Data Point: The Secret Price of Student Debt

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Introduction

Student loans are now the second largest form of consumer credit in the United States, with 45 million borrowers owing more than $1.6 trillion.[1] The average student loan borrower now owes more than $33,000—an increase of 60 percent from a decade ago.[2] These trends have created a situation that has never existed before in the American economy as borrowers attempt to establish their financial footing while grappling with unprecedented student debt burdens.

It has been widely documented that the impact of student debt ripples across borrowers' lives. For example, student loan borrowers are less able to save for retirement, build wealth, start a family, create a business, or even maintain their physical and mental health.[3]

However, the research on how student debt impacts borrowers' experiences with other financial products is still limited.[4] For example, there is a wide gap in researchers' knowledge of how student loan borrowers fare when accessing and repaying common consumer financial products like mortgages, auto loans, and credit cards. This represents an important blind spot in understanding the consequences of student debt as the successful utilization of different forms of consumer credit has long been essential for American families' financial success.[5]

This *Data Point* seeks to build a better understanding of the effects of student debt on borrowers' financial lives. To date, research on student debt stress has generally focused on borrowers' ability to make payments and the consequences when they cannot.[6] However, our findings show that the impact of student debt is much bigger—even borrowers who can afford their monthly student loan payment are paying an additional secret price on other credit products.

Further, if the spillover effects of student loans in other credit markets were important during periods of economic stability, they have become absolutely critical to understand in the context of the recent economic downturn caused by the coronavirus pandemic. Student loan borrowers were already in distress before this public health crisis arrived.[7] And now, the current crisis is expected to exacerbate levels of student debt across the country.[8] Yet, existing research has still not sufficiently quantified the impact that student loans will have on household balance sheets. Student debt will shape borrowers' experiences and broader family finances to the tune of tens of thousands of dollars.

As lawmakers consider steps to boost the flagging economy amid the coronavirus pandemic, this *Data Point* offers new evidence of the outsized economic drag that student debt imposes not only on individual borrowers' financial well-being but also on those communities that are forced to bear the brunt of the student debt crisis.

Methodology Overview

Using information from the national consumer reporting agency Experian, this *Data Point* models the additional costs that a student loan borrower with a moderate or high student debt burden would pay for a mortgage, an auto loan, a credit card balance, and various combinations of these common credit products in comparison to a borrower with a baseline student debt burden.[9] These markets represent the three largest consumer financial markets outside of student lending.[10] All figures presented are rounded.

Measuring Student Debt Stress

Experian provided data on the average interest rates charged to borrowers for auto loans, mortgages, and credit cards. The data are segmented by different bands of student loan debt-to-income ratios, or DTI. For this report, student loan DTI is defined as the ratio of a borrower's monthly student loan payments to the borrower's monthly gross income. For instance, if a borrower pays $1,000 a month in student loan payments and the borrower's gross monthly income is $4,000, then the student loan DTI is 25 percent.

The demographic details of each DTI band were not provided, but existing research has long established that women, students of color, and students from low-to-moderate income socioeconomic backgrounds generally need to take on more debt to access the same education.[11] These borrowers also tend to have lower incomes throughout their professional lives.[12]

High levels of DTI are also visible among public service professionals such as teachers and social workers.[13] Because these professions generally require a graduate degree, public servants often take on large student debt loads to pursue their chosen field, but their incomes remain relatively low long after graduation.[14] Consequently, while specifics are not available, it is likely that the higher bands of DTI defined here are disproportionately made up of female borrowers, borrowers of color, borrowers from low-to-moderate income households, and public service workers.

FIGURE 1: MEASURING STUDENT DEBT STRESS

Monthly Student Debt Payment to Income (DTI) Bands		
Baseline Level of Student Debt Stress	=	0% to 5% DTI
Moderate Level of Student Debt Stress	=	5% to 10% DTI
High Level of Student Debt Stress	=	10% + DTI

Throughout this *Data Point*, the authors refer to an increase in student loan DTI as an increase in "student debt stress." A borrower with a baseline level of student debt stress has a student loan DTI below five percent. A borrower with a student loan DTI of 5 to 10 percent is characterized as experiencing a moderate level of student debt stress. A borrower with a student loan DTI of ten percent or greater is characterized as experiencing a high level of student debt stress.

Quantifying the Cost of Student Debt Stress

To conduct the analysis included in this *Data Point*, the authors developed a standard projection of loan paydown by combining the provided data with publicly available information about typical loan balances and repayment terms. In turn, the authors used this projection to compare the price paid by a model borrower at a given level of student debt stress for a particular credit product.

The *Data Point* examines the impact of varying levels of student debt stress on three model borrowers:

- A *typical borrower* with an average level of auto, mortgage, and credit card debt according to publicly available data;[15]

- A *lower-debt borrower* with no credit card debt and half as much auto and mortgage debt as the typical borrower;[16] and

- A *strained borrower* who was once a typical borrower but was then faced with a financial shock (such as those stemming from the coronavirus pandemic) and was forced to rely on credit card debt to make ends meet.[17]

For each model borrower, the authors derive the lifetime cost of credit paid by someone with a baseline level of student debt stress and determine the additional financial burden placed on similarly situated borrowers with increasing levels of student debt stress.

Overview of Findings

As borrowers' student debt stress rises, the interest charges they pay on other common forms of consumer credit increase substantially. For instance, the authors' projection shows that a borrower with a high level of student debt stress would pay an additional $3,000 on the average auto loan, over $25,000 more on a standard mortgage, and over $400 more paying down a credit card balance than a student loan borrower with a baseline level of student debt stress.

When these credit products are "bundled," the secret price of student debt becomes more evident. When borrowers with varying levels of student debt stress are modeled as taking on all three of these common forms of consumer debt at the same time, they may pay up to $29,000 more across products.

The Secret Price of Student Debt

The following analysis considers each model borrower as the borrower repays this bundle of financial products, examining the total cost based on the borrower's level of student debt stress. Specifically, this analysis looks at the difference in cost to a borrower with moderate and high levels of student debt stress when compared to a borrower with a baseline level of student debt stress.

- **Typical borrower**: A typical borrower with a high level of student debt stress could pay as much as $29,000 more in total across the term of an auto loan, the life of a mortgage, and the paydown sequence of a credit card balance than the same typical borrower with a baseline level of student debt stress.

- **Lower-debt borrower**: A similar premium on this bundle of credit products exists even for borrowers with low levels of debt beyond student loans. As detailed below, a borrower with relatively less auto, mortgage, and credit card debt but a high level of student debt stress could pay $13,000 more across this bundle of adjacent credit products than the same lower-debt borrower with a baseline level of student debt stress.

- **Strained borrower**: The premium that student debt imposes on additional forms of credit is most pronounced for financially strained borrowers. A strained borrower who also has a high level of student debt stress could pay an additional $29,500 across the bundle of financial products considered here when compared to an identical borrower with a baseline level of student debt stress.

Given the anticipated economic effects of the coronavirus pandemic, including unprecedented levels of unemployment, the *strained borrower* scenario is likely to become increasingly common.[18] The secret price student loan borrowers pay on other credit products can worsen the severe financial hardship faced by the most vulnerable borrowers precisely when they are least able to shoulder it. Furthermore, research suggests that this strain can have broader impacts across entire communities, especially those communities where people are disproportionately likely to struggle with the fallout from student debt.[19]

Together, these findings illustrate the far-reaching economic effects of student debt on American families. This *Data Point* underscores the need for policymakers to take immediate action to address the burden of student debt for all borrowers, particularly in the context of federal efforts to respond to the coronavirus pandemic and its effect on the economy. Further, this *Data Point* illustrates the need for more research on the intersection of student debt and other consumer financial products, especially the secret price student debt imposes across borrowers' financial lives. Finally, these findings also suggest that vulnerable borrowers who can least afford additional costs are hit hardest by the significant premium student debt imposes on the users of other common credit products.

The Secret Price of Credit Products

The following analysis demonstrates the additional costs student loan borrowers pay across various credit products.

Auto Loans

In this example, the paydown of an auto loan is simulated using publicly available data on the average auto loan size and term—a principal balance of $32,797 and a nearly 70-month term.[20]

The following simulation assumes a loan with $32,797 in starting principal, a 70-month repayment term, and the interest rates attributable to each level of student debt stress. The data indicate that a borrower with a high level of student debt stress would pay $3,289 more than a borrower with a baseline level of debt stress for an auto loan for the same principal amount and repayment term. Similarly, a borrower with a moderate level of student debt stress would pay $1,301 more than a borrower with a baseline level of student debt stress for the same loan amount and term. The difference in costs is attributable to the *secret price*—the interest rate premium imposed on student loan borrowers.

FIGURE 2: THE SECRET PRICE STUDENT LOAN BORROWERS PAY FOR AN AUTO LOAN

Auto Loans		Loan value: $32,797 Loan term: 70 months
Baseline level of student debt stress	**Moderate level of student debt stress**	**High level of student debt stress**
6.62% Average interest rate	**7.80%** Average interest rate	**9.56%** Average interest rate
$566 Estimated monthly cost	**$585** Estimated monthly cost	**$613** Estimated monthly cost
$39,625 Total cost	**$40,927** Total cost	**$42,915** Total cost
The secret price tag of student debt: +$3,289		

Mortgages

In this example, the paydown of a mortgage is modeled on the average mortgage loan size and term for a new home purchase—a principal balance of $354,500 paid over a 30-year term.[21]

The following simulation assumes a loan with $354,500 in starting principal, a 30-year repayment term, and the interest rates attributable to each level of student debt stress. The data indicate that a borrower with a high level of student debt stress would pay $25,348 more than a borrower with a baseline level of student debt stress for a mortgage with the same principal amount and repayment term. Similarly, a borrower with a moderate level student debt stress would pay $9,929 more than a borrower with a baseline level of stress for the same loan amount and term.

The data show that even a small yearly interest rate premium for borrowers due to additional student debt stress can add a large cost over the life of a mortgage.

FIGURE 3: THE SECRET PRICE STUDENT LOAN BORROWERS PAY FOR A MORTGAGE

Mortgages		Loan value: $354,500 Loan term: 360 months
Baseline level of student debt stress	**Moderate level of student debt stress**	**High level of student debt stress**
4.56% Average interest rate	**4.69%** Average interest rate	**4.89%** Average interest rate
$1,809 Estimated monthly cost	**$1,836** Estimated monthly cost	**$1,879** Estimated monthly cost
$651,189 Total cost	**$661,119** Total cost	**$676,538** Total cost
The secret price tag of student debt: +$25,348		

Credit Cards

In this example, the paydown of a credit card balance is modeled on the average outstanding credit card debt of American consumers—$6,194.[22] This simulation also assumes a five-year paydown.[23]

The simulation shows that it would cost a borrower with a high level of student debt stress $428 more to pay down a credit card balance over a five-year term than it would cost a borrower a baseline level of student debt stress. Over the same five-year term, a borrower with a moderate level of student debt stress would pay $241 more than a borrower with a baseline level of student debt stress. Note that figure outcomes are rounded.

FIGURE 4: THE SECRET PRICE STUDENT LOAN BORROWERS PAY ON CREDIT CARDS

Credit Cards		Loan value: $6,194 Loan term: 60 months
Baseline level of student debt stress	**Moderate level of student debt stress**	**High level of student debt stress**
14.13% Average interest rate	**15.37%** Average interest rate	**16.32%** Average interest rate
$145 Estimated monthly cost	**$149** Estimated monthly cost	**$152** Estimated monthly cost
$8,672 Total cost	**$8,914** Total cost	**$9,101** Total cost
The secret price tag of student debt: +$428		

The Compound Effect of Combined Debts

The following analysis demonstrates the additional costs borrowers with varying amounts of student debt stress would pay on bundles of consumer credit products.

Typical Borrower

The following example shows that a *typical borrower* with a high level of student debt stress would pay $29,066 more than a borrower with a baseline level of student debt stress on a bundle of credit products including an auto loan, a mortgage, and a credit card—each product at the same value and terms representing an average consumer as outlined in previous examples. Similarly, as depicted below, a borrower with a moderate level of student debt stress would pay $11,472 more than a borrower with a baseline level of student debt stress, all for the same set of common credit products. The starting balance and term of each of the loans included in this standard bundle is the same as the starting balance and term used for each of the products in the examples above and can therefore be considered to represent the situation of a typical borrower.

FIGURE 5: THE SECRET PRICE A TYPICAL STUDENT LOAN BORROWER PAYS FOR CREDIT

Typical Borrower Bundle	Auto loan: $32,797 balance, 70 month term Mortgage: $354,000 balance, 360 month term Credit card: $6,194 balance, 60 month term	
Baseline level of student debt stress	**Moderate level of student debt stress**	**High level of student debt stress**
$39,625 Total auto loan cost	**$40,927** Total auto loan cost	**$42,915** Total auto loan cost
$651,189 Total mortgage cost	**$661,119** Total mortgage cost	**$676,538** Total mortgage cost
$8,672 Total credit card cost	**$8,914** Total credit card cost	**$9,101** Total credit card cost
$699,487 Total combined cost	**$710,959** Total combined cost	**$728,553** Total combined cost
The secret price tag of student debt: +$29,066		

Lower-Debt Borrower

Student loan borrowers pay a secret price on other forms of credit even when they have less non-student loan debt than the average consumer. This cost disparity is evident in the example of a model *lower-debt borrower*. This borrower carries no credit card balance, takes on a 30-year mortgage that is half the amount of the average mortgage described above ($177,250 instead of $354,500), and gets an auto loan for half the average amount and loan term described above ($16,399 for 35 months instead of $32,797 for 70 months). The mortgage term is kept at 30 years simply to reflect the dominance of the 30-year fixed rate mortgage in the American housing market.

Even while taking on relatively less debt beyond student loans than the *typical borrower*, a *lower-debt borrower* with a high level of student debt stress would pay $13,452 more on a mortgage and auto loan than a lower-debt borrower with a baseline level of student debt stress. Similarly, a lower-debt borrower with a moderate level of student debt stress would pay $5,275 more on these credit products than a lower-debt borrower with a baseline level of student debt stress.

These findings show that student loan borrowers with higher levels of student debt stress pay more for other common forms of credit even when taking on modest levels of non-student debt.

FIGURE 6: THE SECRET PRICE A LOWER-DEBT BORROWER PAYS FOR CREDIT

Lower-Debt Borrower Bundle	Auto loan: $16,399 balance, 35 month term Mortgage: $177,250 balance, 360 month term Credit card: N/A	
Baseline level of student debt stress	Moderate level of student debt stress	High level of student debt stress
$18,078 Total auto loan cost	$18,388 Total auto loan cost	$18,856 Total auto loan cost
$325,595 Total mortgage cost	$330,559 Total mortgage cost	$338,269 Total mortgage cost
$0 Total credit card cost	$0 Total credit card cost	$0 Total credit card cost
$343,672 Total combined cost	$348,947 Total combined cost	$357,125 Total combined cost
The secret price tag of student debt: +$13,452		

Strained Borrower

The secret price that student loan borrowers pay on other forms of credit is likely to be most damaging for borrowers attempting to grapple with a financial shock. This report contemplates a *strained borrower* who once had the same profile as the *typical borrower* but then needed to take on additional credit card debt to absorb an unexpected economic hardship.[24] In light of the coronavirus pandemic, this example is especially relevant.

In keeping with common reactions to financial shocks, this *strained borrower* is modeled as having a large credit card balance.[25] In particular, the borrower is assumed to start with $12,388 in credit card debt (twice the level of the *typical borrower*) and to pay it off over five years.[26]

All other inputs are kept the same as in the *typical borrower* example above. The *strained borrower's* situation is modeled this way to highlight the impact that an unexpected financial shock can have on student loan borrowers who might otherwise seem to have an average financial footing.

FIGURE 7: THE SECRET PRICE A STRAINED BORROWER PAYS FOR CREDIT

Strained Borrower Bundle		Auto loan: $32,797 balance, 70 month term Mortgage: $354,500 balance, 360 month term Credit card: $12,388 balance, 60 month term
Baseline level of student debt stress	**Moderate level of student debt stress**	**High level of student debt stress**
$39,625 Total auto loan cost	**$40,927** Total auto loan cost	**$42,915** Total auto loan cost
$651,189 Total mortgage cost	**$661,119** Total mortgage cost	**$676,538** Total mortgage cost
$17,345 Total credit card cost	**$17,827** Total credit card cost	**$18,202** Total credit card cost
$708,160 Total combined cost	**$719,873** Total combined cost	**$737,654** Total combined cost
The secret price tag of student debt: +$29,495		

In Figure 7, a *strained borrower* with high levels of student debt stress would pay $29,495 more across a common bundle of financial products than an identically situated borrower with a baseline level of student debt stress. Similarly, a borrower with a moderate level of student debt stress would pay $11,713 more than a borrower with a baseline level of debt stress in the same scenario that this example describes.

These findings imply not only that vulnerable borrowers are likely to face additional costs across their financial lives but also that vulnerable borrowers who were already burdened by student debt are likely to face even greater consequences from unexpected financial disruptions. As described above, borrowers with a high level of student debt stress are also disproportionately likely to be borrowers of color, women, and borrowers from low-to-moderate income socioeconomic backgrounds.

Conclusion

Student debt has reached crisis levels in the U.S. However, little is known about the compound effect that student debt has on borrowers' experiences across other common markets for consumer credit. This *Data Point* is a first step in filling that gap as well as posing additional questions on the impact of student debt's secret price.

The increased interest rates that student loan borrowers pay on auto loans, credit cards, and mortgages, combined with publicly available data on the average size and term of these loans, paint a stark picture. Borrowers with higher levels of student debt stress, something that is already a burden, go on to face thousands of dollars of additional costs across various other forms of consumer credit.

A *typical borrower* with a high level of student debt stress would pay almost $30,000 more on a bundle of these common financial products than a similar borrower with a baseline level of student debt stress. Similarly, a borrower with a moderate level of student debt stress would pay over $11,000 more for these products than a *typical borrower* with a baseline level of debt stress. In both cases, this is due to the interest rate premium student loan borrowers are charged on other financial products because of their existing student loan debt.

These findings suggest that millions of student loan borrowers are charged a secret price for other forms of credit. Concerningly, the most vulnerable borrowers are more likely to be hit with the highest price and most costly repercussions across their financial lives. Further, these findings demonstrate that the fallout from student debt is broader than its impacts on borrowers in delinquency or default on their student loans. Instead, even as borrowers make progress in repayment, those who need to take on large amounts of student loan debt relative to their future income pay a hefty premium on other forms of credit for the rest of their financial lives. This observation points to a significant underestimation of the true cost that student debt has on consumers, the economy, and society, as well as in perpetuating systemic inequality. Researchers and policymakers should continue to pursue solutions to address the considerable costs imposed by student debt.

Finally, these results underscore the challenges that millions of Americans with student debt will face as a result of the fallout from the coronavirus pandemic. Borrowers with higher levels of student debt stress

pay a considerable premium when they are forced to absorb additional debt to grapple with an unexpected financial shock, likely causing substantial financial ramifications for years to come. This finding adds to the growing literature indicating that targeted debt relief may have beneficial compound effects across consumers' financial lives and communities, especially in the context of crisis response.[27]

In conclusion, policymakers should take action to address the ripple effect of student debt across borrowers' finances. This was true before the coronavirus pandemic arrived and has become only more pressing today.

Acknowledgments

This *Data Point* was made possible by Experian, which generously provided data on estimated interest rates observed for various credit products among borrowers in different bands of student loan DTI ratios.

Endnotes

1   *See Why Borrowers Matter, State by State*, Student Borrower Protection Ctr.: Domino (Mar. 23, 2020), https://protectborrowers.org/why-borrowers-matter-state-by-state/.

2   *See Consumer Credit – G.19*, Board of Governors of the Fed. Res. Sys., https://www.federalreserve.gov/releases/g19/HIST/cc_hist_memo_levels.html (last updated Apr. 7, 2020); *2018 Student Loan Update*, Fed. Res. Bank of N.Y. (2018), https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/xls/sl_update_2018.xlsx. Note that this change is calculated per the end of the availability of the New York Fed's data, which ends at Q4 2017.

3   *See* Consumer Fin. Protection Bureau (CFPB), *Snapshot of older consumers and student loan debt* 14 (2017), http://files.consumerfinance.gov/f/documents/201701_cfpb_OA-Student-Loan-Snapshot.pdf (finding that borrowers nearing retirement "had a lower median amount in their employer-based retirement account or an Individual Retirement Account (IRA) than consumers without student loan debt"); Joe Valenti, *A Look at College Costs across Generations*, AARP (May 2019), https://www.aarp.org/content/dam/aarp/ppi/2019/05/a-look-at-college-costsacross-generations.doi.10.26419-2Fppi.00063.001.pdf (finding that student loan borrowers may need to work two to seven years longer than non-borrowers to achieve the same retirement savings); Joseph Egoian, *73 Will Be the Retirement Norm for Millennials*, NerdWallet (Oct. 23, 2013), https://www.nerdwallet.com/blog/investing/73- retirement-norm-millennials/ (finding that a 4 year college graduate with median student loan debt of $23,000 has about $115,000 less in retirement savings than a 4 year college graduate with no student loans by the time they reach age 73); Mikhail Zinshteyn, *Saddled With Debt, Recent Grads Can't Save*, AARP (May 29, 2019), https://www.aarp.org/money/credit-loans-debt/info-2019/recent-grads-delay-saving.html; Robert Bozick and Angela Estacion, *Do student loans delay marriage? Debt repayment and family formation in young adulthood*, 30 Demographic Res. 69, 1865-1891 (June 13, 2014), https://www.demographicresearch.org/volumes/vol30/69/30-69.pdf; Dora Gicheva, *Student loans or marriage? A look at the highly educated*, 53 Econ. of Educ. Rev. 207-216 (2016); Brent W. Ambrose et al., *The Impact of Student Loan Debt on Small Business Formation* (Mar. 31, 2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2417676; Brandon Busteed, *Student Loan Debt: Major Barrier to Entrepreneurship*, Gallup (Oct. 14, 2015), http://www.gallup.com/businessjournal/186179 /student-loandebt-major-barrier-entrepreneurship.aspx; Patricia E. McLean-Meyinsse, *Are Concerns About Repaying Student Loan Debt Related to Health Status Rankings?*, 50 J. Food Distribution Res. 138 (2019), https://www.fdrsinc.org/wp-content/uploads/2019/03/JFDR_50.1_15_McLean-Meyinsse.pdf; Katrina M. Walsemann et al., *Sick of Our Loans: Student Borrowing and the Mental Health of Young Adults in the United States*, 124 Soc. Sci. & Med. 85 (2015), https://www.sciencedirect.com/science/article/abs/pii/S0277953614007503.

4   Critical research to date has explored how student debt affects wealth building and asset accumulation. *See, e.g.*, Robert Hiltonsmith, *At What Cost? How Student Debt Reduces Lifetime Wealth* (2013), https://www.demos.org/sites/default/files/imce/AtWhatCostFinal.pdf. However, the research on the effect of student debt across other credit product pricing remains underexplored.

5   *See, e.g.*, Richard Cordray, *CFPB Director Richard Cordray's Prepared Lecture on Economic Rights as Civil Rights at Michigan State University*, CFPB (Oct. 10, 2014), https://www.consumerfinance.gov/about-us/newsroom/cfpb-director-richard-cordrays-prepared-lecture-on-economic-rights-as-civil-rights-at-michigan-state-university/.

6   *See, e.g.*, Soo Hyun Choo, 43 *Understanding Student Loan Decisions: A Literature Review*, Fam.& Consumer Sci. Res. J 229 (Mar. 2015), https://www.researchgate.net/publication/272240931_Understanding_Student_Loan_Decisions_A_Literature_Review.

7   The Federal Reserve Bank of New York reported at the end of Q1 2020 that 10.8 percent of aggregate student loan debt was "90+ days delinquent or in default. Res. & Stat. Group, Fed. Res. Bank of N.Y., *Quarterly Report on Household Debt and Credit 2020:Q1 (2020)*, https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hhdc_2020q1.pdf (also finding that "delinquency rates for student loans are likely to understate effective delinquency rates because about half of these loans are currently in deferment, in grace periods or in forbearance and therefore temporarily not in the repayment cycle. This implies that among loans in the repayment cycle delinquency rates are roughly twice as high."); *see also* Ben Kaufman, *New Data Show Student Loan Defaults Spiked in 2019—A Warning to Industry and DeVos Amid Economic Fallout*, Student Borrower Protection Ctr.: Domino (Mar. 13, 2020), https://protectborrowers.org/every-26-seconds/ (finding that a new student loan borrower defaulted every 26 seconds in 2019).

8   *See* Seth Frotman, *Broken Promises: How Debt-financed Higher Education Rewrote America's Social Contract and Fueled a Quiet Crisis*, 2018 Utah L. Rev. 1 (2018), https://dc.law.utah.edu/cgi/viewcontent.cgi?article=1172&context=ulr; Kery Murakami, *The Next Financial Blow*, Inside Higher Ed (Apr. 13, 2020), https://www.insidehighered.com/news/2020/04/13/public-colleges-face-looming-financial-blow-state-budget-cuts; Michael Mitchell et al., *State Higher Education Funding Cuts Have Pushed Costs to Students, Worsened Inequality*, Ctr. on Budget & Pol'y Priorities (Oct. 24, 2019), https://www.cbpp.org/research/state-budget-and-tax/state-higher-education-funding-cuts-have-pushed-costs-to-students.

9   Interest rates on mortgages, credit cards, and auto loans for borrowers in various bands of student debt-to-income (DTI) were provided by Experian. Data on the starting balance and term of the average mortgage, credit card, and auto loan come from publicly available sources cited *infra* in the examples that pertain to each credit product. The bands of student DTI provided by Experian were then mapped to different levels of student debt stress as depicted in Figure 1.

These interest rates, starting loan balances, and loan terms were fed into a standard loan paydown model in Excel. For each product, the starting loan balance and term were held constant across each level of student debt stress, and the interest rates were varied according to the data provided by Experian. Given these parameters, the model produced the monthly and overall cost of each credit product for borrowers at each level of student debt stress. The cost of each product for borrowers with a high student debt stress band was then compared to the cost of the same product for borrowers with a baseline level of student debt stress band to find the secret price that student loan borrowers pay for that product. The same comparison was then made for each product between borrowers with a moderate level of student debt stress and borrowers with a baseline level of student debt stress.

For the "bundle" examples discussed, the overall cost of each product for a borrower of a given level of student debt stress was added together. The summed cost of that bundle was then compared across student debt stress bands to determine the secret price that student loan borrowers pay across a combination of consumer financial products.

10 *See* Res. & Stat. Group, Fed. Res. Bank of N.Y., *Quarterly Report on Household Debt and Credit 2020:Q1* (2020), https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hhdc_2020q1.pdf.

11 *See* Aissa Canchola et al., *The significant impact of student debt on communities of color*, CFPB (Sep. 15, 2016), https://www.consumerfinance.gov/about-us/blog/significant-impact-student-debt-communities-color/ (borrowers of color); Amer. Ass'n of Univ. Women, *Deeper in Debt: Women and Student Loans* (2017), https://files.eric.ed.gov/fulltext/ED580345.pdf; Robert Hiltonsmith, *At What Cost? How Student Debt Reduces Lifetime Wealth* Fig. 2 (2013), https://www.demos.org/sites/default/files/imce/AtWhatCostFinal.pdf (borrowers of color); CollegeBoard, *Trends in Student Aid 2019*, at 22 fig.15A (2019), https://research.collegeboard.org/pdf/trends-student-aid-2019-full-report.pdf (borrowers from low- to moderate-income socioeconomic backgrounds).

12 *See, e.g.*, *Beginning Postsecondary Students: 2012/2017*, Nat'l Ctr. for Educ. Stat.: PowerStats, https://nces.ed.gov/datalab/index.aspx?ps_x=cddcaphcb (last visited May 1, 2020).

13 *See, e.g.*, Ulrich Boser & Chelsea Straus, *Mid- and Late-Career Teachers Struggle with Paltry Incomes*, Ctr. for Amer. Progress (July 23, 2014, 6:00 AM), https://www.americanprogress.org/issues/education-k-12/reports/2014/07/23/94168/mid-and-late-career-teachers-struggle-with-paltry-incomes/; Nat'l Ass'n of Soc. Workers, *In the Red: Social Workers and Educational Debt* (2008), https://www.socialworkers.org/LinkClick.aspx?fileticket=cndL4_gur88%3D&portalid=0.

14 Ulrich Boser & Chelsea Straus, *Mid- and Late-Career Teachers Struggle with Paltry Incomes*, Ctr. for Amer. Progress (July 23, 2014, 6:00 AM), https://www.americanprogress.org/issues/education-k-12/reports/2014/07/23/94168/mid-and-late-career-teachers-struggle-with-paltry-incomes/; Nat'l Ass'n of Soc. Workers, *In the Red: Social Workers and Educational Debt* (2008), https://www.socialworkers.org/LinkClick.aspx?fileticket=cndL4_gur88%3D&portalid=0.

15 *See infra* notes 20 (average auto loan: $32,797), 21 (average mortgage loan $354,500), and 22 (average credit card balance: $6,194).

16 *See infra* notes 20 (auto loan: $16,399) and 21 (mortgage loan $177,250).

17 *See generally* Fed. Res. Board, *Report on the Economic Well-Being of U.S. Households in 2017* (May 2018), https://www.federalreserve.gov/publications/files/2017-report-economic-well-being-us-households-201805.pdf (see page 2).

18 *See* Lance Lambert, *Real unemployment rate soars past 24.9%—and the U.S. has now lost 33.5 million jobs*, Fortune (May 7, 2020), https://fortune.com/2020/05/07/unemployment-33-million-coronavirus/.

19 *See, e.g.*, Sophie Quinton and Nat. J., *The Disproportionate Burden of Student-Loan Debt on Minorities* (May 5, 2015), https://www.theatlantic.com/education/archive/2015/05/the-disproportionate-burden-of-student-loan-debt-on-minorities/392456/.

20 *See* Experian, State of the Automotive Finance Market Q4 2019 (2019), https://www.experian.com/content/dam/marketing/na/automotive/quarterly-webinars/credit-trends/2019-q4-state-of-the-automotive-finance-market.pdf.

21 *See Average U.S. Mortgage Size Hits Record-High $354,500—MBA*, Reuters (Mar. 13, 2019), https://www.reuters.com/article/us-usa-mortgages/average-u-s-mortgage-size-hits-record-high-354500-mba-idUSKBN1QU1VA.

22 The average used here refers to the average balance among borrowers with a balance, not among all consumers as a whole. *See* Matt Tatham, *2019 Consumer Credit Review*, Experian (Jan. 13, 2020), https://www.experian.com/blogs/ask-experian/consumer-credit-review/; CFPB, *Data Point: Credit Card Revolvers* (2019), https://files.consumerfinance.gov/f/documents/bcfp_data-point_credit-card-revolvers.pdf.

23 Research from the Federal Reserve Bank of Philadelphia indicates that many credit card users were still paying down balances for at least four years after the Great Recession arrived (see Figure 3: https://www.philadelphiafed.org/-/media/consumer-finance-institute/payment-cards-center/publications/discussion-papers/2016/dp16-01_what-happened-to-revolving-credit-card-balances-2009.pdf?la=en). Further, more recent research indicates that consumers have been approved for more credit through their credit cards than they have recently used, giving them an "ability to draw on already existing credit lines from credit cards" to serve as a "credit cushion that people can rely on" during the coronavirus pandemic. Andrew Haughwout et al., *U.S. Consumer Debt Payments and Credit Buffers on the Eve of COVID-19* (May 5, 2020), https://libertystreeteconomics.newyorkfed.org/2020/05/us-debt-payments-and-credit-buffers-on-the-eve-of-covid-19.html. The author therefore models the borrower here as taking five years to pay down their credit card balance. This assumption reflects both lessons from the last recession and observers' expectation that credit cards will play an important role in families' efforts to soften the economic blow of the current crisis.

24 *See supra* note 17.

25 *See, e.g.*, J. Michael Collins et al., *The Role of Credit Cards for Unemployed Households in the Great Recession*, FDIC Consumer Research Conference 2015, https://www.fdic.gov/news/conferences/consumersymposium/2015/Presentations/Edwards.pdf.

26 *See* Matt Tatham, *2019 Consumer Credit Review*, Experian (Jan. 13, 2020), https://www.experian.com/blogs/ask-experian/consumer-credit-review/; CFPB, *Data Point: Credit Card Revolvers* (2019), https://files.consumerfinance.gov/f/documents/bcfp_data-point_credit-card-revolvers.pdf.

27 *See, e.g.*, Tomasz Piskorski & Amit Seru, *Debt Relief and Slow Recovery: A Decade After Lehman* (Dec. 1, 2018) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3303411&mod=article_inline.