

CASCADE FOCUS

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Student Loan Trends in the Third Federal Reserve District

By Thomas Hylands*

The state of the student loan market has received much attention in recent years, as the number of borrowers and their collective debt have risen dramatically. These increases have been particularly problematic in the wake of the 2007–09 recession because increased unemployment and suppressed income impair borrowers' ability to make payments on their loans. This report outlines the recent history of student borrowing in the Third Federal Reserve District, which covers eastern and central Pennsylvania, southern New Jersey, and Delaware, and explores lending patterns, by the neighborhood income of the borrower, to better understand the implications for low- and moderate-income communities.

Borrowing to finance education is not a new practice, but it has become increasingly common in recent years.¹ When looking for causes, an obvious place to start is the increasing cost of higher education. Figure 1 shows the average cost for a year of undergraduate education, including tuition, fees, and room and board, and how that cost was financed

Highlights

- The student loan market in the Third Federal Reserve District has grown considerably in recent years, in terms of both the number of borrowers and the aggregate amount of outstanding debt.
- Borrower balances are typically higher in upper-income than in lower-income neighborhoods, but loan performance, as measured by lower delinquency rates, is stronger in higher-income neighborhoods.
- The borrowers with the highest delinquency rates are those with balances of less than \$13,000.
- The proportion of the population holding student loans has increased for all age groups; while the young are more likely to take out student loans, the median balance for borrowers is fairly similar across age groups.

by the average student between the 1990–91 and 2011–12 academic years. During the early stages of that period, the cost was largely paid for through out-of-pocket expenditures — for example, savings, employment while attending college, or a form of credit other than a student loan — and a significant portion was also covered by grant aid. Those sources were unable to completely absorb the rising cost of education, however, as out-of-pocket expenditures fell in real terms by \$900. By the 2011–12

academic year, despite grant aid increasing by more than \$5,000 per student on average, loans for the typical student rose from \$1,700 to \$5,700 to make up the shortfall. The problem was likely exacerbated by the recent financial crisis, which for many families eroded savings and limited their access to other forms of credit (such as home equity loans) that might otherwise have been put toward paying for education. Thus, the rising costs of higher education, the falling portion of

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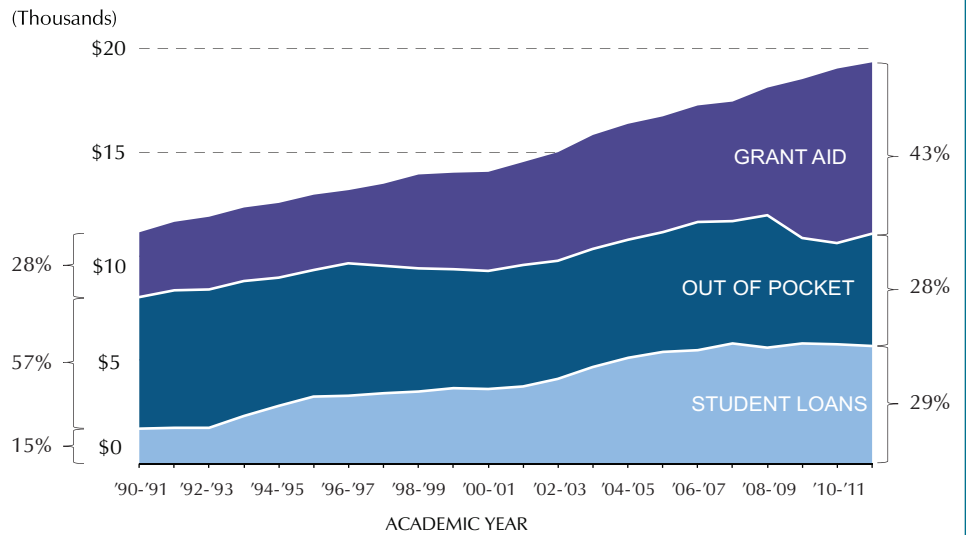
¹See Appendix 1 for a primer on the structure of and recent developments in the student loan market.

those costs covered by out-of-pocket expenditures, and rising college enrollment through the same period² have fed the student borrowing boom.

Does it matter if students are borrowing more? Is the increased debt a problem? The argument can be made that more people attending college means a more educated and productive workforce, and there is ample evidence that, at an individual level, college can be a very good investment.³ This could mean that individuals and the macroeconomy benefit from increased student borrowing in the long run. However, in the short run, borrowers may have to reduce expenditures on other goods and services in order to finance their education, and those who fall into delinquency will have restricted access to other forms of credit in the future.

A 2012 Rutgers University study found that recent graduates with student loans have made significant lifestyle choices, including short-term decisions like moving in with family to reduce costs (27 percent of students surveyed) or taking less desirable jobs to help pay off their loans (25 percent), as well as major life decisions such as delaying marriage or other committed relationships (14 percent), putting off continuing

Figure 1
Financing the Average Cost for One Year of Undergraduate Education (constant 2012 dollars)



The chart is adapted from work by the Hamilton Project.^a Cost data include tuition, fees, and room and board.^b Grant aid includes federal grants, education tax benefits, Federal Work Study income, state grants, institutional grants, and private and employer grants.^c Student loans include federal and nonfederal loans.^c Out-of-pocket expenses are total costs minus grant aid minus student loans.^d

^a Michael Greenstone and Adam Looney, "Rising Student Debt Burdens: Factors Behind the Phenomenon," The Hamilton Project, 2013, available at <http://ow.ly/thmiU> (accessed March 24, 2014).

^b U.S. Department of Education, National Center for Education Statistics, "Digest of Education Statistics: 2012," 2012, available at <http://ow.ly/thmtr> (accessed March 24, 2014).

^c College Board, "Trends in Student Aid 2013," 2013, available at <http://ow.ly/th98R> (accessed March 24, 2014).

^d More information on the method is available from the original authors at <http://ow.ly/thigg> (accessed March 24, 2014).

² U.S. Census Bureau, "Number Enrolled in College by Type of School and Enrollment Status, 1970 to 2012," 2013, available at www.census.gov/hhes/school/data/cps/historical/FigureA-7_2012.pdf (accessed November 6, 2013).

³ Sandy Baum, Jennifer Ma, and Kathleen Payea, "Education Pays 2013," College Board, 2013; Anthony P. Carnevale, Stephen J. Rose, and Ban Cheah, "The College Payoff," Georgetown University Center on Education and the Workforce, 2013. It is worth noting, however, that while college graduates as a group generally earn more than those with lower levels of formal education, there is no guarantee that college will pay off for any given graduate, as outcomes can vary dramatically by type of academic institution (Kevin Lang and Russell Weinstein, "Evaluating Student Outcomes at For-Profit Colleges," National Bureau of Economic Research, 2012), field of study (Anthony P. Carnevale and Ban Cheah, "Hard Times: College Majors, Unemployment, and Earnings," Georgetown University Center on Education and the Workforce, 2013), and other factors.

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education (28 percent), and delaying major purchases such as cars and houses (40 percent).⁴ Similarly, the Federal Reserve Bank of New York has documented a sharp reduction in home-secured debt at age 30 and in auto debt at age 25 among student borrowers, to the point that use of those credit types at those ages is now lower for those with student debt than those without.⁵ In addition to restricted use of other forms of credit, households carrying student loan debt have a lower net worth than those without student loans, even after controlling for age and other demographic factors, which affects their short-term financial health.⁶ These factors may have ripple effects over time that affect individual borrowers and the macroeconomy in the long term, particularly if a large proportion of borrowers are not able to make the required payments on their loans.

Students living in the Third Federal Reserve District have not been immune to the cost pressures laid out in Figure 1. Indeed, all three states in the District have significantly cut back on appropriations for higher education in recent years, and their public universities currently rank as some of the most expensive in the

country (Table 1).⁷ Rising costs, and the implications for student loan debt, are particularly relevant for low- and moderate-income students, since among students who start a program at a four-year institution, those from the lowest-income quartile have a much lower rate of attainment of any degree (50 percent) than those from the second (61 percent), third (67 percent), and highest (77 percent) quartiles.⁸ A similar pattern is seen for students at two-year institutions, but with lower completion rates across the board. Failing to complete any degree is a big obstacle to loan

repayment because any debt that the student incurs is not offset by greater earning power. As a result, those who do not complete their degree are more likely to be unemployed⁹ and to default on their loans¹⁰ than those who do graduate.

This report provides an analysis of student loan debt in the Third Federal Reserve District using data from one of the nation's three major consumer credit bureaus. The report focuses on aggregate and median student debt levels and delinquency rates between 2005 and 2013 and

Table 1
Higher Education Costs and Funding in Third District States

	Average Annual Cost of Tuition and Fees at a Four-Year Public Institution (National Rank)	Change in State Higher Education Appropriations, 2007-12 (National Rank)
Delaware	\$10,890 (7)	-25.9% (27)
New Jersey	\$12,399 (3)	-22.6% (24)
Pennsylvania	\$12,330 (4)	-31.7% (41)
U.S.	\$8,655 (--)	-23.0% (--)

Sources: College Board, "Trends in College Pricing 2013," 2013 (costs); State Higher Education Executive Officers, "State Higher Education Finance FY 2012," 2013 (appropriations).

⁴Charley Stone, Carl Van Horn, and Cliff Zukin, "Chasing the American Dream: Recent College Graduates and the Great Recession," Rutgers University John J. Heldrich Center for Workforce Development, 2012.

⁵Federal Reserve Bank of New York, Liberty Street Economics Blog, "Young Student Loan Borrowers Retreat from Housing and Auto Markets," 2013, available at <http://ow.ly/uUKEi> (accessed March 24, 2014).

⁶William Elliott and IlSung Nam, "Is Student Debt Jeopardizing the Short-Term Financial Health of U.S. Households?" Federal Reserve Bank of St. Louis *Review*, 2013.

⁷The Center on Budget and Policy Priorities reports that states have both increased public university tuition and cut spending on higher education, often in ways that diminish the quality of education, in order to make up the shortfall from state appropriation reductions (Phil Oliff, Vincent Palacios, Ingrid Johnson, and Michael Leachman, "Recent Deep State Higher Education Cuts May Harm Students and the Economy for Years to Come," Center on Budget and Policy Priorities, 2013).

⁸U.S. Department of Education, National Center for Education Statistics, "Digest of Education Statistics: 2011," 2011, available at http://nces.ed.gov/programs/digest/d11/tables/dt11_347.asp (accessed November 6, 2013).

⁹U.S. Department of Labor, Bureau of Labor Statistics, "Earnings and Unemployment Rates by Educational Attainment," 2013, available at http://www.bls.gov/emp/ep_chart_001.htm (accessed November 6, 2013).

¹⁰Mary Nguyen, "Degreeless in Debt: What Happens to Borrowers Who Drop Out," *Education Sector Brief*, 2012.

investigates whether differences in the reported trends emerge when explored by the borrower's neighborhood income level.¹¹

Data

This study uses data from the Federal Reserve Bank of New York Consumer Credit Panel/Equifax (CCP). The CCP is an anonymous, nationally representative random 5 percent sample of the U.S. population with a Social Security number and a credit history.¹² The CCP includes quarterly data on each individual student loan that a panelist has taken out, up to 20 loans per panelist. The study period covers the first quarter of 2005 to the second quarter of 2013 and is limited to borrowers in the Third Federal Reserve District. All dollar figures are reported in nominal values.

The CCP does not contain panelist income data, but it does include the census tract of the panelist's reported residence. In conjunction with data from the American Community Survey (ACS), this allows the assignment of panelists to a neighborhood income category according to the ratio of the median family income (MFI) of the census tract to that of the local metropolitan statistical area, the metropolitan division, or the MFI of the nonmetropolitan portion of

the state.¹³ The low-income category includes census tracts with an MFI that is less than 50 percent of the area MFI; moderate-income tracts fall between 50 percent and 79 percent of the area MFI; middle-income tracts range from 80 percent to 119 percent of the area MFI; and the upper-income category includes tracts with an MFI of 120 percent of the area MFI or higher.

Note that while the assigned income category of a given census tract is held constant throughout the study period, the income category assigned to a borrower is contemporaneous with his or her residence in each quarter; thus, a borrower's income category can change from quarter to quarter if the borrower's address on file with the credit bureau changes.¹⁴ More information on the data and methods is available in Appendix 2.

The following analysis presents estimates of student loan debt and

loan performance for panelists in each neighborhood income group and for borrowers in the Third District as a whole.

Market Overview

By most measures, the student loan market has changed dramatically since 2005. In the Third District, the number of borrowers rose from just over 1.1 million (11.5 percent of the CCP) at the start of 2005 to just under 1.8 million (17.5 percent of the CCP) in the second quarter of 2013, and the aggregate student loan debt increased from \$18 billion to more than \$46.5 billion during the same period (Figure 2). These increases were fairly steady throughout, suggesting no obvious impact from the credit crisis that affected other forms of credit.¹⁵ This may be because 1) student loans do not have strict underwriting requirements like other types of loans, 2) further education could help put off entry into a difficult labor market,

Compared with the U.S.

Residents of the Third District are more likely to have student loans than residents of the U.S. as a whole: Nearly 18 percent of Third District panelists reported student loans in the second quarter of 2013, versus 16 percent nationally.

¹¹ For a similar study using the same data set at the national level but ignoring the neighborhood income level of borrowers, see Wenli Li, "The Economics of Student Loan Borrowing and Repayment," Federal Reserve Bank of Philadelphia *Business Review* (Third Quarter 2013).

¹² Selection into the sample is predicated on the last two digits of an individual's Social Security number, which is not included in the data set used for analysis. About 8 percent of households do not have a member with a credit report and are thus not included in the data set (Meta Brown, Andrew Haughwout, Donghoon Lee, and Wilbert van der Klaauw, "Do We Know What We Owe? A Comparison of Borrower- and Lender-Reported Consumer Debt," Federal Reserve Bank of New York *Staff Report* 523, 2013).

¹³ The income data come from the five-year ACS estimates for 2005–09. To ensure consistency, the metropolitan area definitions adopted for the release of the 2005–09 ACS data and defined in the November 2008 Office of Management and Budget Bulletin No. 09-01 are used throughout, and the neighborhood's assigned income category is used for the entire study period.

¹⁴ The income category assigned to current students may not accurately reflect their socioeconomic status, depending on whether they use a college address or home address for billing purposes; if they use a college address, the income category will reflect the economic conditions in the area around their college. It is therefore quite possible that the neighborhood income classification of current students will change when they leave college. However, the inclusion of current students does not substantially affect the results for neighborhood income categories presented in this paper, as explained further in Appendix 2.

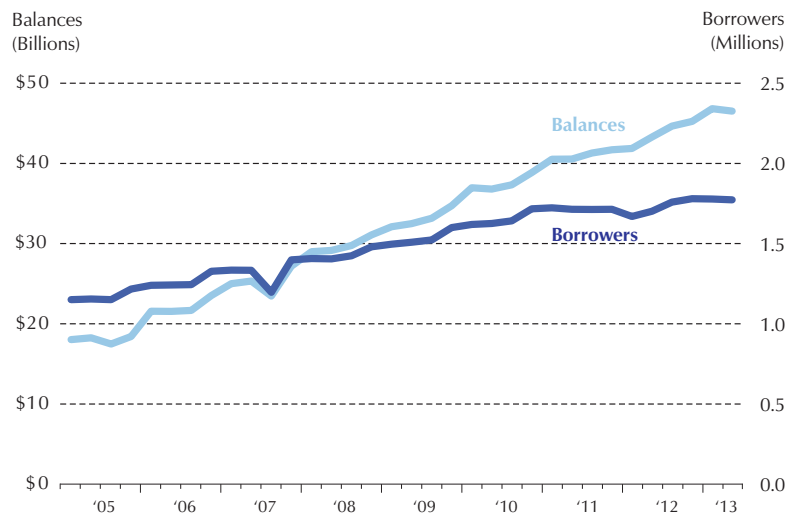
¹⁵ Federal Reserve Bank of New York, Research and Statistics Group, Microeconomic Studies, "Quarterly Report on Household Debt and Credit, August 2013," 2013, available at www.newyorkfed.org/research/national_economy/householdcredit/DistrictReport_Q22013.pdf (accessed November 6, 2013).

and 3) the weak economy reduced the opportunity cost of higher education.

While it is clear that the market grew substantially, there was relatively little change in the income distribution of the borrowers when measured by neighborhood income. The proportions of borrowers and aggregate student loan debt associated with each income group varied by only a few percentage points across all quarters and, generally speaking, reflected the distribution of the overall population: The 6 percent of the population that lived in neighborhoods classified as low income in the 2010 census accounted for 7 percent of aggregate outstanding student loan debt and 8 percent of student loan borrowers throughout the study period, while the 28 percent of the population in upper-income neighborhoods contributed 25 percent of borrowers and 29 percent of aggregate debt (Table 2).

The much sharper increase in aggregate student loan debt than in the number of borrowers (Figure 2) indicates that debt for the typical borrower was increasing throughout the study period: The median balance among all borrowers grew steadily from a starting point of \$9,500 to \$16,900 in the most recent quarter (Figure 3). The increase was particularly large for those from upper-income neighborhoods, where the median balance stood at \$19,500 (an increase of \$8,300, or 74 percent, since the start of 2005). Although the percentage increase was actually greater (85 percent) over the period in low-income neighborhoods, the median balance at the end of the period (\$12,300) and the increase over the period (\$5,700) were both substantially lower. Figure 4 further illustrates the point that relatively low student loan balances are characteristic of low- and moderate-income neighborhoods, while balances in excess of \$20,000 are more common in middle- and upper-income neighborhoods.

Figure 2
Aggregate Student Loan Debt (nominal dollars) and Number of Borrowers with at Least One Student Loan



Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax

Some variation in the data occurs because of occasional reporting gaps by loan servicers to the credit bureau. The third quarter of 2007 is the most prominent example: The dips in both lines occur because a large servicer failed to provide the necessary information in time, rather than because of a sudden decline in aggregate student loan debt and borrowers.

Table 2
Distribution of Borrowers with Student Loan Debt and Aggregate Student Loan Debt, by Neighborhood Income, Second Quarter 2013

Income	Population	Borrowers	Aggregate Debt
Low	6%	8%	7%
Moderate	21%	17%	16%
Middle	46%	49%	48%
Upper	28%	25%	29%

Sources: U.S. Census Bureau, 2010 (population); Federal Reserve Bank of New York Consumer Credit Panel/Equifax (borrowers and aggregate debt).

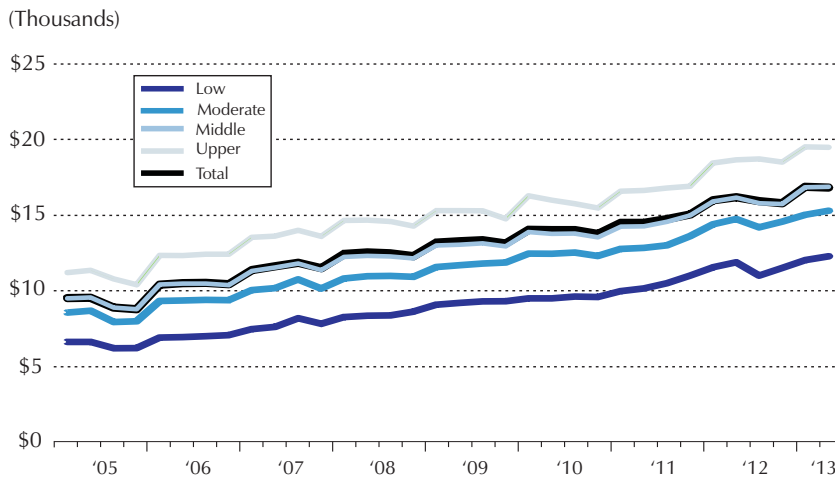
Columns may not sum to 100 percent due to rounding.

Delinquency

Under the right circumstances, funding one's education by taking on student loan debt is not necessarily problematic. As discussed earlier, education is typically a good investment that often pays dividends in the form of higher lifetime earnings. Problems arise when these expected higher earnings do not materialize

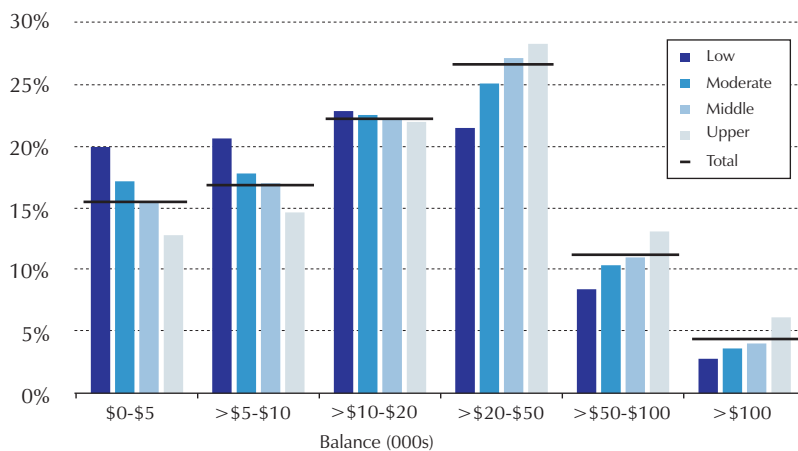
— because of an economic downturn or because the degree was not completed, for example — and borrowers are not able to meet their loan obligations. When borrowers fall behind on payments for their loan, they are considered delinquent, which can reduce their credit scores and restrict future access to other forms of credit (e.g., credit cards and mortgages). In this report, delinquency is defined as

Figure 3
Median Student Loan Balance (nominal dollars), by
Neighborhood Income



Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax

Figure 4
Distribution of Borrowers in the Second Quarter of 2013,
by Balance and Neighborhood Income



Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax

a loan being 1) past due by 90 or more days, 2) in collections, or 3) charged off. When this happens to many borrowers at the same time, there can be negative repercussions for the loan market and for the economy more broadly.

Figure 5 shows the delinquency rate by neighborhood income, calculated as the number of borrowers delinquent on at least one student loan as a percentage of all borrowers with any student loan debt. Unlike other forms of credit, student loans come with stipulations that make calculating their delinquency rate difficult. Students are not required to repay loans while they are enrolled at least half-time in college, and, depending on their loan product, they may receive a grace period after leaving school before payments must start. Ideally, the delinquency rate would be calculated only for borrowers who have left school or entered the repayment period, but the CCP does not include information on enrollment status or grace periods. Accordingly, the delinquency rates presented here are calculated for all borrowers with outstanding student loans.

As a result, these estimates should be considered conservative: The true rate is likely somewhat higher. However, the estimates include loans that have been charged off but that can remain on a borrower's credit report for up to seven years, a process that can inflate the delinquency estimates relative to other sources. For these reasons, and because these rates reflect the percentage of delinquent borrowers rather than the share of delinquent loans or the delinquent loan balance, the estimates given here may not be directly comparable to other published rates.

Across all income groups, the delinquency rate fluctuated throughout the study period but maintained a steady increase until

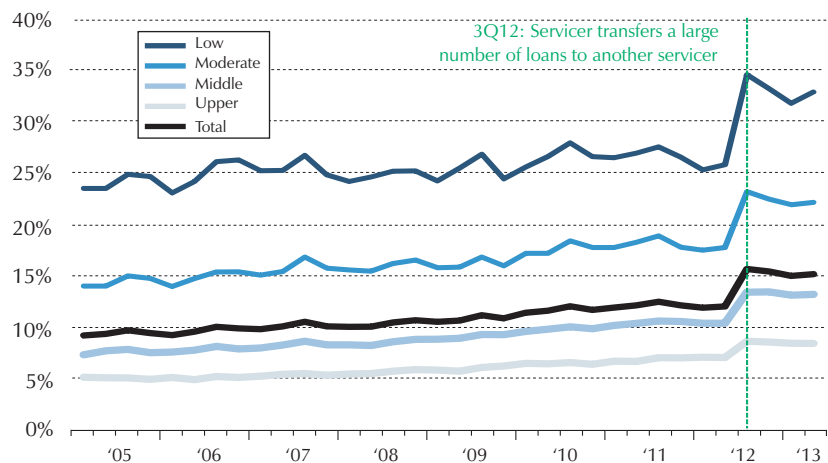
Compared with the U.S.

Third District residents borrow more to pay for their education: The median balance held by a student loan borrower from the Third District was \$16,900 in the second quarter of 2013, higher than the national median of \$15,800.

the third quarter of 2012, when a significant number of loans were transferred from one servicer to another. It appears that differences in the reporting practices between these servicers contributed to a discontinuous jump in the count of student loans that appear in our data. Many of these loans were originated in earlier periods and many were also delinquent at the time they first appeared in the CCP. In the second quarter of 2013, the overall delinquency rate was 15 percent, a figure heavily weighted by the large number of borrowers living in middle- and upper-income neighborhoods that generally exhibit relatively strong loan performance. In the same quarter, the rate was 33 percent for borrowers in low-income neighborhoods. In other words, one out of every three student loan borrowers living in a low-income neighborhood was 90 or more days delinquent on at least one loan.

In addition to becoming delinquent at a higher rate than previously, today's borrowers are doing so more quickly, particularly those borrowers in lower-income neighborhoods. Among all borrowers who become delinquent for the first time on a student loan, the mean number of months between taking out their last student loan before becoming delinquent on any student loan and the date of that first delinquency¹⁶ fell from just over 39 months to just under 33 during the study period (a statistically significant decrease). Higher neighborhood income is

Figure 5
Student Loan Borrower Delinquency Rate,*
by Neighborhood Income



Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax

* Borrowers with at least one student loan that is 90 or more days past due, in collections, or charged off as a percentage of all borrowers with any student loan debt.

associated with a longer duration of loan repayment before delinquency, but there was a similar decline for all income groups. In the second quarter of 2013, a delinquent borrower from a low-income neighborhood reached delinquency more quickly than a delinquent borrower from an upper-income neighborhood (30 months versus almost 35, a statistically significant difference).¹⁷

A popular media narrative is that students with large debt burdens graduate from college and find themselves struggling to pay off their loans. However, this glosses over the fact that most borrowers who become delinquent on their loans have relatively low balances compared with those quoted in the popular press.¹⁸ Figure 6 maps out the distribution of all borrowers and that of all delin-

Compared with the U.S.

Third District residents are managing their loans better than borrowers elsewhere: The Third District delinquency rate was 15 percent in the second quarter of 2013, but it was 18 percent nationally.

¹⁶ Rather than use the origination date of the delinquent loan, in this calculation I use the origination date of the last student loan taken out by the borrower before the delinquency because this is closer to the date at which the borrower enters the loan repayment period. Using the origination date of earlier loans would include a greater portion of the grace period and thus overestimate the time until delinquency.

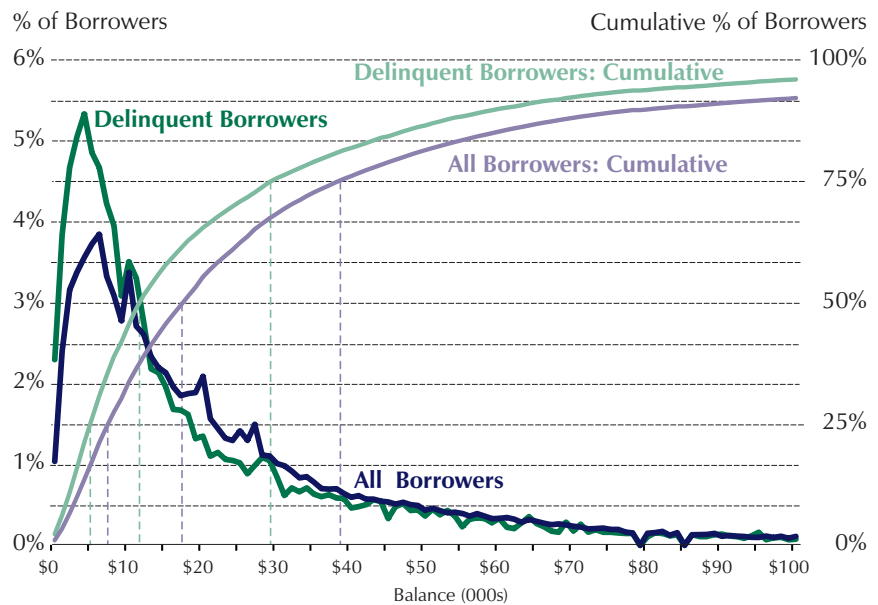
¹⁷ Note that all these figures reflect the time between borrowers taking out their last loan and becoming delinquent on any of their loans. Federal loans do not require repayment while a student is enrolled at least half-time in college, and most also offer the borrower a six- to nine-month grace period after leaving school before payment is due. Furthermore, to be considered delinquent in this analysis, a borrower must be at least 90 days behind on payments. With these caveats in mind, it is likely that the actual number of months that students are staying current on their loans is lower than the estimates indicate.

¹⁸ See, for example, Ruth Simon, "Student-Loan Load Kills Startup Dreams," *Wall Street Journal*, August 14, 2013; Andrew Martin and Andrew W. Lehren, "A Generation Hobbled by the Soaring Cost of College," *New York Times*, May 12, 2012; and Ronald D. White, "Law School Grad Learns How to Pay Off a Heavy Debt," *Los Angeles Times*, September 20, 2013.

quent borrowers by their total outstanding balances in the second quarter of 2013, rounded to the nearest thousand dollars. The borrowers (in purple) are heavily skewed toward the lower balances, with a quarter of all borrowers having a total outstanding balance of \$7,400 or less and half with a balance of \$16,900 or less. The distribution of delinquent borrowers (in green) is even more skewed to the left, and the line is above the borrowers' line for balances under \$13,000, indicating that borrowers with total balances in that range account for a disproportionate number of delinquencies. That result is in contrast to borrowers whose balances fall between \$13,000 and \$52,000, where the borrowers' (purple) line is above the delinquent borrowers' (green) line, indicating a lower delinquency rate for this group. For balances above \$52,000, the proportions of borrowers and delinquencies are similar and very small, although the share of overall borrowers generally exceeds the share of delinquent borrowers, which again indicates a slightly depressed delinquency rate relative to those with balances under \$13,000.

To be clear, the interpretation of Figure 6 is not that certain total balances foster better loan performance than others. Rather, borrowers who end up with a balance in a given range tend to perform better with repayment. There are several possible explanations for this outcome. One possibility is that borrowers with a low balance discontinued their education without receiving a qualification, while those with higher balances completed their course of study and obtained a degree. Receiving a qualification is important for loan repayment because earnings are markedly higher for those who complete a course of study.¹⁹ Alternatively, better students may be selecting better, more expensive schools

Figure 6
Distribution of Borrowers and Delinquent Borrowers with Student Loan Debt in the Second Quarter of 2013

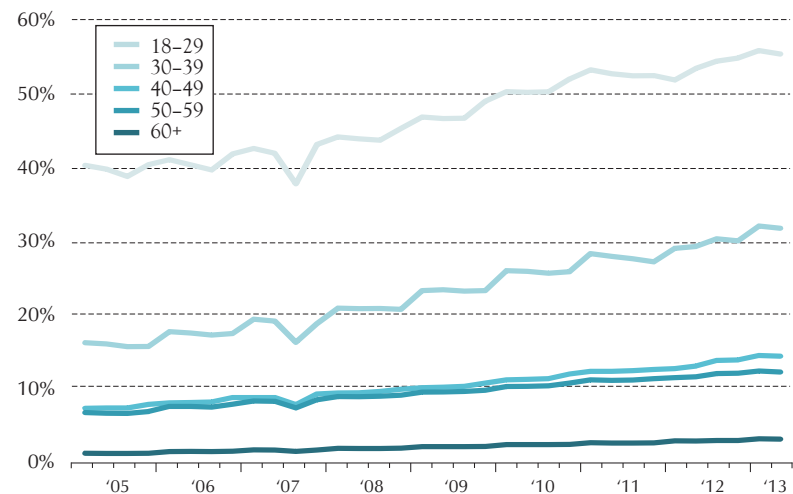


Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax

The cumulative distribution curves, in the lighter shades, show the proportion of borrowers and delinquent borrowers at or below each balance level; quartile balances are marked off for reference.

Delinquent borrowers are defined as borrowers with at least one student loan that is 90 or more days past due, in collections, or charged off.

Figure 7
Proportion of Borrowers in the CCP with Student Loan Debt, by Age



Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax

The figure excludes loans with ECOA codes of C (comaker), S (shared, unknown), T (terminated), and U (undesigned). See Appendix 2 for more information.

¹⁹ Anthony P. Carnevale, Stephen J. Rose, and Ban Cheah, "The College Payoff," Georgetown University, Center on Education and the Workforce, 2013.

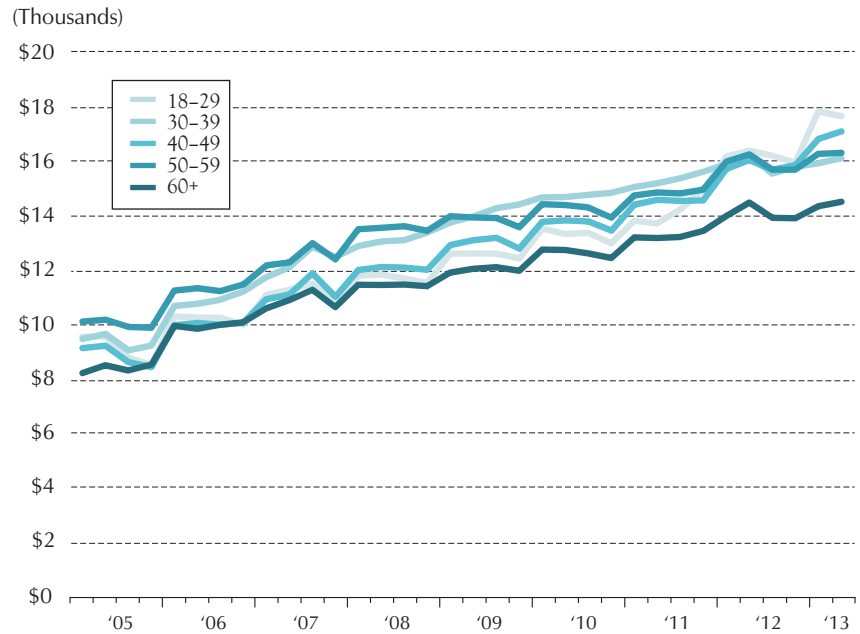
that require greater debt but lead to a higher payoff in the labor market thereafter. Students with higher expectations of future earnings may be willing to borrow more today than those without such expectations.

Mature Borrowers

Although the traditional student will begin higher education very soon after completing high school, many borrowers carry student loans well past that period of their life. Figure 7 documents an increasing prevalence of student loans across all age groups. Not surprisingly, most of the growth is among borrowers under age 40, but the proportion of borrowers in the CCP with a student loan almost doubled among those in their 40s and 50s and increased by almost two and a half times for those aged 60 or older, albeit from very low levels. Moreover, not only is there an increasing number of older borrowers but, like their younger counterparts, they are also taking on larger loans (Figure 8). The median balance for a borrower between the ages of 18 and 29 was \$17,700 in the second quarter of 2013, but borrowers in their 50s were not far behind at \$16,300, and even borrowers in their 60s had a median student loan debt of \$14,500. The younger age groups borrow at a much higher rate, but among those who do borrow, the similarity of the debt levels across the age groups is striking.

Older borrowers may be taking out loans in order to pay for their own education or someone else's — for example, a younger family member's. Information on what a student loan is used for is not reported to the credit bureaus, but in the event that the loan is taken out for someone else, it may be a cosigned loan, meaning that the student and the cosigner are jointly responsible for repayment. The use of cosigned loans rose along with the market as a whole, particularly

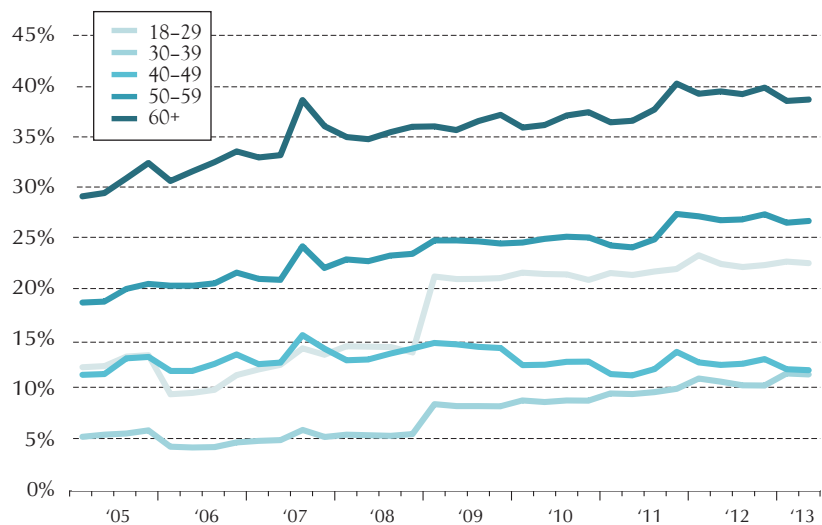
Figure 8
Median Student Loan Balance (nominal dollars), by Age



Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax

The figure excludes loans with ECOA codes of C (comaker), S (shared, unknown), T (terminated), and U (undesigned). See Appendix 2 for more information.

Figure 9
Proportion of Borrowers with Student Loan Debt Who Have at Least One Cosigned Loan, by Age



Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax

among young borrowers who lack the credit history needed to obtain individual loans (Figure 9). The share of older borrowers with cosigned loans increased through the study

period and is particularly high relative to younger borrowers: Among all holders of student loans age 60 and older, 39 percent held cosigned loans in the second quarter of 2013, com-

pared with 11 percent for borrowers in their 30s. Note that this statistic is based only on loans for which cosigners have joint responsibility for repayment; not included are so-called comaker loans, for which the cosigning party assumes responsibility for repayment only in the event that the primary borrower is unable to make payments.

In addition to cosigning for a loan, older borrowers can also provide financial support for a younger family member's education by securing an individual loan. The Federal Parent PLUS loan program, for example, is specifically designed to allow parents to meet the cost of their child's undergraduate education in this way. For those borrowers who do take on loans to pay for another person's education, however, paying off those loans may be more burdensome than normal because they will not receive

the increased earning power often associated with advancing one's education. This could be particularly challenging for borrowers who are nearing the end of their careers or who have already retired.

Conclusions

Between 2005 and 2013, the number of borrowers in the Third Federal Reserve District who took out loans to finance their education increased substantially, and those borrowers took on increasingly larger debts. Debt levels during this period were positively correlated with neighborhood income, and delinquency rates were higher in low- and moderate-income neighborhoods and for borrowers with lower balances. Finally, despite often being associated with the young, student borrowing increased across all age groups, in terms of both the number

of borrowers and their balances.

This analysis provides an overview of the student loan market in the Third Federal Reserve District, but important questions remain about the impact of the dynamics identified here. For example, a better understanding of what role college duration and completion play in loan performance would be helpful in understanding why delinquent student loan borrowers tend to have relatively low balances. Additional research on how student debt impacts later access to and use of other forms of credit would help us understand the implications of the recent surge in student borrowing and how it might affect individual borrowers and the economy in the medium to long term. Such future research is necessary to more fully understand the findings in this report. ✦



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APPENDIX 1: Introduction to Student Loans

The federal government is by far the largest provider of student loans in the U.S. and has played an instrumental role in shaping the market. The federal government runs a variety of loan programs with varying eligibility requirements (see Table A1 for a summary), but because broad access to education has been a long-term policy objective, student loans have been widely available with little underwriting involved to establish the borrower's ability to repay the debt. Even private lenders, who would ordinarily have more reason to ensure that their debtors are able to repay their loans, were given an incentive to lend to students through the Federal Family Education Loan Program (FFELP), which provided subsidies and a federal guarantee on privately issued student loans.

The FFELP, along with private loans that held no government guarantee, helped to create significant growth in the private loan market. Combined,

they represented 25 percent of all student loan originations by volume in the 2007–08 academic year.^a However, that changed in the wake of the financial crisis that hit the economy that year. Because interest rates on FFELP loans were capped, the return was too low to attract private capital in a tight credit market, and many private lenders exited the market.^b In 2010, the federal government discontinued the FFELP and switched to an entirely direct lending model, the Federal Direct Loan Program (FDLP). In the 2012–13 academic year, the federal government accounted for roughly 92 percent of the student loan debt issued.^c

Student loans are extremely difficult to discharge through bankruptcy proceedings: Only when a student can prove that a loan is causing undue hardship can a loan be discharged, and the bar for proving such a claim is very high. Moreover, the education that is purchased

with student loans cannot be used as collateral for a loan, as in the case of a house or a car, so borrowers who find themselves unable to repay their student loans face a very difficult situation. In response to an increasing number of student borrowers struggling to make payments on their loans, the federal government has expanded and introduced new repayment plans for many borrowers and loan types that allow graduated payments, income-related payments, extended repayment periods (from the standard 10 years up to as many as 25 years), loan consolidation, and loan forgiveness for working in designated fields for a set period of time. These options are not available for private student loans, however, and so borrowers who hold private loans, which tend to have higher interest rates and less flexible repayment options to begin with, have received little or no benefit from the federal government's reforms.

^a College Board, "Trends in Student Aid 2013," College Board, 2013.

^b Kelly Edmiston, Lara Brooks, and Steven Shepelwich, "Student Loans: Overview and Issues," Federal Reserve Bank of Kansas City, Community Affairs Department Working Paper, 2012.

^c College Board, "Trends in Student Aid 2013," College Board, 2013.

APPENDIX 1: Introduction to Student Loans *(continued)*

Table A1
Types of Student Loans

	Federal Direct — Subsidized	Federal Direct — Unsubsidized	Federal Parent PLUS/Grad PLUS	Federal Perkins	Private
Purpose:	For students with demonstrated financial need; federal government pays the interest that accrues on the loan while the student is in school	For all students, regardless of financial need; student is responsible for interest accrued while in school	To meet expenses not covered by other federal aid	Low-interest loans for students with exceptional financial need	Varies
Volume (\$bn), 2012-13:	\$28	\$55	\$17	\$1	\$9
Interest Rate (for loans issued 7/2013 to 6/2014):	3.86%	UG: 3.86% G/P: 5.41%	6.41%	5.00%	Varies
Annual Limit:*	\$3,500-\$5,500, depending on year of college	\$5,500-\$7,500, depending on year of college**	Up to the cost of education minus other aid	UG: \$5,500 G/P: \$8,000	Varies
Aggregate Limit:*	\$23,000	\$31,000**	N/A	UG: \$27,500 G/P: \$60,000***	Varies

Notes: The Federal Direct (both subsidized and unsubsidized) and PLUS (both parent and graduate) loans were offered through the FFELP before the program was terminated in 2010. Those loans are now offered through the FDLP instead.

UG: undergraduate students; G/P: graduate/professional students

* Limits reported for dependent students; there are higher caps for independent students and undergraduates whose parents are unable to obtain Federal Parent PLUS loans.

** Federal Direct — Unsubsidized limits are for total of subsidized and unsubsidized Federal Direct loans.

*** Includes Federal Perkins loans accrued as an undergraduate.

Sources:

U.S. Department of Education, "Subsidized and Unsubsidized Loans," 2013, available at studentaid.ed.gov/types/loans/subsidized-unsubsidized (accessed November 6, 2013).

U.S. Department of Education, "PLUS Loans," 2013, available at studentaid.ed.gov/types/loans/plus (accessed November 6, 2013).

U.S. Department of Education, "Perkins Loans," 2013, available at studentaid.ed.gov/types/loans/perkins (accessed November 6, 2013).

College Board, "Trends in Student Aid 2013," 2013, available at <http://ow.ly/th98R> (accessed March 24, 2014).

APPENDIX 2: Data and Methods

As mentioned, this study uses data from the Federal Reserve Bank of New York Consumer Credit Panel/Equifax (CCP) data set. The CCP is an anonymous, nationally representative random 5 percent sample of the U.S. population with a Social Security number and a credit history. The CCP is an unbalanced panel, which means that the randomly selected panelists are added to the data set once they meet the entrance criteria and are dropped in the event that they die or no longer have sufficient information in their credit file. Entry into the CCP is limited to individuals that Equifax knows to have at least one of the following: a public record (e.g., a judgment) within the past seven years; a bankruptcy filing within the past 10 years; an open credit account; or a closed account that is still being reported. Note that a closed account can be reported for up to seven years if it did not close in good standing.^a

Based on these selection criteria, it is clear that the CCP does not include all adults: As noted previously, around 8 percent of households do not have a member with a credit report and therefore cannot be included in the data set.^b Furthermore, there is an apparent delay in reporting some loans for young borrowers (ages 18 to 23) in the CCP, and this analysis suggests that the proportion of young borrowers omitted from the CCP has increased since 2011. This means that, although the loans do eventually make it into the data set, a small proportion of loans are omitted each quarter. Because recent quarters appear to be

disproportionately affected, estimates of aggregate student loan debt since 2011 may be somewhat conservative relative to prior estimates.

The raw data have information on each individual loan a borrower holds. However, since many borrowers have more than one loan, for this analysis loan records are aggregated to the level of the borrower. This analysis excludes deceased borrowers and those who appear in the data set for no more than one year, unless they are present in the most recent quarter. Borrowers with a nonresidential address (e.g., a post office box) and those for which relative neighborhood income is unknown are excluded from income category estimates but included in total estimates.

In addition to the restrictions based on borrower characteristics, the analysis also excludes loans with Equal Credit Opportunity Act (ECOA) codes of C (comaker), S (shared, but unknown type), T (terminated), and U (undesignated), and loans that are being paid under a wage earner plan. For comaker loans, the panelist is responsible for the loan only in the event that the maker of the loan defaults, and so the estimates include the makers (ECOA code M) but not the comakers. The shared and undesignated codes indicate that the credit bureau can identify the loan as a student loan but does not have sufficient information to categorize it further, which means the loan may be of a type that should be excluded. Terminated loans may

still be existing accounts, but they are no longer associated with the panelist and should not be treated as such.

Loans with more than one borrower, referred to as cosigned loans in this report, appear on the credit report of each party to the loan. In order to avoid double counting those loans when calculating aggregate student loan debt, the value of all loans with an ECOA code of J (joint account) are halved, but for median calculations, the full value of the loan is retained. Loans with an ECOA code of M (maker) are joint loans, but the cosigning party, or comaker, becomes responsible for repayment only in the event that the primary borrower cannot make the required payments. In this study, maker loans are included, but comaker loans (ECOA code of C) are excluded. Because of this exclusion, the maker and comaker loans do not double count the same loan, so maker loans are not halved in aggregate balance calculations. Finally, the analysis excludes the few loans with a value in excess of \$1,000,000.

It is worth emphasizing that this analysis does not exclude borrowers based on age or enrollment status. Ideally, the analysis of student loan debt by neighborhood income category would exclude current students because the neighborhood income of a current student's credit bureau address may not be a good proxy for that student's socioeconomic status, financial resources, or future prospects for debt repayment. While it is,

^a More information on the CCP is available in Donghoon Lee and Wilbert van der Klaauw, "An Introduction to the FRBNY Consumer Credit Panel," Federal Reserve Bank of New York *Staff Report* 479, 2010.

^b Meta Brown, Andrew Haughwout, Donghoon Lee, and Wilbert van der Klaauw, "Do We Know What We Owe? A Comparison of Borrower- and Lender-Reported Consumer Debt," Federal Reserve Bank of New York *Staff Report* 523, 2013.

APPENDIX 2: Data and Methods *(continued)*

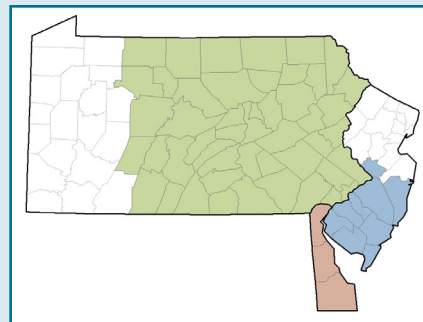
unfortunately, not possible to identify current students in this data set with any degree of certainty, I did develop alternative neighborhood income estimates that excluded

borrowers who did not appear to have begun repaying their loans — a proxy for current students and recent graduates. Other than slightly higher median balances for all of the

neighborhood income categories, the alternative estimates were not qualitatively different from those presented in this paper.

The Third Federal Reserve District

The Federal Reserve Bank of Philadelphia serves the Third District, which covers eastern and central Pennsylvania, southern New Jersey, and Delaware. The Bank's Community Development Studies and Education Department supports the Federal Reserve System's economic growth objectives by promoting community development in low- and moderate-income communities and fair and impartial access to credit in underserved markets.



Sources: ArcUSA, U.S. Census Bureau, ESRI



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