
# Economics of Guaranteed Student Loans

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# Summary

Since 1966, the federal government has provided guarantees and subsidies to approved private lenders or certain state government entities that make student loans. College graduates' enhanced human capital is generally not viewed as collateral. Lenders, without federal subsidies and guarantees, would charge interest rates more in line with other unsecured loans, such as credit card debt, that could push the financial costs of higher education beyond the reach of many students and their families. Although federal subsidies for student lenders have probably expanded access to higher education, some observers have contended that subsidy rates were higher than necessary to ensure students' access to educational loans.

The College Cost Reduction and Access Act (P.L. 110-84), enacted in September 2007, was motivated, in part, by the impression that lender subsidies within the Federal Family Education Loan (FFEL) program had been higher than necessary. The act cut interest rate subsidies to lenders and increased the proportion of default costs borne by lenders.

Starting in February 2008, some student lenders encountered difficulties in the secondary loan market—a market in which securities backed by bundles of student loans, often called SLABS (student loan asset-backed securities), are sold to investors. Turmoil in world capital markets in late 2007 and 2008 appears to have raised interest costs to some student lenders. Specifically, widespread failures of auction-rate securities markets beginning in mid-February 2008 have raised costs of funds for some student lenders.

In early 2008, some FFEL program lenders announced plans to make fewer student loans within certain market segments in response to a tightened credit market and recent legislation. In particular, some lenders have announced plans to reduce the number of loans to students attending certain institutions, such as two-year and proprietary schools. Some observers contend that student lenders have overstated their recent troubles. Nonetheless, loans remain available through the William D. Ford Federal Direct Lending Program (FDLP).

In response to growing concerns about the availability of student loans for the 2008-2009 academic year, Congress passed *Ensuring Continued Access to Student Loans Act of 2008* (H.R. 5715; P.L. 110-227), which was signed into law on May 7, 2008. The act raises loan limits for Stafford loans (which some claim would reduce demand for private student loans), provides new options for parent borrowers, expands the lender-of-last-resort program, and allows the Secretary of Education to purchase FFEL student loan assets from lenders. The Secretary has announced plans to purchase student loans originated for the 2008-2009 school year.

Some Members of Congress and participants in the student lending market have called for consideration of additional measures that might introduce liquidity into the market for securitized student loans using the Federal Financing Bank or other federal entities. This report will be updated as warranted.

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Since 1966, the federal government has provided guarantees and subsidies to approved private lenders or state government entities that make student loans. The aim: making higher education more affordable.[1] Because college graduates' enhanced human capital is generally not viewed as collateral, without federal subsidies and guarantees, lenders would probably charge interest rates more in line with other unsecured loans, such as credit card debt, that could push the financial costs of higher education beyond the reach of many students.[2] Recent changes in the federally guaranteed loan programs, outlined below, have raised concerns that the supply of student loans could be disrupted for the 2008-2009 academic year, prompting Congress and the Administration to take steps to forestall possible disruptions that might affect students' education plans.

## Overview of the Student Loan Market

Two major student loan programs exist federally: the Federal Family Education Loan (FFEL) program and the William D. Ford Federal Direct Loan (FDLP) program. These programs provide loans to undergraduate, graduate and professional students, and the parents of undergraduate dependent students, to help finance the costs of postsecondary education.

The FFEL program is the largest student loan program.[3] Subsidized and "unsubsidized" FFEL Stafford loans are made to students. FFEL PLUS loans are made to parents of students, as well as to graduate and professional students. Loan volumes for the PLUS program are much smaller than FFEL loan volumes.

The federal government absorbs interest costs of students in school or in deferment for subsidized loans, which are available to students meeting certain financial need tests. For "unsubsidized" loans, which are not need-based, interest costs that accrue while a student attends school or is in deferment are either paid by the borrower or folded into the loan itself. The William D. Ford Federal Direct Loan Program, created in 1993,[4] allows students enrolled in participating institutions of higher education to obtain Stafford and PLUS loans directly from the federal government.

### Loan Volumes

Federal student loans (FFEL, FDLP, and Perkins) are projected to provide $74 billion of the estimated $258 billion cost of higher education in the 2007-2008 academic year.[5] In recent years,

[1] The FFEL program was created by the Higher Education Act of 1965 (P.L. 89-329). It appears that the first loans were made in 1966. For background on the FFEL program, see CRS Report RL34077, *Student Loans, Student Aid, and FY2008 Budget Reconciliation*, by (name redacted), (name redacted), and (name redacted).

[2] For an analysis of the justification for federal student loan guarantees, see Barbara Miles and (name redacted), "Reducing Costs and Improving Efficiency in the Student Loan Program," *National Tax Journal*, vol. 50, no. 3, Sept. 1997, pp. 541-556.

[3] CRS Report RL34077, *Student Loans, Student Aid, and FY2008 Budget Reconciliation*, by (name redacted), (name red acted), and (name redacted), describes recent changes in federal student loan programs. "Unsubsidized" loans receive an implicit subsidy from the government, which allows students to borrow at below-market rates.

[4] FDLP was enacted as Title IV of P.L. 103-66, The Omnibus Budget Reconciliation Act of 1993.

[5] The Federal Perkins Loan program provides low-interest, fixed-rate loans to students with financial need. For details, see CRS Report RL32854, *Federal Perkins Loans and FFEL/DL Stafford Loans: A Brief Comparison*, by (name red acted).

FFEL loan volume has been about four times greater than FDLP loan volume.[6] Private student loans are projected to provide another $18 billion of that total.[7] Contributions from students and their parents are projected to cover $71 billion, with scholarships and grants covering the remaining $95 billion.

**Figure 1** shows Stafford loan volumes for undergraduate students attending four-year or two-year public institutions, and **Figure 2** shows the same data for students attending four-year or two-year private institutions. Total Stafford loan volumes for both the FDLP and FFEL programs are much higher for four-year colleges and universities than for two-year institutions, and are substantially higher than loan volumes for proprietary institutions. In particular, student loan volumes for two-year private institutions are very low compared to volumes for four-year private institutions.

## Direct Loans

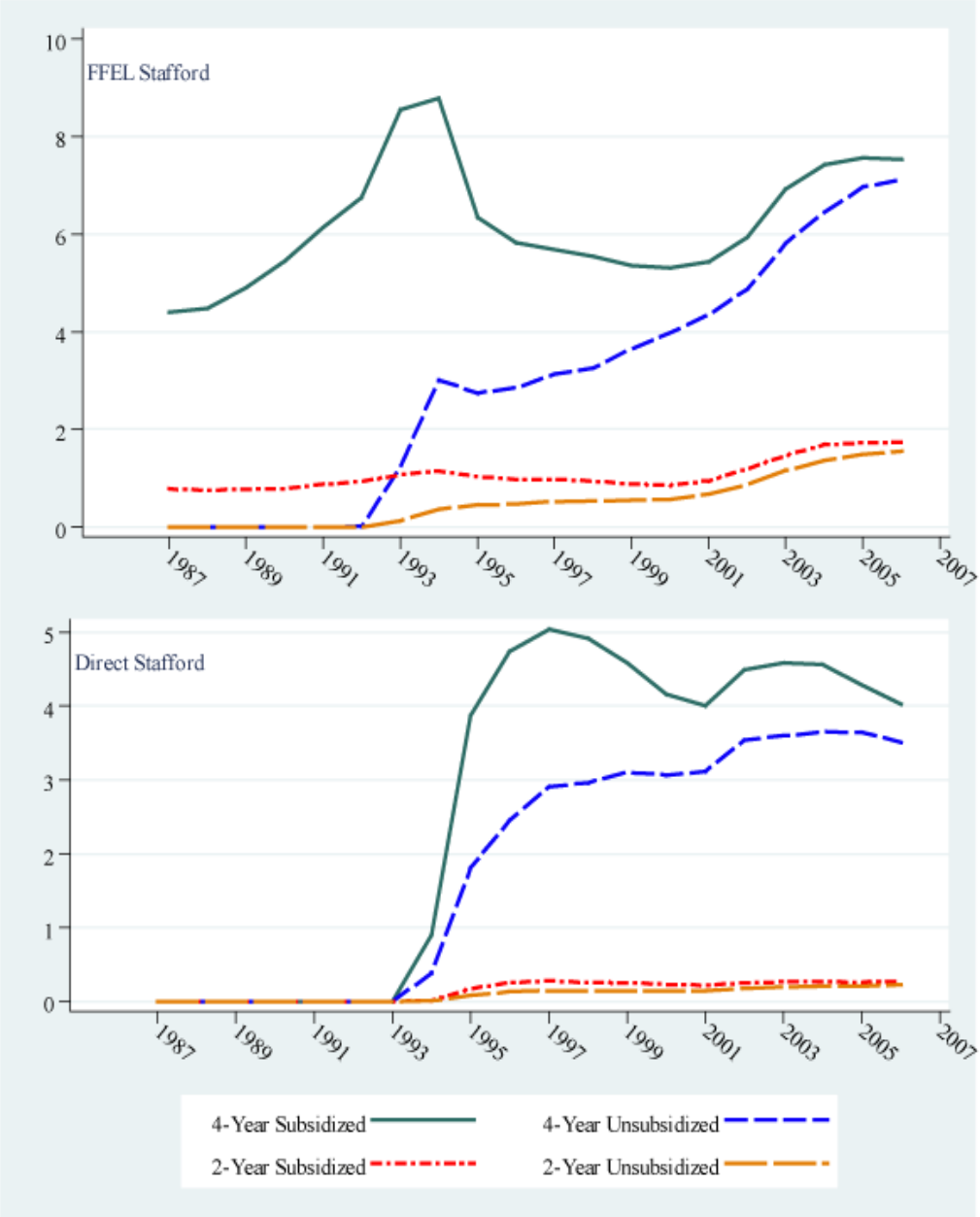
Schools, or their subunits, choose to participate in the FFEL program or the FDLP program. Thus, the FDLP program could provide loans in the event that private FFEL lending was insufficient to satisfy student loan demand, if school financial aid officials made participation decisions that would allow that to occur. Some have expressed concern that a rapid increase in FDLP loans, which might occur were a significant proportion of FFEL lenders to exit the market, would present significant administrative challenges to the Department of Education. On May 21, 2008, the Education Secretary, Margaret Spellings, sent a letter to student lenders stating that the department had the ability, if need be, to double the volume of FDLP loans.[8]

[6] According to the Department of Education, $56.2 billion in FFEL loans, $14.1 billion in FDLP loans, and $1.1 billion in Perkins loans will be available to students in FY2008, in addition to an estimated $16.4 billion in Pell grants. Loans consolidations for existing borrowers were estimated to total $38 billion in 2008. See http://www.ed.gov/about/overview/budget/budget09/summary/edlite-section2d.html#tables.

[7] Anna and Robert Leider, Don't Miss Out (32nd Edition), (Alexandria, VA: Octameron Associates, 2005); College Board, *Trends in Student Aid 2007*, (Washington, D.C. : 2007), available at http://www.collegeboard.com/prod_downloads/about/news_info/trends/trends_aid_07.pdf.

[8] Letter from Secretary of Education Spellings to Chief Executive Officers of FFEL Lenders, May 21, 2008, available at http://ifap.ed.gov/eannouncements/attachments/052108FFELPMonitoring.pdf.

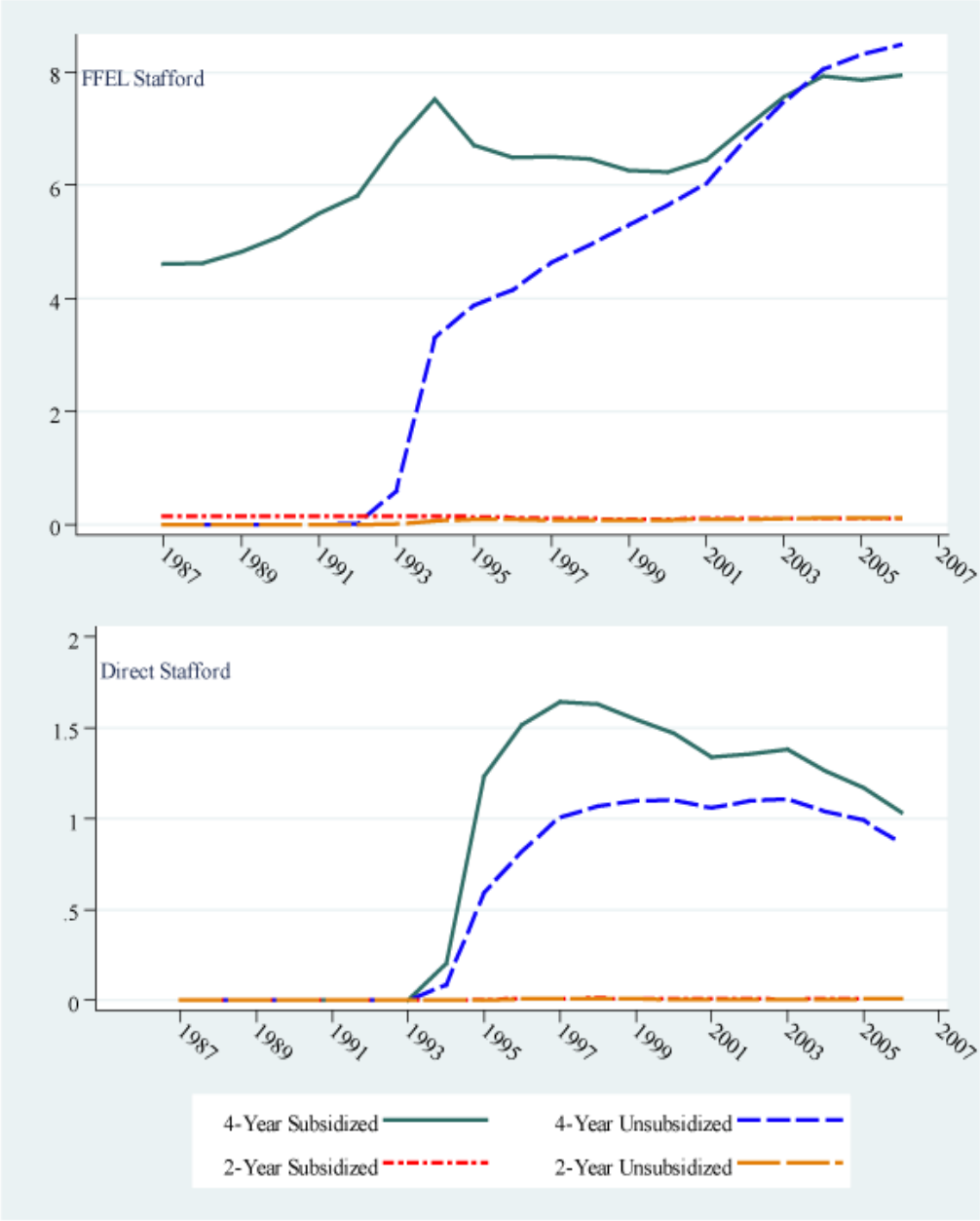
**Figure 1. Stafford Loans for Students in Public Colleges & Universities, 1987-2006 (in billions of dollars)**




**Source:** Data provided by Department of Education.

**Note:** Totals for 50 states and D.C. Foreign loans excluded.

**Figure 2. Stafford Loans for Students in Private Colleges & Universities, 1987-2006 (in billions of dollars)**




**Source:** Data provided by Department of Education.

**Note:** Totals for 50 states and D.C. Foreign loans excluded.

## The College Cost Reduction and Access Act

The College Cost Reduction and Access Act (P.L. 110-84), enacted in September 2007, cut interest rate subsidies to lenders and increased the proportion of default costs borne by lenders.[9] Some have argued that reductions in Federal Family Education Loan (FFEL) subsidies, as well other changes in the FFEL program, would lead some student loan providers to exit the market.[10]

### Lender Withdrawal Announcements

In early 2008, some student lenders announced plans to restrict loans in response to tightening credit conditions and cuts in federal subsidies put in place by the College Cost Reduction and Access Act. In February 2008, the Pennsylvania Higher Education Assistance Program (PHEAA) announced they would suspend making federally guaranteed loans.[11] Since then, many other lenders announced plans to suspend participation in federally guaranteed student loan programs. According to Finaid.org, as of July 14, 2008, 96 lenders had indicated that they would suspend originating FFEL loans and an additional 24 indicated that they would only suspend originating consolidation loans. In addition, 27 lenders announced that they would suspend new private loans. In total, as of July 14, 2008, 125 lenders had indicated that they would suspend participation in private loans and some part of the FFEL program.[12] The Secretary of Education, in a March 4, 2008, letter to financial aid professionals, requested that financial aid offices relay information on lenders' intentions to curtail student loans to the U.S. Department of Education.[13]

Some analysts maintain that difficulties in the market for student loans stem from wider problems in credit markets or from student loan industry attempts to create pressure to reverse subsidy cuts.[14] Further, some student loan providers have encountered financial problems not directly related to the student loan market. For example, Sallie Mae (SLM Corp.) took a $1.5 billion

[9] This legislation was motivated, in part, by the impression that lender subsidies within the Federal Family Education Loan (FFEL) program had been higher than necessary.

[10] For example, Joe Below, president of the Consumer Bankers' Association, contended that "loan availability could become tenuous as a result of the combination of a dramatically lower return coupled with significantly increased risk." "An Ambitious Student Aid Bill," *Inside Higher Education*, June 13, 2007, available at http://www.insidehighered.com/layout/set/print/news/2007/06/13/loans.

[11] Jonathan Glater, "A Lender Halts U.S.-Backed Student Loans," *New York Times*, Feb. 28, 2008. The Department of Education Inspector General found in Nov. 2007 that PHEAA had billed the federal government for subsidies on loans that were ineligible for those subsidies. Department of Education, Office of the Inspector General, "Special Allowance Payments to the Pennsylvania Higher Education Assistance Agency for Loans Funded by Tax-Exempt Obligations," Final Report ED-OIG/A03G0014, Nov. 2007. PHEAA's Chief Executive Officer resigned in Oct. 2007 after Pennsylvania state auditors found that PHEAA had paid over $7.5 million in bonuses to executives and staff and board members since 2004. Pennsylvania Department of the Auditor General, "Auditor General Jack Wagner Finds PHEAA Gave $7.5 Million in Bonuses to Hundreds of Employees," press release, Oct. 4, 2007, available at http://www.auditorgen.state.pa.us/Department/Press/WagnerFindsPHEAAGaveMillionsInBonuses.html; Bill Zlatos, "PHEAA President Submits Resignation, Effective October 10," *Pittsburgh Tribune-Review*, Oct. 4, 2007.

[12] FinAid, "Lender Layoffs and Loan Program Suspensions," available at http://www.finaid.org/loans/lenderlayoffs.phtml, accessed July 21, 2008.

[13] U.S. Department of Education, "Notice of Information Collection Requests," 73 Federal Register 110, June 6, 2008, available at http://ifap.ed.gov/fregisters/attachments/FR06062008.pdf.

[14] "Congress Prepares for Student-Loan Crisis, While Declaring It Unlikely," *Chronicle of Higher Education*, Mar. 20, 2008; Ben Miller, "The Real Credit Crunch Culprit (Hint: It's Not Lender Subsidy Cuts)," *The Higher Ed Watch Blog*, New America Foundation, Mar. 27, 2008, available at http://www.newamerica.net/blog/higher-ed-watch/2008/real-credit-crunch-culprit-hint-its-not-lender-subsidy-cuts-3001.

write-down stemming from financial positions it took that would have increased in value had its stock price risen.[15] Some observers contend that student lenders have overstated their recent troubles and that loans remain available through the Federal Direct Lending Program (FDLP).

The following sections describe key provisions of the FFEL loan program and outline changes made by the College Cost Reduction and Access Act. Although reductions in interest rate subsidies for FFEL lenders have attracted the most attention, other legislative changes may also have important effects on the student loan market.

## Lender Subsidy Formulae

The formulae determining interest rates that student borrowers pay and the yields (including certain subsidies) received by FFEL lenders for various types of federally guaranteed loans are set by legislation. These formulae have been changed many times since 1981. Other changes in program details, such as higher origination fees paid to the federal government, have reduced lenders' profit rates. On the other hand, new information and communication technologies have sharply increased productivity in the banking industry, reducing servicing costs for student loans, and other things equal, increasing lender profits.

Lenders participating in federal guaranteed loan programs receive subsidy payments that, according to language of the Higher Education Act, ensure holders of FFEL loans receive at least "equitable" returns, compared to other financial opportunities available to those lenders. Under current law, these lenders receive a yield equal to a short-term commercial paper (CP) rate plus a legislatively determined add-on, which can vary by type of loan and by type of lender.[16] When borrower interest rates fall below the sum of the CP rate and the add-on, the government makes Special Allowance Payments (SAP) to lenders. Special Allowance Payments are determined quarterly.[17]

During some periods in the past, when the fixed borrower rate exceeded the sum of the SAP add-on and the base interest rate, lenders would collect the difference, known as "floor income" or "excess interest." The Higher Education Reconciliation Act of 2005 (HERA; P.L. 109-171; Sec. 8006(b)(1)) changed Stafford student loan rules so that floor income on loans disbursed on or after April 1, 2006, is now returned (i.e., rebated) to the federal government.

The College Cost Reduction and Access Act (P.L. 110-84) reduced lender subsidies in several ways. For new loans originated after October 1, 2007, lender origination fees increased from 0.5% to 1% of loan value. SAP add-on rates for Stafford loans and consolidation loans were cut by 0.55% (55 basis points) for for-profit lenders and by 0.40% (40 basis points) for not-for-profit lenders. SAP add-on rates for PLUS loans were reduced by 85 basis points for for-profit lenders and by 70 basis points for not-for-profit lenders.

[15] Michael de la Merced, "Sallie Mae Records Huge Loss on Bad Bets," *New York Times*, Jan. 28, 2008, p. B1.

[16] This commercial paper index, compiled by the Federal Reserve, is the 3-Month AA Financial Commercial Paper Rate (series ID: CPF3M) available at http://research.stlouisfed.org/fred2/series/CPF3M?cid=120.

[17] The special allowance payment formulas are set out in Section 438 of the Higher Education Act. For more information on special allowance payments, see CRS Report RL33674, *The Administration of the Federal Family Education Loan and William D. Ford Direct Loan Programs: Background and Provisions*, by (name redacted).

## Default Costs

The act also increased the proportion of default costs borne by lenders. For loans originated after October 1, 2012, lender insurance rates will be cut from 97% to 95%. As of October 1, 2007, the "exceptional performer" status enjoyed by lenders that met certain federal regulatory requirements, which gave those lenders access to faster processing of default paperwork and a 99% insurance rate, was eliminated. On the other hand, average default rates have decreased sharply since the early 1990s, thus generally reducing the financial risks to lenders of defaults. The total default rate for FFEL and FDLP loans for the FY2005 cohort (calculated in July 2007) was 4.6%, well below the peak default rate of 22.4% reached by the FY1990 cohort. FY2005 cohort default rates for four-year institutions were even lower, averaging 3.0% for public four-year institutions and 2.3% for their private counterparts.[18]

## Borrower Rates

The College Cost Reduction and Access Act also specified a gradual reduction in borrower interest rates for subsidized Stafford loans to undergraduates. Borrower interest rates for new subsidized Stafford student loans, which had been fixed at 6.8% since July 1, 2006, are scheduled to decline gradually to 3.4% in July 2011. From July 1, 1988, through June 30, 2006, borrower rates were based on interest rates for 91-day Treasury bills plus an interest margin, subject to a cap.[19] Conditions and rules for borrower interest rates have changed many times, and the rate a given student has paid depends on when a student's first loan originated, how many years the loan has been in repayment, and how promptly the student has made payments, among other factors.

## Lenders of Last Resort

Eligible borrowers can also receive FFEL program loans from a lender of last resort if they cannot obtain a loan from another lender.[20] Each state has a designated federal student loan guarantor, which is responsible for administering a lender-of-last-resort program. The lender of last resort may be the guarantor itself or an eligible private FFEL lender. The federal government guarantees 100% of loans issued by lenders of last resort. The Ensuring Continued Access to Student Loans Act of 2008 (P.L. 110-227) made several changes to the lender-of-last-resort program.[21] The Department of Education, in spring 2008, has been requiring guarantee agencies to update their lender-of-last-resort programs.[22]

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[18] U.S. Department of Education, Federal Student Aid, *Briefing on National Default Rates*, Sept. 10, 2007, available at http://ifap.ed.gov/eannouncements/attachments/0910FY2005Briefinged.pdf.

[19] From July 1, 1988, through Sept. 30, 1992, borrower interest rates for the first four years were set at 8%. Afterwards, the borrower rate was based on interest rates for 91-day Treasury bills plus an interest margin, subject to a cap. For details on borrower rate formulae, see SLM Corporation, *Form 10-K Filing for Fiscal Year 2006*, Appendix A, p.6.

[20] For details on lenders of last resort and student eligibility requirements, see the *Common Manual: Unified Student Loan Policy, May 2008 edition*, sec. 3.7. The *Common Manual* is published by the 36 guarantors that participate in the FFEL program, and is available at http://www.usafunds.org/forms/school_lender/icm0308.pdf.

[21] For more information on these changes, see CRS Report RL34452, *The Ensuring Continued Access to Student Loans Act of 2008*, by (name redacted).

[22] For further details on changes in the lender-of-last-resort programs, see U.S. Department of Education, "Dear Colleague" Letter GEN-08-03, FP 08-03 http://ifap.ed.gov/dpcletters/attachments/050608GEN0805Attach.pdf.

Were many lenders to leave the student loan market due to lower profits, more students might use lenders of last resort. In past years, lender-of-last-resort loans have comprised a tiny share of the student loan market. According to the Department of Education, lender-of-last-resort loans have never accounted for more than 1% of total federal student loan volume in a fiscal year. In recent years, such loans have accounted for about one-fourth to one-half of 1% of Stafford loan volume.[23]

To understand how recent legislative changes might affect the market for student loans, a basic supply and demand model is presented below.

# Supply and Demand for Student Loans

The standard economic model of supply and demand provides a starting point for analysis of the student loan market, although federal intervention and the particular characteristics of the student loan market also play important roles.[24]

## Supply

The supply for student loans is mainly determined by the cost of capital, the costs of marketing and of originating loans, the costs of administering loans and repayments, and the costs associated with prepayment or default.[25] For a firm in a competitive market, the supply curve is the firm's marginal cost curve, which relates the incremental cost of each additional unit of output to the volume of output.[26] A supply curve for student loans shows the relationship between the volume of loans lenders are willing to make and the lender interest rate.

### Funding Costs

Student lenders obtain capital in ways similar to other commercial lenders. In a traditional banking model, banks use deposits to make student loans that they can hold on their own books. Lenders can also obtain funds by borrowing in the short- and medium-term commercial paper market. In the past two decades, however, securitization has become an increasingly important source of funds for lenders.

Many lenders, in the student loan market as elsewhere, use securitization procedures that allow them to sell packages of thousands of individual loans to outside investors. Most student lenders transform many of the loans they originate into student loan asset-backed securities (SLABS), which can be sold to investors or financial institutions.[27] According to one market expert, about

[23] Discussion with a Department of Education, Office of the Under Secretary official, Sept. 7, 2007.

[24] The basic supply and demand model may be less applicable to the private loan market, where adverse selection may occur. Adverse selection occurs when lenders cannot observe characteristics of borrowers that affect default.

[25] Prepayment occurs when a borrower pays off a loan before its original maturity, which reduces the amount of interest paid to the lender.

[26] This presumes that the firm earns enough to make shutting down an unattractive option.

[27] Nomura Securities International, Nomura Fixed Income Research, *Student Loan ABS 101: An Introduction to Student Loan ABS*, Jan. 26, 2005, available at http://www.adelsonandjacob.com/pubs/Student_Loan_ABS_101.pdf.

85% of student loans are typically securitized.[28] Securitization allows lenders to concentrate on originating loans if they choose not to hold those loans in their own portfolios. Most financial analysts have viewed such securitization strategies as a way to reduce the costs of lending, although some lenders, such as Sallie Mae, the largest issuer of guaranteed student loans, hold a substantial portion of the loans they originate in their own portfolios.[29] Many other firms "warehouse" some loans that are in the process of being securitized.[30]

Securitization procedures, which provide student lenders access to broader capital markets, also can subject student lenders to risks associated with global capital movements and developments. In particular, a severe tightening of credit in international capital markets has had significant effects on student lenders. As interest rate spreads increased in late 2007 and early 2008, the cost of funds to commercial borrowers, including student lenders, has increased.

## Origination Fees and Administrative Costs

Origination costs include not only fees paid to the federal government for guaranteed loans, but also the administrative costs of transactions with students and their schools. Student loan marketing costs have increased sharply as lenders have attempted to expand their market shares, especially in the private loan market.[31] On the other hand, new information and communication technologies have sharply increased productivity in the banking industry, reducing servicing costs for student loans.

According to the Department of Education, average student loan servicing costs range from approximately 30 basis points for larger, more efficient lenders, to about 60 basis points for smaller lenders and some not-for-profit lenders. A typical student loan origination costs larger, more efficient lenders about $25 per loan and costs smaller lenders about $75 per loan.[32]

## Default Risks

Student loan defaults typically rise during economic downturns. Although some young graduates may be able to draw upon family resources, others may struggle in a weak job market and become unable to pay loans.[33] Lenders are largely insulated from the costs of default on

[28] Testimony of Tom Deutsch, Deputy Executive Director, American Securitization Forum, in U.S. Congress, Senate Committee on Banking, Housing, and Urban Affairs, *Turmoil in U.S. Credit Markets Impact on the Cost and Availability of Student Loans*, hearing, 110th Cong., 2nd sess., Apr. 15, 2008, available at http://banking.senate.gov/public/_files/OpgStmtDeutsch41508_ASFSIFMASenateBankingTestimony.pdf.

[29] SLM (Sallie Mae) Corp., 10-K Filing for 2007, available at http://www.salliemae.com/NR/rdonlyres/98EB09F8-712E-41E5-B14B-B694791574F9/8874/200710KBOW49222BOW014_BITS_NFeb292009.pdf.

[30] Typically, a firm engaging in securitization of assets accumulates loans from originators (which may be subunits of the firm), which are then held in a warehouse trust financed by bank loans or by other means, and administered by a trustee. Once enough loans are accumulated, they are securitized and the resulting asset-back securities are sold. Proceeds from that sale are then used to repay warehousing credit costs and other costs of accumulating loans.

[31] Lender initiatives to be included on schools' preferred lender lists may have played a role in higher marketing costs in recent years.

[32] Department of Education, Department of the Treasury, Office of Management and Budget, "Notice of terms and conditions of purchase of loans under the Ensuring Continued Access to Student Loans Act of 2008, 73 *Federal Register* 127, July 1, 2008, p. 37423, available at http://edocket.access.gpo.gov/2008/pdf/E8-14820.pdf.

[33] After October 8, 1998, student loans cannot be discharged through bankruptcy unless narrowly defined "undue hardship" requirements are met.

guaranteed student loans, although the College Cost Reduction and Access Act (as noted above) raised the proportion of default costs that lenders must bear, in large part due to the elimination of the "exceptional performer" status. Lenders or those holding loan-backed assets bear the costs of private loan defaults. According the most recent data, defaults among students attending proprietary schools are higher than among students attending public or private institutions, and default rates for students at four-year institutions are lower than for students at two-year programs.[34]

### Prepayment Risk

Lenders face prepayment risks when borrowers can consolidate or refinance loans at lower interest rates, which can reduce lender profit margins. For example, when students consolidate loans, one or more existing loans are paid off using funds from a new loan. Lenders who had held those existing loans receive early repayment, and thus receive no additional interest payments. Prepayment trends are highly dependent on changes in interest rates: when interest rates fall more borrowers with variable-rate loans find it worthwhile to prepay.[35] In the past year, benchmark interest rates have fallen sharply, which may encourage some borrowers to prepay loans. Federal laws, however, restrict consolidation options of students. The introduction of a fixed 6.8% borrower rate for Stafford loans at the beginning of July 2006, as well as the scheduled reduction in borrower rates enacted in the College Cost Reduction and Access Act may reduce the value of consolidation options for many borrowers, and thus may reduce prepayment risks to lenders.

## Demand

Demand for student loans largely depends on the costs of higher education, the perceived value of obtaining higher education, and the value of alternatives to attending college, such as working.[36] A demand curve for student loans shows the relationship between the volume of loans borrowers are willing to take and the price of those loans, that is, the borrower interest rate.

A change in any of the factors underlying student loan demand will cause the demand curve to shift. For example, the college premium, defined as the difference between average wages of college graduates and those who did not attend college, has increased over the last quarter century, giving students and their families greater incentive to invest in higher education. An increase in the college premium, other things equal, causes the demand curve to shift, so that a larger volume of student loans is demanded at a given borrower interest rate. An **Appendix** explains shifts in demand and supply curves in more detail.

Other changes may have ambiguous effects on the demand for student loans. The cost of college attendance has increased in real terms over the past few decades, which may discourage some students from enrolling, but may increase demand for loans among those students who do enroll. Economic conditions might also have ambiguous effects on demand for student loans. During

[34] U.S. Dept. of Education, Office of Student Financial Aid Programs data, available at http://www.ed.gov/offices/OSFAP/defaultmanagement/instrates.html.

[35] The interest rate for a consolidated loan is a weighted average of the interest rates, rounded up to the nearest one-eighth of 1%, on the loans at the time of consolidation. Students that only hold fixed-rate loans, therefore, cannot obtain a more advantageous interest rate through consolidation.

[36] Many college students work at least part time. Nonetheless, time spent working can reduce the quantity of time available for studying, or the intensity of study, or both.

economic downturns, students' ability to pay for higher education may decrease, although the opportunity cost of going to college may fall if other options, such as working or non-academic training programs, become less attractive.

# A Simple Model of the FFEL Student Loan Market

Interest rates paid by borrowers and those received by lenders for federally guaranteed loans are set legislatively. Because interest rates, which act as the price of a loan, are not set by a market mechanism, the student loan market will not clear: either lenders will be willing to supply more loans at the legislatively set lender interest rate than borrowers are willing to accept at the borrower interest rate, or more borrowers will want loans (at their interest rate) than lenders are willing to supply (at their interest rate).

**Figure 3** illustrates two cases. In the first diagram, demand for student loans ($Q^D$), given the borrower interest rate, falls short of loan supply ($Q^S$) at the lender rate. Lenders' profits are then represented by a trapezoid below the lender interest rate and above the supply curve, comprising regions A, C, and E.

The triangle below the supply curve and above the demand curve represents deadweight loss (DWL). When loans are originated above the socially efficient level, indicated by the intersection of demand and supply curves, so that the social costs of some loans exceed the benefits gained by society, the resulting reduction in economic well being is called deadweight loss.[37] An inefficiently low volume of student loans would also generate deadweight loss.

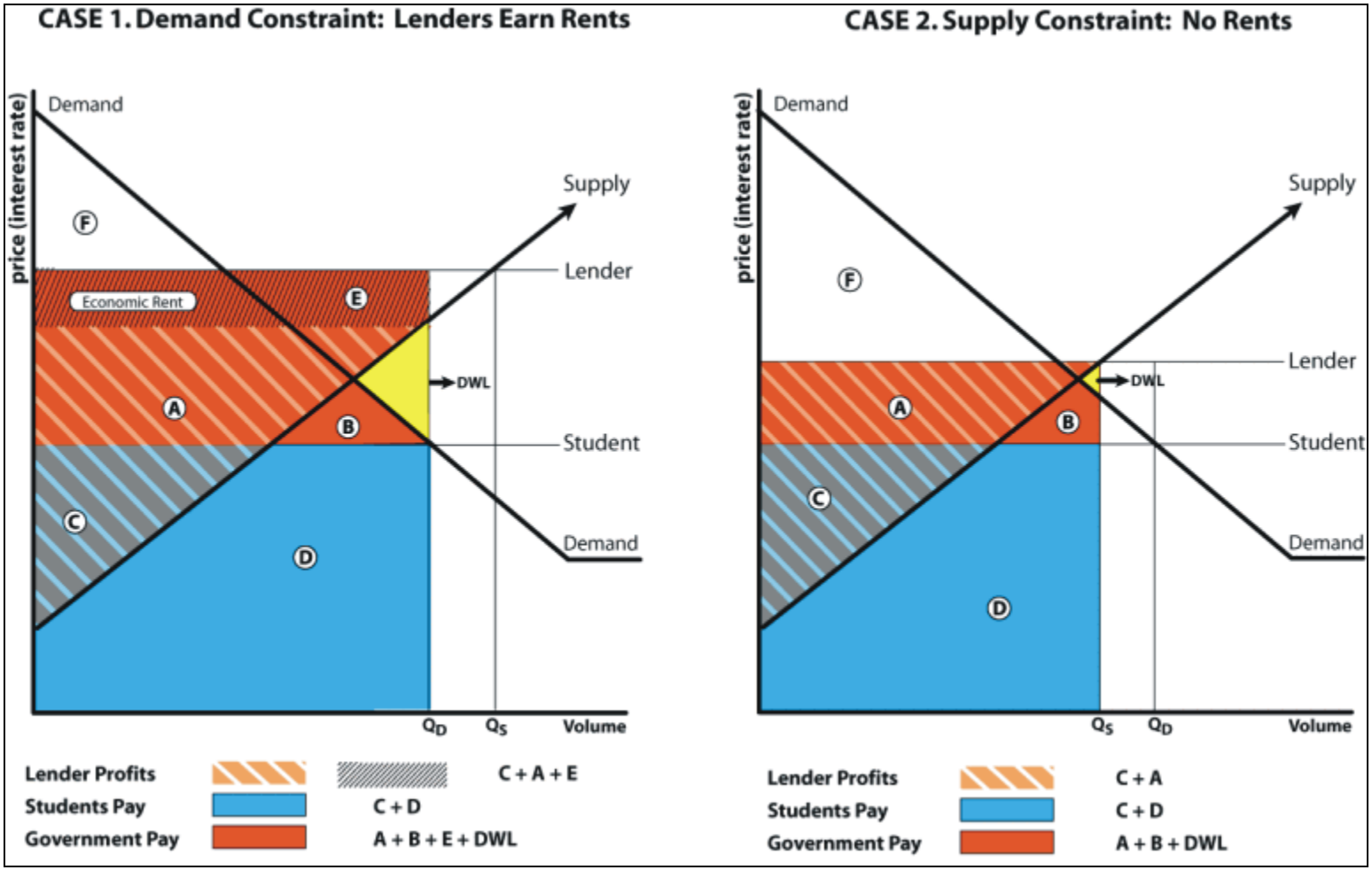
Lenders earn economic rents (rectangle E) because they receive a price that exceeds their costs. An economic rent is a payment above the minimum needed to induce a given amount of supply. A small reduction in the lender interest rate shrinks rectangle E, hence squeezing lenders' rents, without reducing loan supply.

In the second case, demand for student loans ($Q^D$), given the borrower interest rate, exceeds loan supply ($Q^S$) at the lender rate.[38] Lenders earn no economic rents and some would-be borrowers are unable to obtain FFEL loans. These borrowers might obtain loans from the Direct Loan Program, if their school participated in that program, or from a lender of last resort. Otherwise, students may obtain non guaranteed private loans or might go without student loans altogether.

[37] This discussion ignores spillover benefits to society. Spillover benefits can be accommodated into the analysis by adding the value of those spillovers to society to the demand curve, which reflects only benefits to a student or family, to obtain a marginal social benefit (MSB) schedule. The socially efficient loan volume is then set by the intersection of the MSB schedule and the supply curve.

[38] If the lender rate were below the intersection of supply and demand curves, then the deadweight loss triangle would lie below the demand curve and above the supply curve to the left of their intersection, reflecting the loss in social well-being due to an inefficiently low volume of student loans. The size and shape of other components would also change.

**Figure 3. A Simple Model of the Student Loan Market: Two Cases**




**Source:** CRS

## The Effect of Subsidy Cuts

In past discussions of changes in federal student loan subsidies, lender organizations warned that subsidy cuts could either reduce the flow of private capital into student lending, or increase the costs of student loans to borrowers. Furthermore, some lenders and their representatives warned that subsidy cuts or other program changes that reduced lenders' profitability would lead some lenders to exit the student loan market.[39]

On the other hand, if lenders do receive rents, then a small reduction in the lenders' interest rate squeezes those rents, but has no effect on output decisions, as shown in Case 1 in **Figure 3**. Some economists and political scientists have argued that other market participants or political actors would try to capture some portion of those rents.[40] In the guaranteed student loan market, many lenders provide colleges and universities with logistical and administrative support. The provision of such services to schools could stem from schools' ability to capture a portion of lenders' economic rents, presumably due to their control over preferred lender lists. Many colleges and universities develop preferred lender lists, based on lenders' perceived customer service quality, ability to offer borrower benefits, proximity, administrative convenience, or according to other criteria set by the institution.[41] Preferred lender lists typically give contact information for a small (4-10) number of lenders. Students are not required to deal with lenders on the preferred list, but preferred lists are considered an important determinant of students' lender choices.

Some student borrowers have been eligible for "borrower benefits," such as lower interest rates or the waiver of some fees.[42] Only about one in 10 students, however, has been able to take full advantage of available borrower benefits.

Some news reports in 2003 claimed that some lenders had struck deals with some university officials to switch school participation from FDLP to the FFEL.[43] In 2007, the attorney general of New York State, Andrew Cuomo, uncovered numerous cases of conflicts of interest between college financial aid officials and student loan lenders.[44] One Senate committee report concluded that "some FFEL lenders provided compensation to schools with the expectation, and in some cases an explicit agreement, that the school will give the lenders preferential treatment, including placement on the school's preferred lender list."[45] The existence of such practices may suggest

[39] Stephen Burd, "Clinton Administration Offers Plan to Cut Interest Rates on Loans: Advocates for Student Borrowers Applaud the President's Proposal, but Lenders Say it Would Force Them Out," *Chronicle of Higher Education*, Mar. 6, 1998.

[40] Jagdish N. Bhagwati, "DUP (Directly Unproductive Profit-Seeking) Activities and Rent Seeking: A Survey," *Kyklos*, vol. 36, no. 4, 1983, pp. 634-37.

[41] National Association of Student Financial Aid Administrators, "Guide to Developing a Preferred Lender List," NASFAA Monograph Series, no. 15, May 2005, available at http://www.nasfaa.org/PDFs/2005/Monograph15.pdf.

[42] Fitch Ratings, "Borrower Benefits in FFELP: Student Loan ABS Cash Flow Considerations," special report, available at http://www.securitization.net/pdf/Fitch/FFELP_31Oct06.pdf.

[43] Megan Barnett, Julian E. Barnes, and Danielle Knight, "Big Money On Campus: In the Multibillion-dollar World of Student Loans, Big Lenders Are Finding New Ways to Drain Uncle Sam's Coffers," *U.S. News & World Report*, Oct. 19, 2003, available at http://www.usnews.com/usnews/edu/articles/031027/27loans.htm.

[44] Diana J. Schemo, "Cuomo Plans to Broaden Student-Lending Inquiry," *New York Times*, June 7, 2007.

[45] U. S. Senate Health, Education, Labor and Pensions Committee, *Report on Marketing Practices in the Federal Family Education Loan Program*, June 14, 2007, available at http://kennedy.senate.gov/imo/media/doc/Student%20Loan%20Report.pdf.

that at least some lenders were earning profits above the minimum level necessary to induce them to supply guaranteed student loans.

The Department of Education estimated in July 2008 that pre-tax FFEL lender yield net of servicing and financing costs was 44—74 basis points above the commercial paper benchmark rate for for-profit lenders and 59—89 basis points above that rate for not-for-profit lenders.[46]

## Restructuring in the Student Loan Market

Student loan providers may react to recent market and legislative changes in several ways. Lenders may provide fewer benefits to students and schools, or may redirect resources to other markets, or may leave the loan market altogether.[47]

Banking, along with the student loan industry, has changed dramatically in the last decades. Mergers and acquisitions among banks and other financial institutions, claimed to have increased banking sector efficiency, also helped consolidate student lending.

Lenders in the student loan market, like firms in any competitive market, have different cost structures, and some lenders may have competitive advantages in specific types of loans or in dealing with specific types of students. As margins narrow, either because legislative action has raised fees and cut subsidies or because of more difficult economic conditions, less-efficient firms could face strong pressures to leave segments of the student loan market. If other firms can serve those markets more efficiently, those firms will gain market share at the expense of exiting firms. If no firm can earn profits, however, firms exit and loan supply shrinks.

If economic and legislative changes affect guaranteed student loan markets, some market segments are more likely to be affected than others. The average size of loans for students at four-year colleges and universities are larger than for two-year college students, which reduces the ratio of loan servicing costs relative to loan value. If the paperwork costs of originating and servicing a $5,000 loan are the same as for a $500 loan, then the latter loan is more costly to the lender. Lenders may perceive that some types of students or some areas of study are more prone to default or require higher servicing costs. Also, legislative changes may interact with financial-market conditions to affect particular market segments. For example, Salle Mae announced in April 2008 that it would stop offering federal consolidation loans, claiming that a combination of lower federal subsidies and a credit crunch made such loans unprofitable.[48]

## Empirical Evidence

Economic theory cannot predict exactly how student loan providers react to changes in financial markets and/or legislation because some factors have ambiguous effects and because magnitudes

[46] Department of Education, Department of the Treasury, Office of Management and Budget, "Notice of terms and conditions of purchase of loans under the Ensuring Continued Access to Student Loans Act of 2008," 73 *Federal Register* 127, July 1, 2008, p. 37423.

[47] For example, Sallie Mae announced that it would no longer pay a 1.5% loan origination fee on behalf of students taking out Stafford loans. Jane J. Kim, Salle Mae Won't Offer Consolidation Loans," *Wall Street Journal*, Apr. 12-13, 2008, p. B2.

[48] Ibid.

of key parameters can affect the size and direction of effects on market outcomes. Such issues can only be resolved by empirical research. A few studies have examined how lenders have reacted to past changes in SAP subsidy levels, and have found no measurable effects on the supply of guaranteed student loans. A 1994 study found that the supply of student loans did not respond to changes in subsidy levels.[49] A CRS analysis conducted in 2007 also found that changes in SAP subsidy levels from 1997 through 2006 had no statistically significant effect on the supply of student loans. The analysis did find some statistically significant effects suggesting that lower interest rates for borrowers increased the demand for student loans.[50] Analyses of historical data, however, may not reflect lender responses to recent subsidy cuts or during what some have termed an unusually severe credit crunch.

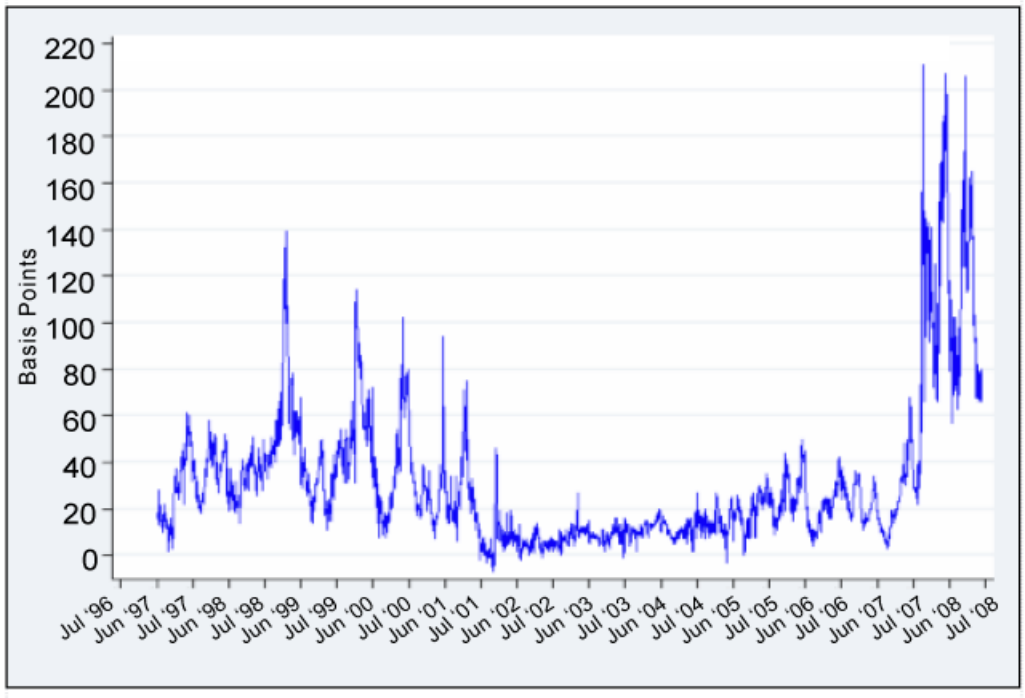
# Student Lending and the Credit Crunch

Developments in financial markets, especially those associated with mortgage securities, have led many investors to become more cautious and less willing to accept risk. Investors, therefore, have been demanding greater compensation for taking risks in the form of higher interest rate spreads. **Figure 4** shows the spread (difference) between 3-month AA-rated financial commercial paper securities and the 3-month constant maturity Treasury rate. This spread reflects financial markets' assessment of the riskiness of one key class of securities issued by financial institutions relative to Treasury securities of the same maturity.

[49] Thomas Hungerford and W. Upshaw, Federal Credit Programs and Cointegration: the Case of Student Loans, *Economics of Education Review*, vol. 13, Sept. 1994, pp. 235-242.

[50] Details available from the author.

**Figure 4. Spread Between 3-Month Financial Commercial Paper and 3-Month Constant Maturity Treasury Rates**




**Source:** Federal Reserve. Spread is difference between 3-Month AA Financial Commercial Paper Rate and 3-Month Treasury Constant Maturity Rate. One basis point is 1/100th of 1%.

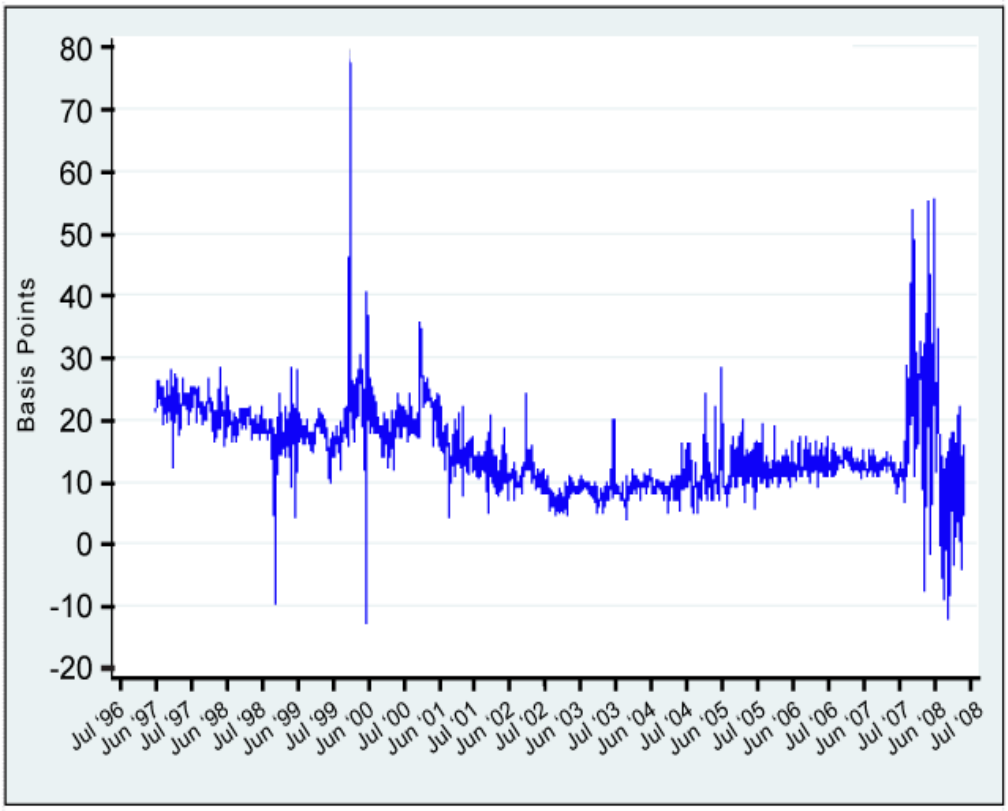
Higher interest spreads, in turn, raise the cost of capital for lenders. Although financial liquidity has fallen mostly due to developments in the real estate market in the United States and in other countries, wider concerns about economic and financial conditions have affected all credit markets.[51]

Because the lender interest rates for federally guaranteed Stafford loans disbursed since the start of 2000 are based on a commercial paper rate, student lenders are cushioned from risks associated with the spread between Treasury bill and commercial paper rates.[52] Issuers of private student loans, which are not guaranteed, are not protected from those risks. Moreover, the design of federal guaranteed loan subsidies does not protect student lenders from other financial risks. For example, **Figure 5** shows the spread between 3-month U.S. Dollar LIBOR (London Interbank Offer Rate) and an index of 3-month rates for financial commercial paper. Because many financial instruments are based on LIBOR interest rates, increased volatility in the difference between LIBOR and the commercial paper rates used in student lender subsidy formulae could expose those lenders to higher levels of financial risk.

[51] Federal Reserve Bank, "Minutes of the Federal Open Market Committee, Apr. 29-30, 2008," available at http://www.federalreserve.gov/monetarypolicy/fomcminutes20080430.htm.

[52] Special allowance payments for FFEL Stafford loans disbursed before January 1, 2000, were based on rates for 91-day Treasury bills. For details, see SLM (Sallie Mae Corp, *10-K Filing for 2006*, Appendix A.

**Figure 5. Spread Between 3-Month Dollar LIBOR and 3-Month Financial Commercial Paper Rates**




**Source:** Commercial paper rate from Federal Reserve; LIBOR (London Interbank Offer Rate) from British Bankers' Association, collected by EconStats.com. Spread is difference between 3-Month U.S. Dollar LIBOR Rate and 3-Month AA Financial Commercial Paper Rate. One basis point is 1/100th of 1%.

Finally, some student lenders have structured their finances in ways that have exposed them to financial risks generated by a wider credit crunch. In particular, many student lenders have raised funds through the auction-rate securities market, which has been strongly affected by the credit crunch.

## Auction-Rate Securities

Some lenders have packaged student loans into securities whose interest rates are set at given intervals by an auction procedure. These auction-rate securities have been widely used in municipal finance and other financial markets. Interest rates for auction-rate securities are effectively tied to short-term market interest rates, even though the securities typically have long maturities.[53] In past decades, variable-rate securities have required lower interest rates than fixed-rate securities on average. The theory of finance implies that investors require higher interest rates to hold fixed-rate securities that force them to bear more interest-rate risks. Many borrowers, such

[53] For a detailed explanation of the auction-rate securities market, see Douglas Skarr, "Auction Rate Securities," California Debt and Investment Advisory Commission Issue Brief, Aug. 2004, available at http://www.treasurer.ca.gov/Cdiac/issuebriefs/aug04.pdf.

as municipalities and student loan originators, therefore viewed auction-rate securities as a cheaper way of raising funds, compared to alternative borrowing strategies. Widespread auction failures starting in mid-February 2008, however, left those markets with very little liquidity, casting doubt on the future viability of auction-rate securities.[54]

An issuer of auction-rate securities, such as a student lender, typically engages a broker/dealer, usually a major investment bank, to underwrite and distribute securities. The broker/dealer and issuer choose an auction agent, typically a bank, who oversees operation of the auction mechanism. The period between auctions is not standard, but is often 7, 28, or 35 days. Before each auction, interested investors state how much of an issue they wish to hold and specify the lowest interest rate they are willing to accept. The auction agent then compiles these bids and parcels out holdings to investors with the lowest interest rates until the entire issue is taken up. The interest rate of the last bidder assigned a portion, termed the "clearing rate," is then paid to holders until the next auction. Bidders who specified an interest rate above the clearing rate receive none of the issue.[55]

If bidders' requests are insufficient to take up the whole issue then the auction fails. The interest rate is set by terms of the securitization contract, and investors holding a portion of the issue retain their stake. For issuers, failure of an auction often raises interest costs well above prevailing short-term commercial paper rates. For investors holding portions of auction-rate securities, an auction failure often results in an attractive interest rate, but with severely constrained liquidity. Many investors, according to court documents, told that auction-rate securities were "cash equivalents," were left with illiquid investments with maturities of 10 years or more.[56] On the other hand, some financial institutions had warned investors in previous years of possible liquidity risks in auction-rate securities markets.[57]

In the past, some broker/dealers have supported auction-rate markets by bidding on their own accounts to avoid auction failures, which could have reduced their ability to attract new underwriting clients.

## Auction Failures

Before fall 2007, failures of interest auctions were considered unusual. In August 2007, interest rate spreads between government securities and money market rates (see **Figure 4**) exploded as concerns emerged that mortgage-backed liabilities could threaten the survival of some financial institutions. The scramble for liquidity put pressure on auction-rate securities, in which investors lacked a guaranteed option to sell holdings back to issuers or broker/dealers, so that liquidity for those securities depended on successful interest auctions. According to some sources, many large

[54] One financial journalist dubbed the auction-rate securities market a "historical relic." Aline van Duyn, "Little chance of quiet farewell for auction rate securities," *Financial Times*, Aug. 2, 2008, available at http://www.ft.com/cms/s/0/c1e2bf0e-602b-11dd-805e-000077b07658.html.

[55] In 2006, the U.S. Securities and Exchange Commission (SEC) sanctioned 15 broker/dealers for irregularities in auction-rate securities markets. See SEC Administrative Proceeding File No. 3-12310, In the Matter of Bear, Stearns & Co. Inc., et al. (cease-and-desist order, May 31, 2006), available at http://www.sec.gov/litigation/admin/2006/33-8684.pdf.

[56] Summons and complaint, Cuomo v. UBS Securities LLC, et al., case 650262-2008, filed July 24, 2008 in the Supreme Court of New York (New York County), available at http://www.oag.state.ny.us/ press/2008/july/UBS.pdf.

[57] SVB Asset Management, *Fixed Income Advisory: Auction Rate Securities Update*, June 2006, available at http://www.svbassetmanagement.com/pdfs/ AuctionRateSecurities0606.pdf.

investment banks began to reduce holdings of auction-rate securities and began to market those securities more aggressively to small investors.[58] Sales to small investors, however, provided an insufficient increase in demand to allow many auctions to run without broker/dealer support.

When broker/dealers support auctions to avoid failures they absorb auction-rate securities onto their own balance sheets. In late 2008, some broker/dealers had accumulated substantial inventories of auction-rate securities as a result of supporting auctions. For example, court documents indicated that UBS increased its holdings of auction-rate securities by about 500% from June 2007 to January 2008.[59] In the first half of 2007, UBS holdings of auction-rate securities had fluctuated between $1 billion and $2 billion. By February 8, 2008, UBS held nearly $10 billion in auction-rate securities, raising serious risk-management concerns at a time of mounting mortgage-backed securities losses.

On February 13, 2008, most major broker/dealers ceased their support of interest auctions, leading to failures in the vast majority of auctions held that day. As a result, the auction-rate securities market has largely seized up, leaving investors with illiquid investments in long maturities. When auctions fail, interest rates are set by terms of the securization contract. In some cases, default interest rates revert to high levels that have caused some issuers financial stress, while in other cases interest rates are more in line with normal short-term rates. While many investors earn interest rates higher than usual money market rates, the lack of liquidity has decreased the value of many of those holdings.[60] Small investors locked into auction-rate securities who have had to borrow to meet short-term obligations typically pay much higher rates than what those securities return.

Auction failures have occurred for asset-backed securities that have little obvious relation to mortgage markets, such as student loans and municipal debt, where the financial risks embedded in the loans themselves appear minimal.[61] Even though federal guarantees for student loans protect lenders or their assignees from most losses due to default, administrative and legal procedures required by the default process could delay payments to asset holders. That is, federal guarantees ensure *eventual* payment of most lost earnings due to default, but not *prompt* payment. In some cases, bond insurers provide guarantees of *timely* payment to holders of asset-backed securities. Concerns about the financial condition of bond insurers, therefore, might trigger investor concerns about timely payment, even if eventual repayment were federally guaranteed.

Problems in the vast majority of auction-rate markets, however, probably stem from how auction-rate securities are structured, rather than from the quality of underlying assets. In particular, auction-rate securities provide investors with substantial liquidity so long as auctions function normally. When potential investors fear that auctions may fail, however, which would lock them into illiquid positions, they may hesitate to bid, especially when short-term credit has become more difficult or costly to obtain. Fears of auction failure may be self-fulfilling: concerns that auctions may fail will deter bidders, thus increasing the chance of a failure.

[58] Civil Complaint, New York v. UBS Securities, p. 3.

[59] Ibid., pp. 3,29.

[60] For a description of recent developments in the market for auction rate securities, see Gretchen Morgenson, "It's a Long, Cold, Cashless Siege," *New York Times*, Apr. 13, 2008.

[61] Concern over the financial condition of some bond insurers has been cited as a factor in the failure of auctions for municipal securities. "Auction rate securities unwinding," *Financial Times*, Apr. 29, 2008.

The collapse of the auction-rate securities market put substantial strains on investors who had thought they were investing in highly liquid cash equivalents that then became highly illiquid.[62] Many investors and financial professionals claim that they were not alerted to possible liquidity risks due to auction failures. Furthermore, many financial professionals claim that they were led to believe that dealers would play a more active role in preventing auction failures. One survey found that about two thirds of corporate treasurers in firms that held auction-rate securities, said that dealers had implied that support for auction securities to avoid auction failures, and 17% of treasurers said that dealers had explicitly promised such support.[63]

Unwinding of the auction-rate securities market will probably be complex, even when the quality of underlying assets, such as federally guaranteed student loans, is high. Some municipalities have restructured auction-rate securities debt and some other issuers have redeemed portions of security issues. Litigation initiated by state attorneys general and by class-action suits may play an important role in this restructuring.[64] Citibank bought back about $7.5 billion in auction-rate securities from small investors as part of an agreement with the New York State Attorney General, and committed to unwind auction-rate securities holdings of larger investors as well.[65]

Some issuers of debt have viewed auction-rate securities as a less expensive means of borrowing funds compared to other variable-rate securities, such as variable rate demand obligations (VRDOs). In light of recent experience many debt issuers and investors will seek alternatives to auction-rate securities.[66]

# Congressional and Administrative Action

As signs that student lenders might contract the supply of loans emerged in early 2008, Members of Congress have taken several actions intended to ensure that college students would be able to obtain loans necessary to financing their educations. On February 28, 2008, shortly after the Pennsylvania Higher Education Assistance Agency announced that it planned to halt issuing federal loans, the chairs of the House and Senate Education and Labor Committees (Representative George Miller and Senator Edward Kennedy) wrote to Secretary of Education Margaret Spellings, urging her to take steps to avoid any possible disruptions of the federal student loan programs.[67] The Ranking Member of the House Education and Labor Committee (Representative Howard "Buck" McKeon) wrote to Secretary Spellings on February 15, 2008, asking her to monitor trends in the student loan market.[68]

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[62] Gretchen Morgenson, "It's a Long, Cold, Cashless Siege," *New York Times*, Apr. 13, 2008.

[63] Joanna Chung, "Investors Expected Bond Bail-Out," *Financial Times*, June 30, 2008, p.1.

[64] Aaron Pressman, "Auction-Rate Securities: How to Get Unstuck," *Business Week*, May 22, 2008, available at http://www.businessweek.com/magazine/content/08_22/b4086076696407.htm.

[65] Heather Landy, "Citigroup to Return Billions to Investors, Pay $100M in Penalties," *Washington Post*, Aug. 7, 2008.

[66] For example, Nuveen Investments and Eaton Vance Management have announced plans to develop new forms of variable-rate securities. "Fund Manager Is to Refinance Stalled Auction-Rate Notes," *New York Times*, May 22, 2008, p. C8.

[67] George Miller, Chair of the House Education and Labor Committee, and Edward Kennedy, Chair of the Senate Education and Labor Committee, letter to Secretary of Education Margaret Spellings, Feb. 28, 2008, available at http://www.house.gov/apps/list/speech/edlabor_dem/rel022808.html.

[68] Howard (Buck) McKeon, Ranking Member of the House Education and Labor Committee and Ric Keller, Senior Republican, Subcommittee on Higher Education, Lifelong Learning and Competitiveness, letter to Secretary of (continued...)

## Ensuring Continued Access to Student Loans Act of 2008

On April 14, 2008, the House Education and Labor Committee reported H.R. 5715, the *Ensuring Continued Access to Student Loans Act of 2008* which would raise loan limits for Stafford loans, provide new options for parent borrowers, expand certain lender-of-last-resort options for borrowers and schools, and would allow the Secretary of Education to purchase FFEL student loan assets from lenders.[69] The bill also raised the possibility of using federal financial institutions, such as the Federal Financing Bank, Federal Home Loan Banks, and the Federal Reserve, to assist in ensuring the smooth functioning of student loan finance.

H.R. 5715 passed the House on April 17, 2008. Senator Kennedy introduced a similar bill (S. 2815) on April 3, 2008, that would raise loan limits and take steps to ensure smooth functioning of the secondary (i.e., securitized) market for student loans. On April 30, the Senate passed an amended version of H.R. 5715 that the House accepted the next day. The President signed the measure (P.L. 110-227) on May 7.

On May 21, 2008, the Secretary of Education Margaret Spellings, using authority granted by the Ensuring Continued Access to Student Loans Act of 2008, announced plans to offer FFEL lenders the option of selling loans originated for the 2008-2009 academic year to the government.[70] In addition, the government may buy a portion of student loan asset-backed securities (SLABS) and hold them up to the end of September 2008 in order to provide liquidity to lenders that have relied on securitization methods of finance. The Secretary has stressed her intention to ensure that the program, which aims to "protect lenders against losses on new loans for one year," will result in no net cost to the government.[71] Details of the initiative, entitled the "Loan Purchase Commitment" and the "Loan Participation Purchase Program" were published in the *Federal Register* on July 1, 2008.[72]

Designing and administering programs that provide insurance benefits to sophisticated financial institutions that have access to modern risk-management and hedging techniques, and that would impose no net economic cost on the federal government would seem a challenging task, especially if FFEL lender yields were aligned closely with lender costs and if the costs of using federal funds were fully accounted for.[73] The Department of Education, however, contends that these loan purchase programs could save the federal government money, because the reduction in interest subsidies paid to lenders would more than offset, according to its calculations, the costs

(...continued)

Education Margaret Spellings, Feb. 15, 2008, available at http://republicans.edlabor.house.gov/Media/File/PDFs/021508spellings. pdf.

[69] For details, see CRS Report RL34452, *The Ensuring Continued Access to Student Loans Act of 2008*, by (name red acted).

[70] Letter from U.S. Secretary of Education Margaret Spellings to Chief Executive Officers of FFEL Lenders, May 21, 2008, available at http://ifap.ed.gov/eannouncements/attachments/052108FFELPMonitoring.pdf.

[71] Ibid.

[72] Department of Education, Department of the Treasury, Office of Management and Budget, "Notice of terms and conditions of purchase of loans under the Ensuring Continued Access to Student Loans Act of 2008, 73 *Federal Register* 127, July 1, 2008, available at http://edocket.access.gpo.gov/2008/pdf/E8-14820.pdf.

[73] Lucas and Moore contend that standard methods of computing the financial costs of loan programs to the federal government understate the true economic costs of those funds. See Deborah Lucas and Damien Moore, "Guaranteed Versus Direct Lending: The Case of Student Loans," Congressional Budget Office Working Paper 2007-09, June 2007, available at http://www.cbo.gov/ftpdocs/82xx/doc8232/2007_09_StudentLoans.pdf.

of administering these programs and the costs of financial and operational risks that these programs might incur.[74]

## Other Federal Responses and Congressional Proposals

Several Members of Congress and major student lenders have called for consideration of measures that might provide additional liquidity to the student loan market.[75] Government decisions on whether to supply liquidity to financial markets in times of systemic financial stress have typically started with a consideration of Bagehot's Rule, which is explained below.

### Bagehot's Rule and Market Liquidity

Central banks for over a century have accepted responsibility for providing liquidity to markets during credit contractions, to avoid serious harm to solvent financial institutions that might affect the stability of financial markets as a whole. Central bankers, however, typically do not wish to reward financial institutions for having taken unwise or overly risky decisions. In the phrase of the English writer Walter Bagehot, central banks should "lend freely at a penalty rate on good collateral."[76] In other words, central banks, according to Bagehot's law, should stand willing to exchange high quality but illiquid assets for highly liquid securities, such as Treasury bonds, but on such terms that provide incentives for prudent behavior in the future.[77]

Some proposals to inject liquidity into student loan markets reflect, at least in part, the logic of the Bagehot Rule. While few believe that difficulties in the student loan market, which comprises a small part of world financial markets, are a threat to the stability of national or international capital markets, a disruption of the student loan market could inflict substantial hardship on students or their families, as well as upon colleges and universities. Thus, offering loans or other forms of liquidity to student lenders during a credit contraction can help avoid harming students and higher education institutions.

If such disruptions of the student loan market are due entirely to external forces, then there is little need to impose a penalty rate on lending to ensure prudent behavior in the future. On the other hand, if the availability of government liquidity on generous terms might encourage lender behavior that might lead to future financial disruptions, then some financial economists would argue that lending at a penalty rate would improve financial stability in the student loan market.

[74] The Department of Education concluded that in an extreme scenario in which the government purchased all FFEL loans originated for the 2008-2009 academic year, "costs for both the Purchase Program and the Participation Program were less expensive to the Government than for the baseline subsidy costs for FFELP loans costs for the FFELP baseline in this period." Other scenarios, according to the Department's analysis, the Loan Purchase Program would be less expensive to the government than a baseline scenario. Ibid. Also see discussion of the Federal Credit Reform Act of 1990 and the calculation of subsidy costs later in this report.

[75] SLM Corporation, "Congress Debates Proposals on Student Loan Liquidity," available at http://www.salliemae.com/schools/financial_aid/straight-talk/congress-liquidity.htm.

[76] Walter Bagehot, *Lombard Street*, (London: Henry S. King, 1873).

[77] Jean-Charles Rochet and Xavier Vives, "Coordination Failures and the Lender of Last Resort: Was Bagehot Right After All?" *Journal of the European Economic Association*, Dec. 2004, vol. 2, no. 6, pp. 1116-1147.

## Congressional Proposals

In April 2008, Senator Dodd called on Ben Bernanke, Chairman of the Federal Reserve Board, and Treasury Secretary Henry Paulson to consider measures that might provide additional liquidity to the student loan market.[78] Senator Dodd proposed that Secretary Paulson consider using the Federal Financing Bank (FFB) to play a role in the student loan market and that Chairman Bernanke consider allowing the Federal Reserve's newly created Term Securities Lending Facility (TSLF) to accept high-quality SLABS as collateral.

### *Federal Financing Bank*

On April 29, 2008, Representative Kanjorski introduced H.R. 5914, the Student Loan Access Act, which would let the FFB buy certain securities backed by federally guaranteed loans. The Federal Financing Bank Act of 1973 (P.L. 93-224,12 U.S.C. 2281 et seq.) created the Federal Financing Bank (FFB) to centralize and streamline federal debt management policies.[79] FFB is a government corporation, but acts as an arm of the U.S. Treasury. The FFB provides a means for federal agencies to finance their credit programs by borrowing directly from the Treasury, and replaces earlier arrangements that allowed agencies to issue their own off-budget debt.[80] In 1985, the Gramm-Rudman-Hollings Act (P.L. 99-177) introduced additional controls on federal credit programs financed through FFB.

The Federal Credit Reform Act of 1990 (FCRA) requires that the reported budgetary cost of a credit program equal the estimated subsidy cost at the time the credit is provided.[81] The FCRA defines a subsidy cost as "the estimated long-term cost to the government of a direct loan or a loan guarantee, calculated on a net present value basis, excluding administrative costs." For a proposed credit program, Congressional Budget Office (CBO) must estimate the subsidy cost, and the Office of Management and Budget (OMB) becomes responsible for estimating the subsidy cost once legislation containing a federal credit program is enacted. In the view of OMB, FCRA requires that any estimated subsidy amount (*even if zero*) be covered by an enacted appropriation of budget authority.[82] Therefore, under OMB's interpretation of FCRA, allowing the FFB to purchase student loans or assets backed by student loans would require legislation providing budget authority to cover any subsidy or administrative costs that the federal government might incur.

In the past, FFB has only purchased assets that are 100% guaranteed by the federal government. While FFEL and FDLP loans carry federal guarantees, those guarantees are not complete, except in certain, limited circumstances.[83] While securities backed by federally guaranteed student loans may carry other guarantees for investors, those securities are not fully guaranteed by the federal

[78] U.S. Congress, Senate Committee on Banking, Housing, and Urban Affairs, *Turmoil in U.S. Credit Markets Impact on the Cost and Availability of Student Loans*, hearing, 110th Cong., 2nd sess., Apr. 15, 2008.

[79] CRS Report 96-875, *"The Federal Financing Bank: Overview, Budgetary Status, and the Debt Limit*, by James Bickley. This report is out of print but available upon request from the author.

[80] CRS Report RL30365, *Federal Government Corporations: An Overview*, by (name redacted).

[81] The Federal Credit Reform Act of 1990 was created as part of the Omnibus Budget Reconciliation Act of 1990 (P.L. 101-508). For more information on FCRA, see CRS Report RL30346, *Federal Credit Reform: Implementation of the Changed Budgetary Treatment of Direct Loans and Loan Guarantees*, by (name redacted).

[82] OMB Circular A-129 (revised), section II, available at http://www.whitehouse.gov/omb/circulars/a129/a129rev.html.

[83] See discussion in the section on "Lenders of Last Resort" above.

government. Thus, proposed FFB purchases of student loans or securities backed by student loans would represent a significant change in FFB practices.

### *Term Securities Lending Facility*

The Federal Reserve's Term Securities Lending Facility, established March 11, 2008, provides liquidity to financial markets by allowing primary dealers (i.e., banks and securities brokerages that trade in U.S. government securities with the Federal Reserve System) to exchange high quality but illiquid assets for Treasury securities, which are widely considered cash equivalents.[84] The Federal Reserve announced on May 2, 2008 that primary dealers may pledge AAA/Aaa-rated asset-backed securities as collateral in upcoming Term Secured Lending Facility auctions, a measure intended to provide liquidity to various financial markets, including the market for securitized student loans.[85] On July 30, 2008, the Federal Reserve said it would extend the TSLF until January 30, 2009.[86]

# Conclusion

Since the inception of the federal guaranteed student loan program, Congress has sought to allow lenders an "equitable" return on capital to ensure an adequate supply of student loans and to avoid disruptions that would interfere with the educational plans of students. As financial markets have evolved and banking practices have become more efficient, however, lender yields that were once perceived to be "adequate" may have, over time, allowed student lenders to earn rents (that is, receive a price above their costs). From time to time, Congress has adjusted lender subsidy formulae with the aim of bringing lender yields more in line with lender costs, thus reducing costs to taxpayers or making funds available for other priorities while avoiding supply disruptions. Because the true economic costs of lenders are not easily observed, and because costs in different segments of the student loan market differ, achieving a precise alignment of lender yields and lender costs is difficult. Moreover, lenders have different cost structures, so that a cut in lender interest rate subsidies that would allow a highly efficient, low-cost lender to earn a profit might put considerable pressure on another lender with higher costs.

The latest legislation to adjust lender yields for guaranteed student loan programs, the College Cost Reduction and Access Act of 2007, according to its sponsors, was intended to reduce "excess" subsidies to student lenders.[87] Student lenders and industry associates have claimed that those subsidy reductions would force many student lenders from the market, potentially disrupting loan supply and complicating financial arrangements of many students and their families. Since early 2008, several dozen lenders have announced plans to leave the student loan market in part or in full, raising concerns that inadequate supply of student loans could disrupt financial aid arrangements in the 2008-2009 academic year.

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[84] Federal Reserve Bank of New York, "Understanding the Recent Changes to Federal Reserve Liquidity Provision," May 2008, available at http://www.newyorkfed.org/markets/Understanding_Fed_Lending.html.

[85] Federal Reserve Press Release, May 2, 2008, available at http://www.federalreserve.gov/newsevents/press/monetary/20080502a.htm.

[86] Board of Governors of the Federal Reserve Bank, press release, July 30, 2008, available at http://www.federalreserve.gov/newsevents/press/monetary/20080730a.htm.

[87] U.S. Congress, House Committee on Education and Labor website, "*College Cost Reduction and Access Act*," available at http://edlabor.house.gov/micro/ccraa.shtml, accessed July 2, 2008.

Evaluating the effects of subsidy reductions and changes in lender insurance provisions, however, is difficult to separate from the effects of episodes of turmoil in global financial markets that emerged about the same time as the last stages of congressional consideration of the College Cost Reduction and Access Act of 2007. Congress, by passing the Ensuring Continued Access to Student Loans Act of 2008 and through other initiatives, has sought to put in place mechanisms that would avoid or at least mitigate any such disruption in the near term. The need for other measures or for more thorough going changes in federal student loan policy in the longer term may depend on how the current economic slowdown develops, and how financial markets react and evolve in the face of challenging economic conditions.

# Appendix. Shifts in Demand and Supply of Student Loans

This appendix explains how economic, demographic, and other factors can affect the demand for student loans and the supply of student loans using basic microeconomics. A demand curve shows a relationship between price and the quantity of a good or service that consumers want to buy at that price, holding other factors constant. In a market for loans, the interest rate is the price and the volume of loan originations is a typical measure of quantity.

## Demand Shifts

Demand for student loans is a *derived demand*, meaning that students and their families presumably value the benefits of higher education, which loans help finance, rather than the loans themselves. That is, the willingness of students and their families to take student loans depends on the attractiveness of higher education.

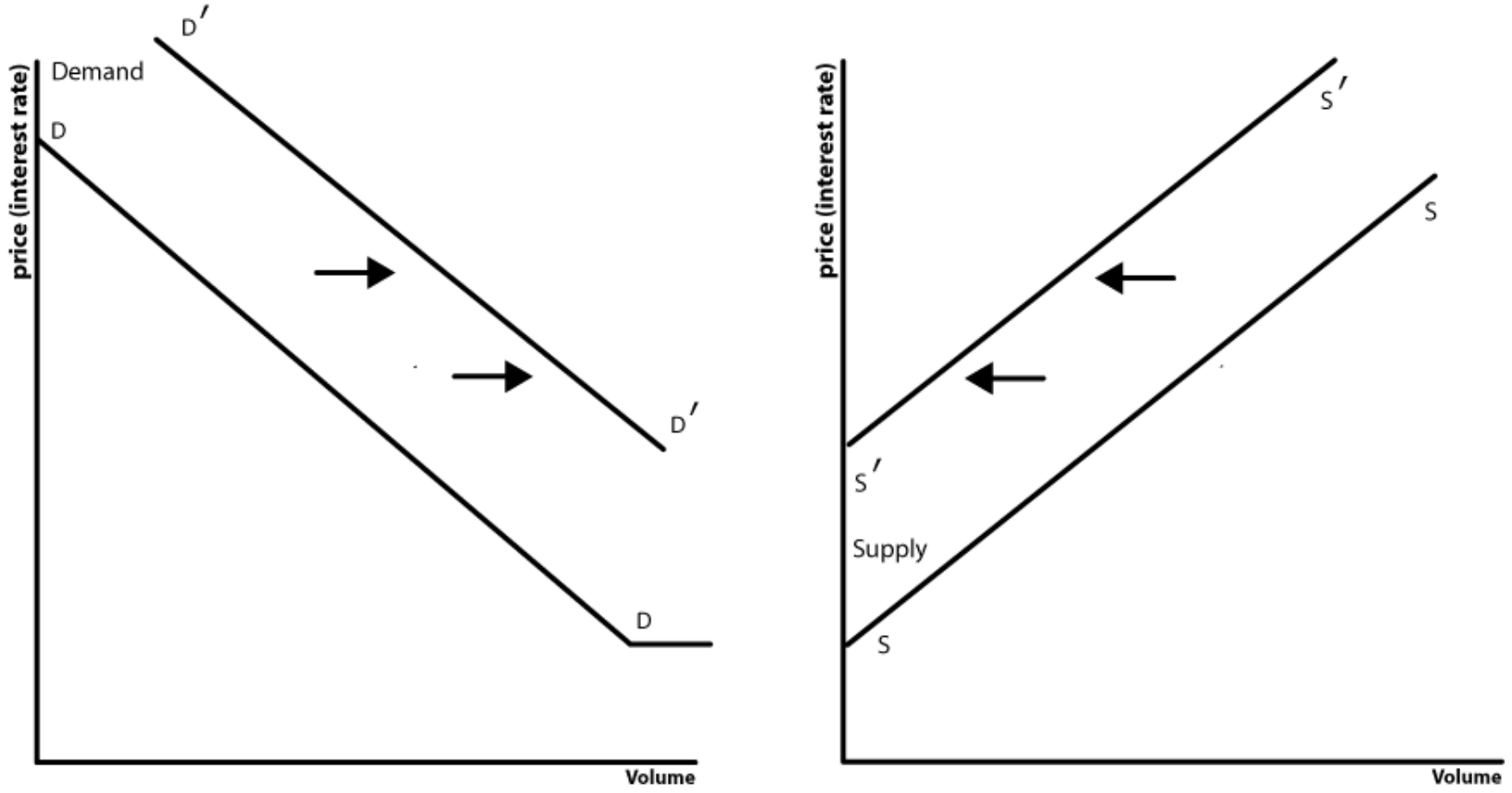
When some factor that helps determine the demand curve changes, the demand curve shifts. For example, when the number of graduating high school students increases, the demand curve (*DD* in **Figure A-1**) shifts to the right (*D'D'*), so that at any given price, a higher quantity of loans is demanded. Conversely, a decrease in the number of new high school graduates would shift the demand curve to the left. Changes that most economists believe would cause the demand for student loans to shift to the right include the following:

- increases in the college premium (the average difference between wages earned by college graduates and those earned by those who have not attended college),
- increases in the size of traditional college-age cohorts (18-21),
- increases in the number of non-traditional students.

Some factors could arguably increase or decrease demand for student loans. For example, an increase in the unemployment rate may reduce income, which could reduce demand for higher education and student loans. Alternatively, higher unemployment could reduce the amount of income a student would lose by attending school, which could increase demand for higher education. Thus, the effect of rising unemployment on demand for student loans is ambiguous.

The cost of higher education also may have an ambiguous effect on demand for student loans. Higher tuition costs could increase the demand for loans, or could discourage some students from attending. Similarly, family income could also have an ambiguous effect on the demand for student loans. At some income levels, an increase in income could increase the probability of attending college, while at higher income levels, additional income might reduce the need for loans. The effect of unemployment, higher tuition, and family income on demand for higher education, therefore, can only be resolved by empirical research.

**Figure A-1. Figure. Shifts in Supply and Demand for Student Loans**




**Source:** CRS

## Supply Shifts

Similarly, a supply curve shows the relationship between price and the quantity of a good or service that firms are willing to supply, holding other factors constant. The lender interest rate or the yield lenders receive acts as the price in loan markets. A competitive firm's supply curve is its marginal, or incremental, cost schedule.[88]

The supply curve shifts when something changes lenders' costs. For example, if lenders' cost of funds, then profit-maximizing lenders will be willing to offer fewer loans at a given price, so that the supply curve shifts to the left (from *SS* in **Figure A-1** to *S'S'*). For FFEL lenders, who receive a yield based on increases relative to an index of commercial paper rates, the cost of funds rises if market interest rates used to finance loans rise relative to commercial paper rates, which may occur in periods of high financial volatility.

On the other hand, if lenders find more efficient ways to service loans, thus lowering their costs, then the supply curve shifts to the right. Other factors that economists believe would shift the supply of student loans to the left include the following:

- increased default rates,
- higher loan servicing costs (especially in comparison to loan size),
- higher marketing costs.

## Student Loan Markets Differ From Other Markets

As noted in the Introduction, student loan markets differ from other markets in important ways. In many types of loan markets, lenders and borrowers have imperfect information about each other, which may lead to problems of adverse selection and moral hazard. Adverse selection occurs when lenders cannot distinguish between more and less risky borrowers, which can prevent less risky borrowers from obtaining loans on terms that reflect their low risk of default. Moral hazard occurs when lenders cannot monitor borrowers, so that some borrowers may take actions that increase risk to the lender. For example, moral hazard would occur if students were less careful with borrowed funds than with their own earnings.

Both adverse selection and moral hazard can cause loan markets to function inefficiently or to shut down completely. While some loan markets mitigate such problems via collateral requirements or the use of credit score information, those approaches are not easily applied to student loan markets.[89]

The aim of federal student loan guarantee programs, according to many economists, is to support a competitive loan market by mitigating potential adverse selection and moral hazard problems.

[88] More precisely, the supply curve of a firm in a competitive market is its marginal cost curve so long as the price is high enough to allow a firm to recover its costs. If the price is not high enough, the firm shuts down, at least in the short run.

[89] In particular, the benefits of higher education are unsuited as collateral, as noted above. Judging the creditworthiness of college students, most of whom are at the beginning of their adult lives, would be difficult, while tying the availability of loans to family credit scores could severely restrict access to higher education.

By guaranteeing loans, the federal government greatly reduces lenders' risk exposure, lessening adverse selection problems. Enforcing standards and procedures on lenders and institutions of higher education, and requiring lenders to retain a small portion of default risk, many analysts would argue, reduces moral hazard problems.

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