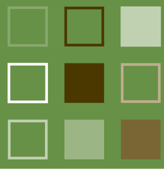

Economic Commentary

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Three Myths about Peer-to-Peer Loans

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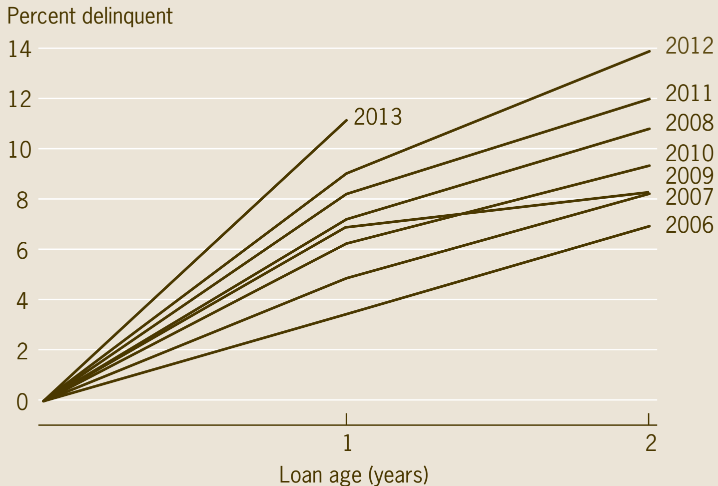
Peer-to-peer lending platforms, which provide a way for individuals who want to invest to lend to those who want to borrow, have experienced phenomenal growth in the past decade. Many praise the industry and maintain that P2P loans provide unique benefits to consumers. We examine a comprehensive set of credit bureau data to examine P2P borrowers, their credit behavior, and their credit scores. We demonstrate there is little evidence of these benefits. In fact, P2P loans resemble predatory loans in terms of the segment of the consumer market they serve and their impact on consumers' finances.

Peer-to-peer (P2P) lending came to the United States in 2006, when individual investors began lending directly to individual borrowers via online platforms. In the decade since, the industry has grown dramatically, and P2P lending is now widely regarded as the most progressive consumer finance innovation in financial markets today.

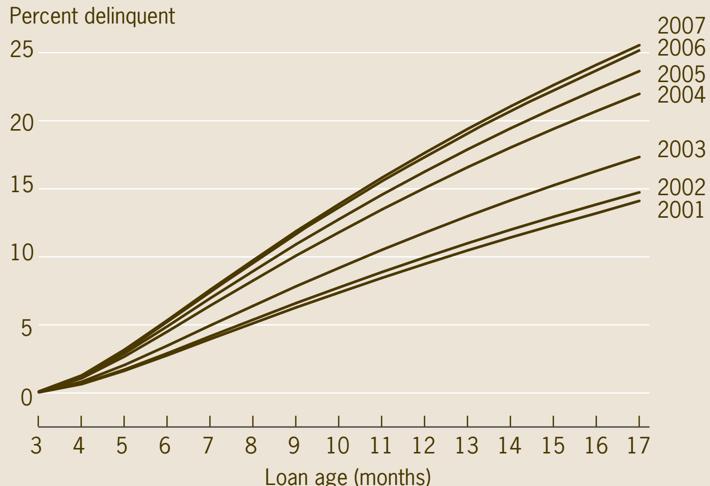
Online lenders and policymakers have suggested that the P2P market offers unique benefits to consumers. Three benefits are often repeated and seem to have become widely accepted. First, P2P loans allow consumers to refinance expensive credit card debt. Second, P2P loans can help customers build their credit history and improve their credit scores. Finally, P2P proponents claim that P2P lending extends access to credit to those who are underserved by traditional banks.

But signs of problems in the P2P market are appearing. Defaults on P2P loans have been increasing at an alarming rate, resembling pre-2007-crisis increases in subprime mortgage defaults, where loans of each vintage perform worse than those of prior origination years (figure 1). Such a signal calls for a close examination of P2P lending practices. We exploit a comprehensive set of credit bureau data to examine P2P borrowers, their credit behavior, and their credit scores. We find that, on average, borrowers do not use P2P loans to refinance preexisting loans, credit scores actually go down for years after P2P borrowing, and P2P loans do not go to the markets underserved by the traditional banking system.[1] Overall, P2P loans resemble predatory loans in terms of the segment of the consumer market they serve and their impact on consumers' finances. Given that P2P lenders are not regulated or supervised for antipredatory laws, lawmakers and regulators may need to revisit their position on online lending marketplaces.

Figure 1. Delinquency Rates by Loan Vintage



Source: Authors' calculations based on data from TransUnion.



Source: Demyanyk and Van Hemert (2011).

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From Peer to Peer to Institution to Peer

While P2P lending hasn't changed much from the borrowers' perspective since 2006, the composition and operational characteristics of investors have changed considerably. Initially, the P2P market was conceived of as individual investors lending to individual borrowers (hence the name, "peer-to-peer"). Yet even from the industry's earliest days, P2P borrowers attracted institutional investors, including hedge funds, banks, insurance companies, and asset managers. Institutions are now the single largest type of P2P investor, and the institutional demand is almost solely responsible for the dramatic, at times triple-digit, growth of P2P loan originations (figure 2).[2]

The shift toward institutional investors was welcomed by those concerned with the stability of the financial sector. In their view, the P2P marketplace could increase consumers' access to credit, a prerequisite to economic recovery, by filling a market niche that traditional banks were unable or unwilling to serve. The P2P marketplace's contribution to financial stability and economic growth came from the fact that P2P lenders use pools of private capital rather than federally insured bank deposits.

Regulations in the P2P industry are concentrated on investors. The Securities and Exchange Commission (SEC) is charged with ensuring that investors, specifically unaccredited retail investors, are able to understand and absorb the risks associated with P2P loans.

On the borrower side, there is no specific regulatory body dedicated to overseeing P2P marketplace lending practices. Arguably, many of the major consumer protection laws, such as the Truth-in-Lending Act or the Equal Credit Opportunity Act, still apply to both P2P lenders and investors. Enforcement is delegated to local attorney general offices and is triggered by repeat violations, leaving P2P borrowers potentially vulnerable to predatory lending practices.

Evaluating Three Claims about P2P Lending

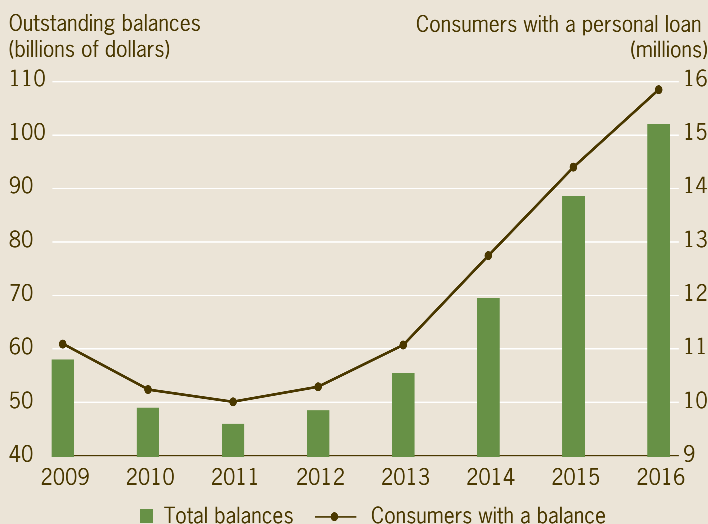
We investigate three questions: Are P2P loans used to refinance previous loans, do P2P loans help borrowers build a better credit history, and do P2P lenders serve individuals or markets underserved by traditional banks? To accurately assess these questions, we need to compare the behavior of financially identical people who differ only on one dimension, namely whether they took a P2P loan. That is, we need a sample of people with the same trends of incomes, debt, credit scores, and patterns of loan repayment before any of them took out a P2P loan. Some people in the sample have taken out a P2P loan and others have not.

Data with the sample of financially identical individuals are not readily available, so we construct the sample ourselves. We use data from the TransUnion credit bureau, in which we observe about 90,000 distinct individuals who received their first P2P loan between 2007 and 2012. We also observe about 10 million individuals who did not receive P2P loans and whom we label non-P2P individuals. Using a statistical technique called propensity score matching, we identify non-P2P individuals who are financially similar to P2P individuals during the two years prior to the date on which P2P individuals obtained their P2P loan. We match individuals based on the location of their residence, their credit score, their total debt, their income, their number of delinquencies in the past two years, and whether or not they have a mortgage.

Are P2P loans used to refinance previous loans?

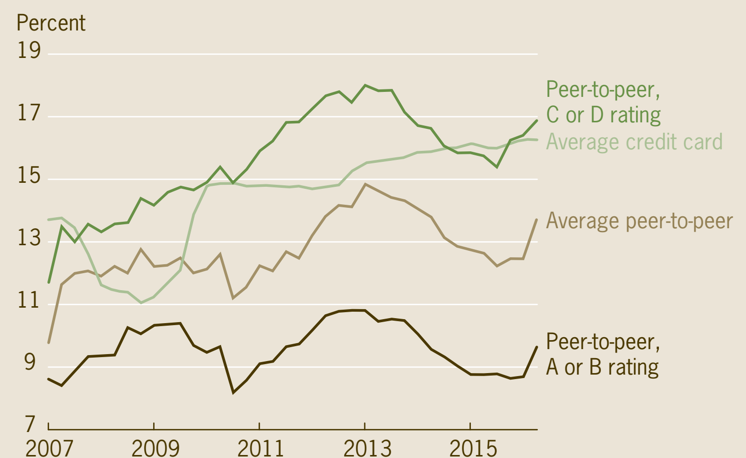
The most widely promoted argument in favor of P2P lending is that it lowers borrowing costs. Consumers can take on a fixed-term and potentially lower-cost P2P installment loan and use the proceeds to repay expensive lines of credit (e.g., credit card accounts), thus lowering their overall borrowing costs.

Figure 2. Growth of Peer-to-Peer Lending



Source: TransUnion Consumer Credit Database.

Figure 3. Interest Rates for P2P Loans and Credit Cards



Source: Bankrate.com and lendingclub.com.

This claim is typically supported by two facts. First, a number of P2P platforms report lower average borrowing rates than those offered by an average credit card company. Second, the vast majority of P2P borrowers across different P2P platforms say that repaying their existing debt is the main reason they want to take out a new P2P loan. For example, about 81 percent of borrowers on Lending Club, a P2P platform, cite refinancing and consolidation of existing debt as a core use of Lending Club loan proceeds.

Our investigation suggests that not every P2P borrower manages to obtain a better interest rate than a credit card rate. At Lending Club, for example, P2P borrowers are categorized by grades A to D, reflecting the probability of default. On average, around 40 percent of loans are awarded a grade of A or B. These higher-rated borrowers are considered the least risky and are charged 8–12 percent interest rates. Borrowers with grades C or D tend to be riskier, and their annual interest rate can go as high as 30 percent. These interest rates do not compare favorably with credit card interest rates (figure 3).

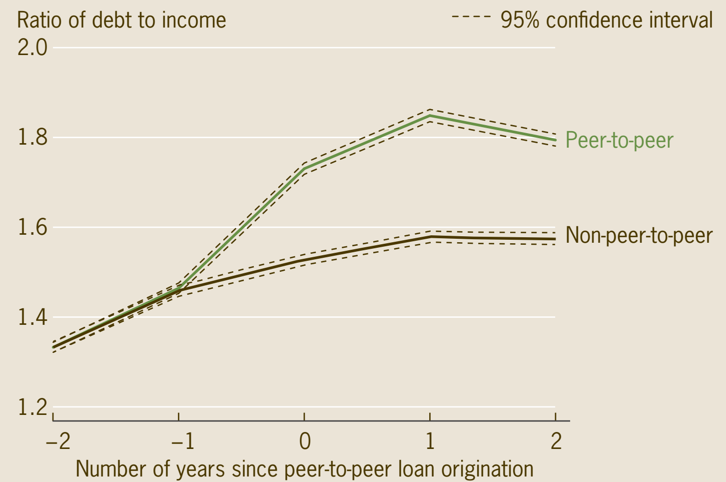
To verify whether borrowers actually use the proceeds of their P2P loans to repay pre-existing debt, we need our matched data sample. All borrowers pay off their loans either fully or partially sometime after they borrow, but equipped with matched data, we can statistically evaluate whether borrowers use P2P loans to refinance their existing debt accounts, i.e., pay off (higher-interest rate) credit cards and/or consolidate other loans, to a greater degree than people who did not take P2P loans.

If P2P loans are used for refinancing and loan consolidation, we should not see differences in total debt balances between P2P and matched non-P2P borrowers during and after the P2P origination year. If anything, total debt balances of P2P borrowers could decline after P2P origination if (cheaper) P2P term-loans are used to refinance (more expensive) revolving credit card debt. However, instead of this pattern, we observe total debt increasing after the P2P loan origination year (figure 4). Using a statistical technique that allows us to account for other potential differences between P2P and non-P2P borrowers' financial, economic, and demographic characteristics, we estimate that, on average, the non-P2P debt balances of P2P borrowers grow about 35 percent more than those of non-P2P borrowers within two years of the P2P origination year.

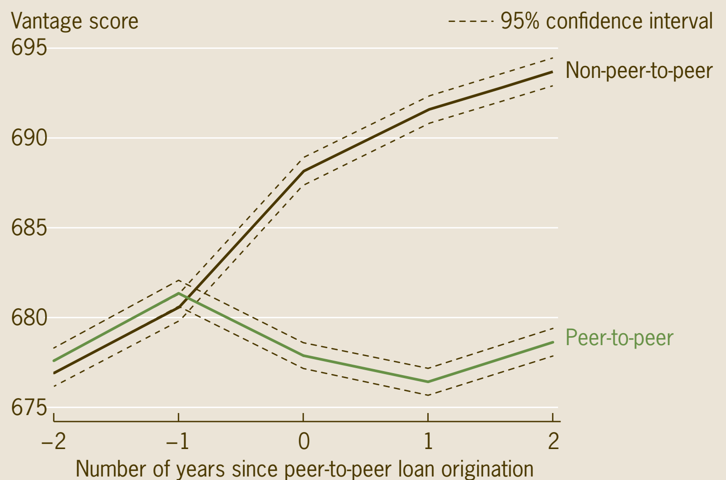
One can argue that P2P credit might be used to refinance the most expensive consumer debt—credit card accounts. Because credit card debt, on average, constitutes only about 6 percent of total consumer indebtedness, it might be difficult to capture the effects of refinancing by evaluating the dynamics of total debt or even total non-P2P debt. To this end, we isolate credit card accounts. Once again, however, the results show that credit card debt increases for P2P borrowers. P2P borrowers exhibit a 47 percent increase—rather than a decrease—in their credit card balances after obtaining P2P credit as compared to matched non-P2P borrowers.

Figure 4. Total Debt Outstanding, Credit Scores, and Delinquency before and after P2P Loan Origination

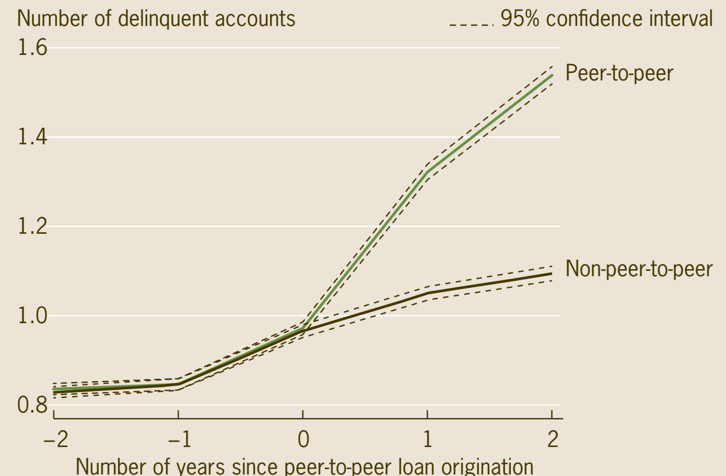
Panel A: Total Debt Outstanding



Panel B: Credit Score



Panel C: 90 Days Past-Due Delinquency



Note: Year 0 is the year of origination.
Source: Authors' calculations based on data from TransUnion.

Do P2P loans help in building a better credit history?
P2P lenders suggest that P2P loans help borrowers improve their credit histories and credit scores. Specifically, P2P proponents cite three ways in which P2P borrowing contributes to consumer credit score enhancement. First, applying for a P2P loan leads only to a "soft" credit score inquiry that does not affect one's credit score as opposed to a "hard" credit card or bank loan inquiry that, by definition, does affect credit scores. Second, P2P loans are reported to credit bureaus as installment debt rather than revolving debt (such as credit cards); this by itself could improve one's credit score because, in a typical credit bureau model, installment loans are considered less risky than revolving loans due to the smaller uncertainty associated with the expected stream of payments for installment loans. Finally, because P2P loans are allegedly issued to refinance existing high-cost credit card debt, they have the capacity to free up cash flow and thus lead to a reduction in total outstanding balances, resulting in improved financial health for consumers and subsequent credit score improvements.

To evaluate if P2P loans indeed enhance borrowers' credit histories, we compare the credit scores and delinquency rates of P2P and non-P2P borrowers after P2P loan origination. If P2P borrowing helps improve borrowers' credit history, we should observe P2P borrowers' exhibiting lower delinquency rates and higher credit scores after P2P loan origination as compared to non-P2P borrowers.

Our results suggest that the credit scores of P2P borrowers fall substantially and delinquency rates rise after taking on a P2P loan (figure 4) compared to non-P2P borrowers. We also discovered that numerous measures of derogatory events (number of past due accounts—both revolving and installment—and number of bankruptcies) significantly increased for borrowers who took out P2P loans. These results indicate that P2P loans have the capacity to worsen borrowers' prospects for future access to financing.

Do P2P lenders serve individuals or markets underserved by the traditional banking system?
So far, the evidence we have presented suggests that P2P credit is not systematically used by consumers to refinance or consolidate their existing credit accounts. Rather, P2P credit is accompanied by increases in consumer debt beyond P2P borrowing. While some might see this evidence as a glass half empty and blame the P2P industry for contributing to potentially unsustainable consumer debt, others might see it as a glass half full and argue that P2P lenders provide access to consumer finance to the underbanked US population.

To evaluate this possibility, we first use our matched sample and statistically evaluate whether P2P credit is flowing to underserved consumers. To do so, we compare access to traditional loans by P2P borrowers and matched non-P2P borrowers. We find nothing to suggest that P2P borrowers are different from non-P2P borrowers. Our evidence indicates that P2P borrowers are unlikely to be cut off from traditional banking services, and they access these services before and after obtaining P2P loans. We observe that P2P borrowers obtain other credit from traditional banks at rates similar to non-P2P individuals. For example, as shown in table 1, 33.63 percent of P2P borrowers increase their credit card balances at the same time as they obtain a P2P loan. This fraction is 10 percentage points larger than that for non-P2P consumers. Similarly, 10.5 percent of P2P borrowers also obtain a non-P2P installment loan from a traditional bank alongside their P2P loan. Among the pool of matched non-P2P consumers, 6.7 percent obtain a non-P2P installment loan. In addition, the new loan balances from traditional banks and P2P platforms are of similar sizes, about 2 percent of borrowers' annual incomes.

Using our data sample of matched P2P and non-P2P individuals could create an incomplete comparison, as we could be comparing P2P borrowers and non-P2P borrowers who are similarly banked or underbanked. To evaluate if this is indeed the case, we abandon the propensity-score-matched-comparison approach and compare the characteristics of P2P and non-P2P borrowers using the full sample of individuals. If P2P credit is flowing to traditionally underserved areas and consumers, we should observe that individuals from these underserved groups—including racial minorities and those with lower incomes, lower credit scores, lower debt-to-income ratios, and limited access to traditional credit intermediaries—would be more likely to obtain a P2P loan.

It is somewhat tricky to do this full-sample comparison properly in the statistical sense because P2P consumers constitute only a small fraction of our data sample (90,000 P2P consumers versus 10 million non-P2P consumers). To this end, we first evaluate the characteristics of P2P markets (identified by zip code) that attract P2P lending, and then we zoom in on those P2P markets and evaluate the characteristics of individuals who got P2P loans in them.

Table 1. P2P and Non-P2P Borrowers' Access to Credit

Measure	P2P borrowers (percent)	Non-P2P individuals (percent)
Balance of new $P2P_t$/$income_{t-1}$	2.42	0
Share with increased credit card $balances_t$	33.63	22.99
Share with new credit $cards_t$	30.71	20.76
Balance of new credit $card_t$/$income_{t-1}$	1.65	1.08
Share with increased installment $balances_t$	10.95	7.42
Share with new installment $accounts_t$	10.45	6.73
Balance of new installment $loans_t$/$income_{t-1}$	2.88	2.04
Number of individuals in sample	81,637	408,123

Source: Authors' calculations based on data from TransUnion (2007–2014).

We find that the residents of P2P zip codes indeed have, on average, lower incomes and lower credit scores. P2P zip codes have less-educated and more racially diverse populations. Potentially, these characteristics could indicate that these areas are indeed underserved by traditional banks. However, the results also show that P2P credit is flowing into zip codes in which borrowers tend to have higher, not lower, debt-to-income ratios, and there are more bank branches and fewer individuals without credit cards in these areas.[3] These facts indicate that the residents of P2P zip codes do have access to the traditional banking system and have previously obtained credit; thus, they are not likely to be unbanked.

When we zoom in on the P2P zip codes and compare the P2P and non-P2P borrowers who live within them, we once again observe that P2P borrowers are characterized by lower income levels, lower credit scores, and a higher number of delinquencies. These borrowers are more likely to be African American and not have a college degree. At the same time, P2P borrowers' levels of debt-to-income ratios tend to be similar to non-P2P borrowers'. This evidence once again indicates that P2P borrowers are unlikely to be underbanked but are likely to be overleveraged even prior to obtaining their P2P loans.

Conclusions

Based on our findings, one can argue that P2P loans resemble predatory loans in terms of the segment of the consumer market they serve and their effect on individual borrowers' financial stability. The 2007 financial crisis illustrated the importance of consumer finance and the stability of consumer balance sheets. The crisis inspired a wide set of research that explored the contagion mechanisms across financial institutions, across individual consumer credit accounts, and across consumers in local markets. The bulk of this academic research calls for stable financial markets and long-term sustainable credit markets.

While P2P lenders do not yet claim a significant share of the retail financial market, the double- and triple-digit growth rates of P2P origination volumes and the rapidly expanding P2P customer base indicate that online lenders have the capacity to represent a formidable market force in the near future. The evidence we document, combined with the fast growth of the P2P market, suggests that the P2P industry has the potential to destabilize consumer balance sheets. Consumers in the at-risk category—those with lower incomes, less education, and higher existing debt—may be the most vulnerable. The overall performance of P2P loans strikingly resembles that of the subprime mortgage market before the 2007 subprime mortgage crisis (figure 1).

Laws and regulations designed to protect this at-risk segment of the population have existed since the creation of the Equal Credit Opportunity Act of 1974; the protections have been reinforced with a series of antipredatory laws and the Dodd-Frank Act. Interestingly, the Equal Credit Opportunity Act defines creditors as lenders who make decisions and set terms, such as interest rates. Such a definition offers an opportunity for regulatory agencies to apply fair-lending rules and antipredatory lending laws to online lenders. Yet currently there are no regulators that oversee the online lending marketplace and its players. It might be time to look more closely at P2P lending practices and evaluate their implications for consumer finance.

Footnotes

1. This *Economic Commentary* is based on our working paper, Demyanyk, Loutskina, and Kolliner (2017). For more details and an expanded analysis, see the working paper.

2. See, for example, https://www.risk.net/risk-management/2372612/hedge-funds-securitisation-and-leverage-change-p2p-game, and https://www.crowdfundinsider.com/2014/10/51371-peer-peer-lending-turned-hedge-fund-consumer-lending/.

3. We estimate the share of underbanked consumers as the share of individuals without a credit card in a zip code using data from another credit bureau, Equifax. The Equifax data are available to us from the Federal Reserve Bank of New York's Consumer Credit Panel/Equifax. To measure local access to traditional banking services, we count the number of bank branches in a zip code from the Summary of Deposits data, reported by the FDIC.

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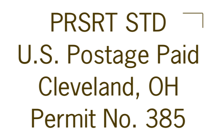
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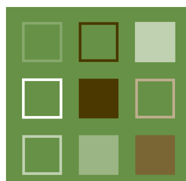

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