new firm-level data set that includes explicit information on whether a worker at the company was referred by a current employee, Brown, Setren, and Topa are able to provide rich detail on the empirical relationships among employment referrals, match quality, wage trajectories, and turnover for a single U.S. corporation and to test various predictions of theoretical models of labor market referrals. The authors’ results align with the following predictions: 1) referred candidates are more likely to be hired, 2) referred workers experience an initial wage advantage, 3) the wage advantage dissipates over time, 4) referred workers have longer tenure in the firm, and 5) the variances of the referred and nonreferred wage distributions converge over time. The richness of the data allows the authors to analyze the role of referrer-referee relationships, and the size and diversity of the corporation permit analysis of referrals at a wide variety of skill and experience levels.
Abbott and Bacon Districts: Education Finances during the Great Recession
Rajashri Chakrabarti and Sarah Sutherland
This paper exploits rich panel data and trend-shift analysis to analyze how school finances in the Abbott and Bacon School Districts in New Jersey, as well as the high-poverty districts in general, were affected during the Great Recession and the American Recovery and Reinvestment Act federal stimulus period. The authors’ analysis shows downward shifts in revenue and expenditure per pupil during the post-recession era in all three groups of districts. However, the Abbott Districts showed the sharpest declines in both revenue and expenditure relative to preexisting trends. Of importance, the Abbott Districts were the only group in the analysis to show statistically significant negative shifts in instructional expenditure (the expenditure category most closely related to student learning), even with the federal stimulus. Declines in noninstructional categories were also the most prominent in the Abbott Districts. With comparably less of a decline in state and federal aid, the Bacon Districts maintained spending across-the-board at higher levels than the other groups did.

Banking and Finance
No. 564, July 2012
The Minimum Balance at Risk: A Proposal to Mitigate the Systemic Risks Posed by Money Market Funds
Patrick E. McCabe, Marco Cipriani, Michael Holscher, and Antoine Martin
This paper introduces a proposal for money market fund (MMF) reform that could mitigate systemic risks arising from these funds by protecting shareholders, such as retail investors, who do not redeem quickly from distressed funds. The authors’ proposal would require that a small fraction of each MMF investor’s recent balances, called the “minimum balance at risk” (MBR), be demarcated to absorb losses if the fund is liquidated. Most regular transactions in the fund would be unaffected, but redemptions of the MBR would be delayed for thirty days. A key feature of the proposal is that large redemptions would subordinate a portion of an investor’s MBR, creating a disincentive to redeem if the fund is likely to have losses. In normal times, when the risk of MMF losses is remote, subordination would have little effect on incentives.

No. 567, August 2012
Intermediary Leverage Cycles and Financial Stability
Tobias Adrian and Nina Boyarchenko
Adrian and Boyarchenko present a theory of financial intermediary leverage cycles within a dynamic model of the macroeconomy. Intermediaries face risk-based funding constraints that give rise to procyclical leverage. The pricing of risk varies as a function of intermediary leverage, and asset return exposure to intermediary leverage shocks earns a positive risk premium. Relative to an economy with constant leverage, financial intermediaries generate higher consumption growth and lower consumption volatility in normal times, at the cost of endogenous systemic financial risk. The severity of systemic crisis depends on intermediaries’ leverage and net worth. Regulations that tighten funding constraints affect the systemic risk-return trade-off by lowering the likelihood of systemic crises at the cost of higher pricing of risk.

No. 569, August 2012
A New Look at Second Liens
Donghoon Lee, Christopher Mayer, and Joseph Tracy
The authors use data from credit reports and deed records to better understand the extent to which second liens contributed to the housing crisis by allowing buyers to purchase homes with small down-payments. Second liens in the form of home equity lines of credit (HELOCs) were originated to relatively high-quality borrowers, and originations were declining near the peak of the housing boom. By contrast, characteristics of closed-end second liens (CES) were worse on all these dimensions. Default rates of second liens are generally similar to that of the first lien on the same home, although HELOCs perform better than CES. Finally, the authors show that delinquency rates on second liens, especially HELOCs, have not declined as quickly as those on most other types of credit, raising a potential concern for lenders with large portfolios of second liens on their balance sheets.
No. 570, September 2012

Pricing TIPS and Treasuries with Linear Regressions
Michael Abrahams, Tobias Adrian, Richard K. Crump, and Emanuel Moench

Abrahams et al. present an affine term structure model for the joint pricing of Treasury Inflation-Protected Securities (TIPS) and Treasury yield curves that adjusts for TIPS’ relative illiquidity. The authors’ estimation using linear regressions is computationally very fast and can accommodate unspanned factors. The baseline specification with six principal components extracted from Treasury and TIPS yields, in combination with a liquidity factor, generates negligibly small pricing errors for both real and nominal yields. Model-implied expected inflation provides a better prediction of actual inflation than breakeven inflation. The value of the deflation floor calculated from the model is generally small in magnitude, but it spiked during the recent crisis.

No. 571, September 2012

Information Acquisition and Financial Intermediation
Nina Boyarchenko

This paper considers the problem of information acquisition in an intermediated market, where the specialists have access to superior technology for acquiring information. The informational advantages of specialists relative to households lead to disagreement between the two groups, changing the shape of the intermediation-constrained region of the economy and increasing the frequency of periods when the intermediation constraint binds. Acquiring the additional information, however, is costly to the specialists, making them less likely to decrease their risky asset holdings when the intermediation constraint binds. Boyarchenko shows that this behavior leads the equity capital constraint to bind more frequently, making asset prices in the economy more volatile. She finds empirical evidence consistent with these predictions.

No. 572, September 2012

Doing Well by Doing Good? Community Development Venture Capital
Anna Kovner and Josh Lerner

This paper examines the investments and performance of community development venture capital (CDVC). It finds substantial differences between CDVC and traditional venture capital (VC) investments: CDVC investments are far more likely to be in nonmetropolitan regions and in regions with little prior venture capital activity. Moreover, CDVC is likely to be in earlier-stage investments and in industries outside the venture capital mainstream that have lower probabilities of successful exit. Even after the authors control for this unattractive transaction mix, the probability of a CDVC investment being successfully exited is lower. One benefit of CDVCs may be their effect in bringing traditional VC investment to underserved regions: When Kovner and Lerner control for the presence of traditional VC investments, each additional CDVC investment results in an additional 0.06 new traditional VC firm in a region.
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